ENVIRONMENTAL PROTECTION

LAND USE MANAGEMENT

WATER MONITORING AND STANDARDS

Ground Water Quality Standards

Antidegradation Policy

Adopted Amendment:	**N.J.A.C. 7:9C-1.4**
Adopted Repeal and New Rule:	**N.J.A.C. 7:9C-1.8**
Proposed:	July 2, 2007 at 39 N.J.R. 2417(a)
Adopted:	_____ by Lisa P. Jackson, Commissioner, Department of Environmental Protection
Filed:	_____ as _____
Authority:	N.J.S.A. 13:1D-1 et seq., 58:10A-1 et seq., and 58:11A-1 et seq.
DEP Docket No:	13-07-06/89
Effective Date:	
Expiration Date:	

The Department of Environmental Protection (Department) is adopting amendments to N.J.A.C. 7:9C-1.4 and a new rule at N.J.A.C. 7:9C-1.8 of the Ground Water Quality Standards (GWQS). The adopted rules replace the antidegradation policy and antidegradation limits previously established at N.J.A.C. 7:9C-1.8(a) through (e) with a revised antidegradation policy at N.J.A.C. 7:9C-1.8(a) and implementation procedures at 1.8(b)1 through 5 that establish the water quality conditions to be maintained for different ground water classifications and their

corresponding designated uses. The revised antidegradation policy and implementation procedures apply equally to Class II and Class III ground water, improving protection of existing ground water quality from significant degradation. The revised policy also prohibits any new or expanded discharge to ground water in the Highlands Preservation Area that is not in conformance with the Highlands Water Protection and Planning Act Rules at N.J.A.C. 7:38.

The revised GWQS antidegradation policy is being adopted as a companion to the adoption of amendments to the Water Quality Management Planning (WQMP) rules at N.J.A.C. 7:15 elsewhere in this issue of the New Jersey Register (see XX NJR XXX). By amending the WQMP rules in conjunction with the GWQS antidegradation policy, the Department is extending the antidegradation policy beyond NJPDES-permitted facilities. For discharges to ground water from new or expanded domestic treatment works, a demonstration of compliance with the revised antidegradation policy will be conducted at two scales. A regional demonstration of compliance will be conducted through the WQMP process. Evaluation on a regional scale will allow for consideration of secondary and cumulative impacts on a watershed (that is, HUC 11) basis, such as from a large-scale development. Placement of the proposed domestic treatment works will not be addressed in the regional evaluation. Therefore, once the regional demonstration has been completed, a site-specific evaluation will also be required, through the New Jersey Pollutant Discharge Elimination System (NJPDES) discharge to ground water permitting process pursuant to the NJPDES rules at N.J.A.C. 7:14A, to demonstrate that the permitted discharge will maintain existing ground water quality that is better than criteria.

Under N.J.A.C. 7:9C-1.8(b), the Department will be using a nitrate concentration of two mg/L for the purpose of evaluating compliance with the antidegradation policy at N.J.A.C. 7:9C-1.8(a) for new and expanded domestic treatment works that discharge to Class II and Class III ground water. The Department has determined that two mg/L nitrate is representative of the statewide average existing ground water quality, and is using nitrate as a surrogate for the constituents in domestic wastewater for the purpose of evaluating compliance with the new antidegradation policy at N.J.A.C. 7:9C-1.8(a) for new and expanded domestic treatment works that discharge to Class II and Class III ground water.

Summary of Hearing Officer's Recommendation and Agency Response:

A public hearing on the proposal was held on August 8, 2007 in the Public Hearing Room at the Department's headquarters building in Trenton. Debra Hammond, Chief of the Bureau of Water Quality Standards and Assessment, within Water Monitoring and Standards, served as the Hearing Officer at the public hearing. Two people attended the hearing. No testimony was provided. Ms. Hammond recommended that the rules be adopted as proposed. The Department accepts this recommendation. The record of the public hearing is available for inspection in accordance with applicable law by contacting:

New Jersey Department of Environmental Protection

Office of Legal Affairs

Attn: DEP Docket Number 13-07-06/09

Department of Environmental Protection

P.O. Box 402

Trenton, New Jersey 08625-0402

Summary of Public Comments and Agency Responses:

The comment period for the proposal closed on August 31, 2007. The following persons timely submitted written comments:

1. Joan B. Fittz, Executive Director, New Jersey Manufactured Housing Association
2. Elizabeth George-Cheniara, Esq., Director of Environmental Affairs, New Jersey Builders Association
3. Chris Gigliotti, Village Homes & Properties, LLC, submitted on behalf of Cornerstone Urban Renewal LP
4. Robin Love, President, Residents Alliance for Neighborhood Preservation, Inc.
5. Richard Nieuwenhuis, President, New Jersey Farm Bureau
6. Dennis Palmer, Executive Director, Landis Sewerage Authority
7. Anthony Russo, Director, Regulatory Affairs, Chemistry Council of New Jersey, submitted on behalf of the Council as well as The Site Remediation Industry Network
8. Steven T. Senior, Counsel, Riker Danzig Attorneys at Law, submitted on behalf of the Technical Regulations Advisory Coalition

The comments received and the Department's responses are summarized below. The number(s) in parentheses after each comment identifies the respective commenter(s) listed above.

General

1. COMMENT: New Jersey's population increases, and thus its future housing and commercial infrastructure needs, will be better balanced with the environmental constraints outlined under these amendments and new rules. (4)

2. COMMENT: The commenter strongly supports the new stricter standards proposing to prohibit any new or expanded discharge to ground water in the Highlands Preservation Area that is not in conformance with the Highlands Water Protection and Planning Act Rules. (4)

3. COMMENT: The Department appropriately determined not to expand the areas that can be designated as Class I-A, as had been proposed in 2004. Expanding Class I would have further increased the areas that are precluded from any development activity. (2)

4. COMMENT: The commenter supports the proposal to apply the new antidegradation policy equally to Class II and Class III ground water. (4)

RESPONSE TO COMMENTS 1 through 4: The Department appreciates the commenters' support for the rules.

