

(2) Subtract from (b)1i(1) above the number of Pinelands Development Credit redemption opportunities to be realistically afforded by the zoning provisions contained in Tabernacle Township's certified land use ordinances for any area being redesignated to a Regional Growth Area; and

(3) Multiply the remainder by two-thirds to calculate the number of Pinelands Development Credit redemption opportunities likely to be lost as a result of the redesignations.

ii. The effect on Pinelands Development Credit allocations is to be calculated as follows:

(1) The number of Pinelands Development Credits eligible for allocation to any area being redesignated to an Agricultural Production Area is to be estimated in accordance with N.J.A.C. 7:50-5, Part IV; and

(2) Subtract from (b)1ii(1) above the estimated number of Pinelands Development Credits extinguished as a result of any redesignation of land from an Agricultural Production Area classification to another management area.

iii. The total number of Pinelands Development Credits to be purchased and redeemed equals the sum of (b)1i and ii above.

New Rule, R.2000 d.232, effective June 5, 2000.  
See: 32 N.J.R. 151(a), 32 N.J.R. 2082(a).

#### **7:50-10.16 Pinelands Commission approval and evaluation**

(a) In accordance with N.J.A.C. 7:50-3, the Commission approved management area changes and zoning provisions in Tabernacle Township and Pemberton Township through its certification of Tabernacle Township Ordinance 1999-1 and Pemberton Township Ordinance 17-1999 on September 10, 1999. This pilot program shall be evaluated based on the management area changes and zoning provisions implemented by those ordinances and any subsequent amendments or corrections which may be made to them in the future.

(b) The Executive Director shall review this pilot program and report to the Commission on its implementation three years following completion of construction of the public educational facility in Tabernacle Township. The Executive Director shall determine whether the pilot program is successful in accordance with the following criteria:

1. The purchase and redemption of Pinelands Development Credits in accordance with N.J.A.C. 7:50-10.15(b) has resulted in the permanent protection of approximately 1,000 acres of land in the Preservation Area District, Special Agricultural Production Area and/or Agricultural Production Area;

2. Development of the public educational facility has had no significant adverse impact on adjacent agricultural lands within Tabernacle Township's Agricultural Production Area;

3. Development of the public educational facility has not resulted in unanticipated or unintended development on adjacent and surrounding lands in Tabernacle Township's Rural Development Area or Regional Growth Area and has otherwise proven to be compatible with the existing character of the adjacent Pinelands Village;

4. Any lands included in the redesignated area in Tabernacle Township which were not utilized for the public educational facility continue to be put to those uses which existed prior to the redesignation, or, if not, have been converted to uses which are compatible with those of the surrounding area;

5. The redesignated lands in Pemberton Township have been permanently protected through the purchase of easements under the Farmland Preservation Program or other means;

6. Redesignation of the lands in Pemberton Township has contributed to the continued long-term viability of that municipality's Agricultural Production Area and land use conflicts with the remaining Regional Growth Area have not materialized; and

7. The pilot program, when viewed in its entirety, has served to further the purposes and objectives of the Pinelands Protection Act, the Federal Act and this Plan.

(c) If the Executive Director finds that this pilot program has not been implemented or has not been successful based on the criteria set forth in (b) above, the Executive Director shall, if appropriate, initiate the procedures set forth in N.J.A.C. 7:50-3.61 through 3.65 and, if necessary, propose an amendment to this subchapter, in accordance with N.J.A.C. 7:50-7, to repeal the pilot program. If the Pinelands Commission revokes, suspends or modifies the certification of this program, such action shall not affect the certification status of the remaining provisions of the municipal land use ordinances unless the municipalities ignore or refuse to implement such revocation, suspension or modification order.

(d) If the Executive Director finds that this pilot program has been successful based on the criteria set forth in (b) above, the Executive Director may propose an amendment to this Plan in accordance with N.J.A.C. 7:50-7 to broaden its applicability in the Pinelands; provided, however, that no such proposal shall be made until the Executive Director has submitted a report to the Commission which evaluates the potential for use of intermunicipal transfers for specified uses in defined situations throughout the Pinelands, as well as whether or not alternative techniques and processes exist or could be developed which might provide for the development of public educational facilities in a manner which better addresses the goals and objectives of this chapter and

the Pinelands Protection Act. The Executive Director's report shall specifically address the applicability of the changes required by the Secretary of the Interior to the now repealed N.J.A.C. 7:50-5.33 to any proposed amendment to this Plan that is recommended in the report.

