

**ENVIRONMENTAL PROTECTION  
LAND USE MANAGEMENT  
DIVISION OF WATER SUPPLY**

**Safe Drinking Water Act Rules**

**Readoption:** **N.J.A.C. 7:10**  
Proposed: December 7, 2009 at 41 N.J.R. 4381(a)  
Adopted: , 2010 by Bob Martin,  
Commissioner  
Department of Environmental Protection

Filed: April 30, 2010 as R.d. **without change.**  
Authority: N.J.S.A. 13:1D et seq., 58:11-9.1 et seq., 58:11-23 et seq.,  
and 58:12A-1 et seq.

DEP Docket Number: 17-09-11/749  
Effective Date: April 30, 2010  
Expiration Date: April 30, 2015

The Department of Environmental Protection (Department) hereby readopts, without change, the Safe Drinking Water Act Rules at N.J.A.C. 7:10. These rules establish the State primary and secondary drinking water regulations for public and nonpublic water systems, construction standards, fees, requirements for physical connections between an approved and an unapproved water supply, and provisions regarding civil administrative penalties and adjudicatory hearings under the New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq.

The proposal to readopt the Safe Drinking Water Act (SDWA) rules without amendments was published in the New Jersey Register on December 7, 2009 at 41 N.J.R. 4381(a). No public hearing was requested or held concerning the proposal. The comment period was set to close on February 5, 2010. On January 20, 2010, Governor Christie issued several executive orders. Executive Order No. 1 suspended for 90 days more than 150 then-pending proposals of various New Jersey agencies, among which was the proposal to readopt the SDWA rules and 11 other proposals of the Department. Executive Order No. 1 states that one of the Governor's priorities is to establish, under the direction of a Red Tape Review Group, a "commonsense" approach to the promulgation of rules. The commonsense principles are described in Executive Order No. 2, and the Red Tape Review Group is established under Executive Order No. 3. The purpose of the suspension was to afford the Red Tape Review Group the opportunity to examine the suspended rulemakings and make recommendations as to those proposed rules it determines are "unworkable, overly-proscriptive or ill-advised."

On February 3, 2010, the Department filed for publication in the New Jersey Register a notice of the extension or reopening of the comment period on the proposal to readopt the SDWA rules, and the other 11 suspended Department rulemakings, to March 15, 2010. The notice appeared in the March 1, 2010, New Jersey Register (see 42 N.J.R. 642(a)). The Department posted the notice on its website on February 4, 2010. The Department sought

through the notice to focus any additional written comments submitted on the purposes of the rules review set forth in the executive orders. The Department also announced in the notice that it would be scheduling informal stakeholder meetings on the proposals and that the dates for the meetings would be posted on the Department's website. The schedule of the stakeholder meetings was subsequently posted on the website on February 22, 2010.

The stakeholder meeting for the proposal to readopt the SDWA rules was held on March 10, 2010. At the stakeholder meeting, the Department specifically sought discussion of the economic analysis, federal standards comparison, process improvement, and compliance and enforcement review for the proposal. The stakeholder meeting was attended by 29 persons representing water systems, commercial laboratories, environmental advocates, consultants, attorneys, responsible parties, and realtors. The readoption of the SDWA rules without change was unanimously supported by all those who participated in the discussion, for reasons including avoiding the loss of Federal funding, preventing the elimination of existing State safe drinking water standards, and preventing potential adverse effects on public health and the economy. Concerns were also raised regarding potential reductions in public health protection as a result of the increased emphasis on economic concerns related to rulemaking under the Executive Orders. Participants also supported exempting the proposal to readopt the SDWA rules from the "freeze" imposed on pending rules under Executive Order No. 1 due to the public health protection aspects of the rule. One recommendation was made that the Department include in the SDWA rules a provision to provide enforcement latitude for reporting errors that are made accidentally. Participants commended the Department's recent efforts regarding electronic reporting, which have simplified the reporting process for public water systems.

The Department notes that in January 2010 it proposed amendments to the SDWA rules to (1) address certain process changes related to permit efficiency and (2) update the penalty and enforcement provisions to conform to the amendments to the SDWA at N.J.S.A. 58:12A-10 made by P.L. 2007, c. 246, commonly referred to as the Environmental Enforcement Enhancement Act, enacted effective January 2008 (see 42 NJR 17(a)). The comment period for that proposal was extended to March 15, 2010, by the above-mentioned notice regarding the 12 suspended Department proposals, and the proposal remains pending as of this writing.

This adoption document may be viewed or downloaded from the Department's website at [www.nj.gov/dep/rules](http://www.nj.gov/dep/rules).

#### **Summary of Public Comments and Agency Responses.**

The Department timely received written comments on the proposal from the following persons:

1. Caffrey, Robert
2. Ferriero, Paul W., Township Engineer, Township of Randolph
3. George-Cheniara, Elizabeth, Esq., New Jersey Builders Association
4. Greyer, James J.
5. Kondracki, Edward A., on behalf of the Township of Moorestown, the Evesham Municipal Utilities Authority, and the Association of Environmental Authorities
6. Len, Christopher, New York/New Jersey Baykeeper and Hackensack Riverkeeper
7. Rodriguez, Lynn, Somerset County Department of Health

8. Toffenetti, Joanne
9. Wolfe, Bill, New Jersey Public Employees for Environmental Responsibility

A summary of the comments and the Department's responses follows. The number(s) in parentheses after each comment identifies the respective commenter(s) listed above.

1. COMMENT: The Department is proposing to readopt the existing rules without change in order to extend the expiration date of the chapter. The readoption is supported as these rules are necessary to ensure the quality of the drinking water and in turn to protect public health. However, the Department is strongly encouraged to convene stakeholders and initiate a formal process to allow for interested party review prior to undertaking any rulemaking. Stakeholder input from the regulated community, including the building industry, and the owners and operators of water systems is critical, as these stakeholders are responsible for the required operation, maintenance, treatment and monitoring standards set forth in the rules. (3)

RESPONSE: The Department appreciates the commenter's support for the readoption of the SDWA rules. Consistent with Executive Order Nos. 1 through 3 (2010), the Department will seek stakeholder input prior to future rulemaking.

2. COMMENT: The SDWA rules should be readopted without any amendments that would impose additional mandates on private well owners and the small businesses that the Department regulates as "public water systems." New Jersey is already recognized as having some of the most stringent drinking water regulations in the nation. Take into consideration the economic challenges that the majority of New Jersey residents are facing; further mandates that exceed Federal requirements and create greater economic hardship for those that are struggling to make ends meet are not needed. In many cases, New Jersey drinking water standards far exceed the Federal standards and the standards being implemented by the vast majority of the nation. Current drinking water standards should be readopted and then "frozen in place" with the exception of any future Federal mandates or the discovery of a compelling issue that requires immediate attention at the State level.

The commenter states that, as the owner of a home with a private well and also a small business that the Department has classified as a public water system because it uses the on-site privately owned well for water supply, the costs for the commenter's company to comply with the current regulations has more than tripled over the last four years. The commenter states that, under the current SDWA rules, the commenter's business is forced to spend over \$5,000 per year on testing, maintenance and "licensed water system operator" fees despite the fact that there are only two small restrooms and the water is not used for consumption purposes. It is absurd that a small business with only restroom sinks is required to have a "licensed water system operator" on its staff.

Within the past year, the Department has issued dozens of pages of new bureaucratic policies and procedures that small businesses like the commenter's must now follow to maintain compliance. These directives are confusing and strewn with cross-references to website material, multiple attachments and prior Federal and State regulations. The time,

effort and costs required to simply understand and keep up with these regulations has itself become an impediment to doing business in New Jersey. It is understood that the Department views these expenses as necessary cost to live and do business in New Jersey. However, the Department drinking water regulations have reached a threshold of excess. (4)

RESPONSE: The Department acknowledges the comment in support of readopting the SDWA rules without change. Public water systems are defined under the Federal and State safe drinking water regulations as systems that serve at least 25 individuals daily for at least 60 days out of the year. Public water systems are divided into two categories, community water systems and non community water systems, based on the number of persons served. There are also two types of non community systems, transient and non-transient. These classifications are not a result of State regulations but are based on Federal mandates. The testing, operation, and maintenance requirements applicable to water systems are designed to ensure the quality of the delivered water and avoid potential exposure to unsafe levels of contaminants. The extent to which State and Federal requirements apply to a water system is dependent upon the classification of a water system. Monitoring and reporting requirements are generally less for smaller systems that serve fewer consumers during shorter periods of time and greater for those larger systems that serve more consumers over longer periods of time. Though implementation of these requirements result in costs to the owner of a water supply system, they are essential for the provision of high quality potable water and for the protection of public health. Further, these requirements apply whether or not the owner of a water system provides the water for consumption, as the Department cannot be sure that the water is not available for consumption. Once a water system is classified as a public water system, the Department must ensure that the water meets Federal and State requirements for the protection of public health. The importance of regular monitoring cannot be overemphasized as it is the only way to ensure that public health is effectively protected. Additionally, microbiological contaminants can affect consumers by means other than directly drinking the water. For instance, microbiological contaminants in the water can be transferred by hand washing and then ingested through hand to mouth contact, resulting in acute health effects.

Based on the information provided by the commenter, it appears that the commenter's small business became classified as a nontransient noncommunity public water system in the last few years and, as a result, has been required to expend financial resources to attain compliance with the SDWA rules, including obtaining a licensed operator. Most of the water systems in the State are small water systems. At the end of 2009, New Jersey listed 3979 public water systems in its inventory. These included 616 community water systems, 823 nontransient noncommunity water systems, and 2450 transient noncommunity water systems. Many of the nontransient and transient noncommunity water systems are considered small water systems.