5. COMMENT: The existing background data in the Vineland area demonstrates nitrate values well above the assumed 2.0 mg/l level in the proposed rule. These wells are distributed over a wide area and are not influenced by any sole source or individual point source. By utilizing the proposed logic applied to the City of Vineland Water Utility average ground water value data added to the drinking water standard and then divided by two, the antidegradation number would be 7.78 mg/l. This might be acceptable to the commenter. The newly proposed level of 6 mg/l is not acceptable and the existing drinking water standard of 10 mg/l should be utilized. The rulemaking is overbroad, oversimplified and arbitrary in its application. (6)

6. COMMENT: The rule proposal should be withdrawn as the existing antidegradation policy and contemporary technology sufficiently protect designated uses, particularly drinking water use, and ground water quality. The proposal to impose and enforce stricter antidegradation standards is unnecessary. (2)

RESPONSE TO COMMENTS 5 and 6: The rule replaces the antidegradation limits established under former N.J.A.C. 7:9C-1.8(b) for Class II-A ground water to protect ground water quality from the potential adverse impacts of new and expanded treatment works that discharge to ground water. As explained in the summary of the rule proposal, comments were received in response to the Department's October 4, 2004 "Notice Seeking Comment on Certain Topics

Related to the Ground Water Quality Standards" (see 36 N.J.R. 4400) suggesting that the Department revise downward the policy of allocating 50 percent of the available decrement between background concentration and the 10 mg/L water quality criterion for nitrate and maintain nitrate levels at two mg/L in Category One watersheds and outstanding natural areas. The Department decided to extend this approach to Class II-A, Class II-B, and Class III ground water to protect existing ground water quality from significant degradation, rather than just protecting ground water in Class One areas and Category One watersheds. While the revised antidegradation policy may result in a more stringent outcome, as illustrated by the City of Vineland, it is consistent with the intent of the antidegradation policy and with the Department's mandate to restore, enhance and maintain the chemical, physical and biological integrity of the State's waters, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial and other uses of water (see N.J.S.A. 58:10A-2).

While contemporary technology may exist to sufficiently protect designated uses, particularly drinking water uses, and ground water quality, there is no regulatory requirement that any particular technology be employed to prevent degradation of existing ground water quality. The Department did receive comments in response to the October 4, 2004 notice suggesting that technology which meets the drinking water criteria should be more than adequate to protect ground water quality; however, the Department determined that it was not reasonable to establish a Best Available Treatment level for discharges to ground water since mandating a minimum treatment level would result in unnecessary and unjustified costs. In addition,

requiring only the level of treatment necessary to meet the drinking water standards would not minimize the lowering of ground water quality. These adopted rules and the companion amendments to the WQMP rules provide a mechanism for implementing the antidegradation policy for new development on individual subsurface sewage disposal systems, thus protecting drinking water and ground water from degradation caused by such development.

7. COMMENT: Proposed N.J.A.C. 7:9C-1.8(b)2 should not be adopted. It is unnecessary and redundant for the Department to address the Highlands ground waters in this rule.(2)

RESPONSE: Without N.J.A.C. 7:9C-1.8(b)2, the classification of ground water in the Highlands region would default to the Class II designation, which is inconsistent with the Highlands Water Protection and Planning Act Rules. The provision is necessary to avoid conflict between the GWQS antidegradation policy and the specific groundwater protection in the Highlands preservation area afforded under the Highlands Water Protection and Planning Act and the Department's implementing rules at N.J.A.C. 7:38.

Implementation through other programs:

8. COMMENT: Since the rule is proposed as a companion to the WQMP rule proposal, and since the proposal refers to the WQMP rule proposal as its justification, this rule proposal must be withdrawn if the WQMP rule proposal is substantially amended or not adopted. (2)

RESPONSE: These GWQS rules were proposed as a companion to the proposal to amend the WQMP rules. None of the changes made on adoption in the WQMP rules (published elsewhere in this issue of the New Jersey Register) affect the implementation of the GWQS antidegradation policy as adopted herein.

9. COMMENT: If adopted as proposed, the regulatory program will be intertwined with the water quality management planning process. (1)

RESPONSE: As explained in the proposal summary at 39 N.J.R. 2417 (a), the GWQS are not self-implementing; they are implemented through other Department programs including the WQMP, NJPDES, Site Remediation, and Waste Management programs. Therefore, the GWQS are "intertwined" with these other regulatory programs. The WQMP rules have historically required, and under the amendments adopted elsewhere in this issue of the New Jersey Register continue to require, that applications for NJPDES permits for new and expanded discharges of wastewater be consistent with the applicable areawide water quality management plan(s) before a permit can be issued.

10. COMMENT: How will the regulations be applied in the general permit program, if at all? Will modification applications filed in the NJPDES program be subject to the regulations if adopted as proposed or only applications for new discharges? What if the modification, although for an increase in flow does not include any new development, for example, to respond to increase in water use or to correct permitting errors? (1)

RESPONSE: The GWQS rules as adopted require that new and expanded domestic wastewater treatment facilities that discharge to ground water outside of the Highlands and that require a NJPDES permit must comply with the antidegradation policy by maintaining a concentration of six mg/L nitrate on the property served by the wastewater treatment facility. An existing facility operating under an existing general permit authorization that seeks to increase the volume of wastewater discharged will require a new NJPDES permit authorization and will no longer be eligible to operate under its existing general permit authorization. The revised antidegradation policy applies to all NJPDES discharge to ground water (DGW) permits issued for new discharges or for existing facilities that are proposing expansions resulting in increased design flow and/or discharge volume, regardless of whether the NJPDES DGW permit is an individual or general permit. Therefore, any new authorization under a general permit for a discharge to ground water would need to address the antidegradation policy.

Revised Antidegradation Policy

11. COMMENT: The proposal would require that applicants demonstrate compliance with the antidegradation policy for all new and expanded discharges to ground water in Class II-A, Class II-B and Class III ground waters but does not provide a basis for the new mandate. Before adopting an unduly burdensome requirement, the Department must substantiate how the current approach fails to protect ground water. (2)

RESPONSE: As explained in the proposal summary, the former antidegradation policy for Class II ground water allowed a new or expanded discharge to degrade ground water quality by as much as half of the available capacity and, for Class III ground water, allowed new and expanded discharges to degrade the ground water until it reached the same concentration as expressed by the criteria. The revised antidegradation policy and implementation mechanisms are designed to ensure that ground water quality that is better than the existing criteria is maintained within a specified range for the different groundwater classifications. Thus, the revised policy strengthens the protection of ground water in order to meet the mandate of the Water Pollution Control Act that the State "restore, enhance and maintain the chemical, physical and biological integrity of its waters …" (N.J.S.A. 58:10A-2).