New Rule, R.2000 d.232, effective June 5, 2000.  
See: 32 N.J.R. 151(a), 32 N.J.R. 2082(a).

#### 7:50-10.17 through 7:50-10.20 (Reserved)

### PART IV—ALTERNATE DESIGN TREATMENT SYSTEMS PILOT PROGRAM

#### 7:50-10.21 Purpose

(a) The high quality of surface and ground water resources in the Pinelands is one of the defining characteristics of the region. Both the Federal Act and the Pinelands Protection Act call for the preservation, protection and enhancement of the significant values of the land and water resources of the Pinelands and its unique ecosystem. Water resources in the Pinelands are protected by a combination of land use and water quality programs established in N.J.A.C. 7:50-5 and 6.

(b) The water quality requirements of N.J.A.C. 7:50-6, Part VIII, include provisions which are aimed at controlling the amount of nitrogen that enters the environment both because nitrogen in itself is a significant pollutant, but also because it often serves as an indicator of changes in overall water quality. To that end, N.J.A.C. 7:50-6.84(a) limits the concentration of nitrogen in wastewater to two parts per million at the property line. Based on the Pinelands Septic Dilution Model (found in N.J.A.C. 7:50-6 Appendix A), a standard septic system, to which no nitrogen removal is attributed, requires at least 3.2 acres to dilute the concentration of nitrogen to two parts per million at the property line for a single family dwelling. N.J.A.C. 7:50-5 authorizes residential development utilizing an on-site wastewater system on lots between one and 3.2 acres in certain circumstances. In those circumstances, N.J.A.C. 7:50-6.84(a)5 currently allows lots between 1.5 and 3.2 acres in size to be developed if a RUCK on-site wastewater treatment system is used. However, it has been several years since a RUCK system has been installed in the Pinelands Area. In those circumstances prior to August 5, 2002, pressure dosed septic systems were allowed to be utilized on lots between one and 3.2 acres in size. Studies undertaken by the Commission have found that the pressure dosed septic system being installed in the Pinelands Area has not been effective on lots *smaller than* 3.2 acres in meeting the water quality standards of N.J.A.C. 7:50-6, Part VIII.

(c) In 2000, the Commission formed a special committee to investigate alternate septic system technologies that would better meet the water quality requirements of 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 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. Residential development using any of these 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. The Alternate Design Waste Water Treatment Systems Pilot Program is authorized as a means to test whether these systems can be maintained and operated so as to meet the water quality standards contained in N.J.A.C. 7:50-6, Part VIII with maintenance requirements that a homeowner can be reasonably expected to follow. Since these systems do require maintenance beyond that which would be required for a standard septic system in order to optimize treatment efficiencies, municipalities will be encouraged to allow community systems to be installed in larger residential developments where densities between one and 3.2 acres are currently authorized. Since insufficient data is available to determine a particular efficiency of these alternate design pilot program treatment systems for non-residential development, the use of these systems for non-residential development will be evaluated on a case-by-case basis pursuant to N.J.A.C. 7:50-6.84(a)1 if any such system is proposed to reduce total nitrogen in the effluent for non-residential development.

New Rule, R.2002 d.247, effective August 5, 2002.  
See: 34 N.J.R. 722(a), 34 N.J.R. 2804(b).

#### 7:50-10.22 General standards

(a) Alternate design pilot program treatment systems shall be authorized for residential use where the proposed lot size and density is consistent with the provisions of N.J.A.C. 7:50-5 and the municipal land use ordinance that has been certified by the Commission pursuant to N.J.A.C. 7:50-3 and provided that the following standards are met:

1. Systems shall be authorized only in those municipalities which have adopted an ordinance that is in conformance with the requirements of this Part and has been certified by the Commission pursuant to N.J.A.C. 7:50-3.