USEPA guidelines require that all public community and nontransient noncommunity water systems have a licensed operator. There is no provision to allow an exemption from this requirement. However, in order to reduce the licensed operator related costs and requirements for nontransient noncommunity water systems that either have no treatment or limited treatment, in 2000 the Department promulgated amendments to the Licensing of

Water Supply and Wastewater Treatment System Operators rules at N.J.A.C. 7:10A that created the Very Small Water System (VSWS) license category for such water systems (see 32 N.J.R. 3585(a)). Licensed operators in this category need only satisfy minimal requirements to obtain a license to operate a system. Using the Expense Reimbursement Grant from USEPA, the Department provides funding to directly pay training and certification costs including application and initial licensing fees. Specifically, for the VSWS license category, most costs for initial training and certification are paid by the Department for the owner of a water system or one of his employees to become a licensed operator. Training consists of the completion of a 12-hour training course, as opposed to the 180-hour course required for higher licenses. The 12-hour training course is paid for by the Department, with the exception of a nominal cost of \$25 to the student charged by the educational institution. The licensee is thereafter responsible only for a \$50 annual fee and obtaining 12 hours of continuing education every three years for license renewal. Such training is often provided free of charge or at reduced cost. More than 85 percent of the nontransient noncommunity water systems in the State are classified as a VSWS. If a higher license is required, the Department also provides tuition reimbursement for completing the required training.

The Department recognizes however, that small water systems such as that described by the commenter face unique financial and operational challenges in providing drinking water that meets State and Federal standards. Both the Department and the USEPA provide technical assistance to small water systems, and as new requirements are promulgated or implemented, develop guidance specifically for use by small water systems to assist them in compliance with those requirements. With proper planning and preparation, complying with drinking water regulations need not be an overwhelming task. Many State resources to assist small water systems can be found at <http://www.nj.gov/dep/watersupply/swstech.htm> while Federal resources are available at <http://www.epa.gov/safewater/smallsystems/index.html>.

As the commenter acknowledges, readoption of the SDWA rules without amendments does not impose any new requirements or increase costs to those regulated under the rules. Consistent with Executive Order Nos. 1 through 3 (2010), the Department will seek stakeholder input prior to future rulemaking and would welcome comments or recommendations that might assist very small water systems with compliance, while still protecting public health.

3. COMMENT: The commenter supports the readoption of the SDWA rules, but has significant concerns with a section that currently provides loopholes regarding certain testing requirements. This section should be strengthened to ensure safe water quality. Under the well construction requirements, any newly constructed well is required to be tested for a full set of parameters to ensure basic water quality standards are met (N.J.A.C. 7:10-12.30). The commenter's office routinely discovers business locations on well water, such as small restaurants and doctor's offices which are open to the public and have numerous employees on staff but there is no historical record of the original water quality test results. If, based on population, the commenter registers these systems as transient, public noncommunity water systems, only then are they required by the Department to begin testing for bacteria and nitrate. There is no mechanism to require that these older wells be tested to ensure they meet

standards for inorganics, volatile organic compounds, iron, pH, and manganese. If the current well owner cannot provide evidence that the well was tested for the above parameters after construction, it is recommended that the administrative authority have the ability to mandate a one-time set of tests upon being registered as a public noncommunity water system. This could be accomplished by modifying the language at N.J.A.C. 7:10-12.30(b), as “The owner of a public noncommunity water system shall sample and analyze the raw water in accordance with N.J.A.C. 7:10-5 and for secondary contaminants in accordance with N.J.A.C. 7:10-7 upon construction and/or upon being registered by the administrative authority as a public noncommunity water system unless the system can provide sampling results showing compliance with those parameters.

The Private Well Testing Act (PWTA), N.J.S.A. 58:12A-26 et seq., and rules, N.J.A.C. 7:9E, require lessors of property to test the well for total coliform bacteria, nitrate, lead, volatile organic compounds, pH, iron, and manganese (and other parameters based on the county where the well is located). The commenter often finds business locations that are registered as transient public noncommunity water systems but that have tenants living on-site. These tenants do not get the benefit of the protection the PWTA was intended to provide. The PWTA, at N.J.S.A. 58:12A-32, specifically states that lessors have to test the well water only if the water supply is not required to be tested pursuant to any other State law. Because of this loophole, numerous tenants are drinking well water that has only been tested under the requirements for transient public noncommunity water systems, and therefore only for bacteria and nitrate. These tenants, including children and the elderly, sharing the well of the transient non-community water system do not have the advantage of knowing whether the well could be contaminated with lead, volatile organic compounds like benzene or methyl tertiary butyl ether, or arsenic. It is recommended that this loophole be closed to ensure all tenants served by well water are offered the protection of the PWTA testing and reporting goals. (7)

RESPONSE: The Department acknowledges that the testing requirements for a newly designated transient noncommunity water system with an existing well would consist of bacteria and nitrate, that these requirements are less stringent than those required by the PWTA rules at N.J.A.C. 7:9E for private wells, and that historical well test results may not be available for wells installed many years ago. Public transient noncommunity water systems, by definition, serve a population of less than 25 of the same persons for less than six months each year. Public transient noncommunity water systems are water systems that provide water in a place such as a gas station, campground, or restaurant. Consumers of the water from these water systems are not expected to be drinking the water over a long period of time. Therefore, routine monitoring for those contaminants that do not have acute effects, such as those mentioned by the commenter is not required. These requirements are consistent with those required by the Federal Safe Drinking Water Act Rules at 40 CFR 141 and 143.

The County Environmental Health Act at 26:3A2-27 provides that a local health authority may adopt and enforce environmental health ordinances. This could include provisions for new water systems or water systems serving only a few long-term tenants to collect additional water quality data where such is not required under the SDWA rules.

Therefore the commenter's concern could be addressed at the local level. Additionally, where a local health department becomes aware that there are contaminants in of a transient noncommunity water system's well, for instance, through the receipt of PWTA results from a nearby property, that health authority may recommend testing of the well of concern.

The Department notes that on March 29, 2010, the USEPA announced the review results for the National Primary Drinking Water Regulations (NPDWR). The purpose of the review, called the Six-Year Review, is to identify those national regulations for which current health effects assessments, changes in technology, and/or other factors provide a health or technical basis to support a regulatory revision that will maintain or strengthen public health protection. (75 Fed. Reg. 59, 15500). In that review, USEPA requested public input on whether it should review all contaminant rules to include additional monitoring requirements for transient noncommuntiy water systems. If this change were to be made, it might address the concerns of the commenter. The Department intends to work with the USEPA to determine whether changes to the monitoring requirements for transient noncommunity water systems are warranted.

4. COMMENT: The Department should clarify the rules regarding the construction of water systems (Subchapters 11 and 12) to make it clear that the extension of water main systems for fire protection is permissible where firm capacity does not necessarily exist. Existing N.J.A.C. 7:10-12.4 (general provisions and prohibitions), at (c)1, establishes that a person seeking to build a realty improvement or to alter or replace an existing water system must connect to an adequate public community water system if one is within 200 feet, can be connected to legally, and the connection is practical. This provision can be interpreted to mean that any water main extension must have capacity for any future development that may occur along the main. This effectively prohibits the use of water mains in public community water systems from providing superior fire protection in areas served by private wells. It is also illogical that a fire protection main could not be built while homes on private wells were under construction, but a fire protection main could be installed after the construction was complete.

In order to allow the rules to provide for the best possible fire protection and public safety, the Department should modify N.J.A.C. 7:10-11.10(c), which requires denial of a permit application for a proposed distribution main extension if the public community water system is unable to meet its historical peak daily demand as well as the additional demand anticipated from the proposed expansion, to include the following qualification: "Notwithstanding anything to the contrary, the Department will permit the extension of water facilities within approved franchise areas solely for the purpose of providing fire protection for existing or proposed realty improvements in cases where there is otherwise a lack of firm capacity in the public community water system as determined under N.J.A.C. 7:10-11.5(e). In such cases, the realty improvements along said water facilities shall not be permitted to connect to the extended facilities for potable water supply unless and until adequate firm capacity is available as determined by the Department pursuant to N.J.A.C. 7:10-11.5(e) and appropriate approvals are obtained from the Department and all governmental agencies having jurisdiction over such connections."

The suggested language would remove any ambiguity about the ability to construct fire protection water mains; protect the public health, safety and welfare by allowing the most effective fire protection to be available throughout an approved service area; and conserve resources and save substantial sums of money by allowing the fire protection lines to be constructed before homes or other structures are built rather than after the fact. (2)

RESPONSE: A continuous and dependable water supply is critical for the protection of public health and is necessary for the construction of new housing developments, the continuous operation of businesses and for fire protection. The protections built into the factors for determining available firm capacity and water supply for new developments and fire protection at N.J.A.C. 7:10-11.4(a)3, 11.5 and 11.10(c) are designed to provide ample water and treatment under a variety of conditions, including peak water demands and potential infrastructure failures. These protections have been successful in achieving the goal of an uninterrupted, high quality potable water supply throughout the State.

N.J.A.C. 7:10-11.10(b)2 requires a permit for any water main construction in excess of 1500 linear feet; N.J.A.C. 7:10-11.10(b)4i states that a connection to or extension of a water system shall not be undertaken if the anticipated demand associated with a project or activity to be served by the connection or extension would exceed the applicable firm capacity or water allocation limits. The rules for determining firm capacity of a water supply do not provide for a distinction between fire protection mains or water mains installed for development and homeowner use. Where the analysis of firm capacity and water supply conducted pursuant to N.J.A.C. 7:10-11.5 results in a determination that adequate supply is unavailable, an application for additional water use would be denied pursuant to N.J.A.C. 7:10-11.10(c), regardless of the intended use. This determination would not change after a development was completed unless additional firm capacity is identified and obtained.