In addition, while the existing NJPDES permit process addresses site-specific impacts to ground water by requiring that ground water quality criteria be met at the property boundary, this process does not account for secondary and cumulative impacts to ground water caused by multiple discharges to ground water within a given area, or the impacts associated with wastewater facilities that do not require NJPDES permits, such as discharges to ground water (DGW) from individual subsurface sewage disposal systems (ISSDS). Therefore, in order to protect ground water quality from the cumulative impact of numerous discharges from DGWs and ISSDSs, the Department determined that, through the wastewater management planning process, it was necessary to require that wastewater alternatives be considered based on the type and density of development, the availability of existing infrastructure, and the availability of

assimilative capacity in potential receiving waters or the ability of the land to absorb wastewater and still protect surface water or ground water quality.

Thus, the adopted WQMP rules include new development on septic systems in the types of projects that require regional analysis of impacts to ground water and the GWQS rules apply the revised antidegradation policy to all new and expanded discharges to Class II and Class III ground waters, to ensure that the ground water quality will be maintained regardless of the type of wastewater treatment facility discharging to ground water or the class of ground water receiving the discharge.

Nitrate Concentration and Demonstration of Compliance

12. COMMENT: The proposal is arbitrary and capricious because it singles out one parameter and did not develop a statewide average for any of the other 150 or more parameters contained in Appendix Table 1 for an antidegradation limit. (6)

13. COMMENT: The commenters oppose the proposed assumption of two mg/L nitrate concentration as being representative of ground water quality statewide. The rule does not clearly identify the data source. The basis and underlying science has not been explained or published, nor has an opportunity for review of such science been provided, thus denying the regulated community the ability to comment meaningfully on the proposal. The Department has not adequately demonstrated a need to update the nitrate standard to two mg/L statewide and has

not provided trend data showing a decrease in ground water quality or identified any other compelling environmental reason to justify this standard. Where is the text or report that supports this and in what time frame was the data collected? What peer review was performed and what outside agencies reviewed the data? The proposal lacks adequate justification for the selection of nitrate and the two mg/L concentration. The proposed broad-brush policy is being implemented without the requisite technical support and is, therefore, arbitrary and capricious. (1, 2, 5, 6)

RESPONSE TO COMMENTS 12 and 13: The rule does not establish a new ground water quality criterion for nitrate; rather, it establishes two mg/L nitrate as the target for demonstrating compliance with the new antidegradation policy. The rule establishes nitrate as a surrogate for the constituents in domestic wastewater, for the purpose of demonstrating compliance with the antidegradation policy, because nitrate is one of several constituents that is found in relatively large and predictable amounts in domestic wastewater. The rule also establishes that two mg/L concentration is representative of the statewide average existing ground water quality for the purposes of implementing antidegradation, which is consistent with the amendments to the WQMP rules, N.J.A.C. 7:15, adopted elsewhere in this issue of the New Jersey Register, and supported by the Department's technical support document entitled, "Nitrate as a Surrogate for Assessing Impact of Development Using Individual Subsurface Sewage Disposal Systems on Ground Water Quality".

The rule does not restrict how the Department addresses other parameters, including constituents listed in Appendix Table 1, through the NJPDES discharge to ground water permit process. While the rule replaces the antidegradation limits established under former N.J.A.C. 7:9C-1.8(b), applicants are still required to meet the applicable ground water quality criteria established for other parameters under existing N.J.A.C. 7:9C-1.7.

All data points, sampling station identifiers, and sampling dates that provided the scientific basis for the Department's decision to use two mg/L nitrate in the GWQS and WQMP proposals were made available for public review in the Department's technical support document entitled, "Nitrate as a Surrogate for Assessing Impact of Development Using Individual Subsurface Sewage Disposal Systems on Ground Water Quality", which the Department posted on its Web site at: http://www.nj.gov/dep/watershedmgt/DOCS/rule_doc/Tech-Report-FINAL-05-21-07.pdf on May 21, 2007, and was cited in the WQMP rule proposal summary. This document also cited data demonstrating a declining trend in ground water quality in New Jersey, as illustrated by increasing concentrations of nitrate in ground water over time in parts of the State experiencing new development.

The GWQS proposal summary referred the reader to the WQMP proposal for more information on the nitrate target, stating: "Additional information related to this determination is set forth in the Summary of the proposal of the Water Quality Management Planning Rules (WQMP) published in the May 21, 2007 New Jersey Register at 39 N.J.R. 1870(a)." Copies of both rule proposals were available for public review or electronic download from the

Department's Web site at: http://www.state.nj.us/dep/rules. Since all the technical information and data related to the rule proposal were readily available for review by all interested parties during the public comment period for both proposals, the Department did not find it necessary to convene a separate "peer review" process and did not conduct one.

14. COMMENT: The proposed definition of property is overbroad. One of the fundamental tenets of property ownership is the right to hold title as an individual and the recognition of the right of an entity to be a property owner. Another fundamental tenet is the designation of lot and block lines as descriptive tools to define ownership. The proposed definition, as a result of its scope, blurs both lot and block designations and the indicia of ownership rights that attached to the owner of record. Property beyond a lot and block designation should not be burdened unless it is part of the project under review by the Department, as set forth in the application. (1)

RESPONSE: The intent of N.J.A.C. 7:9C-1.8(b)4 is to establish antidegradation implementation requirements for facilities that require a NJPDES permit for discharges to ground water; it does not apply to individual lots and blocks. The rule text uses the phrase "property served by the treatment works" to mean the lot and block associated with the treatment works, not the lots and blocks of all the properties (lots and blocks owned by individual property owners) that utilize the treatment works for wastewater treatment and disposal.

