ENVIRONMENTAL PROTECTION
DIVISION OF WATER SUPPLY
DIVISION OF ENVIRONMENTAL SAFETY, HEALTH AND ANALYTICAL PROGRAMS

Private Well Testing Act Rules, Safe Drinking Water Act Rules, Regulations Governing the Certification of Laboratories and Environmental Measurements

Proposed Amendments: **N.J.A.C. 7:9E-2.1, and 4.1; 7:10-5.1 through 5.5; 12.30, 7:18-5.6, and 9.4.**

Authorized by: Mark N. Mauriello, Acting Commissioner
Department of Environmental Protection

Authority: N.J.S.A. 13:1D et seq., 13:1E-1 et seq., 58:11-9.1 et seq., 58:11-23 et seq., 58:11-64 et seq., 58:12A-1 et seq., and 58:12A-26 et seq.

Calendar reference: See Summary below for explanation of exception to calendar requirement.
DEP Docket Number: 02-09-02/548

A public hearing concerning this proposal will be held on April 13, 2009, at 9:00 A.M., at:

New Jersey Department of Environmental Protection
1st Floor Public Hearing Room
401 East State Street
Trenton, NJ, 08625

Submit written comments concerning this proposal by May 15, 2009 to:

Janis E. Hoagland, Esq.
Attn: DEP Docket Number: 02-09-02/548
Office of Legal Affairs
Department of Environmental Protection
401 East State Street
P.O. Box 402
Trenton, New Jersey 08625-0402

The Department of Environmental Protection (Department) requests that commenters submit comments on disk or CD as well as on paper. Submittal of a disk or CD is not a requirement. Submittals on disk or CD must not be access restricted (locked or read only) in order to facilitate use by the Department of the electronically submitted comments. The Department prefers Microsoft Word 6.0 or above. Macintosh™ formats should not be used.

Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

The agency proposal follows:

Summary

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

The Department is proposing to amend the New Jersey Safe Drinking Water Act (SDWA) rules at N.J.A.C. 7:10 to establish a maximum contaminant level (MCL) of five micrograms per liter (µg/l) for perchlorate, a chemical compound of concern for which no Federal or State drinking water standard has yet been established. Perchlorate is an inorganic ion that has been detected in drinking water supplies in New Jersey and throughout the nation. Perchlorate is both a naturally occurring and a manmade chemical. Much of the perchlorate manufactured in the United States is used as the primary ingredient of solid rocket propellant. Perchlorate is also used in a wide variety of industrial processes (lubricating oils and air bags) and pyrotechnics (fireworks and matches). Wastes from the manufacture and improper disposal of perchlorate-containing chemicals are increasingly being discovered in soil and water.

The proposed amendments to the SDWA rules also specify monitoring, compliance, and public notification requirements for perchlorate. The Department is also proposing amendments to the SDWA rules to reflect changes in contact information due to organizational changes within the Department, and to update references to the Federal Safe Drinking Water Act, 42 U.S.C. § 300f et seq.

The Department is also proposing amendments to the Private Well Testing Act (PWTA) rules at N.J.A.C. 7:9E to include perchlorate. The PWTA rules are promulgated under the authority of the New Jersey Private Well Testing Act, N.J.S.A. 58:12A-26 et seq., and establish the requirements for the sampling of individual private wells to ensure that purchasers and lessors of properties served by private potable wells are made aware of the quality of the untreated drinking water sources prior to sale or lease. The Department is proposing to amend the PWTA rules to add perchlorate to the list of parameters that must be tested for in all wells subject to the PWTA and to require laboratories to inform the test requester and local health authority within 24 hours when perchlorate exceeds the MCL.

Lastly, the Department is proposing to amend the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18. These rules regulate laboratories conducting analyses of samples submitted under a variety of State statutes, including the SDWA and PWTA. More specifically, these rules establish a certification program for performing environmental analyses, and establish the administrative procedures to be followed by certified environmental laboratories and by laboratories seeking to become certified. The proposed amendment to this chapter would establish an expedited notification process by which laboratories would inform their clients and the administrative authority (local health

department or Department, as appropriate) within 24 hours of the sampling results when the perchlorate MCL is exceeded.