A fire protection main constitutes an extreme example of an immediate high volume water demand to a water system. A water system that has insufficient firm capacity to supply daily demand to homeowners will not have the additional capacity to supply the higher flow demands necessary for fire protection. Allowing the water main to be installed for fire protection only would provide a false sense of security as fire hydrants served by water lines that are not capable of providing the required water volume and pressure 100 percent of the time could easily fail when used in an emergency. Further, water left unused in the mains will foster unacceptable levels of bacterial growth. Specifically, where a water system has inadequate firm capacity, it is unlikely that the minimum pressure required at N.J.A.C. 7:10-11.10(d)1 for a water main of 20 pounds per square inch at street level under all flow conditions, would be maintained. Thus, where a fire protection water main is connected to a water main used for potable purposes, and a water pressure drop occurs during periods of high water use for fire protection or any other time, the water with unacceptable levels of bacteria growth could be drawn back into the water system used for potable purposes, resulting in potential acute public health risks.

Rather than revise the rule as suggested, the Department believes that public health protection is better served if the water system obtains additional sources of water rather than

constructing fire mains that could run dry upon use and which could compromise the potable supply to the other customers of the water system if inadequately maintained.

5. COMMENT: Municipal water utilities in New Jersey today are faced with problems obtaining Safe Drinking Water permits from the Department for new construction. These problems are caused by rules that either require a municipal utility to construct infrastructure improvements that are oversized or not necessary, or else to waste money by purchasing water from outside water purveyors that is not needed under any reasonable set of operating circumstances. The rules assume that a “perfect storm” of events, which are unlikely *ever* to occur together, will *always* occur together. The rules require municipal utilities to plan for and secure enough firm sources of water to get through the perfect storm, no matter how unlikely, no matter how short in duration, no matter what emergency or contingency plans exist, and no matter what the costs to the municipal utility may be. In short, the rules are a waste of scarce municipal resources and ratepayers’ money, a major impediment to new construction in New Jersey, and a burden on economic recovery in the State.

Regarding firm capacity, under N.J.A.C. 7:10-11.4(a), “firm capacity” is the pumping and/or treatment capacity of the municipal utility plus the amount of water that the municipal utility is obligated to purchase from another water purveyor. The regulation goes on to state, however, that in calculating “firm capacity”, the municipal utility must assume that its largest well, pumping station or treatment unit will always be out of service.

While a utility may take a unit off-line for scheduled repairs perhaps every five years, it will do so only at off-peak times of the year. No utility will ever take a needed unit off-line for scheduled repairs during the peak months of summer. While there may be rare emergencies that would require a unit to be taken off-line in the summer, the redundancy that is already built into the system, plus the imposition of additional water use restrictions barring all non-essential use of water, as well as the availability of emergency water purchases through existing interconnections, would allow the municipal utility to provide enough water to meet the usual, basic “winter demands,” which are generally only about half of the peak demands of summer.

It is important to understand that a municipal utility just cannot buy water and count that water towards its firm capacity. N.J.A.C. 7:10-11.4 (a) will only allow purchased water to be included in the calculation of firm capacity to the extent that a municipal utility is contractually obligated to purchase a stipulated amount of water each year. Thus, if a municipal utility has the ability to purchase water through an interconnection with another water purveyor, no water is counted towards firm capacity unless there is a set annual obligation to purchase a stipulated amount. Even then, the municipal utility only gets credit for the amount of water it is obligated to purchase, not the amount that it is capable of purchasing.

The SDWA rules require each municipal water utility to either make a firm commitment to purchase water or over-construct facilities to produce water that would not be needed 99.99 percent of the time in order to satisfy the perfect storm of events that will

rarely, if ever occur and which can be handled on a temporary emergency basis if it does occur.

For determining “firm capacity”, the Department should do away with the requirement that the largest well be considered out-of-service in calculating firm capacity. As noted, the redundancy that is already built into water systems, plus the imposition of additional water use restrictions barring all non-essential use of water, as well as the availability of emergency water purchases through existing interconnections, would allow the municipal utility to provide enough water to meet the usual, basic “winter demands,” which are generally only about half of the peak demands of summer.

The Department should also allow the hydraulic capacity of any interconnections to be counted towards firm capacity. This, in fact, was the Department’s approach until very recently. At the minimum, the hydraulic capacity of any interconnections should be recognized as being available to get through the peak months of summer or any short-term emergency situation, without requiring the municipal utility to enter into a firm agreement to purchase water that it may not otherwise need. (5)

RESPONSE: N.J.A.C. 7:10-11.4(a)3 requires that, in calculating firm capacity, one must assume the largest pumping or treatment unit is out of service. In some cases, the largest pumping unit can be the largest well as noted by the commenter. During the review for firm capacity of each system the Department examines how the loss of each system component including the most critical supply source would potentially result in an inability to deliver an uninterrupted and safe potable supply. This assessment does not assume that that largest well is always out of service or that the utility’s water need will always be equivalent to the amount of water used during the highest month of the last five years. Instead, based on the average day for a peak month, it assesses how an interruption in supply through, for example, loss of a source or a treatment unit would affect a system’s ability to provide water to consumers. In essence, it is a snapshot review of a short-term adverse-effects scenario and not a permanent condition.

The Department does not believe that the procedure used to determine firm capacity is overly restrictive or that it provides firm capacity values that would not be needed 99.99 percent of the time, as the commenter suggests. In the Department’s experience, primary water supply system pumping or treatment units have failed or been disabled during a peak water demand period, such as during the hotter, drier summer months. A range of seasonal stresses on water system infrastructure, including extreme and unpredictable storms, flooding, and energy shortages, for example, have the potential to coincide with periods of extreme water demand. The condition of the infrastructure can also influence system reliability. For example, the yield of the well, the age of the well, or the water quality of source waters can influence usage of a well throughout the year. Accordingly, the incorporation of system redundancies is essential to ensuring the adequate provision of public water supply during all seasons and under all demand conditions.

Water use restrictions and emergency declarations that encourage the conservation of the public water supply should be relied upon to provide supply under recurring, predictable

seasonal peak demands. For unpredictable system stress affecting firm capacity or infrastructure such as floods, or changes in well yield or quality, water use restrictions would not be effective because notification does not result in instantaneous reduction and, from the Department's experience, would likely be insufficient. In fact, the lack of sufficient infrastructure or firm capacity that provide system redundancies could increase the likelihood that a system would need to declare an emergency as that system would be less able to accommodate even small emergencies or fluctuations in demand.

Under N.J.A.C. 7:10-11.4(a), firm capacity is defined as "adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation), and/or adequate capacity by supply from another water system pursuant to contract to meet peak daily demand". Hydraulic capacity of an interconnection does not correlate directly with the amount of supply that can be instantaneously delivered by the serving water system. The amount of water that can be delivered at any given instant is typically less than the maximum amount of hydraulic capacity as it depends both on pressure differential and water demand.

Therefore, allowing water systems to take credit for the total hydraulic capacity available, rather than the contracted limits approved under the water allocation rules at N.J.A.C. 7:19-7.1, could result in the supplier of water being left without adequate supply and could provide a false sense of the amount of water that is potentially available. It has been the Department's experience that reliance of multiple purveyors upon the hydraulic capacity of a single supplier jeopardizes the supplier's ability to meet demands particularly during events such as regional power outages. Power outages are a problem because they result in an inability for the supplier to pump and treat water and thus reduce supplies.

In 2004 the Department promulgated the specific requirements for the demonstration that an applicant must make to show the proposed water system would have firm capacity to meet peak daily and average monthly demand (see 36 N.J.R. 5383(b)). Under the requirements, an applicant must possess a water allocation permit with applicable limits and/or bulk purchase agreements (that is, contracts) to divert or obtain the amount of water necessary to meet the monthly and annual estimated demands for the proposed system. The applicant must also demonstrate that the water system will have adequate firm capacity to meet peak daily demand. These requirements were implemented over the next few years as new permits were issued, thereby standardizing how water supply from other water systems pursuant to contract are used in the determination of firm capacity.

6. COMMENT: As to peak daily demand, N.J.A.C. 7:10-11.5(e) requires that a municipal utility have enough "firm capacity" to meet its "peak daily demand." The "peak daily demand" is calculated by adding together the current demand, the demand that is projected to come from the new project, and the demands that were projected to come from prior projects that have been approved but not yet connected. There are problems with the way the Department defines each of these three components.

First, the Department defines the current demand as the "average daily demand as recorded in the peak month of the prior five years." See N.J.A.C. 7:10-11.5(e)1i. This is

almost always a summer month, and may be considerably higher than other summer months and may occur for a variety of reasons, many of which may be currently inapplicable, such as the implementation of new or tighter water use restrictions. The highest peak month in the last five years may be on the order of 10 to 25 percent higher than average summer month demands and may be more than twice as high as a normal demand month. Yet the Department requires the municipal utility to always assume that the demand from the highest month in the past five years will be a constant demand each and every month of each and every year. This requires the municipal utility to develop such infrastructure and enter into such purchase agreements that will guarantee, at a minimum, such water availability on a 365-day basis.

The Department should redefine the average daily demand as the average daily demand of the three highest peak months of the prior 12 months. This gives a municipal utility the incentive to control water demands through water use restrictions and other measures and see an immediate reward for such efforts. As it is now, if the highest month was in the prior year, a municipal utility that reduces demands through water use restrictions, rates, contingency plans or other methods gets no benefits from such efforts for another five years.