15. COMMENT: The statewide drinking water level for nitrate is 10 mg/L and should be utilized as the standard for onsite systems for ground water discharge and recharge. The

Department should also consider using half the drinking water standard (5 mg/L) or applying the drinking water standards (10 mg/L) at monitoring wells at the property line. Any antidegradation limits or application should be made at the property line, not just at a down gradient monitoring well. (6)

16. COMMENT: Class II waters are for drinking water supply and the required ground water quality standard should be the drinking water quality criteria, not the proposed antidegradation standards. Applicants should be able to demonstrate compliance with the drinking water criteria through wastewater treatment. (2)

17. COMMENT: The commenter supports the Department's decision to grant applicants the option of treating ground water to meet the ground water quality criteria at the point of discharge and encourages the Department to make this option available under proposed N.J.A.C. 7:9C-1.8(b)3. (2)

18. COMMENT: The commenter requested clarification of how the two-part analysis for compliance with the antidegradation policy, one on the regional level and the other at the site level, will be implemented. (1)

RESPONSE TO COMMENTS 15 through 18: As stated in the previous response, the adopted rule does not establish a new ground water quality standard for nitrate. The rule establishes a two-step demonstration of compliance with the antidegradation policy, one on the regional scale

under N.J.A.C. 7:9C-1.8(b)2 and another at the site-specific scale under N.J.A.C. 7:9C-1.8(b)3, for new and expanded discharges to ground water from domestic treatment works. The demonstration of compliance on a regional scale requires that a nitrate concentration of two mg/L be maintained over the HUC 11 watershed. This allows for consideration of secondary and cumulative impacts on a watershed basis, such as the impact of large-scale development on the ground water system associated with the HUC 11 watershed. Regional impacts are ideally addressed through the development of a comprehensive wastewater management plan pursuant to the WQMP rules at N.J.A.C. 7:15, where options may be evaluated and impacts adjusted so that ground water quality is maintained. Additional detail on the regional demonstration of compliance is provided in the summary of the WQMP rule proposal that was published on May 21, 2007 (see 39 N.J.R. 1870(a)).

If a project that requires a NJPDES permit is determined by the Department to comply with the antidegradation policy on a regional basis, and is otherwise consistent with the wastewater management plan, then a second, more detailed demonstration of compliance on a site-specific scale will be conducted through the NJPDES permit process. Demonstration of compliance with the antidegradation policy on a site-specific scale requires that a nitrate concentration of six mg/L nitrate be maintained over the property served by the wastewater treatment facility.

Under the rule, the applicant must demonstrate, through the NJPDES-DGW permit process, that there is sufficient property to maintain ground water quality based on the projected

volume of wastewater to be generated and the level of treatment proposed. Such demonstration often involves ground water modeling to project the constituent concentration at the property boundary. Actual on-site monitoring of ground water may be required as well. The site-specific demonstration of compliance allows for consideration of near-field effects, such as the potential impact of one domestic treatment works on an adjacent property owner's potable well, and identification of the proper type, size, and location of the wastewater treatment system based on the physical constraints of the property in question (for example, soils, proximity to wells, and other discharges). Depending on the size of the property and the volume of wastewater proposed to be discharged to ground water, an applicant may be required to install treatment designed to achieve compliance with the ground water quality standards at the point of discharge.

The Department did not propose to change the ground water quality criterion for nitrate of 10 mg/L, which is based on the drinking water standard and continues in effect. Rather than using half the drinking water standard or applying the current drinking water standard at monitoring wells, as suggested by the commenters, the Department derived six mg/L as the target concentration by averaging the existing nitrate ground water quality criterion of 10 mg/L (the same concentration as the drinking water standard) and the statewide average nitrate concentration in ground water of two mg/L.

The site-specific demonstration of compliance with the antidegradation policy is in addition to the requirement to meet ground water quality standards, which is already established under the NJPDES rules at N.J.A.C. 7:14A-7.6. The option of treatment is available to

applicants as part of the development of NJPDES DGW permit limits to comply with the ground water quality criteria established under N.J.A.C 7:9C-1.7; however, treatment (specifically treatment to meet drinking water standards) in lieu of the regional analysis is not allowed under the WQMP rules and would not be sufficient to comply with the antidegradation policy of the GWQS rules since it does not address the secondary and cumulative impacts of the discharge over the HUC 11 watershed nor does it address all the wastewater constituents for which nitrate is serving as a surrogate.

Under either demonstration (site-specific or regional), if the discharge to ground water from the proposed domestic treatment works does not comply with the antidegradation policy, the applicant may be required to reduce the number of development units to be served by the facility, reduce the size of the facility, change the location of the wastewater discharge, or change the level or type of wastewater treatment.

19. COMMENT: The ground water standard for nitrate should be determined on a HUC 11 basis, since the WQMP rules evaluate septic density on a HUC 11 basis. (5)

20. COMMENT: A single statewide standard is inappropriate and it is unreasonable to apply to the entire state an antidegradation standard of two mg/L nitrate, which is currently applied only in the Pinelands because of its pristine background water quality. This standard is only appropriate for the Pinelands and maybe the Highlands. (2, 5, 6)

21. COMMENT: Site-specific or municipality-specific ground water data should be utilized for any project in the state, rather than the proposed statewide, one-size-fits-all proposal, specifically in the City of Vineland or Cumberland County where local ground water monitoring data indicate existing background nitrate concentrations well above the assumed two mg/L level proposed in the rule. Where there is existing ground water quality data, it should be utilized for any expansion of wastewater treatment facilities rather than the statewide average of two mg/L nitrate for existing ground water quality. The rulemaking is overbroad, oversimplified, and arbitrary in its application. (6)

22. COMMENT: This proposal does not take into account what impact farming operations have had on ground water. Those areas in the Garden State that have long farming histories have historical ground water levels above the two mg/L nitrate concentration. This proposal will unfairly impact upon discharges to ground water in farming areas where the existing background is already well above the two mg/L average. (6)

RESPONSE TO COMMENTS 19 through 22: The rule does not establish a ground water quality criterion for nitrate; rather, it establishes two mg/L nitrate as a means of implementing the revised antidegradation policy. The Department determined that two mg/L nitrate represents the statewide average existing ground water quality, based on ground water monitoring data from around the State, and is therefore an appropriate antidegradation target for all ground waters of the State. A detailed discussion of this determination was provided in the summary of the proposed WQMP rules (see 39 N.J.R. 1879(a)) and the Department's technical support document

entitled, "Nitrate as a Surrogate for Assessing Impact of Development Using Individual Subsurface Sewage Disposal Systems on Ground Water Quality" (see Response to Comments 12 and 13).

The Department determined that it was reasonable and appropriate to use the statewide average existing ground water quality (as represented by the statewide average nitrate concentration in ground water of two mg/L) as the target for implementation of the antidegradation policy, on a HUC 11 basis, for all Class II-A, Class II-B, and Class III ground water. The installation of monitoring wells and the sampling and analysis needed to determine the existing ground water quality for 150 individual HUC 11s or 566 individual municipalities would be extremely expensive and not necessary to meet the intent of the antidegradation policy.