The promulgation of an MCL for perchlorate will trigger the establishment of a specific criterion for perchlorate in the Ground Water Quality Standards, in accordance with N.J.A.C. 7:9C-1.7(c)5i. The new specific criterion will be five µg/l. The Department will publish a Notice of Administrative Change in the New Jersey Register to add perchlorate as a new specific criterion of five µg/l to Appendix Table 1 of N.J.A.C. 7:9C. The new specific criterion will be the ground water remediation standard for perchlorate pursuant to the Remediation Standards, N.J.A.C. 7:26D-2. The Department may derive an interim specific criterion for any constituent, in accordance with N.J.A.C. 7:9C-1.7(c)2. Accordingly, the Department has established five µg/l as an interim specific ground water quality standard for perchlorate. This interim specific standard will apply until the promulgation of the MCL establishes the specific criterion and remediation standard noted above.

Safe Drinking Water Act Rules

Perchlorate MCL

New Jersey Safe Drinking Water Quality Institute Recommendation

The New Jersey Drinking Water Quality Institute (Institute), established by the 1983 amendments to the New Jersey SDWA (N.J.S.A. 58:12A-20), is a 15-member advisory body to the Department. Its role is to provide the Department with recommendations regarding the drinking water program. New Jersey specific standards are developed through the Institute and recommended to the Department. The standards are developed in conformance with the New Jersey SDWA at N.J.S.A. 58:12A-13(b), which provides that MCLs are to be established within the limits of medical, scientific and technological feasibility, for carcinogens, based upon the goal of an excess cancer risk of no greater than one in one million over a lifetime exposure period. For chemicals causing effects other than cancer (noncarcinogens), the goal is the elimination of all adverse health effects resulting from ingestion, within the limits of practicability and feasibility.

Three subcommittees were established within the Institute to assist in the development of MCLs. The Health Effects Subcommittee recommends health-based levels for the contaminants listed in the SDWA, and develops an additional list of drinking water contaminants based on occurrence in New Jersey drinking water. The Testing Subcommittee evaluates the limits of testing methodology in achieving the health-based levels established by the Health Effects Subcommittee. The Treatment Subcommittee evaluates best available treatment technologies for removal of the contaminants from drinking water to achieve the health based level while considering the limits of available testing methodologies. The Department asked the Institute to investigate a regulatory limit for perchlorate in drinking water.

Sampling for perchlorate in New Jersey public water systems was undertaken as part of the requirements of the Unregulated Contaminant Monitoring Rule (UCMR), which is a

component of the Federal Safe Drinking Water Act Regulations, between 2001 and 2003 (64 FR 50555). Of the 123 New Jersey public water systems sampled under the UCMR, perchlorate was detected above the minimum reporting level for the study of four µg/l in six of the systems. In order to further evaluate the occurrence of perchlorate the Department initiated several sampling events between 2003 and 2005. These sampling events included sampling at public community and noncommunity water systems, as well as private well sources around the State. This sampling revealed the presence of perchlorate in groundwater in 10 of 21 counties. Specifically, perchlorate was detected in groundwater in Atlantic, Bergen, Camden, Cumberland, Essex, Gloucester, Middlesex, Morris, Ocean, and Salem Counties, indicating Statewide occurrence of perchlorate. The highest value detected was 253 µg/l at a public water system located near a military facility.

Health Effects: The adverse health effects of perchlorate arise from inhibition of iodine uptake into the thyroid gland, which may lead to disturbances of thyroid function at sufficient doses. Pregnant women and infants are considered to be sensitive subpopulations to the effects of perchlorate, as ingestion of elevated levels of perchlorate can cause hypothyroidism which can have serious consequences on neurodevelopment.

