

**ENVIRONMENTAL PROTECTION**

**PINELANDS COMMISSION**

**Pinelands Comprehensive Management Plan**

**Minimum Standards for Land Use Distribution and Intensities; Water Quality; Pilot Program for Alternate Design Wastewater Treatment Systems**

**Proposed Amendments: N.J.A.C. 7:50-5.22, 5.23, 5.24, 5.26, 5.27, 5.28, 6.84, 6.85, 10.21, 10.22, and 10.23**

Authorized By: New Jersey Pinelands Commission, Nancy Wittenberg, Executive Director.

Authority: N.J.S.A. 13:18A-6j.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

Proposal Number: PRN 2020-063.

A **public hearing** concerning this notice of proposal will be held on:

Wednesday, September 2, 2020, at 9:30 A.M.

Richard J. Sullivan Center

15C Springfield Road

New Lisbon, New Jersey

Submit written comments by regular mail, facsimile, or email by September 18, 2020, to:

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The name and mailing address of the commenter must be submitted with all public comments. Commenters who do not wish their names and affiliations to be published in any notice of adoption subsequently prepared by the Commission should so indicate when they submit their comments.

The agency proposal follows:

### **Summary**

The New Jersey Pinelands Commission (Commission) proposes to amend Subchapter 5, Minimum Standards for Land Uses and Intensities; Subchapter 6, Management Programs and Minimum Standards; and Subchapter 10, Pilot Programs, of the Pinelands Comprehensive Management Plan (CMP). The CMP has been guiding land use and development activities in the Pinelands since it took effect on January 14, 1981. The CMP has been amended many times, most recently in October 2018, through a set of amendments related to the Pilot Program for Alternate Design Wastewater Treatment Systems (see 50 N.J.R. 2327(b)).

Amendments related to the Pilot Program for Alternate Design Wastewater Treatment Systems ("Pilot Program" or "Program") are again being proposed to extend the Program, authorize a piloted technology for permanent use, remove two piloted technologies from the Program, revise manufacturer reporting and certification requirements, and clarify certain

requirements. Amendments are also being proposed to eliminate inconsistencies among certain sections of Subchapters 5, 6, and 10 and to modify reporting requirements in Subchapter 6. A more detailed description of the Pilot Program and proposed amendments follows.

The Commission created the Pilot Program in 2002, to test advanced septic system technologies for residential development. An ad hoc committee convened earlier by the Commission had concluded that advanced technologies could be more effective at meeting the water quality standards of the CMP than conventional septic systems for residential development on lots smaller than 3.2 acres. This finding was significant, as there are many lots in the Pinelands zoned for residential use, but that do not meet the CMP's 3.2-acre minimum lot size requirement for residential development served by conventional septic systems. This left many landowners unable to build houses on these smaller lots.

Based on the committee's recommendations, the Commission formally established the Pilot Program by amending the CMP to allow five specific alternate waste water treatment technologies to be installed for residential development in the Pinelands (see 34 N.J.R. 722(a); 2804(b); N.J.A.C. 7:50-10, Part IV). The Pilot Program was designed to test whether the alternate treatment systems could be maintained and operated to meet the water quality standards of the CMP in a manner that a homeowner could reasonably be expected to follow.

The CMP water quality standards, N.J.A.C. 7:50-6, Part VIII, control the amount of nitrogen that can enter the environment, as nitrogen is a significant pollutant that often serves as an indicator of changes in overall water quality. Unlike conventional septic systems, which control nitrogen by diluting the waste water on larger parcels of land, as is required in the Pinelands Area, alternate technologies treat the waste water to reduce nitrogen levels rather than relying solely on the dilution of nitrogen. This allows for more effective waste water treatment

on smaller parcels in the Pinelands Area that are zoned for residential development. All the technologies accepted into the Pilot Program utilize proven biological nutrient removal processes to reduce nitrogen levels in treated wastewater.

The first Pilot Program treatment system was installed in 2004. As of May 1, 2020, a total of 346 Pilot Program systems have been installed to service single-family residential development in 28 Pinelands municipalities. The Pilot Program has given landowners the opportunity to build houses on smaller parcels of land that are zoned for residential development, but that do not meet the 3.2-acre minimum lot size for conventional septic systems.

The Pilot Program has evolved over the last 18 years in response to the continuous evaluation and assessment of technologies. Based on the recommendations of the Executive Director in program implementation reports issued in 2006, 2009, 2012, and 2017 (updated 2018), the Commission has periodically amended the rules related to the Pilot Program. Links to all reports can be found on the Commission's website at [www.nj.gov/pinelands](http://www.nj.gov/pinelands).

Of the original five technologies piloted, three were deemed successful and permanently approved by the Commission (Amphidrome and Bioclere for use on parcels of at least one acre; Fast for use on parcels of at least 1.4 acres) and two were removed from the Program based on lack of sales or not meeting water quality standards (Ashco RSF III and Cromaglass). (See 42 N.J.R. 987(a); 2422(a), 49 N.J.R. 3075(a); 50 N.J.R. 969(a), 39 N.J.R. 1970(a); 5077(b), and 46 N.J.R. 319(a); 1877(b)).

In addition to the actions taken on each of the five original piloted technologies, the Commission has also amended the CMP to expand and enhance the Program, including:

- Authorizing the Commission to accept additional prescreened technologies into the Program;

- Removing fixed deadlines for the installation of piloted technologies;
- Authorizing the Executive Director to impose an immediate suspension on all new installations of a Pilot Program technology that is not adhering to the requirements of the Program or meeting CMP water quality standards;
- Allowing piloted technologies in all Pinelands municipalities;
- Removing limits on the amount of installed systems for a technology in the same residential development.

Amendments to the Pilot Program, including those discussed above, were adopted by the Commission in 2006, 2007, 2010, 2014, 2017, and 2018 and can be found at 37 N.J.R. 4133(a); 38 N.J.R. 1829(b), 39 N.J.R. 1970(a); 5077(b), 42 N.J.R. 987(a); 2422(a), 46 N.J.R. 319(a); 1877(b), 49 N.J.R. 30759(a); 50 N.J.R. 969(a), and 50 N.J.R. 1523(a); 2327(b).