Conducting a demonstration of compliance with the antidegradation policy on a regional basis, as required by the WQMP rule, provides the opportunity to address the cumulative impacts of development served by wastewater treatment facilities that discharge to ground water as well as development on individual subsurface sewage disposal systems. All undeveloped and underdeveloped lands must be considered in these regional demonstrations. Adjustments to the level of treatment provided by NJPDES-permitted facilities can be factored into the determination of allowable equivalent dwelling units, when determining compliance with the antidegradation target of two mg/l at the HUC 11 scale. The number of equivalent dwelling units is determined through the build-out analysis required by the WQMP rules using two mg/L

nitrate as the water quality target for what can be generated by the new development, regardless of the existing on-site concentration.

As explained in the WQMP rule proposal summary, the regional analysis conducted under the WQMP rules utilizes a recharge-based nitrate-dilution model to calculate the number of acres per dwelling unit needed to dilute a pollutant load in order to achieve a concentration target in the ground water. Input factors include recharge capabilities based on soil type, climate based on precipitation data, pollutant load per person expressed as 10 pounds per person per year, the number of persons per equivalent dwelling unit, and the target concentration for ground water of two mg/L nitrate. The only variables that can change the outcome of the model are the soils, the precipitation, and the number of persons per dwelling unit. The other input factors are fixed. The existing ambient ground water concentration of nitrate is not used as an input factor for the model and thus does not affect the outcome of the regional analysis. The regional analysis is conducted the same for new residential development on existing farmland as on any other type of land. Locations such as existing agricultural lands, where the existing ambient ground water quality concentration of nitrate is higher than the statewide average of two mg/L nitrate, will be able to add the same number of equivalent dwelling units as lands where the existing concentration is less than two mg/L of nitrate. In this way, the antidegradation policy ensures that, where ground water quality is better than existing criteria, it will not be degraded to the criteria, and where the ground water quality contravenes criteria, it will not be allowed to degrade further, enabling the ground water quality to improve over time through natural attenuation.

As discussed in the preceding response, if a project that requires a NJPDES permit complies with the antidegradation policy on a regional basis, a second, more detailed site-specific demonstration of compliance will be conducted through the NJPDES permit process. Compliance with the antidegradation policy on a site-specific scale requires that the applicant must demonstrate that there is sufficient property to maintain a nitrate concentration of six mg/L nitrate over the property served by the wastewater treatment facility based on the projected volume of wastewater to be generated and the level of treatment proposed. Depending on the size of the property and the volume of wastewater proposed to be discharged to ground water, an applicant may be required to install treatment designed to achieve compliance with the ground water quality standards at the point of discharge, reduce the size of the project so it generates less wastewater, redesign the method/level of wastewater treatment, or forgo expansion of an existing facility.

23. COMMENT: Projections of future wastewater, which would be required under the new rule in order for an applicant for a NJPDES DGW permit to demonstrate that there is sufficient property on the site to maintain ground water quality and meet ground water quality criteria, would be unreliable and should not be required. The required projections of anticipated wastewater needs in proposed N.J.A.C. 7:15-5.18(a) of the WQMP rule proposal would be highly speculative and difficult for the designated wastewater management planning entity to complete and, therefore, should not be required by the Department. (2)

24. COMMENT: The Department should not adopt the proposed antidegradation policy because the required demonstration of compliance on a regional, HUC 11 scale cannot be implemented practically in New Jersey, rendering implementation onerous and impractical, which will unnecessarily increase the costs of development. It is inappropriate and ineffective to require an evaluation of projected development and wastewater needs on a regional, HUC 11 basis in New Jersey where land use planning and regulation occur at the municipal level. It will require WMP agencies to expend resources for little if any environmental benefit. Municipalities do not have databases based on HUC 11 to compile accurate and reliable information necessary for environmental buildout analysis and allocations by watershed. WMP agencies would face technological hurdles in formatting the required data as information on municipal planning, zoning, and developed conditions most likely would not be available on GIS. It would be very expensive for the agencies to utilize GIS to identify the water service areas.

Sufficient information is not available regarding "underdeveloped" areas for the Department to determine, through such regional evaluation, that development density can be accommodated that will result in attainment of two mg/L nitrate in the ground water on a HUC 11 basis, as required under proposed N.J.A.C. 7:15-5.25(e). The Department should revise the WQMP proposal to require analyses and plans based upon geopolitical boundaries rather than by HUC 11 watershed; otherwise, an allocation methodology for septic usage should be included in the WQMP rule. The Department should use its GIS system and land use/land cover database of underdeveloped land and undeveloped land by HUC 11 and assign septic usage to be used by counties in the preparation of their wastewater management plans. (2)

RESPONSE TO COMMENTS 23 and 24: The GWQS do not require projections of wastewater flow. However, the GWQS are not self-implementing and both the NJPDES rules and the WQMP rules do require projections of wastewater flow as part of their respective approval processes. Comments about these requirements are outside the scope of this rule; however, it should be noted that such requirements are not new and have been a fundamental aspect of the wastewater planning and permitting processes since their inception. Projecting wastewater flow is a well-established aspect of the civil engineering and land use planning professions and is extremely reliable for its intended purpose in the above-cited rules.

Under the WQMP rules, the Department cannot issue a permit or approval for a project that is inconsistent with the applicable areawide Water Quality Management Plan(s). The adopted amendments to the WQMP rules establish that a new facility proposing to discharge 2,000 gallons per day or more, or an existing facility seeking an increase in its permitted flow, is inconsistent with the areawide Water Quality Management Plan(s) unless it can be demonstrated that the antidegradation target of two mg/L nitrate will not be exceeded at full build-out over the HUC 11 watershed within which the proposed project is located. Therefore, the regional, HUC 11-scale analysis required by the adopted WQMP rules to demonstrate compliance with the antidegradation policy at N.J.A.C. 7:9C-1.8 (b)3 must be completed before any NJPDES permits can be issued for a new or expanded domestic treatment facility to discharge to ground water. The rationale for using two mg/L nitrate as the target for demonstrating compliance with the antidegradation policy on a HUC 11 basis is explained in the Response to Comments 12 and 13.

The adopted GWQS rules do not establish the requirement for the build-out analysis, which are established under the WQMP rules; therefore, comments on the build-out analysis are beyond the scope of this rule.