The Institute recommended a health-based MCL for perchlorate of five µg/l based upon the Reference Dose of 0.0007 mg/kg/day. A Reference Dose, or RfD, is a numerical estimate of a daily oral exposure to the human population, including sensitive subgroups, that is not likely to cause harmful effects during a lifetime. This RfD was recommended by the National Research Council (NRC) in 2005 and reviewed by the Institute. It is based upon the No Observed Effect Level (NOEL) for inhibition of uptake of iodine into the thyroid in a study in which radioactive iodine was administered to human volunteers (Greer, M.A., Goodman, G., Pleus, R.C. and Greer, S.E. (2002) Health Effects Assessment for Environmental Perchlorate Contamination: The Dose Response for Inhibition of Thyroidal Radioiodine Uptake in Humans. Environmental Health Perspectives. 110: 927-937.) The RfD of 0.0007 mg/kg/day is 10-fold lower than the NOEL in the study, since an uncertainty factor of 10 was included to protect individuals who may be more sensitive to perchlorate, including infants and fetuses. In itself, inhibition of iodine uptake into the thyroid is not considered an adverse effect, unless the inhibition is sufficient to result in effects on thyroid hormones. Effects on the thyroid hormones, thyroid stimulating hormone (TSH) and thyroxine (T4), were not observed in the higher dose range used in clinical studies or in an occupational cohort. Available data indicate that the margin between the NOEL and adverse effects is at least two orders of magnitude or more in healthy adults. Therefore, the RfD of 0.0007 mg/kg/day, which includes an uncertainty factor of 10, is at least three orders of magnitude below the dose where adverse effects would be expected to occur in healthy adults, and is considered to be protective of the sensitive subpopulations.

The RfD of 0.0007 mg/kg/day recommended by NRC has also been incorporated into the Integrated Risk Information System (IRIS) database, prepared and maintained by the USEPA. IRIS is an electronic database containing information on human health effects that may result from exposure to various chemicals in the environment.

The Institute's health-based MCL of five µg/l for perchlorate was derived from the RfD

of 0.0007 mg/kg/day using assumptions of 67 kg (147 lbs.) for the body weight of a pregnant woman and two liters/day for drinking water consumption. It incorporates a Relative Source Contribution factor of 0.2, which means that 20 percent of exposure is assumed to arise from drinking water and 80 percent from other sources, such as diet. Additionally, the health-based drinking water concentration protective of bottle fed infants, based on the RfD of 0.0007 mg/kg/day and appropriate assumptions for body weight and daily water intake, was determined to be five µg/l.

Recent information on the effects of perchlorate

Since the Institute's health-based level recommendation was issued on October 7, 2005, additional information relevant to perchlorate has become available. A United States Food and Drug Administration 2008 total diet study of perchlorate and iodine provides comprehensive data on the range of daily dietary intake of perchlorate in various age groups and subpopulations in the United States. (Murray, C.W., Egan, S.K., Kim, H., Beru, N. and Bolger, P.M. (2008). US Food and Drug Administration's Total Diet Study: Dietary Intake of Perchlorate and Iodine. Journal of Exposure Science and Environmental Epidemiology. 18:571-580.) The data from the study for adults, including pregnant women who are the most sensitive adult subpopulation, suggest that a Relative Source Contribution factor greater than the default value of 0.2 is appropriate for perchlorate. This means that the new data indicate that less than 80 percent of exposure is assumed to arise from sources other than drinking water, such as diet. Using a Relative Source Contribution greater than 0.2 would result in a health-based level for adults greater than five µg/l as the level of perchlorate a person could ingest from water without exceeding the RfD could be higher because their exposure from other sources is lower. However, as discussed above, infants are also a sensitive subpopulation for perchlorate's adverse effects on the thyroid. Therefore, the Department further evaluated the appropriate health based level for this subpopulation.

USEPA's recently finalized Child Specific Exposure Factor Handbook provides a range of drinking water ingestion estimates for various age groups of infants and children in ml/kg/day. (U.S. EPA. Child-Specific Exposure Factors Handbook (2008). U.S. Environmental Protection Agency, Washington, D.C., EPA/600/R-06/096F. 2008). According to this handbook, the highest daily estimate of ingested drinking water from community water supplies for any age group of infants or children considered to be reliable is 151 ml/kg/day, which is the 75th percentile estimate of ingestion of drinking water from community water supplies for infants one to three months old (Life Sciences Research Office. 1995. Federation of American Societies for Experimental Biology Prepared for the Interagency Board for Nutrition Monitoring and Related Research. Third Report on Nutrition Monitoring in the United States: Volume 1. U.S. Government Printing Office, Washington, D.C.) The health-based level of perchlorate in drinking water protective of infants based on this water intake and the RfD of 0.0007 mg/kg/day is five µg/l. Therefore, this newer information for this sensitive subpopulation provides further support for the health-based level of five µg/l recommended by the Drinking Water Quality Institute for perchlorate.

