

7:50-6.82 Water quality management program required

In order to be certified under the provisions of N.J.A.C. 7:50-3, a municipal master plan and land use ordinance must provide for the protection of surface and ground water quality in the Pinelands. It is not necessary that the municipal program incorporate the literal terms of the program set out in this Part; rather, a municipality may adopt alternative and additional techniques which will achieve the equivalent protection of surface and ground water quality as would be achieved under the provisions of this Part.

7:50-6.83 Minimum standards necessary to protect and preserve water quality

(a) All development permitted under this Plan, or under a certified county or municipal master plan or land use ordinance, shall be designed and carried out so that the quality of surface and ground water will be protected and maintained. For the purpose of this Part, agricultural use shall not be considered development.

(b) Except as specifically authorized in this Part, no development which degrades surface or ground water quality or which establishes new point sources of pollution shall be permitted.

(c) No development shall be permitted which does not meet the minimum water quality and potable water standards of the State of New Jersey or the United States.

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. Development of new or the expansion of existing commercial, industrial, and waste water treatment facilities, or the development of new or the expansion of existing non-point sources otherwise permitted in N.J.A.C. 7:50-5, except those specifically regulated in (a)2 through 6 below, provided that:

i. There will be no direct discharge into any surface water body;

ii. All discharges from the facility or use are of a quality and quantity such that ground water exiting from the parcel of land or entering a surface body of water will not exceed two parts per million nitrate/nitrogen;

iii. All public waste water treatment facilities are designed to accept and treat septage; and

iv. All storage facilities, including ponds or lagoons, are lined to prevent leakage into ground water.

2. Development of new waste water treatment or collection facilities which 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 (a)1ii above provided that:

i. There will be no direct discharge into any surface water body;

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

iii. Adherence to (a)1ii above cannot be achieved due to limiting site conditions or that the costs to comply with the standard will result in excessive user fees; and

iv. The design level of nitrate/nitrogen attenuation is the maximum possible within the cost limitations imposed by such user fee guidelines but in no case shall ground water exiting from the parcel or entering a surface body of water exceed five parts per million nitrate/nitrogen.

3. Improvements to existing commercial, industrial, and waste water treatment facilities which discharge directly into surface waters provided that:

i. There is no practical alternative available that would adhere to the standards of N.J.A.C. 7:50-6.84(a)1i.

ii. There is no increase in the existing approved capacity of the facility; and

iii. All discharges from the facility into surface waters are such that the nitrate/nitrogen levels of the surface waters at the discharge point do not exceed two parts per million. In the event that nitrate/nitrogen levels in the surface waters immediately upstream of the discharge point exceed two parts per million, the discharge shall not exceed two parts per million nitrate/nitrogen.

4. Individual on-site septic waste water treatment systems which are not intended to reduce the level of nitrate/nitrogen in the waste water, provided that the following standards are met:

i. The proposed development to be served by the system is otherwise permitted pursuant to N.J.A.C. 7:50-4 and 5;

ii. 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, incorporated herein by reference as subchapter Appendix A, subject to the provisions of (a)4iii below. 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;

iii. Only contiguous land located within the same municipal zoning district and Pinelands management area as the proposed septic waste water treatment system or systems may be utilized for septic dilution purposes, except for the development of an individual single family dwelling on a lot existing as of January 14, 1981, non-residential development on a lot of five acres or less existing as of January 14, 1981, or cluster development as permitted by N.J.A.C. 7:50-5.19;