Smart Growth

25. COMMENT: Implementation of this rule proposal will so impact development that reasonable growth to accommodate population projections will not occur. The proposed implementation provisions do not balance environmental needs with growth opportunities but, in combination with other Departmental regulatory programs, would directly inhibit much needed housing development and economic growth, despite statements made to the contrary in the Environmental and Economic Impact Analyses. The proposal, like its related WQMP rule proposal, fail to address where the reasonable development would occur and how smart growth would be achieved given the required compliance with the antidegradation standard. The proposed rule will impede much needed residential and nonresidential development (2)

26. COMMENT: The commenter requests that the proposed NJDEP guidelines provide the flexibility required to protect private investment, promote environmental justice, and insure that the Smart Growth Values and Principles are implemented in the spirit of fairness and predictability that are the very basis of the New Jersey Smart Growth Vision. (3)

RESPONSE TO COMMENTS 25 and 26: This rule expands the antidegradation policy to also apply to development on individual subsurface sewage disposal systems – in addition to NJPDES-permitted discharges to ground water – in order to protect ground water quality statewide. In New Jersey, environmental justice generally focuses on higher density urban and older suburban communities that are already extensively developed. Wastewater infrastructure for such communities is generally provided by sanitary sewers and larger, centralized wastewater treatment systems discharging to surface waters, since discharges to ground water would likely not be technically feasible or appropriate. Since this rule applies only to discharges to ground water, it would not affect such communities.

The Department believes that this rule will help achieve smart growth because development that complies with the antidegradation policy, as evaluated through the WQMP process, will be supported by the carrying capacity of the natural environment, in this case, the existing ground water quality. As explained in the Smart Growth Impact analysis in the proposal (see 39 N.J.R. 2417 (a)), the State's population is projected to increase to 9.82 million by 2020 and to 10.25 million by 2025 (New Jersey Department of Labor, 2004). The rule will provide protection of human health and the environment, while balancing the need for growth to accommodate New Jersey’s increasing population. That growth will include residential, commercial, and industrial development where it can be supported by the carrying capacity of the environment in which the growth is planned. Under the revised antidegradation policy, future growth and associated development can be evaluated based on the environmental

constraints that define the environmental carrying capacity on a regional basis, and thus provide a fair and predictable decision making process.

27. COMMENT: The State Plan and Smart Growth principles are good guidelines and provide a framework for the creation of compatible community plans that will meet different local needs and challenges. The commenter requests that the Department, along with the Department of Community Affairs, the State Planning Commission, and the Office of Smart Growth provide incentives and regulations that will enhance the predictability and reduce the risks for public-private partnerships that are serving the underserved needs of the community. (3)

RESPONSE: The Department is unsure of the intent of the phrase "underserved needs of the community." The Department believes that this rule as implemented through the amended WQMP rules will enhance the predictability and reduce the risks for public private partnerships. If wastewater management plans are prepared in accordance with the amended WQMP rule, conflicts between sewer service areas and environmentally sensitive areas will be reduced. Further, working with counties and through the counties with municipalities, sewer service areas should only be identified in those places where local land use plans and zoning direct that growth. Once appropriate sewer service areas are identified, based on environmental and local land use planning, a build out analysis is performed to predict the future wastewater treatment and water supply capacity needed to support that development, and the plan will identify how those needs are to be met. As a result, a sewer service area in a wastewater management plan

adopted under the amended WQMP rule will tell a prospective developer the following four things: the area has minimal environmental sensitivity, the area is a place where the local government supports growth, there is adequate wastewater treatment capacity to support the development, and there is adequate water supply to support the development. Therefore, the outcome of wastewater management plans should be greater predictability for the development community.

The Department assumes also that the commenter is suggesting that the Department should provide incentives, in the form of financial assistance, to provide infrastructure in the areas designated for growth. As part of the continuing planning process, the Department periodically develops a priority system and project priority list as the basis to award low and no interest loans from the State Revolving Fund and the Environmental Infrastructure Trust. The system, which was first developed in 1982, is constantly evolving. Historically, the state's highest priority was to upgrade primary treatment plants to achieve secondary levels, thereby significantly reducing pollutant discharges. With the elimination of primary facilities in New Jersey, the primary discharge category has been deleted from the priority system-a major milestone that signals progress is being made under the state's financing programs. The state's highest priority wastewater needs now include combined sewer overflows (CSOs) and major pipe rehabilitation to stop discharges of raw sewage. These types of problems are frequently found in older urban areas, where pollution impacts streams and rivers near large population centers and where the cost to correct these problems is a serious concern. Priority is also placed

on projects in coastal areas, where pollution impacts from outdated sewage treatment and conveyance systems can harm the shore environment and the tourism industry.

To prioritize wastewater projects under the Environmental Infrastructure Financing Program, the Department uses a point system, which ranks projects based on the nature of the wastewater problem. In addition, projects discharging to surface waters receive points that reflect the existing uses of the waterway. These uses include drinking water supplies, boating, fishing, swimming, and water used for industrial or agricultural purposes. The point values reflect the relative priority of the water uses, with drinking water and recreational uses being the highest priorities. Points are also given to projects that would eliminate failing septic systems, a public health threat.

In addition, financing decisions under these programs must be consistent with the areawide water quality management plan. Therefore, as sewer service areas are revised to eliminate conflicts with the Department's other environmental protection mandates, competition for the limited available funds will be reduced making urban infrastructure rehabilitation even more competitive.

Agricultural Impacts

28. COMMENT: The Agricultural Impact Statement fails to mention any impact that this rule will have on land value and equity due to the decrease in allowable density of septic-based

development. Land values in New Jersey for farmland are more than 80% based on the land development potential; this equity is what farmers rely on as collateral for loans. This aspect of economic impact to agriculture is completely absent from the impact statement. The Department should coordinate with the New Jersey Department of Agriculture before the adoption of this rule to discuss mitigation of the impacts to agriculture from this rule. (5)

RESPONSE: As explained in the Agriculture Industry Impact statement, the revised antidegradation policy will not affect existing agricultural operations and will not affect a farmer's property value if the farmer's intent is to keep the land in agricultural use. The policy is triggered if the owner decides to convert agricultural lands to residential/commercial development. As explained in an earlier response, existing ground water quality, particularly on agricultural lands, is not an input factor that influences the outcome of the regional analysis conducted under the WQMP rules to determine the number of equivalent dwelling units that can be supported in compliance with the revised antidegradation policy. Therefore, this rule should not affect the number of equivalent dwelling units that would be allowed on agricultural lands.

The Department understands that five factors are considered by a loan agency when evaluating a loan application. These are character (the owner's credit score), capital (the owner's net worth), collateral (security pledged for the payment of a loan), capacity (earnings and cash flow) and conditions (the terms of the loan). The Department's rules have the potential to affect capital and collateral but would not affect the remaining factors. Consequently, the Department

cannot make generic conclusions regarding whether loans will be denied to agricultural operations based on implementation of the adopted rules.