Second, to the historic peak demand discussed above, the Department requires that the anticipated peak daily water demand of the new project be calculated in a certain fashion. See N.J.A.C. 7:10-11.5(e)1ii. For residential usage, DEP requires that the demand be based upon the average daily demand contained in the Department of Community Affairs' Residential Site Improvement Standards (RSIS), N.J.A.C. 5:21-5.2(d). For non-residential usage, the Department requires that the demand be based upon N.J.A.C. 7:10-12.6(b), Table 1. While these figures represent unrealistic demand figures that are never achieved, the Department compounds the problem by requiring that these demand figures be tripled. See N.J.A.C. 7:10-11.5(f).

To illustrate the fallacy of this requirement, RSIS projects the water demand from a four-bedroom home to be 395 gallons per day. Studies show that the normal four-bedroom home in a suburban area uses about 250 gallons per day, on a year-round basis, including irrigation. As if this discrepancy were not big enough, the 395 gpd must be tripled, and requires the municipal utility to build or buy enough additional capacity for a demand of 1,185 gpd for each new home to be added, or nearly *five-times* the usage that can reasonably be expected to come from that one home. For a 100-home subdivision that will demand about 25,000 gallons per day, the municipal utility must build or buy an additional 118,500 gallons per day of water capacity.

To put these numbers in another perspective, if the 1,185 gpd of projected demand for a four-bedroom home were allocated to various uses, four people could each take a 30-minute shower, flush the toilet a total of 60 times, run a sink faucet for a total of two hours, run a total of eight loads in the dishwasher and eight loads in the washing machine – all in a single day – each and every day of the year. That is the residential demand that DEP requires municipal utilities build or buy for every new home that is to be constructed.

In addition, the peak demands associated with prior projects which have been approved but not yet connected are calculated in the same fashion. Thus the unconnected flows, for which the municipal utility is still obligated to provide, are based on the RSIS and the Department demand projections, which are then tripled. The basic RSIS and the Department demand figures are themselves out-of-date. They do not take into consideration the water-saving fixtures that are now required by plumbing codes. The Department should revise the RSIS and Department average daily demand projections, or the Department should develop its own projected water demand figures based on realistic numbers. (5)

RESPONSE: The Department believes that revising the daily demand calculation using only the prior 12 months will not adequately reflect overall seasonal patterns or cyclical weather patterns that might occur less often than once each year. Droughts are not an annual occurrence, nor are periods of excessive precipitation. For example, according to the information gathered by the National Weather Service, available at <http://www.state.nj.us/dep/drought/rainfall.html>, the period between April 2009 and March 2010 appears to be the wettest of any 12-month interval on record for New Jersey and exceeded the previous record by almost five inches. Water demands are often directly related to the amounts of precipitation during warmer months. Specifically, water demands often increase with less precipitation and high temperatures and decrease with higher precipitation. If the Department were to utilize only 2009 demand figures, which the Department would expect to be low due to increased precipitation, it would likely result in the approval of water main extensions in excess of available supplies during a period of less precipitation and increased demands.

The Department's experience indicates that the five-year period captures a reasonable range of temperature and rainfall variations that might occur each year. The commenter also suggests that average daily demand should be calculated based on the average daily demand of the three highest peak months of the prior 12 months. Again, precipitation data and the Department's experience indicate that 12 months is not an adequate period of time to address annual variations in precipitation and temperature and thus resulting demands. Such assessment of demand is more appropriately made over a period of multiple years. Note that, while the Department generally requires a demonstrated demand reduction over the five year period, the Department will consider documented reductions during a shorter period of time (that is, two or more years) where those reductions are based on permanent measures to control water use, such as adopted outdoor water use limits, and not reliant on natural conditions (higher precipitation and lower temperature during periods of typically high demands), pursuant to N.J.A.C. 7:10-11.3(a).

The current RSIS values adequately represent current uses for the purposes of projecting future demands. An assessment of 1990 through 2007 water use data utilized as part of the development of the draft State Water Supply Plan supports the conclusion that plumbing codes requiring water saving devices have reduced average per capita water demands for new construction. The data also suggest that overall statewide water use is increasing due to increased consumptive water losses, resulting from irrigation and other outdoor water use. A peaking factor of three multiplied by the average daily demand has proven to be an accurate and effective tool for estimating peak water demand. For further information regarding the Department's experience concerning historical water demand and

the establishment of a peaking factor of three, see the response to comment 7 below as well as the readoption of the Safe Drinking Water Act rules published in the New Jersey Register on December 6, 2004, 36 N.J.R. 5383(b); response to comments 42 through 49 at 36 N.J.R. 5390.

7. COMMENT: Regarding water allocation analysis, N.J.A.C. 7:10-11.5(g) requires the municipal utility to also perform a water allocation analysis to determine whether the municipal utility possesses a valid water allocation permit with sufficient monthly and annual diversion limits and/or bulk purchase agreements to meet existing and estimated peak demands. Many of the same problems that exist with the method by which “peak daily demand” is calculated exist with respect to the water allocation calculations: 1) the use of outdated RSIS and the Department demand figures for projecting the base daily demand from new structures; 2) the use of the highest demand in the last five years as a current demand that will be required 365 days a year; and 3) the continuing use of excessive demands that were projected to come from prior projects which have been approved but not yet connected. In addition, the Department requires that the already high and outdated daily demand figures from new structures be multiplied by a peaking factor of 1.5 before it is converted to the monthly demand figures.

The Department starts with an unreasonable and outdated base for determining water demand from new developments, exacerbates the problem by using a multiplier of an additional 50 percent on top of the faulty figures, adds to that faulty demand figures for prior and unconnected developments, and then adds that to the highest usage in the past five years, as though that usage were to occur regularly on a daily, monthly and yearly basis.

The Department should remove the peaking factor of 50 percent. There is no rational basis for such a peaking factor. It only requires more water capacity to be constructed or purchased than is necessary. The Department should make the same adjustments to the water allocation analysis as the commenter suggested (see above) for the peak daily demand analysis. (5)

RESPONSE: Consistent with its charge under both the Federal and State SDWAs to ensure a safe and adequate water supply on a continual basis, the Department requires that water systems “reserve” an adequate supply of water when projecting anticipated demands to be derived from new connections. This margin of safety requires every water system to demonstrate that there is adequate infrastructure and water supply to meet all future demands including when the system experiences the highest peaks in demand – on a monthly, daily, and instantaneous basis.

As noted previously in the responses to comments 5 and 6, in order to ensure that there is adequate water allocation within particular water systems, the Department utilizes the reported peak monthly demand over the past five years to define current demands on the system. The monthly peaking factor of 1.5 (which is what the commenter references as a 50 percent increase in demand) is used to estimate future monthly demand for currently permitted, but not yet connected, water mains as well as applications for new water main extensions. This additional capacity is necessary since, for new homes, new landscaping and

lawns are being established and water use is documented to be higher. Actual (metered) water usage is then used to determine current demand after a period of one year.

The monthly peaking factor of 1.5 was adopted as part of the firm capacity requirements in the State SDWA rule amendments promulgated in 1996. At that time, the Department reviewed Statewide water use data to determine a peaking factor, establishing that the value of 1.5 was representative of the data available at that time. Recent data reviewed by the Department indicates that the peaking factor is still appropriate. For example, for calendar year 2005 through 2008 peak month to average month demand values for Evesham Township Municipal Utilities Authority show a peaking value of 1.4. Peak month to average month demand values for Aqua New Jersey - Woolwich for the same time period show a peaking value of two. The Department acknowledges that there is a difference in water use and averages for larger, established systems when compared to newer systems. Therefore, the value of 1.5 is still within the range of representative values for both established and new systems. For this data set, Evesham Township Municipal Utilities Authority represents an established system and Aqua New Jersey - Woolwich represents a newer system.

As part of the State SDWA rule amendments promulgated in 1996 the Department adopted a peak daily demand factor of three based on a review of Statewide data showing that the maximum daily demand of a water supply system was approximately three times the average daily demand. To verify that this peaking factor is still appropriate, the Department reviewed water use data collected during calendar years 2000 through 2009. A variety of water systems were evaluated to account for size variations, geographical location, population growth, and seasonal fluctuations. The analysis revealed an average daily peaking factor of 2.8 for the systems evaluated. This recent data continues to support use of peak daily demand factor of three.

Further, the application of the peaking factor of 1.5 for residential development pursuant to N.J.A.C. 7:10-11.5(f)1 is consistent with that required by the RSIS at N.J.A.C. 5:21-5.3, referenced therein, which is used to estimate future demands in the water allocation permit review process governed by the rules at N.J.A.C. 7:19. A uniform methodology provides water systems and Department with a predictable process that ensures adequate water for users while helping to protect the quantity and quality of the State's water resources. Additional information regarding evaluation of the peaking factor of 1.5 is including in response to comment 6 above.

8. COMMENT: Regarding the effect of the rules on municipal utilities and their ratepayers, the costs to municipal utilities from these regulations are enormous and wasteful and can no longer be tolerated or passed on to ratepayers. For a 100-home subdivision that will demand about 25,000 gallons per day, but for which the municipal utility must build or buy an additional 118,500 gallons per day, the cost of purchasing water is raised over five-fold. If a municipal utility can purchase water under a "Commodity Demand" agreement by which it purchases a stipulated amount of water each day of the year, it pays about \$3.00 per thousand gallons. Purchasing 25,000 gpd would cost about \$27,000 a year. If the municipal utility has to guarantee a purchase of 118,500 gpd, the costs are around \$130,000 a year. This municipal

utility will be required to waste over \$103,000 each and every year just to provide water to this development.

It is far worse for those municipal utilities that do not have the hydraulic capabilities of buying water under a “Commodity Demand” agreement. For them, the only choice is to purchase a guaranteed amount of water under tariff rates of about \$5.74 per thousand gallons. Instead of paying about \$52,000 a year, the municipal utility is forced to pay over \$248,000 a year, wasting nearly \$196,000 of ratepayers’ money each and every year.