It should be noted that on October 10, 2008 USEPA issued a preliminary regulatory determination for perchlorate through its drinking water Contaminant Candidate List process (73 Fed.Reg., page 60262). USEPA preliminarily determined that a drinking water standard (MCL) for perchlorate is not needed. Instead USEPA will publish a final non-enforceable health based guidance level at the same time its final regulatory determination is issued. The USEPA regulatory determination established a drinking water Health Reference Level for perchlorate of 15 µg/l. The Department has submitted comments expressing concerns with the USEPA preliminary regulatory determination. The main points made in the comments are: 1) A health-based level of 15 µg/l is not protective of infants, as they would be exposed to several times the RfD at this concentration. 2) USEPA should adopt a Federal drinking water standard, rather than drinking water guidance, since perchlorate occurs in public water supplies at levels of health concern at a frequency sufficient to warrant regulation.

The health-based MCL of five µg/l is anticipated to be protective for chronic exposure to the contaminant. Additionally, because pregnant women and infants are subpopulations considered to be sensitive to the effects of perchlorate, and since hypothyroidism can have serious consequences on neurodevelopment of fetuses and infants, the Department is proposing confirmation sampling requirements, public notice requirements and increased monitoring frequencies if a concentration less than the proposed MCL is detected in a water sample as a precaution, to ensure sufficient protection to this sensitive subpopulation.

Analytical Method: The Testing Subcommittee evaluated current testing technologies in order to recommend the preferred analytical procedure for the certified laboratory community to analyze perchlorate in drinking water samples. The Testing Subcommittee recommended USEPA Method 314.0 as the analytical method of choice. This method is proven to be accurate, precise, and able to withstand the rigors of testing. Also, it is currently used by certified laboratories, and is capable of measuring perchlorate with an accepted degree of confidence. The Testing Subcommittee reported that USEPA Method 314.0, operated "as currently written," is sufficient to measure perchlorate to a reporting limit of 2.7 µg/l. The "reporting limit" is the smallest measured concentration of a substance that can be reliably measured using a given analytical method. This reporting limit is acceptable because it is less than the health-based MCL of five µg/l recommended by the Health Effects Subcommittee.

Since the release of the Testing Subcommittee recommendation, the Department's Site Remediation Program developed the "New Jersey Department of Environmental Protection, Perchlorate Point-of Entry Treatment System, Recommended Specifications" document (PERC 5-2008). This document contains the specifications for point of entry treatment systems used for the treatment of potable water funded by the New Jersey Spill Compensation Fund established under the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq. The document contains specifications for the use of an analytical method with a reporting level lower than the 2.7 µg/l reporting level reported for USEPA Method 314.0 for monitoring the efficiency of a treatment unit. Specifically, the document states that all routine monitoring for perchlorate will use USEPA Method 331.0. (Wagner, H.P., Pepich, B.V., Pohl, C., Later, D., Joyce, R., Srinivasan, K., DeBorba, B., Thomas, D., Woodruff, A., and Munch, D.J., 2005, Determination of perchlorate in drinking water using inline column concentration/matrix elimination ion

chromatography with suppressed conductivity detection: U.S. Environmental Protection Agency Report 815-R-05-009, Revision 1.0, 38 p., Method 331.0 Revision: Rev. 1.0, January 2005.) USEPA Method 331.0 is capable of achieving a method reporting level of one µg/l, allowing routine monitoring of the treatment system at a level that is at least one half the MCL. This will permit detection of perchlorate breakthrough of the treatment media as early as possible, allowing replacement of the treatment media to occur before the perchlorate levels in the treated water approach the MCL. Currently there are four laboratories certified by the Department for USEPA Method 331.0, Therefore, though monitoring the effectiveness of a point of entry treatment system may necessitate use of USEPA Method 331.0, in most cases both USEPA methods 314.0 and 331.0 that are approved for use under N.JA.C. 7:18 will be sufficient to characterize the levels of perchlorate in the sample.