While not specific to this rule, the Department coordinates extensively and works cooperatively with the New Jersey Department of Agriculture, the United States Department of Agriculture, and the Federal Farm Bureau toward the initiation of the New Jersey Conservation Reserve Enhancement Program (CREP) that is designed to address the issue of water quality impacts from agricultural uses. CREP is a Federal/State natural resource conservation program that addresses State and nationally significant agricultural related environmental problems. Under CREP, program participants receive financial incentives from USDA's Farm Service Agency (FSA) to voluntarily enroll in the Conservation Reserve Program (CRP) in contracts of 10 to 15 years. Participants remove marginal pastureland or cropland from agricultural production and convert the land to native grasses, trees and other vegetation.

Interested Party Review (IPR)

29. COMMENT: The rule summary states that the Department considered, in preparing this rule proposal, all comments that were submitted in response to the previous Interested Party Review (IPR) notice. However, the Department failed to address all of the comments submitted by the commenters in response to the IPR. (7, 8)

30. COMMENT: Basing a revision of the GWQS on eight commenters in 2004 is inappropriate. Eight commenters are not sufficient to represent public opinion, especially when those comments are not available for review, not all commenters are in agreement with the conclusion of the Department, and New Jersey has undergone many changes since 2004, particularly with respect to down-zoning statewide, enacting the Highlands Act, and additional environmental regulations that have passed, which have all greatly impacted land values. (5)

RESPONSE TO COMMENTS 28 and 29: The scope of this rule is limited to the antidegradation policy and antidegradation limits previously established at N.J.A.C. 7:9C-1.8(a) through (e) and replaced with the revised antidegradation policy at N.J.A.C. 7:9C-1.8(a) and implementation procedures at 1.8(b)1 through 5. The rule does not include other provisions of the GWQS that were the subject of the previous notice of opportunity for comment, as explained below.

On October 4, 2004, the Department published a "Notice Seeking Comment on Certain Topics Related to the Ground Water Quality Standards" (36 N.J.R. 4400). The Department received 43 comments from 22 commenters in response to this notice; eight of those comments pertained to antidegradation. The July 2, 2007 rule proposal contained only amendments pertaining to the antidegradation policy. Thus, in developing the proposal, the Department considered only those public comments received in response to the notice that pertained to antidegradation. These comments were summarized in the rule proposal summary. The other comments received by the Department in response to the notice are available for public review upon request. Should the Department propose to amend other aspects of the GWQS rules that

were discussed in the prior notice, any relevant comments received in response to the notice will be noted at that time.

31. COMMENT: The antidegradation proposal is not a proper remediation standard. Use of the proposed antidegradation policy as a remediation standard is contrary to the purpose of the Brownfield Act to promote cleanup and redevelopment of brownfields. The antidegradation policy is incorporated into the Department's Technical Requirements for Site Remediation as a narrative remediation standard for ground water (see N.J.A.C. 7:26E-1.13(b)2.iii). However, at brownfield and contaminated sites where ground water is not used, environmental receptors are not exposed to contaminants and, therefore, public health and the environment are protected. The Department's proposal to amend the antidegradation policy renders it even more conservative than the existing policy. As a result, the Department is proposing an even more stringent and conservative remediation standard, which is contrary to the purpose of the Brownfield Act since it will render cleanups more costly and difficult to achieve and does not further the legislative intent of the Brownfield and Contaminated Site Remediation Act to promote cleanup and redevelopment of contaminated sites. (7 8)

RESPONSE: The adopted antidegradation policy clarifies that the Department shall not approve any further degradation of ground water quality where background water quality contravenes the criteria. Since the constituents being remediated are, by definition, present at levels that contravene the applicable ground water quality criteria, the antidegradation policy prohibits

additional discharge of such constituents to ground water. It does not require removal of such constituents from ground water to achieve the GWQS.

Requirements for removal of constituents from ground water are established as Ground Water Remediation Standards under the Technical Requirements for Site Remediation, N.J.A.C. 7:26E. The Ground Water Remediation Standards that are applied at remediation sites depend upon the ground water classification where the site is located. For remediation projects in Class I ground water, the Ground Water Remediation Standards are natural quality or "background." For those constituents in Class I ground water that are not naturally occurring (e.g., volatile organic chemicals, pesticides), the Ground Water Remediation Standards are set at the practical quantitation level (PQL). For remediation projects in Class II ground water, the Ground Water Remediation Standards are the higher of the PQL and the health-based ground water quality criterion for a given constituent, established under the GWQS rules at N.J.A.C. 7:9C-1.7(c)1 and listed in Appendix Table 1 of the GWQS, the interim specific ground water quality criteria established under N.J.A.C. 7:9C-1.7(c)2 through 5, or the interim generic ground water quality criteria established under N.J.A.C. 7:9C-1.7(c)6 and listed in Appendix Table 2 of the GWQS. For remediation projects in Class III ground water, the Ground Water Remediation Standards are determined on a case-by-case basis and are set to ensure that there is no impairment of existing uses of the ground water, violation of Surface Water Quality Standards, impacts to air, or violations of down-gradient ground water classification areas.

For site remediation projects that include a discharge to Class II or Class III ground water from a new or expanded industrial treatment works as part of the remedial action (such as a facility constructed to treat the contaminated ground water), the antidegradation provision at N.J.A.C. 7:9C-1.8(b)5 would apply under the NJPDES discharge to ground water permit issued for that industrial treatment works; the antidegradation provisions would not be applied as remediation standards.

32. COMMENT: The Department should defer amending the antidegradation policy until it addresses other aspects of the GWQS to promote smart growth and cleanup and redevelopment of brownfields. The preamble to the rule proposal references a previous "Notice Seeking Comment on Certain Topics Related to the Ground Water Quality Standards" (36 N.J.R. 4400). In that Notice, the Department sought public comment on several aspects of the GWQS and their impact on "smart growth" principles and the cleanup and redevelopment of brownfields. These topics included the classification system for ground water, procedures to reclassify ground water, the designated uses of ground water, and the anti-degradation policy. The current rule proposal fails to consider the other aspects of the GWQS addressed by the previous notice and the public comment provided in response. Moving forward with the current proposal to make the antidegradation policy more stringent and conservative, without addressing the other problems raised by the GWQS classification system and designated uses, will have a further adverse affect on cleanup and redevelopment on brownfield and contaminated sites. The Department should withdraw the rule proposal and develop a new proposal, with the participation of the commenters, that would focus on all aspects of the Ground Water Quality Standards addressed

by the Department's prior notice, entitled "Notice Seeking Comment on Certain Topics Related to the Ground Water Quality Standards" (36 N.J.R. 4400) in order to promote smart growth and cleanup and redevelopment of brownfield and contaminated sites.