The Executive Director issued the fifth implementation report in November 2019 ([https://www.nj.gov/pinelands/landuse/current/altseptic/2019%20Pilot\\_Septic\\_Imlem\\_Rpt%20-%20FINAL.pdf](https://www.nj.gov/pinelands/landuse/current/altseptic/2019%20Pilot_Septic_Imlem_Rpt%20-%20FINAL.pdf)), concluding that the continued use of advanced onsite treatment technologies is essential to the efficient use and orderly development of designated growth areas of the Pinelands, as well as other areas in which residential development is permitted on lots smaller than 3.2 acres. The report addresses, among other things, the evaluation of four technologies added to the Pilot Program in 2011, pursuant to N.J.A.C. 7:50-10.23(b), and the continuation of the Program. The Executive Director made the following recommendations:

- Advance one of the four technologies that entered the Pilot Program in 2011, SeptiTech, beyond the piloting stage and authorize it for permanent use subject to N.J.A.C. 7:50-6.84(a)5iv(3);

- Remove the Busse GT and Hoot ANR technologies from the Pilot Program as neither technology has been installed in the Pinelands Area since being accepted into the Program in 2011;
- Remove the BioBarrier system from the Pilot Program as it has not been successful in meeting CMP water quality standards since being accepted into the Pilot Program in 2011;
- Invoke the Commission’s authority at N.J.A.C. 7:50-10.23(b) to add additional technologies to the Pilot Program by recruiting new NSF Standard 245 and/or USEPA ETV certified technologies to participate in the Pilot Program beginning in 2020, as adding new technologies to the Program should lead to increased competition among the system vendors and may lead to continued price stability and potential cost reductions; and
- Extend the Pilot Program to 2025, by amending N.J.A.C. 7:50-10.23(c) and (d) to require the Executive Director’s next report on newly piloted technologies to be due in 2025, with a possible extension to 2027, if necessary.

The Commission is proposing amendments to the CMP in response to the findings and recommendations set forth in the 2019 Implementation Report, with the exception of the recommendation to remove the Hoot ANR technology. As this rulemaking was being prepared, the Commission received notice of the pending installation of the first Hoot ANR system in the Pinelands Area. The Commission is, therefore, retaining the Hoot ANR technology in the Pilot Program to give it more time for testing. The proposed amendments also update, correct, and clarify various provisions of the rules.

The proposed amendments, and the 2019 Implementation Report on which they are based, were discussed and reviewed at multiple public meetings of the Commission and the Commission's CMP Policy & Implementation Committee in 2019 and 2020. If requested, Commission staff will also provide a presentation on the proposed amendments at a public meeting of the Pinelands Municipal Council (PMC). The PMC, created by the Pinelands Protection Act (N.J.S.A. 13:18A-1 et seq.), is made up of the mayors of the 53 municipalities in the Pinelands Area, or their designees. The Council is empowered to review and comment upon changes proposed by the Commission in the New Jersey Pinelands Comprehensive Management Plan and advises the Commission on matters of interest regarding the Pinelands.

A more detailed description of the proposed amendments follows.

## **Subchapter 5**

The Commission is proposing to update Subchapter 5 to clarify minimum lot sizes for nonresidential development in certain Pinelands management areas. This clarification is necessary to correct inconsistencies resulting from recent amendments to Subchapter 6. In 2018, the Commission amended N.J.A.C. 7:50-6.84(a)5iii(2) to authorize the use of advanced waste water treatment systems for preexisting nonresidential development in the Rural Development Area, Forest Area, Agricultural Production Area, and Preservation Area District. The 2018 amendments allow advanced wastewater treatment systems in these areas when the proposed nonresidential development constitutes an expansion of a nonresidential use that was in existence on January 14, 1981, the effective date of the CMP, or constitutes a change of an existing use to another permitted nonresidential use. (See: 50 N.J.R. 969(a); N.J.A.C. 7:50-6.84(a)5iii(2)). This change provided an opportunity to improve water quality while at the same time allowing for potential expansion of pre-existing commercial uses. There are some provisions in Subchapter 5,

however, that are inconsistent with amended N.J.A.C. 7:50-6.84(a)5iii(2) and the Commission is proposing to update those provisions.

The provisions to be amended, N.J.A.C. 7:50-5.22(d), 5.23(d), 5.24(d), and 5.26(d), prohibit nonresidential structures on parcels less than one acre in the Rural Development Area, Forest Area, Agricultural Production Area, and Preservation Area District, as conventional septic systems that service such structures require lots larger than one acre to meet the CMP septic dilution requirements in those areas. The 2018 amendments to N.J.A.C. 7:50-6.84(a)5iii(2), however, gave some landowners in these areas the ability to expand their existing businesses by converting to advanced waste water treatment systems. Because some of these businesses are located on lots smaller than one acre, they were still precluded from expanding, which was not the Commission's intent. To correct this inconsistency, the Commission is proposing to update N.J.A.C. 7:50-5.22(d), 5.23(d), 5.24(d), and 5.26(d) to recognize that the one-acre minimum lot size requirement in those provisions will not apply to a preexisting nonresidential use in the Rural Development Area, Forest Area, Agricultural Production Area, and Preservation Area District when the landowner is seeking to convert to an advanced technology treatment system from a conventional septic system in accordance with N.J.A.C. 7:50-6.84(a)5iii(2).

Similarly, the Commission is proposing to update N.J.A.C. 7:50-5.27 and 5.28 to make these provisions consistent with N.J.A.C. 7:50-6.84(a)5iii(1), which has allowed the use of advanced waste water treatment systems to serve nonresidential development in Pinelands Villages, Pinelands Towns, and Regional Growth Areas since 1987. N.J.A.C. 7:50-5.27 and 5.28 currently require a minimum lot size of one acre for nonresidential uses in Pinelands Villages, Pinelands Towns, and Regional Growth Areas served by any type of septic system. To recognize that Pinelands water quality standards can be met on smaller lots when advanced treatment

systems are used, the Commission proposes to add new N.J.A.C. 7:50-5.27(b)3 and 5.28(b)3 to remove the one acre lot size requirements for advanced waste water treatment systems that serve new or existing nonresidential uses in Pinelands Villages and Towns and Regional Growth Areas, respectively. These three management areas represent the growth-oriented portions of the Pinelands, where new nonresidential development is encouraged. It should be noted that Pinelands municipalities will retain the ability to establish whatever area and yard requirements they deem appropriate for nonresidential uses in zoning districts within these management areas. The Commission is simply removing what has proven to be an unnecessary restriction on the use of advanced treatment systems in these areas.

The Commission is also proposing minor changes to existing N.J.A.C. 7:50-5.27(b)2 and 5.28(b)2, which address waste water treatment systems for residential development, to more clearly distinguish them from the requirements at proposed new N.J.A.C. 7:50-5.27(b)3 and 5.28(b)3, which address waste water treatment systems for nonresidential development.