Treatment: Of the available treatment technologies that are employed to reduce the concentration of perchlorate contamination in ground water, the Treatment Subcommittee found three types of treatment technologies sufficiently developed and proven for use in public water systems. These technologies are ion exchange, granular activated carbon, and membrane technologies. The most widely used physical process was found to be ion exchange, either through a conventional method or a more perchlorate-selective method. The Treatment Subcommittee reviewed two comprehensive documents that evaluate the various water treatment technologies available to reduce perchlorate levels. In February 2005 the USEPA released "Perchlorate Treatment Technology Update – DRAFT, February 9, 2005," and in March 2005, the Interstate Technology and Regulatory Council (ITRC) Perchlorate Team issued its "Technology Overview – Perchlorate." Based upon the review of these documents, the Treatment Subcommittee concluded that perchlorate can be reduced in drinking water to levels below detection (reported in general as four µg/l in these documents) using various treatment methodologies including ion exchange, granular activated carbon, and membrane technologies.

Based on the recommendations of the Health Effects, Testing and Treatment Subcommittees, the Institute recommended to the Department a perchlorate MCL of five µg/l.

Proposed amendments to establish a perchlorate MCL

The SDWA rules establish the State primary and secondary drinking water regulations for public community and public noncommunity water systems pursuant to the New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq. The proposed amendments to the SDWA rules would establish a perchlorate MCL of five µg/l and specify monitoring, compliance, and public notification requirements for perchlorate. The proposed MCL is based upon the recommendations that the Institute made to the Department as described above and set forth in the report entitled "Drinking Water Quality Institute: Maximum Contaminant Level for Perchlorate, October 7, 2005," available at http://www.nj.gov/dep/watersupply/perchlorate_mcl_10_7_05.pdf.

The Department proposes amendments to N.J.A.C. 7:10-5.2(a)3 to include perchlorate as a State-regulated contaminant having an MCL different from those established by the EPA for inorganic chemicals under the National Regulations. Proposed new N.J.A.C. 7:10-5.2(a)3ii

establishes the MCL for perchlorate of five ug/l, and references the monitoring requirements for perchlorate at proposed new N.J.A.C. 7:10-5.2(a)14 and 15. As specific monitoring requirements for perchlorate are proposed to be included at N.J.A.C. 7:10-5.2(a)14, the Department proposes to amend N.J.A.C. 7:10-5.2(a)7, which sets forth monitoring requirements for inorganic chemicals, to exclude perchlorate.

The monitoring requirements for perchlorate at proposed new N.J.A.C. 7:10-5.2(a)14 apply to both public community and public nontransient noncommunity water systems. This is consistent with the monitoring requirements for all other inorganic chemicals specified in N.J.A.C. 7:10-5.2(a)3 which are also monitored by both public community and public nontransient noncommunity water systems, with the exception of nitrate. For nitrate, both 40 CFR 141.23 and N.J.A.C. 7:10-5.2(a)3 require monitoring of an additional classification of public water system, specifically, public transient noncommunity water systems. Public transient noncommunity water systems are water systems that provide water in a place such as a gas station, campground or restaurant where people do not consume water for long periods of time. Monitoring for nitrate is required for this additional group of public water systems as the exposure to slightly elevated levels of nitrate above the MCL can have immediate (i.e. within hours or days) effects on sensitive subpopulations. Exposure to levels of perchlorate above the proposed MCL are not expected to result in acute health effects because of the safety factors incorporated into the calculation of the MCL. As noted previously, the MCL of five µg/l was derived from the RfD, which is at least three orders of magnitude below the dose at which adverse effects occur, using assumptions of 67 kg for the body weight of a pregnant woman and two liters per day for drinking water consumption. Since elevated concentrations of perchlorate will not result in adverse health effects if consumed in drinking water for a short period of time, monitoring for perchlorate is not required for this class of public water systems.