In addressing these other issues, the Department should use a risk-based approach to establish and reasonably implement new Class II or Class III ground water classifications appropriate to areas where ground water is not used based on either limited ground water yield/availability, where established restrictions on use can be maintained, and/or areas that are historically contaminated. Given the complex nature of these issues, it is incumbent upon the Department to recognize and promote regulations and polices that are based upon risk and the actual and realistic potential of ground water use. (7, 8)

RESPONSE: As explained in the previous response, the antidegradation policy does not require the removal of constituents from ground water; therefore, it does not impact the remediation of contaminated sites, including brownfields. Redevelopment that involves a new or expanded discharge to ground water may be subject to the revised antidegradation policy, depending on the location and type of discharge; however, as explained in the previous response regarding environmental justice, redevelopment in New Jersey is generally associated with urban and older suburban communities where discharges to ground water are usually not technically feasible.

To the extent that redevelopment does utilize new or expanded discharges to ground water, such discharges would be subject to the applicable provisions of the revised

antidegradation policy and would be required to demonstrate compliance with the policy through the NJPDES permit process and/or the water quality planning process as appropriate, to ensure that ground water quality that is better than criteria is protected from significant degradation and that no further degradation of ground water quality occurs where background water quality contravenes the criteria. The Department does not agree that these provisions for protection of ground water quality will have an adverse effect on cleanup and redevelopment on brownfield and contaminated sites.

The comment regarding the ground water classification system and reclassification of Class II and III ground waters is beyond the scope of this proposal.

Comments Outside the Scope of Proposal

33. COMMENT: The Department is proposing Category One protection for portions of Toms River as well as its tributaries that are not currently protected. The 300 ft. buffer requirement as applied to the property in question's approved plans will make the property unbuildable for its intended use. Further delays and additional costs will inhibit the financial viability of the project and will create extreme and unwarranted hardship for the target residential population, which is rapidly growing and severely underserved. We respectfully request that a hardship waiver or exception be granted to this and all other properties that provide affordable housing and supportive services and that received Preliminary and Final Approval prior to February 7, 2005. (3)

RESPONSE: The commenter submitted one set of comments in response to three of the Department's recent rule proposals: the Surface Water Quality Standards, Category One, N.J.A.C. 7:9B; the WQMP Rules, N.J.A.C. 7:15; and the GWQS rule proposal, N.J.A.C. 7:9C. The GWQS rule proposal did not address Category One surface water classifications or project reviews or approvals; therefore, these comments are outside the scope of the GWQS proposal. To the extent that these comments are relevant to the other rule proposals, they will be responded to as part of the Department's final action on those rules.

34. COMMENT: The requirement, under proposed N.J.A.C. 7:15-5.25 of the WQMP rule proposal, that patterns of development permitted, as well as the wastewater management alternative selected, must be assessed in terms of the availability of water supply to meet the needs of projected future development, constitutes a transfer of responsibility of planning for the future of New Jersey from the State to the designated WMP agencies, which violates the New Jersey Constitution and statutes that have assigned the duty for statewide planning to the State, as articulated in the State Development and Redevelopment Plan, and therefore should not be implemented through the adoption of the GWQS. (2)

35. COMMENT: The basis and underlying science for using the statewide standard as a basis for build out analysis in a sewer service area has not been explained or published, nor has an opportunity for review of such science been provided, thus denying the regulated community the ability to comment meaningfully on the proposal. (1)

RESPONSE TO COMMENTS 33 and 34: The ground water quality standards, including the antidegradation policy, are implemented through the WQMP rules; the WQMP rules are not implemented through the GWQS rules. The proposed GWQS rules did not include requirements for build-out analysis, projection of wastewater flow or needs, or assessment of water supply availability. Such requirements were included and explained in the companion rule proposal of amendments to the WQMP rules at N.J.A.C. 7:15, published at 39 N.J.R. 1879(a).

36. COMMENT: If the water quality management plan is not current in an area, then the NJPDES permit application must be deemed inconsistent. It is not clear if an application for an area under 100 acres and 8,000 gpd may proceed in an area where the plan is not current. This requirement will create a blockage in the system, particularly if smaller projects cannot proceed. (1)

RESPONSE: Concerns about the effect of the proposed WQMP amendments, specifically proposed changes to the consistency determination and wastewater management planning processes, on the ability to proceed with a NJPDES or other permit application, are outside of the scope of this GWQS proposal.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. require State agencies that adopt, readopt or amend rules that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis.

The GWQS provide the basis for protection of ambient ground water quality in New Jersey by establishing constituent standards for ground water pollutants. These constituent standards are applicable to the development of effluent limitations and discharge requirements pursuant to the New Jersey Pollutant Discharge Elimination System (NJPDES), N.J.A.C. 7:14A; to develop minimum ground water remediation standards pursuant to the Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1 et seq.; and other requirements and regulatory actions applicable to discharges that cause or may cause pollutants to enter the ground waters of the State.

The authority for setting these standards comes solely from New Jersey law and has no Federal counterpart. The GWQS are not promulgated under the authority of, or in order to implement, comply with, or participate in any program established under Federal law or under a State statute that incorporates or refers to Federal law, Federal standards, or Federal requirements. The goal of the adopted rule is to protect existing ground water quality from significant degradation and to prevent further degradation of ground water that already contravenes criteria. This goal will be achieved by implementing the antidegradation policy through the WQMP rules at N.J.A.C. 7:15 and the NJPDES rules at N.J.A.C. 7:14A.

Accordingly, Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. do not require a Federal standards analysis.

Full text of the adopted amendments and new rule follows (additions to proposal are indicated in boldface with asterisks ***thus***; deletions from proposal are indicated in brackets with asterisks *[thus]*):

(No change from proposal)

Based on consultation with staff, I hereby certify that the above statements, including the Federal standards analysis addressing the requirements of Executive Order 27 (1994), permit the public to understand accurately and plainly the purposes and expected consequences of these amendments. I hereby authorize this adoption.

_____ _____

DATE **Lisa P. Jackson**

Commissioner