### **Subchapter 6**

The Commission is proposing to remove superfluous language at N.J.A.C. 7:50-6.84(a)2ii and make a minor grammatical correction to the same provision. N.J.A.C. 7:50-6.84(a)2 sets forth the criteria under which new waste water treatment facilities are permitted to serve existing development in the Pinelands Area where a public health problem has been identified. One of the criteria is that the facility is designed to accommodate waste water only from existing residential, commercial, and industrial development. The Commission is proposing to modify this limitation as it unintentionally excluded other types of nonresidential development, such as schools, churches, and other institutional uses. Rather than attempting to

list all possible types of development, N.J.A.C. 7:50-6.84(a)2ii will now require that facilities be designed to accommodate waste water from existing development.

The Commission is proposing an amendment to N.J.A.C. 7:50-6.84(a)5 to release the SeptiTech technology from the Pilot Program and authorize its permanent use on residential development on parcels of at least one acre in the Pinelands Area. SeptiTech will join Amphidrome, Bioclere, and Fast as a technology that the Commission has determined meets the CMP water quality standards and has authorized for permanent use. Installation of a SeptiTech system will be subject to a series of requirements imposed on all alternate waste water treatment technologies approved for permanent use, including: mandatory recording of deed notices, conveyance of an approved operation, and maintenance manual to the homeowner, compliance with construction standards, as-built certifications, alarm requirements, system warranty requirements, and renewable operation and maintenance service agreements (see N.J.A.C. 7:50-6.84(a)5iv(2)(C) through (J)).

The Commission is also proposing to amend N.J.A.C. 7:50-6.84(a)5iv(2)(E) to require the manufacturer or engineer of an alternate design waste water treatment system to include the cost of the system in its certification to the Commission and local board of health. Although the systems regulated by this subchapter have “graduated” from the Pilot Program and been granted permanent status for residential use, the Commission continues to collect and monitor the cost of installing systems. Manufacturers and engineers have been routinely providing cost information for the approved systems, and the rule amendment will simply formalize that practice.

Subchapters 6 and 10 require manufacturers of waste water technologies to install warning systems and provide warranties and maintenance contracts for the treatment systems. The specific requirements vary between the two subchapters. To eliminate any confusion and to

ensure uniformity among installations of alternate waste water technology systems, the Commission is proposing minor changes to both subchapters to make them consistent when appropriate.

### **Subchapter 10**

The Commission proposes to update and clarify N.J.A.C. 7:50-10.21, which sets forth the history of the Pilot Program and the status of alternate design treatment technologies in the Program. Language chronicling the piloted technologies between 2002 and 2016 will be removed from N.J.A.C. 7:50-10.21(a) and more succinctly summarized at new N.J.A.C. 7:50-10.21(e). This provision includes a summary of the original technologies accepted into the Pilot Program, removed from the Pilot Program, and authorized for permanent use in the Pinelands Area. Language describing the Commission's decision to expand the Pilot Program in 2010 and accept four additional technologies into the Pilot Program in 2011 is proposed to be removed from N.J.A.C. 7:50-10.21(a) and added at new N.J.A.C. 7:50-10.21(f). The Commission is also proposing, at new N.J.A.C. 7:50-10.21(f), to authorize the SeptiTech technology, which was one of the four technologies accepted into the Pilot Program in 2011, for permanent residential use on residential parcels of at least one acre. Proposed amendments at the text relocated to N.J.A.C. 7:50-10.21(f) will also include notification that the Commission has removed two other technologies accepted into the Pilot Program in 2011 (BioBarrier and Busse GT) because the technology either failed to meet the Plan's water quality standards or because no systems were installed in the Pinelands Area.

The Commission is proposing to change the reporting obligations at N.J.A.C. 7:50-10.22(a)4 to require the Executive Director to submit periodic reports to the Commission instead of annual reports. The Executive Director has submitted annual reports on the installation,

maintenance, and performance data for each piloted technology since the Program's inception in 2002. The Commission has determined that at this advanced stage of the Program, annual reports are not as critical as they were when the Commission was initially testing new technologies. To that end, the Commission is proposing to eliminate the annual reporting requirement and require the Executive Director to submit periodic reports on installation, maintenance, and performance data. Consistent with this more focused, flexible reporting, the Commission is also proposing to eliminate the interim reporting requirement at N.J.A.C. 7:50-10.22(a)4 and replace it with an ongoing obligation for the Executive Director to report to the Commission any significant issues with the installation, maintenance, or performance of any of the piloted technologies.

The Commission is proposing to eliminate the requirement at N.J.A.C. 7:50-10.22(a)5v that a manufacturer or engineer identify installation problems in their certification to the Commission and local board of health upon completion of an individual system. The Commission believes that the reporting obligation at N.J.A.C. 7:50-10.22(a)5xi, which requires manufacturers to identify and discuss installation problems in semi-annual reports to the Executive Director, is sufficient for reporting such problems. It should be noted that there have not been any reported installation problems in many years.

The Commission is also proposing to eliminate the requirement at N.J.A.C. 7:50-10.22(a)5viii for manufacturers to report necessary maintenance and repairs within 10 days to the Executive Director and local board of health. The Commission no longer needs this information on an immediate basis. Requiring manufacturers to include the information in a semi-annual report, as required at N.J.A.C. 7:50-10.22(a)5xi, sufficiently informs the Commission of any maintenance and repairs.

Minor, non-substantive changes are being proposed to update cross-references at N.J.A.C. 7:50-10.22(a)2ii and 3 and (c), as a result of amendments to N.J.A.C. 7:50-10.22(a) in 2018. A minor, non-substantive change is being proposed at N.J.A.C. 7:50-10.22(a)vi to correct the cross-reference regarding a required sample deed notice. A minor, non-substantive change is being proposed at N.J.A.C. 7:50-10.22(a)5ix to correct the cross-reference to the technology manufacturer's manual.

A minor change is being proposed at N.J.A.C. 7:50-10.22(a)5xi to clarify that a manufacturer is required to submit twice-yearly reports to the Executive Director "by" June 5 and December 5 of each year and not necessarily "on" those dates.

The Commission has extended the Pilot Program many times since its inception in 2002, and is proposing to further extend it by amending N.J.A.C. 7:50-10.23(c). The Program has been very successful in identifying alternate septic system technologies that better meet the water quality standards of the CMP. Identifying more advanced technologies on residential lots smaller than 3.2 acres will serve to promote better water quality in the Pinelands Area. In addition, landowners in the Pinelands Area will benefit from an extension, as additional technologies entering the Program will expand consumer choice and stabilize prices. The Commission is proposing to extend the Program to August 2025, at which time the Executive Director will conduct a review and provide a status report to the Commission. The Commission is also proposing to amend N.J.A.C. 7:50-10.23(d) to provide the opportunity for an additional extension of the Pilot Program to 2027, in the event there is insufficient data on the piloted technologies at the time of the required review in 2025. The criteria for reviewing the piloted technologies remain unchanged, but a minor, non-substantive change is proposed at N.J.A.C. 7:50-10.23(c)2 to correct an incorrect cross-reference.