Keep in mind that the physical ability to purchase water is not counted towards firm capacity, only the amount of water that the municipal utility is obligated to purchase annually is counted. A municipal utility cannot just purchase water on an as-needed basis to satisfy firm capacity requirements.

The firm capacity regulation requires a municipal utility to always assume that its largest well will be out of service. If a municipal utility is required to construct back-up infrastructure merely for the purpose of meeting firm capacity requirements, the costs are also great and just as wasteful. A typical well, from design and permitting, through construction, inspection and testing, costs in the neighborhood of \$2,000,000. Even with NJ Environmental Infrastructure Trust traditional financing, annual debt service requirements will be approximately \$123,000 per year, not including the additional costs of maintenance.

If municipal utilities are to provide the water infrastructure needed to support construction in New Jersey, they are faced with tough choices under the rules. Municipal utilities can either build water infrastructure or buy outside capacity that is far excessive for their needs. Either option wastes the little money that governmental entities have available today. A last option is for the municipal utility to turn its back on new construction, making the economic situation in the State worse than it is. (5)

RESPONSE: Pursuant to N.J.A.C. 7:11.4(a)3, the Department requires that any water to be purchased in determining firm capacity or allocation limits be guaranteed by a contract. The amount of water purchased in combination with the water system’s other sources must be adequate to provide the demand required at N.J.A.C. 7:10-11.5(e)1. This demand is the peak daily demand, determined by the average daily demand, recorded in the peak month of the prior five years, not the purchase of an amount that is equal to the peak daily demand multiplied by 365 days as noted by the commenter. In some cases a commodity demand agreement can be used to satisfy this requirement for a contract; however, the Department does not specify the type of contract or terms used to purchase the supplemental water.

Purveyors are not obligated to meet peak demands solely through bulk purchase agreements with another supplier. A purveyor may meet peak month requirements through use of their own sources as authorized in a water allocation permit, by increasing the monthly allocation where appropriate through a major modification of its water allocation permit, through purchases from another supplier, reducing demand, or a combination of these actions. It is the responsibility of the purveyor to identify and implement the most efficient and cost effective measures in meeting its peak demands. Also, a purveyor may be able to

include aquifer storage and recovery in its system so that water is purchased at times and under terms that are more acceptable to the purveyor, then stored and used to meet peak demands when they occur. This often reduces a purveyor's dependency on water purchased from another supplier and routinely allows for more acceptable purchase rates, for example, use of off-peak contracts.

Since a purveyor could have contracts with multiple utilities or other water purchasers, the use of contracts in the determination of firm capacity by the Department is necessary to ensure that the seller of the water has the capacity available when needed by the municipal utility in combination with others to whom the seller is under contract to provide water supply.

Using this standard and the example of 100 homes provided by the commenter, the estimated costs of purchased water are much lower than noted by the commenter. Specifically, the 100 homes are multiplied by the RSIS demand value for a four bedroom home of 395 gallons per day. That value is multiplied by a peak factor of three which equals 118,500 gallons per day. This is the peak daily demand as noted by the commenter. The monthly demand is then determined by multiplying the 100 homes by 395 gallons per day, 31 days per month, and finally by a peak factor of 1.5. This results in 1.8 million gallons per month or 14.4 million gallons per year (1.8 million gallons per month times 365 days). Multiplying 14.4 million gallons per year by the \$3.00 per thousand gallon rate provided by the commenter results in an estimated costs of approximately \$43,200, or one-third of the costs cited by the commenter. As noted above, this annual quantity of water is not equal to 365 times the peak daily demand but is based on the monthly demand.

In the second example of 100 homes and a tariff rate of \$5.74 provided by the commenter, using the same procedures results in an estimated cost of \$82,700, not the \$196,000 noted by the commenter. It again must be noted, however, that the actual amount of water contracted for would be subject to negotiations between the parties.

With regard to the cost of additional infrastructure, the Department agrees that a new large-capacity municipal well could cost up to two million dollars. However, it is unlikely that such a large well would be necessary to accommodate only the peak demand periods in question. Evaluation of current water supply information indicates that each of the factors used in the determination of firm capacity is reflective of current water use in the State.

9. COMMENT: The SDWA rules also affect counties, municipalities, municipal sewer utilities and sewerage authorities through the Department's Water Quality Management Planning (WQMP) rules, N.J.A.C. 7:15, as amended effective May, 2008.

Today, counties have the primary responsibility for preparing wastewater management plans (WMP) in their respective jurisdictions, (N.J.A.C. 7:15-5.4). That responsibility can be assumed by the municipality if the county fails to act (N.J.A.C. 7:15-5.13). General sewer service area designation is withdrawn if a WMP is not submitted in accordance with the regulations (N.J.A.C. 7:15-5.23(c)), meaning that no additional sewer service can be provided in the wastewater management planning area.

As part of the WMP submittal, the WQMP rules require that the planning agency must supply an estimate of the future water demand under a full build-out analysis, using the criteria contained in the “peak daily demand” regulations discussed in the commenter's prior comments above, that is, using outdated RSIS and the Department demand projections which are then tripled (N.J.A.C. 7:15-5.25(f)1i). If the Department “determines that there is insufficient existing water supply available” to provide for a full build-out of the sewer service area, the planning agency “must identify measures to ensure an adequate water supply” (N.J.A.C. 7:15-5.25(f)2), including either reducing water demand by reducing development or increasing water conservation measures, or else obtaining an additional source of water supply. The Department will not approve a WMP that does not “ensure an adequate water supply” (N.J.A.C. 7:15-5.25(f) and (f)2).

This means is that the unreasonable and wasteful approach used by the Department in calculating peak daily demand on the water supply side is carried over to the sewer planning side. The Department will not approve a WMP if there is insufficient existing water capacity today to provide for a full build-out of the sewer service area, no matter how long it takes to achieve the full build-out. The practical consequences of such a determination is that the area permitted for new development must be reduced or the municipal utility must agree to purchase water allocations that it may never need from an operational perspective. Otherwise, the Department will not approve the WMP, sewer service area designation will be withdrawn, and new construction will come to a halt.

Again, the only options are to waste scarce governmental resources to purchase unnecessary water allocations, or to let sewer service area designations be withdrawn and new construction come to a complete stop. But now, the cost of inaction goes up, since the sewer utility may already have constructed and bonded enough treatment capacity for a full build-out, and will be unable to recoup its investment through new connections, connection fees and service charges. This leads to a “stranded debt” situation, which can only be rectified by increasing sewer service charges to all.

The Department should do away with the requirement that of the water that may be needed for a full build-out of the sewer service area must be “in-hand” today. Recognize that the WMP is just a plan, that it should not mandate that water infrastructure and capacity be currently available to satisfy sewer needs that may easily be 20 or more years away. (5)

RESPONSE: The wastewater management plan (WMP) requirements are outside the scope of the readoption of the SDWA rules. However, for the reasons stated in previous responses to comments, the Department believes that the demand projections and peaking factors used in determining system capacity adequately portray realistic scenarios. Such projections and peaking factors ensure that water systems provide a dependable, continuous supply of high quality water to meet the needs of users under a variety of conditions.

The WMP is a document that provides for long range planning for wastewater and certain other water quality concerns, including the availability of an adequate potable water supply to meet the demands at projected build-out. The WMP ensures that development plans recognize and are protective of environmentally sensitive areas and water quality, and

are consistent with waste water and water supply infrastructure limitations. While an adequate, viable source of water supply must be identified, or actions must be taken to reduce demand to assure that demand at environmental build-out does not exceed identified sources of water supply in order to meet projected build-out under the WMP, the WQMP rules do not require that such water supply be “in-hand” at the time the WMP is approved. The WMP is designed to identify if there are any “fatal flaws” in meeting future water demand without causing stream flow or saltwater intrusion problems. The Department recognizes that ultimate build-out for a municipality or county may not occur until decades into the future and that requiring a firm commitment for water supply through contract with another purveyor or constructing additional water supply infrastructure far in advance of the anticipated build-out demand may be an unreasonable economic burden on that community. However, planning to ensure that existing and future wastewater treatment needs and water supply demands are identified and ultimately addressed is sound public policy that not only protects sensitive environments and water quality and supply, but will also assist local officials in ensuring that development projects are located in the most appropriate areas and will provide greater predictability and consistency in the permitting process..

### **Red Tape Review Process and Rulemaking; Executive Order Nos. 1 through 3 (2010)**

10. COMMENT: The Governor’s Red Tape Review executive orders have raised potentially troublesome issues for the Department’s rulemaking and enforcement process. Considering the economic impacts of environmental regulation is a fraught process. Even the best economists struggle to quantify environmental benefits in dollar terms; their best efforts, with the benefit of hindsight, tend to underappreciate environmental value at the time of quantification tragically and repeatedly. Economists struggle with correctly finding and valuing the external impacts of economic transactions, discount rates and contingent values for natural resources; most ecosystem services are not captured in market transactions and are thus of indeterminate value. There is simply no economically viable way for the Department to say, for example, that 15 shopping malls are of equal value to New Jersey as a self-sustaining osprey population.

Cost benefit analyses of environmental regulation, when attempted, are invariably wrong, invariably non-confirmable and invariably minimize the benefit while maximizing the cost. Including such cost benefit analyses in the regulatory process is an important decision for any statute, and legislatures are well aware of the importance of deciding on whether particular legislation will impel or forbid such a process.

Inappropriately applying cost benefit analyses is a common and fatal mistake many levels of government make; one that often puts them on the wrong end of an environmental lawsuit.