2. The manufacturer of the alternate design pilot program treatment system has submitted to the Executive Director and the Executive Director has approved:

i. Detailed specifications and an engineering design for the system. Separate specifications and designs may be submitted for systems serving an individual dwelling and for community on-site systems. These specifications and designs may only be approved by the Executive Director if they are determined to be consistent with the description of the relevant technology contained in the report prepared by Anish R. Jantrania, Ph.D., P.E., M.B.A. entitled "Performance Expectations for Selected On-site Wastewater Treatment Systems," dated December, 2000, incorporated herein by reference, and available at the principal office of the Commission. Subsequent to that approval, manufacturers may submit modified specifications or engineering designs for the system which may then be utilized if the Executive Director determines the modifications are consistent with the originally approved specifications and engineering design and the modified system will be at least as effective as the originally approved system;

ii. A description of the automatic dialing system required in (a)6ii below, and a description of how and when that system will function;

iii. A monitoring protocol that ensures that sufficient data will be obtained to enable a determination of whether the technology complies with the two ppm nitrogen requirement and the water quality standards contained in N.J.A.C. 7:50-6, Part VIII. For each system being monitored, the protocol will provide at a minimum that the effluent will be sampled at least quarterly for a period of at least three years and that at least the following parameters will be analyzed: total nitrogen, nitrate-nitrogen, nitrite-nitrogen, ammonia-nitrogen, total kjeldahl nitrogen and chlorides;

iv. An operation and maintenance manual;

v. A sample warranty and maintenance contract; and

vi. A sample deed notice that is consistent with (a)6viii below.

3. Subject to being increased during the pilot program based on the results of a hearing conducted pursuant to (a)5 below, each Ashco RFS III system shall be located on a parcel containing at least 1.5 acres for each dwelling unit that will be served by the system and each FAST, Cromaglass, Bioclere or Amphidrome system shall be located on a parcel containing at least one acre for each dwelling unit that will be served by the system.

4. The alternate design pilot program treatment systems identified in (a)3 above are authorized to be installed for a period of five years from August 5, 2002.

5. The Executive Director shall submit an annual report to the Commission describing installation, maintenance and performance data for each technology. The Executive Director also shall submit an interim report to the Commission if it is determined 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 report shall be provided to each manufacturer and agent of a technology that is discussed in that report. If it is determined in a report 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 N.J.A.C. 7:50-6.83 or the two parts per million total nitrogen requirement in (a)6x 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 (a)3 above, then any subsequent local approvals for a development that is proposing use of said technology shall be determined to raise a substantial issue and shall be reviewed by the Commission pursuant to the provisions set forth in N.J.A.C. 7:50-4.31 through 4.42. Notice of any hearing scheduled pursuant to this paragraph and any subsequent determination on the application made by the Executive Director or the Commission pursuant to N.J.A.C. 7:50-4.31 through 4.42 shall be provided to the manufacturers of said system and any agent designated by said manufacturer. The annual or interim report issued by the Executive Director shall be part of the hearing record in any hearing conducted pursuant to this paragraph.

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

i. No more than 10 alternate design pilot program septic systems utilizing the same technology shall be installed in the development of any parcel if those systems are each serving one single family dwelling;

ii. Each system shall be equipped with automatic dialing capability to the manufacturer, or its agent, in the event of a mechanical malfunction. 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. Each system shall be designed and constructed so that samples of effluent leaving the alternate design pilot program septic system can be readily taken to confirm the performance of the technology;

iv. The manufacturer or its agent shall be responsible for providing resources for the collection and analysis of effluent samples in accordance with the protocol approved pursuant to (a)2iii above. The samples shall be taken from each system that is installed unless the manufacturer or agent of a particular technology demonstrates, and the Executive Director concurs, that samples from a specified representative number of systems of that technology will provide sufficient information to enable an evaluation of that technology. Each sample shall be analyzed by a New Jersey certified laboratory and the results of each analysis shall be reported to the Executive Director by the manufacturer or its agent within five days of receipt from the certified laboratory. The manufacturer or its agent shall also submit to the Executive Director a quarterly evaluation of all monitoring conducted prior to that evaluation;

v. The manufacturer or its agent shall certify to the Commission and the local board of health that installation of each system has been properly completed and shall include in the certification the cost of the installation and a description of any problem encountered during the installation;

vi. The manufacturer or its agent shall provide to each owner an operation and maintenance manual approved pursuant to (a)2iv above;

vii. Each system shall be covered by a five-year warranty and a minimum five-year maintenance contract that cannot be 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 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;

viii. 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 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 adopted by the Commission that apply to said system;

ix. The manufacturer or its agent shall make available for inspection by the Commission or its agents, upon reasonable notice, all records relating to each system installed in the Pinelands pursuant to this pilot program;

x. By July 5, 2003 and every six months thereafter until the conclusion of the pilot program, each manufacturer or its agent shall submit to the Executive Director a report which 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; and

xi. The system complies with the requirements of N.J.A.C. 7:50-6.84(a)4i through v.