Proposed new N.J.A.C. 7:10-5.2(a)14i(1) and (2) provide that the monitoring location for perchlorate in public community water systems and public nontransient noncommunity water systems is at every point of entry to the distribution system. The point of entry was selected as the monitoring location because perchlorate is a contaminant typically found in source water, rather than being associated with distribution systems. Proposed new N.J.A.C. 7:10-5.2(a)14i(1) specifies that the samples for ground water systems are to be collected annually at every point of entry to the distribution system that is representative of each well after treatment. Proposed new N.J.A.C. 7:10-5.2(a)14i(2) specifies that samples for surface water systems shall also be collected annually at each entry point to the distribution system.

If a sample collected in accordance with N.J.A.C. 7:10-5.2(a)14i(1) or (2) indicates the presence of perchlorate at three µg/l or greater, then, under N.J.A.C. 7:10- 5.2(a)14i(3), the public water system must conduct repeat sampling at the same sampling point in each subsequent calendar quarter. This trigger of three µg/l for quarterly monitoring will allow characterization of the water supply where perchlorate levels are close to the MCL. Trigger levels for increased monitoring below the MCL are used under the SDWA rules for other contaminants, including nitrate and volatile organic compounds, at 40 CFR 141.23(d) and 141.24(h)7, respectively, to ensure that contaminant levels in the water supply are reliably and consistently below the applicable MCLs.

Proposed N.J.A.C. 7:10-5.2(a)14i(3)(A) provides that if four consecutive quarterly samples indicate perchlorate levels at less than three µg/l the sampling frequency may be reduced to annually. Use of a value lower than the MCL for triggering a reduction in the monitoring frequency is consistent with those for nitrate and organic constituents under the requirements of N.J.A.C. 7:10-5.1 and at 40 CFR 141.23(d) and 141.24(h)7. The subsequent annual samples must be collected in the quarter in which the highest prior result was recorded in order to help ensure that compliance with the MCL is properly assessed when annual sampling is resumed. Proposed N.J.A.C. 7:10-5.2(a)14i(3)(B) requires that if a sample indicates perchlorate in the system at a level of three µg/l or greater, then quarterly sampling must be resumed to better assess whether the water system is in compliance with the MCL.

Proposed N.J.A.C. 7:10-5.2(a)14i(4) includes requirements for confirmation samples. A confirmation sample is required to be taken within 72 hours of the system's receipt of results indicating an exceedence of the five µg/l MCL. The Federal Safe Drinking Water Regulations, and by reference, the New Jersey SDWA rules, require a confirmation sample to be collected within 24 hours of notification of the water system by the laboratory conducting the analyses for contaminants with acute or immediate health effects such as nitrate and nitrite, and within two weeks for other inorganic contaminants with chronic health effects. Because pregnant women and infants are subpopulations considered to be sensitive to the effects of perchlorate, the requirement to collect a confirmation sample within 72 hours will help ensure a more rapid public notification than is typically required for a contaminant for which acute health effects are not expected if the MCL exceedence is confirmed.

Proposed new N.J.A.C. 7:10-(a)14i(5) establishes that the first annual perchlorate samples must be collected by June 30, 2010 by public community water systems and by December 31, 2010 by public nontransient noncommunity water systems. An additional six months are provided to the public nontransient noncommunity water systems to help ensure adequate laboratory capacity and to allow the nontransient noncommunity water systems which are typically smaller than the community systems, more time to plan for the monitoring.

Proposed N.J.A.C. 7:10-5.2(a)15i governs the determination of compliance with the perchlorate MCL and specifies that a violation of the perchlorate MCL is subject to enforcement action under N.J.A.C. 7:10-3 and triggers the proposed public notification requirements of N.J.A.C. 7:10-5.5(c). The report of the MCL violation also triggers N.J.A.C. 7:10-5.7(a), which requires the system to take any action necessary to bring the water into compliance with the MCL within one year after the system's receipt of the result indicating the MCL violation.

Proposed N.J.A.C. 7:10- 5.2(a)15i requires that an initial sample collected in accordance with proposed N.J.A.C. 7:10-5.2(a)14i(1), (2), or (3) that exceeds the MCL and the confirmation sample collected in accordance with N.J.A.C. 7;10-5.2(a)14i(4) be averaged to determine compliance with the MCL for perchlorate. If the average perchlorate concentration of those two samples exceeds the MCL of five ug/l, then the supplier of water is considered in violation of the MCL.