While true benefit analysis is probably not possible, only a highly trained economist can be expected to wade through analysis of contingent valuation, externalities and discount rates. Reasonable analysis, let alone accurate analysis, is not possible for a layperson to produce. The commenter’s understanding is that the Department has not used any particular economic theory to generate its benefits analysis, has no methodology to quantify benefits,

has not used economists to review the effects of these rules and has only one economist on staff for the entire department. Although it is good that the Department concludes that its rules are justified by their benefits, a qualified economist is likely to find far greater benefit than the Department has. (6)

RESPONSE: Governor Christie's Executive Order No. 2 delineates "common sense principles" for rulemaking that are intended to provide the "opportunity to energize and encourage a competitive economy to benefit business and ordinary citizens." At section 1a, the Executive Order directs all State agencies to solicit the advice and views of knowledgeable persons from outside of New Jersey State government, including the private sector and academia, in advance of any rulemaking. At section 1d, the Executive Order directs State agencies to "employ the use of cost/benefit analyses, as well as scientific and economic research from other jurisdictions, including but not limited to the federal government when conducting an economic impact analysis on a proposed rule."

The Administrative Procedure Act (APA) at N.J.S.A. 52:14B-23 and 24 (P.L. 1995, c.65, effective June 5, 1995, which codified the substance of Governor Whitman's Executive Order No. 27(1994) into the APA) requires State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a comparison with Federal law. The analysis must include a cost-benefit analysis that "supports the agency's decision to impose the standards or requirements and also supports the fact that the State standard or requirement to be imposed is achievable under current technology, notwithstanding the Federal government's determination that lesser standards or requirements are appropriate." Therefore, since 1994 in accordance with State law the Department has included a cost-benefit analysis in all of its rulemakings where the rules or standards exceed Federal law.

The APA at N.J.A.C. 7:52-14B-4(a)2 requires State agencies to include in each rulemaking a "description of the expected socio-economic impact of the rule." The Office of Administrative Law's Rules for Agency Rulemaking implement the APA and require at N.J.A.C. 1:30-5.1(c)3 that a notice of proposal include "an economic impact statement which describes the expected costs, revenues, and other economic impact upon governmental bodies of the State, and particularly any segments of the public proposed to be regulated." Each of the Department's rule proposals contains such a statement.

As required by the APA and the Rules for Agency Rulemaking, the Department's rule proposals also contain statements of social impact, jobs impact, agriculture industry impact, impact on small business (regulatory flexibility analysis); and statements addressing the proposed rules' impact on smart growth and the cost of housing. The Department in addition includes an environmental impact statement, describing the impact that its proposed rules will have on the environment.

The Department acknowledges that it has not historically provided as much detail in its impact analyses as an economist might. The Department endeavors to employ a practical approach to its determination of the costs and benefits of its rulemakings, and necessarily relies to a certain extent on information developed by other sources. For instance, the

Department may adapt and tailor to the circumstances in New Jersey the economic analysis for a rule performed by another state or the Federal government. In addition, the Department conducts informal and formal outreach to regulated communities, environmental interest groups, the U.S. Environmental Protection Agency, other Federal and State agencies, agencies of other states, and the general public in the early stages of rulemaking. This is particularly the case for larger, more complex rulemakings. The Department will publish notice on its website or in the New Jersey Register, and/or use mail and electronic mail to known stakeholders, providing a description of the rules anticipated to be changed and the timeframe and means by which input will be gathered, for instance, at informal meetings or by written submissions, or both. Through outreach such as this, the Department obtains information on possible costs and benefits of rules that it is developing, as well as suggestions for the approach the Department should take in pursuing its regulatory goals.

Through the impact statements and Federal standards analyses for its rulemakings the Department attempts to identify the anticipated costs and benefits that will result from the proposed rules, including reasonably foreseeable indirect or secondary costs and benefits. The Department does attempt to identify and describe, even if it cannot always quantify in dollar terms, the proposed rules' costs and benefits in order to provide the public with as complete a picture and/or rationale as possible regarding the positive and negative economic impacts of the rulemaking.

Going forward the Department anticipates looking to the scientific and economic research of other jurisdictions and conducting advance outreach for its rulemakings in order to obtain enhanced insight into the costs and benefits that will flow from its rules and help accomplish the regulatory balance contemplated by Governor Christie's Executive Orders.

11. COMMENT: The Governor's concern that Department standards may, in some instances, exceed Federal standards is misplaced. The Federal law in most environmental matters acts as a basement, below which states cannot fall, but above which they may build. The Congress and the EPA are aware that they are setting national minimums, just as they are aware that the states are very different. A minimum that makes sense in a relatively unpopulated state such as Montana, will not necessarily make sense in New Jersey, the most densely populated state in the country. A minimum in a relatively virgin state such as Oregon will not necessarily make sense in New Jersey, a state with legacy of toxic industrial pollution. In this context, it is not only appropriate that New Jersey's regulations would exceed Federal standards in a number of instances, it is essentially mandatory. Any state's environmental protection agency that is doing its job will find instances where the peculiarities of the particular state make Federal regulation inadequate.

New Jersey's regulations, because of the State's population density, industrial legacy and proximity to several huge metropolitan areas, should probably exceed Federal standards in many and diverse ways. The Department is uniquely positioned to use Federal standards as a starting point to create regulations that specifically address the unique problems facing New Jersey and its citizens. The Department, therefore, should not hesitate to exceed Federal standards when the health, safety, and welfare of New Jersey's citizens and its environment require it. (6)

RESPONSE: The APA at N.J.S.A. 52:14B-23 and 24 requires State agencies to include in their Federal standards analysis a discussion of the policy reasons that support the agency's decision to impose a standard that is more stringent than a comparable Federal standard. This is in addition to the cost/benefit analysis that the APA requires, as discussed in the immediately preceding response. The Legislature stated, at N.J.S.A. 52:14B-22, "[i]t is the declared policy of the State to reduce, wherever practicable, confusion and costs involved in complying with State regulations. Confusion and costs are increased when there are multiple regulations of various governmental entities imposing unwarranted differing standards in the same area of regulated activity. It is in the public interest that State agencies consider applicable federal standards when adopting, readopting or amending regulations with analogous federal counterparts and determine whether these federal standards sufficiently protect the health, safety and welfare of New Jersey citizens."

Governor Christie's Executive Order No. 2, section 1e, requires State agencies to "[d]etail and justify every instance where a proposed rule exceeds the requirements of federal law or regulation. State agencies shall, when promulgating proposed rules, not exceed the requirements of federal law except when required by State statute or in such circumstances where exceeding the requirements of federal law or regulation is necessary in order to achieve a New Jersey specific public policy goal." This directive establishes a focus and approach to the comparison with Federal law that the APA requires all State agencies and the Department to conduct for rulemaking.

As the commenter points out, the conditions and circumstances of New Jersey and its citizens can be unique to the State. Consequently, both the APA and Executive Order No. 2 acknowledge that there will be times when it is absolutely appropriate for the Department to promulgate standards that are more stringent than Federal standards, either because New Jersey law so requires or because doing so is necessary in order to achieve important public policy goals for the State.

12. COMMENT: There are probably many instances where Department procedures could be more clear. For example, Department forms may have increased in complexity over the years, some information may be requested redundantly and some permits could, perhaps, be merged. The Department, however, should keep in mind that it is not a "Department of Environmental Permitting," and its mission should not be to smooth the path from developmental permit applications to development. Central to the idea of protection is that one must often say "no." The Department should not look at "process improvement" as making it easier to get to "yes." (6)

RESPONSE: The Department undertakes various efforts to assist the regulated community in the permit application and review process. For example, in accordance with N.J.S.A. 13:1D-111, the Department develops and makes available technical manuals relating to its various environmental permits. The Department also provides checklists, identifying the application steps and submissions required under the respective permitting program rules. Checklists and applications are made available through the Department's

website. The Department often assigns case managers to assist applicants with the permit process, and to coordinate permitting across various Department programs.

The Department convened the Permit Efficiency Review Task Force in 2008 and, in response to its recommendations (see <http://www.state.nj.us/dep/permittf/documents.html>), has undertaken various initiatives to improve outreach for rulemaking and to streamline and improve the permit application and review process. The Department is committed to upgrading its information technology infrastructure to support electronic submission and processing of permit applications and associated reports. The Department is in the process of increasing its network capacity, and is accelerating its efforts to design and develop electronic permitting and reporting services. Recent efforts include, for instance, implementation of an electronic water use and transfer reporting program by the water supply program to facilitate data management, eliminate the use of paper forms, reduce data errors, improve tracking and reporting of data, and make data available in a more timely fashion.

The Department believes process improvements that facilitate the issuance of permits that are consistent with the applicable standards and that are issued in a coordinated and timely fashion are beneficial to the regulated community, the Department, and the environment. Streamlining permitting will conserve the resources of all involved and maintain proper focus on achieving substantive environmental protections. As the Permit Efficiency Review Task Force's recommendations and Governor Christie's Executive Orders recognize, the process of obtaining a permit from the Department should not stand in the way of development that is otherwise allowable under applicable environmental protection law and standards.

13. COMMENT: Although many of the State's environmental regulations could be improved, the Department ought not curtail any protections or delay any rules based on the Governor's Executive Orders. (6)

RESPONSE: The Department, in order to inform the reviews of pending proposed rules being conducted by the Department and the Red Tape Review Group established under Executive Order No. 3 issued by Governor Christie on January 20, 2010, extended or reopened the public comment period for certain pending proposals. (See Notice of extension or reopening of comment periods and informal stakeholder meetings for pending Department of Environmental Protection proposals suspended under Executive Order No. 1 (2010), <http://www.nj.gov/dep/rules/notices.html>, 42 N.J.R. 642(a).) In accordance with Executive Order Nos. 1 and 3, the Red Tape Review Group's task is, among other things, to examine various proposed administrative rules and regulations by a number of State agencies prior to their adoption and make detailed recommendations to the Governor to rescind, repeal or amend those rules. Based on those recommendations, the Commissioner of the Department will determine whether or not to proceed with adoption or amendment of the Department's affected proposals.