As the Commission has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking requirement at N.J.A.C. 1:30-3.3(a)5.

### **Social Impact**

No adverse social impact is anticipated from the adoption of the proposed amendments. Society as a whole benefits from the protection of the Pinelands, and the proposed amendments are designed to do just that. The Pilot Program has resulted in the identification and use of alternate waste water treatment systems that, if properly maintained, can more efficiently meet the water quality standards of the CMP than conventional septic systems for residential use. The proposed amendments authorize a piloted technology for permanent use and extend the Pilot Program for the testing of more technologies until at least 2025. These amendments will have a positive social impact by expanding consumer choice, stabilizing prices, and furthering the protection of the Pinelands.

For nonresidential uses, the amendments recognize that the use of advanced treatment systems may allow certain businesses to be developed or expanded in conformance with CMP water quality standards on lots of less than one acre in size. In the Preservation Area District, Forest, Agricultural Production, and Rural Development Areas, qualifying businesses will be those that have been in operation for decades. In the Regional Growth Area, Pinelands Towns, and Pinelands Villages, the amendments will provide a greater opportunity for nonresidential development in commercial and industrial zones that have long been zoned for such uses. The result will be a continuation of existing land use patterns and fulfillment of municipal zoning plans in a manner than meets all CMP environmental standards.

The rule amendments will result in more efficient use of developable land in the Pinelands Area and not cause any significant changes in land use patterns.

## **Economic Impact**

The proposed amendments will further the positive economic impacts of the Pilot Program on landowners seeking to develop residential parcels between one and 3.2 acres in unsewered areas of the Pinelands Area. The CMP mandates a minimum residential lot size of 3.2 acres if the parcel is to be served by a conventional septic system. Some smaller parcels, however, are zoned for residential development in the CMP despite not meeting the 3.2-acre minimum for conventional septic systems, leaving landowners previously unable to develop those parcels. The Pilot Program has identified alternate design technologies that can meet the CMP's water quality standards on parcels less than 3.2 acres, opening the door for residential development of parcels that are between one and 3.2 acres, and having a positive economic impact on landowners, the construction industry, and the region.

The proposed amendments will grant permanent approval of a piloted technology and extend the Pilot Program to at least 2025, so that the Commission can pilot more technologies. These changes will enhance consumer choice, improve competition, and potentially reduce costs to homeowners.

The elimination of the one acre minimum lot size for new nonresidential uses in the Regional Growth Area, Pinelands Towns, and Pinelands Villages and the expansion of nonresidential uses in other management areas that utilize advanced treatment systems are expected to have a positive economic impact on property and business owners that can avail themselves of these changes. In addition, there could be a positive impact on municipalities who could see an increase in tax revenue from new or expanded businesses in areas zoned for commercial uses.

## **Environmental Impact**

The proposed extension of the Pilot Program is expected to have a significant environmental benefit because alternate treatment systems, when properly maintained, can result in better water quality than conventional septic systems. The Commission will have the opportunity to add alternate wastewater technologies to the Program, which will provide more data to evaluate and the potential to expand the list of permanently authorized technologies that can be utilized to improve water quality in the Pinelands.

### **Federal Standards Statement**

Section 502 of the National Parks and Recreation Act of 1978 (16 U.S.C. § 471i) called upon the State of New Jersey to develop a comprehensive management plan for the Pinelands National Reserve. The original plan adopted in 1980 was subject to the approval of the United States Secretary of the Interior, as are all amendments to the plan.

The Federal Pinelands legislation sets forth rigorous goals that the plan must meet, including the protection, preservation, and enhancement of the land and water resources of the Pinelands. The proposed amendments are designed to meet those goals by allowing for the continued installation and monitoring of alternate design wastewater treatment systems for residential development through a highly successful pilot program.

There are no other Federal requirements that apply to the subject matter of these amendments.

### **Jobs Impact**

The proposed extension of the Pilot Program provides a continued opportunity for new home construction on lots that are zoned for such use, but are too small to support conventional

septic systems and are not served by public sewerage infrastructure. The proposed amendments may, therefore, result in the creation of jobs associated with new home construction. Likewise, the proposed amendments may result in the creation of jobs associated with new business construction because they provide a new opportunity for such development on lots less than one acre through the use of advanced treatment systems.

### **Agriculture Industry Impact**

The proposed amendments to N.J.A.C. 7:50-5.24 will provide some agricultural operations in the Agricultural Production Area the potential to expand existing nonresidential uses on lots that they would otherwise not be able to expand due to lot size restrictions, if they convert to alternate waste water treatment systems from conventional septic systems.

The remaining proposed amendments are not expected to impact the agriculture industry in the Pinelands.

### **Regulatory Flexibility Analysis**

The proposed amendments will extend the Pilot Program, allowing for the continued installation of alternate wastewater treatment technologies in the Pinelands Area. The Commission is also proposing to authorize the permanent use of a piloted technology. Manufacturers that install alternate design wastewater treatment systems in the Pinelands have to comply with reporting, recordkeeping, and compliance requirements. It is believed that at least some of these manufacturers may be small businesses, as defined under the Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. These businesses may continue to incur costs to ensure compliance with the maintenance and monitoring requirements at N.J.A.C. 7:50-

6.84(a)5iv(2) and 10.22(a)5. It is unlikely, however, that businesses will need to engage professional services to meet the requirements. Furthermore, the maintenance and monitoring requirements mostly involve providing manuals, maintenance guarantees, and other documents that the manufacturers already have on hand, as well as the provision of resources for the collection and analysis of effluent sampling.

Some of the requirements may, however, involve more significant costs for the manufacturers, particularly the five-year renewable, non-cancellable maintenance contract required by N.J.A.C. 7:50-6.84(a)5iv(2), 6.85(b), and 10.22(a)5viii. However, these requirements are a critical part of the Pilot Program and the Commission would not be able to extend or expand the Program without them. It is likely that the associated costs will be passed on to the homeowner by the manufacturers, and they represent a relatively small price for the opportunity to develop lots that would otherwise not be developable.

The Commission is proposing to eliminate a certification and reporting requirement and impose an additional minor reporting requirement. N.J.A.C. 7:50-10.22(a)5xi requires manufacturers to identify and discuss installation problems in semi-annual reports to the Executive Director. To eliminate redundancy in reporting obligations, the Commission is proposing to eliminate an identical requirement at N.J.A.C. 7:50-10.22(a)5v, which mandates that manufacturers report installation problems in their certifications to the Commission and local board of health upon completion of an individual system.