- iv. The depth to seasonal high water table is at least five feet;
 - v. Any potable water well will be drilled and cased to a depth of at least 100 feet, unless the well penetrates an impermeable clay aquiclude, in which case the well shall be cased to at least 50 feet;
 - vi. The system will be maintained and inspected in accordance with the requirements of N.J.A.C. 7:50-6.85;
 - vii. The technology has been approved for use by the New Jersey Department of Environmental Protection; and
 - viii. Flow values for non-residential development shall be determined based on the values contained in N.J.A.C. 7:9A-7.4, as amended, except that number of employees may not be utilized in calculating flow values for office uses. In the event that N.J.A.C. 7:9A-7.4 does not provide flow values for a specific use, but a flow value is assigned for that use in 7:14A-23.3(a), the flow value specified in N.J.A.C. 7:14A-23.3(a) shall be used in calculating flow.
5. Individual on-site septic waste water treatment systems which are intended to reduce the level of nitrate/nitrogen in the waste water, provided that the following standards are met:
- i. The technology has been approved for use by the New Jersey Department of Environmental Protection;
 - ii. The proposed development to be served by the system is otherwise permitted pursuant to N.J.A.C. 7:50-4 and 5;
 - iii. The proposed development is either residential or, if non-residential, is located in a Regional Growth Area, a Pinelands Village, a Pinelands Town or in an area within the Preservation Area District designated pursuant to N.J.A.C. 7:50-5.22(b)7;
 - 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) For RUCK septic systems:

(A) For residential development, the system will reduce total nitrogen concentration in the waste water entering the disposal field to 20 parts per million; or

(B) For non-residential development, no reduction in total nitrogen concentration will be assumed, except that a reduction in total nitrogen concentration in the waste water entering the disposal field to 20 parts per million will be assumed if either:

(I) The use is comparable to a single family residential use and it can be demonstrated that the waste water quality is similar to residential waste water; or

(II) The applicant demonstrates that the nitrate/nitrogen concentration of the waste water flow is similar to that of a residential use and the ratio of greywater to blackwater is similar to that of a residential use.

(2) For pressure dosed septic systems:

(A) For residential development, either the system will be located on a lot of at least one acre for each individual 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 dwelling unit per acre of land; or

(B) For non-residential development, no reduction in total nitrogen concentration will be assumed, except that a reduction in total nitrogen concentration in the waste water entering the system by 40 percent will be assumed if either:

(I) The use is comparable to a single family residential use and it can be demonstrated that the waste water quality is similar to residential waste water; or

(II) The applicant demonstrates that the nitrogen concentration of the waste water flow is similar to that of a residential use.

(3) Other on-site septic waste water treatment systems shall only be credited with reducing total nitrogen concentration to the extent authorized by an experimental monitoring program approved by the Pinelands Commission. Such an experimental monitoring program shall only be approved if:

(A) The specific theoretical basis for the nitrogen removal process to be utilized is sound and has been satisfactorily documented in the scientific literature;

(B) The nitrogen removal efficiency of operating systems using the design concept to service one or more types of development has been satisfactorily demonstrated and adequately documented in the scientific literature;

(C) The proposed application of the treatment process could be expected to meet the two parts per million nitrate/nitrogen ground water quality standard in the Pinelands Area and the ability to meet this requirement can be continuously achieved on a long-term basis;

(D) Systems utilizing the design concept can be expected not to require any maintenance beyond that required of conventional septic systems or, if additional maintenance is required, sufficient measures can feasibly be taken to insure that the system will be properly maintained and operated;

(E) A comprehensive monitoring program is feasible to fully evaluate the nitrogen removal efficiency of the application of the proposed design concept;

(F) The system contains components which will allow it to function as a standard system if the alternate experimental technology were to fail; and

(G) The design concept can be expected to meet those requirements of the New Jersey Department of Environmental Protection necessary to receive a Treatment Works Approval.

v. Only contiguous land located within the same municipal zoning district and Pinelands management area as the proposed septic waste water treatment system or systems may be utilized for septic dilution purposes, except for the development of an individual single family dwelling on a lot existing as of January 14, 1981, non-residential development on a lot of five acres or less existing as of January 14, 1981, or cluster development as permitted by N.J.A.C. 7:50-5.19;

vi. The depth to seasonal high water table is at least five feet;

vii. Any potable water well will be drilled and cased to a depth of at least 100 feet, unless the well penetrates an impermeable clay aquiclude, in which case the well shall be cased to at least 50 feet;

viii. The system will be maintained and inspected in accordance with the requirements of N.J.A.C. 7:50-6.85;

ix. Flow values for non-residential development shall be determined based on the values contained in N.J.A.C. 7:9A-7.4, as amended, except that number of employees may not be utilized in calculating flow values for office uses. In the event that N.J.A.C. 7:9A-7.4 does not provide flow values for a specific use, but a

flow value is assigned for that use in 7:14A-23.3(a), the flow value specified in N.J.A.C. 7:14A-23.3(a) shall be used in calculating flow.