The Executive Orders and the Red Tape Review process expressly recognize that some rules must be adopted in order to prevent an adverse impact to public safety or security or public health; prevent prejudice to the State with regard to receipt of funding or

certifications from the Federal government; allow State agencies to exercise their essential powers, duties and functions; and comply with any judicial deadline. Rule proposals that would result in such adverse impacts if adoption were delayed therefore were not suspended. Executive Order No. 2 also directs State agencies to implement the “common sense principles” in all rulemaking while keeping in mind the core missions of the agency; public health, safety, welfare and the environment; and the agency’s underlying regulatory objectives. In determining whether to proceed with its rule proposals and for all future rulemaking, the Department will necessarily take all of these factors into consideration.

14. COMMENT: The Department's notice and comment procedure, the informal stakeholder process, and the Red Tape Review Group process created by Governor Christie's Executive Order No. 2 do not comply with the rulemaking requirements of the New Jersey Administrative Procedure Act (APA). Web posting and reliance on the authority of Governor Christie's Executive Order Nos. 1 through 3 cannot supersede or replace APA requirements. All 12 proposals were proposed pursuant to and in accordance with the APA requirements. The Department may not - after the fact - revise these procedures. (9)

RESPONSE: As the commenter acknowledges, this rulemaking, as well as the other proposals to which the commenter referred, were proposed in accordance with the Administrative Procedure Act (APA), N.J.S.A. 52:14B-1 et seq. On January 20, 2010, Governor Christie issued a number of executive orders. Executive Order No. 1 (EO1) suspended for 90 days more than 150 then-pending proposals of various New Jersey agencies, including 12 proposals of the Department. EO1 states that one of the Governor's priorities is to establish, under the direction of a Red Tape Review Group, a “commonsense” approach to the promulgation of rules. The commonsense principles are described in Executive Order No. 2 (EO2), and the Red Tape Review Group is established under Executive Order No. 3 (EO3). The purpose of the suspension was to afford the Red Tape Review Group the opportunity to examine the suspended rulemakings and make recommendations as to those proposed rules it determines are "unworkable, overly-proscriptive or ill-advised" (see EO1, 4th whereas clause). EO1 directed that the suspension be undertaken in a manner consistent with APA rulemaking requirements, and specifically exempted from suspension any proposed rulemaking for which the failure to adopt would adversely impact public safety or security; adversely impact public health; prejudice the State with respect to receipt of monies from the Federal government or the ability to obtain any certifications from the Federal government; prevent the application of powers, functions and duties essential to the operations of the relevant State agency; or adversely impact compliance with any judicial deadline.

Both EO2 and EO3 stress transparency and the involvement of stakeholders and the public in agency rulemaking, which is a fundamental tenet of the APA. Accordingly, the Department determined it was appropriate both to extend the formal comment period on its suspended proposals and to also hold stakeholder meetings to facilitate informal discussions of the rulemakings in consideration of the purposes of the executive orders.

On February 3, 2010, the Department filed for publication in the New Jersey Register a notice of the extension or reopening of the comment period on the 12 suspended

rulemakings to March 15, 2010. The notice appeared in the March 1, 2010, New Jersey Register (see 42 N.J.R. 642(a)). The Department posted the notice on its website on February 4, 2010.

The notice provided an additional period for public comment on each of the rulemakings beyond that required by the APA. The notice did not change the content of the original proposals in any way. While not precluding additional comment on any aspect of the pending proposals during the extended/reopened comment period, the Department sought through the notice to focus any additional comments submitted on the purposes of the rules review set forth in the executive orders. The Department also announced in the notice that it would be scheduling stakeholder meetings on the proposals and that the dates for the meetings would be posted on the Department's website. The schedule of the stakeholder meetings was subsequently posted on the website on February 22, 2010. The first of the stakeholders meetings was held on March 2, and the last on March 11, 2010.

The stakeholder meeting regarding this rulemaking is described above in the introductory section of this adoption. Public comments for the administrative record were accepted in writing during the original public comment period and during the additional comment period that ended March 15, 2010. As with any rulemaking, and as contemplated by the APA, the Department has reviewed, considered, summarized and is responding in this adoption to all formally submitted comments received during the entirety of the public comment period. In conclusion, DEP did not "revise the procedures after the fact" but, rather, supplemented the statutorily required rulemaking procedures in order to facilitate public input into the review of the rules required by the executive orders.

15. COMMENT: The Department's web post states the following: "[Note: The Department prefers electronic submissions in order to facilitate timely review of comments to meet the timeframes for action in the Executive Orders.]"

The time restriction (in other words, the timeframe for action pursuant to Executive Order Nos. 1 through 3 and the Red Tape Review Group review process) cannot replace or supersede the requirements of the APA. The March 15 deadline is arbitrary and not in accordance with APA requirements. (9)

RESPONSE: The Administrative Procedure Act prescribes minimum notice requirements to ensure that adequate opportunity for public input on a proposed rule is provided. As indicated in response to comment 14 above, the proposals for which the Department extended or reopened the comment period for purposes of the review initiated by the executive orders satisfied the notice and public comment requirements of the APA at the time they were originally proposed. The notice provided an additional period for public comment on each of the rulemakings beyond the minimum required by the APA. The March 15, 2010 close of the additional comment period was established so that comments related to the purposes of the executive orders would be received within the 90-day timeframe (ending April 20) established by Executive Order No. 1 for the Red Tape Review Group to conduct its review of the suspended proposals so that it might thereafter make its recommendations.

16. COMMENT: The substantive requirements of Executive Order Nos. 1 through 3, particularly the requirements to conduct cost/benefit analysis and to consider cost/benefit analysis as a basis for regulatory decisions, is ultra vires and not authorized by either the APA or the enabling authorities pursuant to which each of the 12 rules were proposed. (9)

RESPONSE: The Administrative Procedure Act requires that each proposed rulemaking include a description of the expected socio-economic impact of the rule, as well as a regulatory flexibility analysis of impacts on small businesses, a jobs impact statement, an agriculture industry impact statement, a housing affordability impact statement, and a smart growth development impact statement. See N.J.S.A. 58:14B-4. See also the Rules for Agency Rulemaking, N.J.A.C. 1:30-5.1. In addition, the APA requires that a Federal standards analysis must be included in each proposal and adoption. See N.J.S.A. 52:14B-23, and N.J.A.C. 1:30-5.1. Neither the APA nor the enabling authority for this rulemaking preclude an analysis of the costs and the benefits of a proposed rule as part of the APA-required impact analyses.

17. COMMENT: The "reopening" of the public comment period and retroactive application of new procedures, standards, and decision criteria established by Executive Order Nos. 1 through 3 is ultra vires, not authorized by law, and inconsistent and in violation of law. This includes the APA requirements as well as the enabling statute for each rule proposal. (9)

RESPONSE: As indicated in prior responses, the procedure followed for this rulemaking, including the reopening of the comment period to provide additional opportunity for public comment and the request to focus the additional public comments on the purposes of the rules review set forth in the executive orders, is consistent with the rulemaking requirements of the Administrative Procedure Act. Seeking additional public input on, for example, the potential costs and benefits of the rulemakings in a more focused way as contemplated by the executive orders did not result in new procedures, standards, and decision criteria being imposed. Rather, the extended comment period and stakeholder meetings supplemented the statutorily required rulemaking procedures for public comment and participation in rulemaking. The commenter has not explained how providing an opportunity for additional public comment, or having the Department consider those additional comments, violates the APA or the enabling statutes for this or any of the affected rulemakings. Consequently, the Department is not able to further specifically address this aspect of the comment.

18. COMMENT: The Department's application of the provisions of Executive Order Nos. 1 through 3 to the subject rule proposals would violate the procedural and substantive requirements of Federal environmental laws and the delegation agreements under which New Jersey implements Federal laws. These laws include, but are not limited to the Safe Drinking Water Act, the Coastal Zone Management Act, the Resource Conservation and Recovery Act (RCRA), the Clean Water Act, and the Clean Air Act. The same violations arise by the Department's after the fact "reopening" of the public comment procedure, as part of which this comment is submitted. (9)

RESPONSE: Several of the programs for which proposals were suspended under Executive Order No. 1 and for which the Department reopened or extended the comment period are administered by the Department in conjunction with equivalent Federal programs under independent State statutory authority, as allowed by the applicable Federal statute. Others are programs that have been delegated to the Department by the Federal government, again in accordance with the applicable Federal statute. The Department's decision to allow further opportunity for public comment in order to obtain comments focused on the directives contained in the executive orders is not barred by the New Jersey Administrative Procedure Act and does not violate any Federal environmental law related to any of the Department's programs that implement the affected rules. The Federal statutes and delegation agreements do not preclude the Department from seeking public input determined to be appropriate before taking regulatory action. Similarly, the Federal statutes and delegation agreements do not preclude the Department from considering the impacts of the rulemaking on the regulated public for purposes of determining the best way to implement the required standards.

19. COMMENT: The "reopening" process and the provisions of Executive Order Nos. 1 through 3 violate Federal funding agreements and the National Environmental Partnership Performance Agreement (NEPPS). The Department may not substitute the provisions of the Executive Orders and the Red Tape Review Group review process for the requirements of Federal law, regulation and funding agreements. (9)

RESPONSE: Federal funding agreements and the National Environmental Partnership Performance System (NEPPS) do not establish requirements for the rulemaking process. NEPPS has two major components, the Performance Partnership Agreement (PPA) and the Performance Partnership Grant (PPG). The PPA focuses mainly on activity commitments that the Department makes to earn the overall PPG from the U.S. Environmental Protection Agency. While some of the commitments may relate generally to the development of rules and expected timeframes, neither the PPA nor PPG deals with the procedures for rulemaking. Accordingly, the PPA and PPG do not preclude the Department from seeking and considering public comments related to the purposes of the rules review set forth in the executive orders.