N.J.A.C. 7:10-5.2(a)15ii specifies that a water system will be considered in violation of the MCL for perchlorate if the initial sample exceeds the MCL and the supplier of water fails to collect a confirmation sample or does not collect the confirmation sample within 72 hours of being notified of the initial sample's exceedance of the MCL.

The Department proposes amendments at N.J.A.C. 7:10-5.2(b)4 to specify language that must be included in a public community water system's Consumer Confidence Report (CCR) when perchlorate is detected by a public community water system. The CCR is a report that all public community water suppliers are required to provide to consumers on an annual basis. The CCR summarizes information regarding sources used for drinking water, any detected contaminants, compliance and educational information. The Department also proposes to amend N.J.A.C. 7:10-5.2(b)4 to eliminate the reference to the number of additional contaminants that the Department regulates under this provision that the Federal regulations do not cover, since the contaminants are specifically listed in the paragraph.

Proposed new N.J.A.C. 7:10-5.3(f) establishes analytical requirements for perchlorate in drinking water samples. As proposed at new N.J.A.C. 7:10-5.3(f)1, the reporting limit for any method used to determine compliance with the MCL for perchlorate must be less than three µg/l. As discussed above, the Testing Subcommittee of the Institute determined that the USEPA Method 314.0 is sufficient to measure perchlorate to a reporting limit of 2.7 µg/l. As also noted above, additional methods which meet this criterion are available for use by certified laboratories and may be specified for use by other Department programs.

Proposed new N.J.A.C. 7:10-5.3(f)2 specifies how quickly samples must be analyzed after collection. All annual, quarterly and confirmation samples must be analyzed within 48 hours of sample collection. The 48-hour sample holding time is more stringent than the 28 day holding time required in the analytic method and is the same as that for nitrate samples. The shortened holding time and the amendments proposed at N.J.A.C. 7:18-5.6(i) discussed below, which require a certified laboratory to notify a water system within 24 hours or during the next business day if the MCL for perchlorate is exceeded, will ensure prompt processing of results so that the public can be informed of violations in a timely manner, as specified in proposed N.J.A.C. 7:10-5.5(c).

Proposed N.J.A.C. 7:10-5.5(c) establishes public notification requirements for perchlorate MCL violations and for perchlorate monitoring violations. Public notice requirements are divided into three tiers under 40 CFR 141, Subpart Q to take into account the seriousness of the violation or situation and of any potential adverse health effects that may be involved. Tier one notification is required for MCL violations for those contaminants for which acute effects would occur within hours or days of the time that a person consumes that contaminant in drinking water at a level above the MCL. Under the requirements of a Tier one public notice, a public water system must provide public notice as soon as practical but no later than 24 hours after the system is notified of the violation as specified at N.J.A.C. 7:18-5.6(i). The public water system must also initiate consultation with the Department, as soon as practical, but no later than 24 hours after the public water system is notified of the violation or situation, to determine whether additional public notice requirements are necessary. The public notice must

be provided must be in a form or manner reasonably calculated to reach all persons served by the public water system. *Escherichia coli* bacteria and nitrate are the contaminants with the greatest chance of causing acute health effects if they occur in drinking water at levels above the MCL. Tier one public notice is required for violations for these parameters.

Tier two notification is required for MCL violations for contaminants for which the MCL was established based on chronic effects in people consuming that contaminant in drinking water at levels above the MCL for many years. The drinking water contaminants that can have chronic effects are organic and inorganic chemicals, and radionuclides. Tier three notification is required for other violations and situations not included in Tiers one and two, such as monitoring and reporting violations.