The Commission is also proposing to add a requirement for manufacturers and engineers to include the cost of the installation of an alternate technology system in their certifications to the Commission and local board of health upon completion of the system. In practice, manufacturers and engineers have been routinely providing this information to the Commission,

and the proposed amendment will merely formalize that practice. This requirement will not impose any financial burdens or have an adverse economic impact on manufacturers or engineers.

All other reporting, recordkeeping, and compliance requirements for manufacturers and engineers of alternate design wastewater treatment systems participating in the Pilot Program remain unchanged. These requirements, including maintenance and monitoring, continue to be imposed on manufacturers of authorized technologies, regardless of business size. This is necessary to balance protection of Pinelands resources with the Commission's desire to provide a continued opportunity for residential development on lots less than 3.2 acres in unsewered areas of the Pinelands. In fact, the Commission has identified proper system maintenance as the primary factor in ensuring that the alternate technologies will function in a manner that is consistent with CMP water quality standards. It is, therefore, critical that the requirements continue to be imposed on all manufacturers or their agents.

### **Housing Affordability Impact Analysis**

The proposed amendments have the potential to reduce the cost of alternate design treatment systems for those landowners seeking to develop homes on lots between one and 3.2 acres in the unsewered portions of the Pinelands Area. By extending the Pilot Program to give the Commission the opportunity to add more technologies to the Program, and by authorizing one piloted technology for permanent use, the Commission is expanding the range of installation options for landowners. This could lead to increased competition among the vendors, resulting in decreased costs of the systems for homeowners.

While the proposed amendments may result in a decrease in the costs of alternate design treatment systems, and, therefore, a decrease in the average cost of housing utilizing such systems, it is important to note that these systems are being installed in the unsewered portions of the Pinelands Area and primarily in the Regional Growth Areas, Pinelands Villages, and Pinelands Towns. Permitted densities in the unsewered portions of these management areas are relatively low, ranging from one unit per acre to one unit per 3.2 acres. Housing units in the areas of the Pinelands Area where most affordable housing is targeted or anticipated would not be affected, as such units are typically expected to be served by public sanitary sewer.

### **Smart Growth Development Impact Analysis**

N.J.S.A. 52:14B-4 requires that proposed amendments be evaluated to determine their impacts, if any, on housing production in Planning Areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan (State Plan). Planning Areas 1 and 2 do not exist in the Pinelands Area. Likewise, the State Plan does not designate centers within the Pinelands Area. Instead, N.J.S.A. 52:18A-206.a provides that the State Plan shall rely on the Pinelands CMP for land use planning in the Pinelands. The Commission has evaluated the impact of the proposed amendments on Pinelands management areas designated by the CMP that are equivalent to Planning Areas 1 and 2 and designated centers, namely, the Regional Growth Areas, Pinelands Villages, and Pinelands Towns.

The proposed amendments allow for the continued installation and monitoring of alternate design treatment systems for residential development in the Pinelands Area. These systems are used by landowners in the unsewered portions of the Pinelands Area that are zoned for residential development on lots of less than 3.2 acres in size. These areas are located primarily in Regional

Growth Areas, Pinelands Villages, and Pinelands Towns -- management areas designated for development by the CMP that are equivalent to designated centers under the State Plan. The proposed amendments do not increase the amount of permitted residential development in these management areas; rather, they provide a continued opportunity for the development of housing in accordance with municipal zoning plans that were previously approved by the Commission. Thus, the proposed amendments are not expected to result in any changes in housing density within designated centers or in any other portions of the Pinelands Area.

There will be no effect on new construction in Planning Areas 1 and 2, as designated by the State Development and Redevelopment Plan, as these State Planning Areas do not exist in the Pinelands Area.

### **Racial and Ethnic Community Criminal Justice and Public Safety Impact**

The Commission has evaluated this rulemaking and determined that it will not have an impact on pretrial detention, sentencing, probation, or parole policies concerning adults and juveniles in the State. Accordingly, no further analysis is required.

**Full text** of the proposal follows (additions indicated with boldface **thus**; deletions indicated in brackets [thus]):

#### SUBCHAPTER 5. MINIMUM STANDARDS FOR LAND USES AND INTENSITIES

7:50-5.22 Minimum standards governing the distribution and intensity of development and land use in the Preservation Area District

(a)-(c) (No change.)

(d) Minimum lot areas for non-residential structures shall be determined by application of the standards contained [in] at N.J.A.C. 7:50-6.84(a)4, whether or not the lot is to be served by a centralized waste water treatment or collection facility pursuant to (b)4 above, provided, however, that no such structure shall be located on a parcel of less than one acre. **The requirements of this section shall not apply to a nonresidential use to be served by an individual on-site septic waste water treatment system in accordance with N.J.A.C. 7:50-6.84(a)5iii(2).**

7:50-5.23 Minimum standards governing the distribution and intensity of development and land use in Forest Areas

(a)-(c) (No change.)

(d) Minimum lot areas for non-residential structures shall be determined by application of the standards contained [in] at N.J.A.C. 7:50-6.84(a)4, whether or not the lot is to be served by a centralized waste water treatment or collection facility pursuant to (b)12 above, provided, however, that no such structure shall be located on a parcel of less than one acre. **The requirements of this section shall not apply to a nonresidential use to be served by an individual on-site septic waste water treatment system in accordance with N.J.A.C. 7:50-6.84(a)5iii(2).**

7:50-5.24 Minimum standards governing the distribution and intensity of development and land use in Agricultural Production Areas

(a)-(c) (No change.)

(d) Minimum lot areas for non-residential structures shall be determined by application of the standards contained [in] at N.J.A.C. 7:50-6.84(a)4, whether or not the lot is to be served by a centralized waste water treatment or collection facility pursuant to (b)9 above, provided, however, that no such structure shall be located on a parcel of less than one acre. **The requirements of this section shall not apply to a nonresidential use to be served by an individual on-site septic waste water treatment system in accordance with N.J.A.C. 7:50-6.84(a)5iii(2).**

7:50-5.26 Minimum standards governing the distribution and intensity of development and land use in Rural Development Areas

(a)-(c) (No change.)

(d) Minimum lot areas for non-residential structures shall be determined by application of the standards contained [in] at N.J.A.C. 7:50-6.84(a)4, whether or not the lot is to be served by a centralized waste water treatment or collection facility pursuant to (b)10 above, provided, however, that no such structure shall be located on a parcel of less than one acre. **The requirements of this section shall not apply to a nonresidential use to be served by an individual on-site septic waste water treatment system in accordance with N.J.A.C. 7:50-6.84(a)5iii(2).**

7:50-5.27 Minimum standards governing the distribution and intensity of development and land use in Pinelands Villages and Towns

(a) (No change.)