(b) The property owner shall not be held liable for poor system performance if the system has been properly operated and maintained.

New Rule, R.2002 d.247, effective August 5, 2002.

See: 34 N.J.R. 722(a), 34 N.J.R. 2804(b).

Public Notice: Ashco-A-Corporation, RFS<sup>III</sup> Wastewater Treatment System.

See: 35 N.J.R. 2750(b).

Public Notice: Amphidrome<sup>®</sup> Treatment System.

See: 35 N.J.R. 4135(b).

Ascho-A-Corporation, RFS<sup>III</sup> Gravity Dosing Treatment System.

See: 35 N.J.R. 4136(a).

### 7:50-10.23 Pinelands Commission approval and evaluation

(a) If otherwise appropriate under N.J.A.C. 7:50-3, the Commission shall approve a municipal ordinance authorizing use of alternate design pilot program treatment systems if it finds that the standards of N.J.A.C. 7:50-10.22 are met.

(b) The Executive Director shall review this pilot program four years after August 5, 2002 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. The level of nitrogen in the effluent in each alternate design pilot program treatment system technology based on an evaluation of all monitoring results for that technology under this pilot program;
2. The maintenance required for each alternate design pilot program treatment system technology to meet the efficiency set forth in (b)1 above;
3. The cost of installing and maintaining each alternate design pilot program treatment system technology;
4. The problems associated with the installation, operation and maintenance of each alternate design pilot program treatment system technology and the frequency with which each such problem occurs, the measures taken to eliminate any such problem and the success of those measures;
5. The number of systems of each technology that have been authorized under the pilot program; and
6. Whether the pilot program, when viewed in its entirety, has served to further the purposes and objectives of the Pinelands Protection Act, the Federal Act and this Plan.

(c) If the Executive Director finds that the number of monitoring events for any alternate design pilot program treatment system technology is not adequate to evaluate that technology under this pilot program in accordance with (b) above, the Executive Director shall so inform the Commission and, upon receiving the Commission's approval, initiate a second review to be completed within six years of August 5, 2002;

(d) If the Executive Director finds that this pilot program has not been implemented or has not been successful for one or more of the alternate design pilot program treatment system technologies based on the criteria set forth in (b)

above, the Executive Director shall propose, within three months of the issuance of the report required in (b) above, an amendment to this subchapter, in accordance with N.J.A.C. 7:50-7, to repeal the pilot program as to that technology or technologies.

(e) If the Executive Director finds that this pilot program has not been successfully implemented for one or more of the alternate design pilot program treatment system technologies because insufficient numbers of that technology or technologies have been installed to fully evaluate any such technology but the available information indicates that the technology can significantly reduce the level of nitrogen in the effluent, the Executive Director may propose an amendment to this subchapter, in accordance with N.J.A.C. 7:50-7, to establish a new pilot program as to that technology or technologies.

(f) If the Executive Director finds that this pilot program has been successful for one or more of the alternate design pilot program treatment system technologies based on the criteria set forth in (b) above, the Executive Director shall propose, within three months of the issuance of the report required in (b) above, an amendment to this Plan in accordance with N.J.A.C. 7:50-7 to permit installation of said technology or technologies on a permanent basis. Prior to submitting that proposal, the Executive Director shall specify either in the report required in (b) above or in a separate report to the Commission the institutional and governmental arrangements necessary to ensure adequate maintenance and monitoring of each such technology and the minimum lot size required for each such technology to comply with the water quality standards of N.J.A.C. 7:50-6, Part VIII.

(g) Nothing in this section shall be construed to authorize the installation of an alternate design pilot program treatment system after August 5, 2007 as set forth in N.J.A.C. 7:50-10.22(a)4, unless a rule has been adopted by the Commission which expressly authorizes such installation pursuant to (e) or (f) above.

New Rule, R.2002 d.247, effective August 5, 2002.  
See: 34 N.J.R. 722(a), 34 N.J.R. 2804(b).