6. Surface water runoff, provided that:

i. The total runoff generated from any net increase in impervious surfaces by a 10 year storm of a 24 hour duration shall be retained and infiltrated on-site. Runoff volumes shall be calculated in accordance with the United States Soil Conservation Service Technical Release No. 55, including the definitions, methodologies and guidance contained therein, or the S.C.S. National Engineering Handbook, section 4;

ii. The rates of runoff generated from the parcel by a two year, 10 year and 100 year storm, each of a 24 hour duration, shall not increase as a result of the proposed development. Runoff rates shall be calculated in accordance with the United States Soil Conservation Service Technical Release No. 55, including the definitions, methodologies and guidance contained therein, or the S.C.S. National Engineering Handbook, section 4;

iii. The standards set forth in (a)6i and ii above shall not apply to minor residential development, provided such development does not involve the construction of any new roads, or to minor non-residential development, provided such development does not involve the grading, clearing or disturbance of an area in excess of 5,000 square feet within any five year period;

iv. Surface water runoff shall not be directed in such a way as to increase the volume and rate of discharge into any surface water body from that which existed prior to development of the parcel;

v. Excessively and somewhat excessively drained soils, as defined by the Soil Conservation Service, should be avoided for recharge of runoff wherever practical;

vi. A minimum separation of at least two feet between the elevation of the lowest point of the bottom of the infiltration or detention facility and the seasonal high water table is met, or a lesser separation when it is demonstrated that the separation, either due to soil conditions or when considered in combination with other stormwater management techniques, is adequate to protect ground water quality; and

vii. For private development applications, a four year maintenance guarantee is provided for the entire stormwater management system by the applicant. In addition, for both private and public development applications, the applicant or other interested party shall fund or otherwise guarantee an inspection and maintenance program for a period of no less than 10 years. This may be accomplished by various mechanisms, including but not limited to, the assumption of the inspection and maintenance program obligation by a

municipality, county, public utility or homeowners association or other viable mechanisms to achieve the purposes of this section. The program proposed shall identify the entity charged with responsibility for annual inspections and the completion of any necessary maintenance, and the method to finance said program.

Amended by R.1988 d.405, effective September 19, 1988.

See: 20 N.J.R. 716(a), 20 N.J.R. 2384(a).

In (a)2, added "or collection" and "where a public health problem has been identified", and in (a)4ii, deleted "District" and added "Rural Development Area".

Amended by R.1994 d.590, effective December 5, 1994.

See: 26 N.J.R. 165(a), 26 N.J.R. 4795(a).

Administrative Correction

See: 27 N.J.R. 1410(a).

Amended by R.1995 d.449, effective August 21, 1995.

See: 27 N.J.R. 1557(a), 27 N.J.R. 1927(a), 27 N.J.R. 3158(a).

Deleted (a)5.iv.(2)(A)(I) and (a)5.iv.(2)(A)(II).

Amended by R.1996 d.225, effective May 20, 1996.

See: 27 N.J.R. 3878(a), 28 N.J.R. 2596(a).

In (a)4viii and (a)5ix inserted the reference to 7:14A-23.3(a).

Case Notes

No extraordinary hardship existed entitling property owner to waiver of strict compliance with seasonal high water table requirement. *Papvas v. Pinelands Commission*, 93 N.J.A.R.2d (EPC) 13.

Parcel not have beneficial use; extraordinary hardship existed entitling property owner to waiver of Pinelands Comprehensive Management Plan requirements; conditions imposed. *Christensen v. New Jersey Pinelands Commission*, 93 N.J.A.R.2d (EPC) 5.

Assumption that 3.5 people would inhabit each of proposed dwellings permissible; calculation as to whether proposed development violated nitrate-nitrogen ground water requirements. *Schretzenmair v. Pinelands Commission*, 93 N.J.A.R.2d (EPC) 1.

Sale of adjoining lot precluded existence of extraordinary hardship, even though property owner was elderly individual suffering from heart problems and diabetes and sought to sell or develop property in order to help support herself and two handicapped sons residing with her. *Stark v. Pinelands Commission*, 92 N.J.A.R.2d (EPC) 34.