(b) No residential dwelling unit or nonresidential use shall be located on a parcel of less than one acre unless served by either:

1. A centralized waste water treatment plant; [or]

2. [A] **For residential development, a community on-site waste water treatment system serving two or more [residential] dwelling units [which] that meets the standards of N.J.A.C. 7:50-6.84(a)5 or 10.21 through 10.23, provided that the overall residential density on the parcel does not exceed one dwelling unit per acre[.]; or**

**3. For nonresidential development, an individual on-site septic waste water treatment system that meets the standards at N.J.A.C. 7:50-6.84(a)5.**

(c) (No change.)

7:50-5.28 Minimum standards governing the distribution and intensity of development and land use in Regional Growth Areas

(a) (No change.)

(b) No residential dwelling unit or nonresidential use shall be located on a parcel of less than one acre unless served by either:

1. A centralized waste water treatment plant; [or]

2. [A] **For residential development, a community on-site waste water treatment system serving two or more [residential] dwelling units [which] that meets the standards of N.J.A.C. 7:50-6.84(a)5 or 10.21 through 10.23, provided that the overall residential density on the parcel does not exceed one dwelling unit per acre[.]; or**

**3. For nonresidential development, an individual on-site septic waste water treatment system that meets the standards at N.J.A.C. 7:50-6.84(a)5.**

## SUBCHAPTER 6. MANAGEMENT PROGRAMS AND MINIMUM STANDARDS

7:50-6.84 Minimum standards for point and non-point source discharges

(a) The following point and non-point sources may be permitted in the Pinelands:

1. (No change.)

2. Development of new waste water treatment or collection facilities [which] **that** are designed to improve the level of nitrate/nitrogen attenuation of more than one existing on-site waste water treatment system where a public health problem has been identified may be exempted from the standards [of] **at** (a)1ii above provided that:

i. (No change.)

ii. The facility is designed only to accommodate waste water from existing [residential, commercial, and industrial] development;

iii.-iv. (No change.)

3.-4. (No change.)

5. Individual on-site septic waste water treatment systems that are intended to reduce the level of nitrate/nitrogen in the waste water, provided that the following standards are met:

i.-iii. (No change.)

iv. The design of the system and its discharge point, and the size of the entire contiguous parcel on which the system or systems is located, will ensure that ground water exiting from the entire contiguous parcel or entering a surface body of water will not exceed two parts per million nitrate/nitrogen calculated pursuant to the Pinelands dilution model dated December 1993, as amended, (Appendix A) subject to the provisions of (a)5v below and based on the following assumptions and requirements. For purposes of this section, the entire

contiguous parcel may include any contiguous lands to be dedicated as open space as part of the proposed development but may not include previously dedicated road rights-of-way or any contiguous lands that have been deed restricted pursuant to N.J.A.C. 7:50-5.30 or 5.47:

(1) (No change.)

(2) For Amphidrome, Bioclere, **SeptiTech**, and FAST systems:

(A) For residential development using the Amphidrome, [or] Bioclere, **or SeptiTech** system, the system will be located on a parcel of at least one acre for each individual [single family] **single-family** residential dwelling unit or the system or systems for multi-family developments will be located on a parcel with an overall density equal to or greater than one residential unit per acre of land;

(B)-(D) (No change.)

(E) Prior to the local board of health's issuance of a certificate of compliance, or similar authorization to occupy the development and utilize the treatment system, the technology manufacturer or its agent and a New Jersey licensed professional engineer shall provide written certification, in a form acceptable to the Commission and the local board of health, that installation of each system, and all components and appurtenances, including, but not limited to, pumps, switches, blowers, micro-processors, and local audio/visual and service provider notification alarms has been performed properly and the system and all of its components are operating properly. **The manufacturer or its agent shall include in the certification the cost of the installation;**

(F) The manufacturer or its agent shall provide to each owner an operation and maintenance manual [and shall provide a five-year warranty consistent with the requirements of N.J.A.C. 7:50-10.22(a)5viii];

(G) Each system shall be equipped with a functioning warning system which will activate audible and visual alarms [which] **that** can be readily seen and heard by occupants of the building served and which also provide immediate remote alarm notification to the system service provider [and shall be covered at all times by a renewable Operation and Maintenance Agreement in accordance with N.J.A.C. 7:50-6.85(b);]. **Systems may be equipped with a telemetry control panel, attached to an Internet-based interface that provides continuous remote monitoring, information management, and control of the advanced wastewater pretreatment device. Systems that do not have a telemetry control panel shall use an active phone line equipped with an auto dialer to notify the authorized service provider of alarm conditions, including if power to any of the system equipment is disconnected. The alarm and its switch shall not be on the same electrical circuit as the system pump(s), blower(s), and system component control switches. The alarm system shall periodically communicate with the authorized service provider's remote monitoring system to ensure against unauthorized alarm system disconnections;**

(H) The property owner shall record with the deed to the property a notice consistent with the sample deed notice approved pursuant to N.J.A.C. 7:50-10.22(a)2vi that identifies the technology, acknowledges the owner's responsibility to operate and maintain it and grants access, with reasonable notice, to the local board of health, the Commission and its agents for inspection and monitoring purposes. The recorded deed shall run with the property and shall ensure that the maintenance requirements are binding on any owner of the property during the life of the system and any replacement nitrogen reducing system, if applicable. Evidence that the deed notice was filed shall be provided to the local board of health

and the Commission prior to the board of health's issuance of a certificate of compliance, or similar authorization to occupy the development and utilize the treatment system; [and]

(I) The manufacturer, its agent, the system owner, or the duly authorized service provider shall make available for inspection by the Commission or its agents, upon reasonable notice, all records relating to each system installed in the Pinelands[.];

(J) For nonresidential development, no reduction in total nitrogen will be assumed. Since insufficient data is available to determine a particular efficiency of these technologies for nonresidential development, due to the high degree of variability in wastewater from nonresidential development, the use of these systems for such development will be evaluated on a case by case basis pursuant to (a)1 above if any such system is proposed to reduce total nitrogen in nonresidential effluent[.]; **and**

**(K) Each system shall be covered by an initial five-year warranty and a renewable, minimum five-year maintenance contract that cannot be arbitrarily cancelled and that includes a provision requiring that the manufacturer, or its agent, inspect the system at least once a year and undertake any maintenance or repairs determined to be necessary during any such inspection or as a result of observations made at any other time, including during effluent monitoring. The warranty and maintenance contract shall be consistent with the sample warranty and maintenance contract approved pursuant to N.J.A.C. 7:50-10.22(a)2v.**

(3) (No change.)

v.-ix. (No change.)