20. COMMENT: Based on the concerns expressed by the commenter in comments 14 through 19 above, the Department should withdraw this sham "reopening of the public comment process." This "reopening" process is not in compliance with procedural notice/comment requirements of applicable law. (9)
21. COMMENT: The "common sense principles", standards, criteria, and informal process established by Executive Order Nos. 1 through 3 are not authorized by law, can have no legally binding effect, and expressly violate State and Federal law. Accordingly, this "proposal" must be withdrawn.

RESPONSE TO COMMENTS 20 AND 21: As explained in the responses to comments 14 through 19 above, the Department's actions to propose and adopt this rulemaking meet the requirements of the APA, and do not violate the enabling statutes or applicable Federal law.

22. COMMENT: The "Red Tape Review" process is an informal process that is not on the record. This process is not transparent and not authorized by law. It may not be considered or relied upon in any way for final agency regulatory decisions regarding the subject rule proposals. No information considered or decisions reached during that process may be considered as part of the administrative record of the subject rule proposals, and none of it can be relied on as a basis for final regulatory decisions by the Department. (9)
23. COMMENT: The stakeholder process announced for this proposal is an informal process that is not on the record. This process is not transparent and not authorized by law. It may not be considered or relied upon in any way for final agency regulatory decisions regarding the subject rule proposals. No information considered or decisions reached during that process may be considered as part of the administrative record of the subject rule proposals, and none of it can be relied on as a basis for final regulatory decisions by the Department. The Department should withdraw this proposal and abandon this process.

RESPONSE TO COMMENTS 22 AND 23: As indicated in the response to comment 14, the process followed by the Department in this rulemaking, including the additional public comment period, meets the requirements of the Administrative Procedure Act. The extended/reopened comment period and the informal stakeholder meetings were intended to facilitate receipt of additional public input on the 12 Department proposals suspended under Executive Order No. 1 in consideration of the purposes of the executive orders as enumerated therein. The notice extending and/or reopening the comment period on the suspended rulemakings specifically noted that the stakeholder meetings were not public hearings and that testimony on the proposals was not going to be accepted at them. The stakeholder meetings were open to all, and their purpose was to facilitate informal discussion of the rulemakings. The stakeholder meeting regarding this rulemaking is described above in the introductory section of this adoption. Public comments for the administrative record were accepted in writing during the original public comment period on each of the proposals, and in writing during the additional comment period that ended March 15, 2010. As with any rulemaking, and as contemplated by the APA, the Department has reviewed, considered, summarized and is responding in this adoption to all formally submitted comments received during the entirety of the public comment period.

#### **Outside the Scope of the SDWA rules**

24. COMMENT: The commenter questioned why the Hunterdon County Soil Conservation district is needed; suggested that the establishment of the preservation in the Highlands is a unconstitutional; and suggested there should be a 10 percent cut in services and agencies Statewide. (1)
25. COMMENT: Costly mandates on New Jersey residents and the real estate industry are unwarranted in these economic times. It is very difficult for realtors to sell homes as it is without adding more cost and burden to the potential buyers for a Private Well Testing Act water test. It will put additional burden on the buyers that is not necessary at this time. Perk tests are done when wells are drilled not when homes are put up for resale. (8)

RESPONSE TO COMMENTS 24 AND 25: The comments are beyond the scope of the proposal to readopt the SDWA rules.

### **Federal Standards Analysis**

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

The Federal Safe Drinking Water Act (Federal SDWA) was enacted in 1974 (P.L. 93-523) and amended in 1986 and 1996. Regulations for 23 drinking water contaminants were promulgated, at 40 CFR 141, by the USEPA in 1975. The Federal SDWA regulations were amended in the late 1980s and 1990s such that there are now more than 90 regulated microbiological, chemical and radiological parameters.

In response to the passage of the Federal SDWA, the State SDWA was passed in 1977 and the SDWA rules promulgated in 1979. The Department adopts and incorporates by reference all National Primary Drinking Water Regulations, 40 CFR 141, as amended and supplemented including all siting requirements, filtration and disinfection requirements, maximum contaminant levels (MCLs), monitoring and analytical requirements, reporting requirements, public notification requirements, and record-keeping requirements as the New Jersey primary drinking water regulations, applicable to all public water systems. Therefore, the Department's drinking water program is based on the Federal standards.

However, because there were no Federal standards for hazardous chemicals in drinking water in the early 1980s and a large number of Superfund sites were identified in the State and the prevalence of ground water contamination was increasing, the State Legislature amended the State SDWA in 1983, and directed the establishment of MCLs for a selected list of volatile organic contaminants (VOCs) and synthetic organic contaminants (SOCs). The level of protection established under the statute for carcinogens, is a goal of a risk of no more than one in one million over a lifetime of exposure, and for noncarcinogens, a goal of no adverse physiological effects over a lifetime of exposure. To date, the Department has promulgated MCLs for 14 contaminants that are more stringent than the Federal standards and has promulgated MCLs for five contaminants for which there is no Federal MCL.

The State standard setting process is very similar to the Federal standard setting process but there are some differences. The State SDWA describes three factors in developing MCLs within the statutory framework: health effects; technological ability to measure the contaminant level; and ability of existing treatment technologies to meet the MCL; for noncarcinogenic chemicals, a cost factor is also considered as part of the standard development process. The Federal standard setting process considers health effects; technological ability to measure the contaminant level; and ability of existing treatment technologies to meet the MCL and an additional economic factor. The Federal Act defines an MCL goal of "zero" for carcinogens. Differences in the application of the analytical technology factor, the treatment technology factor, and the economic factor used by the USEPA have resulted in the establishment of Federal MCLs for carcinogens that differ from those established by the Department using the State SDWA process. Consequently, there are contaminants regulated under the State Act that have

more stringent MCLs than those promulgated by the USEPA. The VOCs and SOCs with more stringent MCLs are benzene, carbon tetrachloride, chlordane, 1,2-dichloroethane, 1,2-dichloroethylene, methylene chloride, monochlorobenzene, tetrachloroethylene, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene and xylenes. The VOCs that have State MCLs but no Federal MCL are meta-dichlorobenzene, 1,1-dichloroethane, methyl tertiary butyl ether, naphthalene, 1,1,2,2-tetrachloroethane. The only inorganic contaminant with an MCL more stringent than the Federal MCL is arsenic.

As one of the most heavily populated states in the nation and one where manufacturing and refining industries were significant employers until recent decades, New Jersey has already identified a number of contaminated water supplies. By 2003, 54 community water systems, nearly 9 percent of the more than 600 community water systems in the State, had organic removal systems in place to remove or reduce the levels of regulated volatile or synthetic organic chemicals from the water supply. In many cases, non-regulated organic chemicals were found in the source waters in addition to the regulated organic chemicals that required treatment. These non-regulated contaminants of concern were removed by the processes installed as best available treatment for the regulated organic contaminants. Of the community water systems and nontransient noncommunity water systems that monitored for VOCs in 2008, 11 MCL violations were identified at four systems. Excluding nitrate, for which the State MCL is the same as the Federal MCL, in 2008 there were 78 MCL violations at 20 systems for inorganic chemicals, all involving arsenic, which is the MCL most recently promulgated by the Department. Therefore, for most existing MCLs, including those for which the State MCL is more stringent than the Federal MCL, compliance has already been achieved and therefore the only cost associated with these MCLs is the cost of maintaining existing treatment, which is comparatively low.

In addition, the State SDWA rules contain disinfection requirements and monitoring requirements for some parameters that are more stringent than those required by the Federal rules. Specifically, the Federal rules do not expressly require disinfection by public community water systems using only groundwater as a source. The State SDWA rules require all public community water systems using only groundwater as a source to disinfect, with the exception of those that serve 100 or fewer dwellings or properties. However, those serving 100 or fewer dwellings or properties must increase the number of microbiological samples collected, which is also more stringent than the Federal rules. Additionally, the SDWA rules contain microbiological monitoring requirements more stringent than those contained in the Federal rules since the microbiological sampling frequency cannot be reduced to less than one sample per month for a public water system serving 25 to 1,000 persons, as is permitted under the Federal rules. The SDWA rules also include more stringent requirements for some secondary contaminants, those that affect the taste and odor of the drinking water or affect the aesthetics of the drinking water. Specifically, the Federal rules at 40 CFR 143.4 only recommend monitoring of secondary contaminants. The State SDWA rules require the monitoring of secondary contaminants.

The Department's experience since the inception of the State drinking water program has been that the public wants its drinking water treated so that the lowest possible levels of contaminants remain in the water, regardless of the applicable MCLs. Therefore, more stringent State MCLs have not resulted in expenditures by the water suppliers that were not also supported

by the communities where the drinking water contamination was found. The additional disinfection and monitoring requirements for secondary contaminants are intended to further safeguard the health and welfare of the public. The costs to the water systems to meet these additional requirements is minimal in relation to the costs they incur in treating water to meet the requirements for the primary contaminants. The State's policy of setting standards designed to protect public health is also supported by the water suppliers, which generally strive to provide the best quality of water possible to customers.

Last, the USEPA does not regulate the issuance of physical connection or water system permits, and the enforcement of the National Primary Drinking Water Regulations is delegated to the State. Therefore, no Federal Standards Analysis is required for these provisions.

**Full text** of the readopted rules may be found in the New Jersey Administrative Code at N.J.A.C. N.J.A.C. 7:10.