Extraordinary hardship; waiver of lot size requirement, seasonal high water table requirement, and ground water nitrate-nitrogen requirement. *Eni v. Pinelands Commission*, 92 N.J.A.R.2d (EPC) 31.

Compelling health need; hardship waiver of nitrate-nitrogen discharge limitations; town permitted to build wastewater treatment facility. *Adamucci, et al v. Pinelands Commission and Town of Hammon-ton*, 92 N.J.A.R.2d (EPC) 21.

No extraordinary hardship existed entitling property owner to waiver of strict compliance with density requirements, seasonal high water table requirement, and wetlands protection requirements. *Summonte v. Pinelands Commission*, 92 N.J.A.R.2d (EPC) 9.

Residents living in former gun club were entitled to waiver of strict compliance from minimum lot size and water quality requirements. *Swezeny v. Fulford*, 92 N.J.A.R.2d (EPC) 1.

Waiver to subdivide a parcel of land denied by Pinelands Commission; petitioner failed to establish ownership of the land in compliance with N.J.A.C. 7:50-5.32(a)3i. *Gerber v. Pinelands Commission*, 11 N.J.A.R. 12 (1988).

Petitioner denied waiver of strict compliance with provisions of Comprehensive Management Plan for the Pinelands which establish minimum standards for septic wastewater treatment systems for failure to prove extraordinary hardship. *Kruckner v. New Jersey Pinelands Commission*, 10 N.J.A.R. 237 (1988).

Development application denied to petitioners for failure to meet minimum standards for seasonal high water table and wetlands buffer; waiver of strict compliance denied for failure to offer information to establish an extraordinary hardship citing N.J.A.C. 1:1-11.2 (recodified as N.J.A.C. 1:11-8.3)—(Final Decision by the Pinelands Commission). *Lavecchia v. Pinelands Commission*, 10 N.J.A.R. 63 (1987).

Application to resubdivide two existing lots denied for failure to meet minimum standards for seasonal high water table and wetlands buffer; waiver of strict compliance denied for failure to establish extraordinary hardship. (Final Decision by Pinelands Commission). *Colon v. Pinelands Commission*, 10 N.J.A.R. 14 (1987).

Effluent standard for waterless toilet (2 ppm) cited in determination that denial of waiver of strict compliance with toilet requirement reasonable. *Riggins v. Pinelands Commission*, 8 N.J.A.R. 441 (1985).

Property for which development approval sought, even if minimum lot size requirement met, does not meet minimum standards for wetlands buffer (N.J.A.C. 7:50-6.14) or seasonal high water table (N.J.A.C. 7:50-6.84); permit application denied. *Pfeiffer v. Pinelands Commission*, 8 N.J.A.R. 317 (1985).

Development application denied, in part, for failure to meet minimum standards for seasonal high water table. *Pfeiffer v. Pinelands Commission*, 8 N.J.A.R. 317 (1985).

7:50-6.85 Individual wastewater treatment facility and petroleum tank maintenance

(a) The owner of every on-site septic wastewater treatment facility in the Pinelands shall, as soon as suitable septage disposal facility capacity is available, in accordance with the provisions of Chapter 326 of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and Section 201 of the Clean Water Act:

1. Have the facility inspected by a technician at least once every three years;
2. Have the facility cleaned at least once every three years; and
3. Once every three years submit to the board of health serving the municipality in which the facility is located a sworn statement that the facility has been inspected, cleaned and is functional, setting forth the name of the person who performed the inspection and cleaning and the date of such inspection.

(b) The owners of commercial petroleum storage tanks shall comply with the requirements of P.L. 1986, c.102 (N.J.S.A. 58:10A-29).

Amended by R.1994 d.590, effective December 5, 1994.

See: 26 N.J.R. 165(a), 26 N.J.R. 4795(a).

7:50-6.86 Water management

(a) Interbasin transfer of water between watersheds in the Pinelands should be avoided to the maximum extent practical. In areas served by central sewers, water-saving devices such as water-saving toilets, showers and sink faucets shall be installed in all new development.

(b) Water shall not be exported from the Pinelands except as otherwise provided in N.J.S.A. 58:1A-7.1.