6. (No change.)

7:50-6.85 Individual and non-individual onsite subsurface sewage disposal systems and petroleum tank maintenance

(a) (No change.)

(b) All Pinelands alternate design wastewater treatment systems in active use shall be equipped with a functioning alarm [dialing capability] **system that conforms to the requirements at N.J.A.C. 7:50-6.84(a)5iv(2)(G)** and shall be covered under a renewable operation and maintenance [agreement] **contract that conforms to the requirements at N.J.A.C. 7:50-6.84(a)5iv(2)(K)**, for as long as the system is in active use. [The operation and maintenance agreement shall, at minimum, provide for at least once annual service calls by a qualified service technician. The operation and maintenance agreement shall also provide for periodic onsite inspection and maintenance service visits that meet the minimum operation and maintenance requirements of the Pinelands alternate design wastewater treatment system manufacturer or vendor.]

(c)-(d) (No change.)

## SUBCHAPTER 10. PILOT PROGRAMS

7:50-10.21 Purpose

(a)-(b) (No change.)

(c) In 2000, the Commission formed a special committee to investigate alternate septic system technologies that would better meet the water quality requirements [of] **at N.J.A.C. 7:50-6, Part VIII**, for residential development on lots smaller than 3.2 acres, where such lots are currently authorized by N.J.A.C. 7:50-5. After conducting extensive research, the Committee identified five technologies that [can] **could** be expected to meet these water quality

requirements for residential development. The Committee recommended that an interim program be developed for the approval, installation, and monitoring of the five technologies for use under certain conditions and safeguards. [Based on the available information, the Committee recommended that the Ashco RFS III system be allowed on residential lots of at least 1.5 acres and the other four systems be allowed on residential lots of at least one acre. In November 2006, the Commission decided to remove the Ashco RFS III system from the Alternate Design Treatment Systems Pilot Program. The Commission made this decision due to the manufacturer's failure to make systems commercially available in the Pinelands during the initial five-year period of the pilot program or to otherwise demonstrate the ability or intention for future participation in the pilot program.] Residential development using any of the authorized systems would still have to conform to the lot size and density requirements contained in the municipal land use ordinances that have been certified by the Commission pursuant to N.J.A.C. 7:50-3. [In 2010, the Commission decided to release two of the original pilot program technologies (Amphidrome and Bioclere) from the pilot program and authorize them for permanent use, subject to the provisions of N.J.A.C. 7:50-6.84(a)5iv(3). The Commission also decided to provide an opportunity for expansion of the pilot program to include certain other residential nutrient reducing onsite wastewater treatment technologies that have attained verification and/or certification through the United States Environmental Protection Agency Environmental Technology Verification (USEPA ETV) Program or the National Sanitation Foundation/ American National Standards Institute (NSF/ANSI) Standard 245 testing program. Information regarding the USEPA ETV Program is available from the United States Environmental Protection Agency website at: <http://www.epa.gov/etv/vt-wqp.html#dwtt> and <http://www.epa.gov/etv/pubs/600s07004.pdf>. Information regarding the NSF/ANSI Standard

245 testing program is available from the National Sanitation Foundation website at:

[http://www.nsf.org/business/wastewater\\_certification/standards.asp?program=WastewaterCer#2](http://www.nsf.org/business/wastewater_certification/standards.asp?program=WastewaterCer#2)

45. In 2013, the Commission decided to remove the Cromaglass technology from the Alternate Design Treatment Systems Pilot Program. The Commission made this decision based on the Cromaglass technology's inability to meet the water quality standards contained in N.J.A.C. 7:50-6, Part VIII. In 2016, the Commission released the only remaining original pilot program technology (FAST) from the pilot program and authorize it for permanent use on parcels of at least 1.4 acres in size, subject to the provisions of N.J.A.C. 7:50-6.84(a)5iv(3).]

(d) (No change.)

**(e) Upon adoption of the Alternate Design Treatment Systems Pilot Program in 2002, the Commission authorized five technologies to be tested for residential use in the Pinelands Area: Amphidrome, Ashco RFS III, Bioclere, Cromaglass, and FAST. In 2006, the Commission removed the Ashco RFS III technology from the pilot program due to the manufacturer's failure to make systems commercially available in the Pinelands Area during the initial five-year period of the pilot program or to otherwise demonstrate the ability or intention for future participation in the program. In 2013, the Commission removed the Cromaglass technology from the pilot program due to its inability to meet the water quality standards at N.J.A.C. 7:50-6, Part VIII. The remaining three technologies successfully demonstrated their ability to meet the water quality standards of this Plan and were released from the pilot program and authorized for permanent use in the Pinelands Area in accordance with N.J.A.C. 7:50-6.84(a)5iv. The Amphidrome and Bioclere technologies were released in 2010 and authorized for residential development on parcels of**

at least one acre. The FAST technology was released in 2016 and authorized for residential development on parcels of at least 1.4 acres.

(f) In 2010, amendments to this subchapter authorized the Commission to expand the pilot program and add more residential nutrient reducing onsite waste water treatment technologies that have attained verification and/or certification through the United States Environmental Protection Agency Environmental Technology Verification (USEPA ETV) Program or the National Sanitation Foundation/American National Standards Institute (NSF/ANSI) Standard 245 testing program. Information regarding the USEPA ETV Program is available from the United States Environmental Protection Agency website at: <http://www.epa.gov/etv/vt-wqp.html#dwtt> and <http://www.epa.gov/etv/pubs/600s07004.pdf>. Information regarding the NSF/ANSI Standard 245 testing program is available from the National Sanitation Foundation website at: [http://www.nsf.org/business/wastewater\\_certification/standards.asp?program=Wastewater\\_Cer#245](http://www.nsf.org/business/wastewater_certification/standards.asp?program=Wastewater_Cer#245). Four technologies were evaluated pursuant to N.J.A.C. 7:50-10.23(b) and accepted into the pilot program in 2011. In 2020, the Commission released one of those technologies, SeptiTech, from the pilot program in recognition of its ability to meet the water quality standards at N.J.A.C. 7:50-6, Part VIII, and authorized it for residential development on parcels of at least one acre in accordance with N.J.A.C. 7:50-6.84(a)5iv. The Commission also removed two technologies from the pilot program in 2020: BioBarrier, which failed to meet the water quality standards at N.J.A.C. 7:50-6, Part VIII; and Busse GT, which could not be evaluated as the technology was never installed in the Pinelands Area after being accepted into the pilot program.

7:50-10.22 General standards

(a) Alternate design pilot program treatment systems shall be authorized for residential use in all municipalities provided that the following standards are met:

1. (No change.)
2. The manufacturer of the alternate design pilot program treatment system has

submitted to the Executive Director and the Executive Director has approved:

- i. (No change.)
- ii. A description of the automatic dialing system required [in (a)6ii] **at (a)5ii**

below, and a description of how and when that system will function;

- iii.-v. (No change.)
- vi. A sample deed notice that is consistent with [(a)6viii] **(a)5ix** below.

3. Subject to being increased during the pilot program based on the results of a hearing conducted pursuant to [(a)5] **(a)4** below, each USEPA ETV or NSF/ANSI Standard 245 technology approved by the Commission for participation in the pilot program pursuant to N.J.A.C. 7:50-10.23(b) shall be located on a parcel containing sufficient land area to comply with the two parts per million nitrogen requirement and the water quality standards contained [in] **at** N.J.A.C. 7:50-6, Part VIII, as calculated using the Pinelands Septic Dilution Model and the expected effluent total nitrogen value for the technology based upon the findings of the USEPA ETV and/or NSF/ANSI Standard 245 test data.

4. The Executive Director shall [submit an annual] **periodically** report to the Commission [describing] **on the** installation, maintenance, and performance data for each technology. The Executive Director **shall** also [shall submit an interim] report to the Commission

if [it is determined] **he or she determines** there is a significant installation, maintenance, or performance issue with one or more technologies that needs to be addressed [before the issuance of the next annual report]. Copies of [each annual and interim] **any report issued by the Executive Director** shall be provided to each manufacturer and agent of a technology that is discussed in that report. If [it is determined in a] **the report determines** either that a manufacturer, or its agent, is not adhering to any of the requirements of this pilot program or that any one of the technologies, based on maintenance or installation issues or on an evaluation of all the monitoring results for that technology under this pilot program, is not meeting the minimum water quality standards [in] **at N.J.A.C. 7:50-6.83** or the two parts per million total nitrogen requirement [in (a)5x] **at (a)5xii** below on all lots smaller than 3.2 acres or on lots smaller than a particular size because the effluent exiting the system is higher than was anticipated in establishing the lot sizes [in] **at (a)3** above:

i.-ii. (No change.)

5. Conditions for use of alternate design pilot program treatment systems are as follows:

i. (No change.)

ii. Each system shall be equipped with [automatic dialing capability to the manufacturer, or its agent, in the event of a mechanical malfunction] **a functioning alarm system that conforms to the requirements at N.J.A.C. 7:50-6.84(a)5iv(2)(G)**. The manufacturer or its agent shall report to the Executive Director each such malfunction within five days of its occurrence, describing the nature of the mechanical malfunction, the measures taken to correct the malfunction, and the success of those measures[. Periodic dialing or some other fail safe mechanism shall be provided to ensure against unauthorized disconnections];

iii-iv. (No change.)

v. The manufacturer or its agent and a New Jersey licensed professional engineer shall certify to the Commission and the local board of health that installation of each system has been properly completed and that the system and all of its components are operating properly. The manufacturer, or its agent, shall include in the certification the cost of the installation [and a description of any problem encountered during the installation];

vi.-vii. (No change.)

viii. Each system shall be covered by [a] **an initial** five-year warranty and a **renewable**, minimum five-year maintenance contract that cannot be **arbitrarily** cancelled [and is renewable] and which includes a provision requiring that the manufacturer or its agent inspect the system at least once a year and undertake any maintenance or repairs determined to be necessary during any such inspection or as a result of observations made at any other time, including [when] **during** effluent monitoring [occurs or that is identified based on the results of any effluent monitoring]. Said warranty and maintenance contract shall be consistent with the sample warranty and maintenance contract approved pursuant to (a)2v above[. In addition to complying with the reporting requirements of N.J.A.C. 7:9A-3.4(b) concerning system malfunctions, the manufacturer or agent shall report to the Executive Director and local board of health on all necessary maintenance and repairs within 10 days and shall report to the Executive Director and local board of health semi-annually as to the inspections conducted during the preceding six months including a description of any maintenance and repairs that were undertaken and the success of those measures and their costs];

ix. The property owner shall record, with the deed to the property, a notice consistent with the sample deed notice approved pursuant to (a)2vi above that identifies the

technology, acknowledges the owner's responsibility to operate and maintain it in accordance with the manual required [in (a)6vi] **at (a)2vi** above, and grants access, with reasonable notice, to the local board of health, the Commission, and its agents for inspection and monitoring purposes. The recorded deed shall run with the property and shall ensure that the maintenance requirements are binding on any owner of the property during the life of the system and that the monitoring requirements are binding on any owner of the property during the time period the monitoring requirements apply pursuant to this pilot program or any subsequent [regulations] **rules** adopted by the Commission that apply to said system;

x. (No change.)

xi. **By June 5 and December 5** of each calendar year, until the conclusion of the pilot program, each manufacturer or its agent shall submit to the Executive Director a report [which] **that** includes the number of systems installed during the previous six months and since the beginning of the pilot program, a discussion of any installation problems and what has been done to address those problems, an analysis and evaluation of the monitoring results to date, and a discussion of any operational or maintenance issues, including the number of systems requiring maintenance or repairs and the nature and success of such maintenance and repairs, and the number of times the automatic dialing system was set off and the reasons for each such occurrence;

xii.-xiii. (No change.)

(b) (No change.)

(c) The technology manufacturer or its agent shall troubleshoot and attempt to remediate substandard performance of any system that fails to meet effluent concentration targets after two consecutive sampling events by implementing measures including, but not limited to,

homeowner education, process adjustments, and equipment retrofits. The technology manufacturer or its agent shall report to the Executive Director and local board of health semi-annually on all remedial measures undertaken, pursuant to [(a)6viii] **(a)5viii** above.

7:50-10.23 Pinelands Commission approval and evaluation

(a)-(b) (No change.)

(c) The Executive Director shall review this pilot program relative to any approved USEPA and NSF/ANSI Standard 245 treatment technologies no later than August 5, [2017] **2025**, and shall report to the Commission within three months of that date on its implementation. The Executive Director shall determine whether the pilot program is successful in accordance with the following criteria:

1. (No change.)

2. The maintenance required for each alternate design pilot program treatment system technology to meet the efficiency set forth [in (b)1] **at (c)1** above;

3.-6. (No change)

(d) If the Executive Director finds that the number of monitoring events for any approved USEPA and NSF/ANSI Standard 245 treatment technologies is not adequate to evaluate any of those technologies under this pilot program in accordance with (c) above, the Executive Director shall so inform the Commission and, upon receiving the Commission's approval, initiate a second review to be completed no later than August 5, [2019] **2027**.

(e)-(g) (No change.)