The proposed MCL for perchlorate of five µg/l is protective based on chronic exposure. As a result, the Department has determined that Tier two public notification as defined in 40 CFR Part 141, Subpart Q is appropriate for perchlorate MCL violations. Proposed new N.J.A.C. 7:10-5.5(c)1 requires that the water system conduct Tier two notification if an MCL violation occurs as determined under N.J.A.C. 7:10-5.2(a)15. Tier two notification is required under 40 CFR 141, Subpart Q for violations of an MCL for most inorganic parameters. The proposed Tier two public notice requirement for perchlorate at N.J.A.C. 7:10- 5.2(c)1 incorporates by reference the Tier two requirements at 40 CFR 141, Subpart Q, and establishes additional requirements at N.J.A.C. 7:10-5.5(c)1i through iii.

Tier two public notice at 40 CFR141, Subpart Q requires public notification of the MCL violation as soon as practical or within 30 days. In addition to the initial public notice, Tier two notification at 40 CFR 141, Subpart Q requires repeat notices every three months until a violation is resolved. For public community water systems, public notice can be provided by mail or direct delivery; for public nontransient noncommunity water systems, public notice can be provided by posting a copy of the public notice in conspicuous locations served by the water system, such as in public buildings and community centers, direct delivery or mail to consumers. Tier two public notice at 40 CFR 141, Subpart Q also requires that health effects language be included in the notice.

The proposed additional public notice requirements for perchlorate include, at N.J.A.C. 7:10-5.5(c)1i, that the water supplier must notify the Department within 24 hours after the supplier is notified by the certified laboratory of the MCL violation. Also, due to the sensitivity of pregnant women and infants to perchlorate, the Department is proposing at N.J.A.C. 7:10-5.5(c)1ii that the water supplier notify the Department and the public served by the water supply as soon as possible but not later than 14 days after the supplier is notified of the perchlorate MCL violation, rather than within the 30-day timeframe established in the Tier two notification requirements at 40 CFR 141.203(b)1. Proposed N.J.A.C. 7:10-5.5(c)1iii references the health effects language to be used in the public notice for perchlorate.

Proposed N.J.A.C. 7:10-5.5(c)2 requires Tier three public notification for monitoring and reporting violations for perchlorate, consistent with the notification requirements for monitoring and reporting violations for other contaminants. Tier three requires notice within 12 months and

repeated annual notices thereafter for unresolved violations. For public community water systems, public notice can be provided by mail or direct delivery. For public nontransient noncommunity water systems, public notice can be provided by posting a copy of the notice in public areas throughout the public water system, direct delivery or mail.

N.J.A.C. 7:10-12.30(b) and (c) specify the raw water sample collection and analysis requirements. For new construction of public noncommunity and nonpublic water systems, proposed amendments to N.J.A.C. 7:10-12.30(b) and (c) include perchlorate in the list of chemicals for which testing is required.

The Department also proposes amendments to N.J.A.C. 7:10 to update Department contact information, correct grammatical errors and correct references to the Federal Safe Drinking Water Act Regulations, 40 CFR 141.

Private Well Testing Act rules

As noted above in this summary, sampling conducted by the Department revealed the presence of perchlorate in 10 of 21 counties in the State. Sampling of some private wells in Bergen County by the Department and sampling conducted by local health departments showed detection of perchlorate in 31 percent of the private water wells sampled. Concentrations of perchlorate in public wells have been detected as high as 253 µg/l, and concentrations in private wells in the northeastern portion of the State have been detected at levels greater than 100 µg/l. Based on the results of the sampling of public and private drinking water wells throughout the State, the Institute recommended and the Department has determined that perchlorate should be added to the list of compounds for which sampling is conducted under the Private Well Testing Act Regulations.

Proposed new N.J.A.C. 7:9E-2.1(a)9 adds perchlorate to the list of parameters for which analysis is required. Results will need to be provided for perchlorate for all real estate transactions where the sales contract is executed 90 days after the effective date of these amendments. For lessors that are required to test the water supply once every five years, any samples collected 90 days after the effective date of these amendments for compliance with the PWTA rules must include perchlorate. The 90 day delay is intended to enable realtors, homeowners and others time to prepare for compliance with this testing requirement.

At N.J.A.C. 7:9E-2.1(d), paragraphs 1 through 3 are proposed to be deleted. The paragraphs, though unrelated to establishing an MCL for perchlorate, include implementation dates related to radionuclide testing that have passed and are therefore no longer necessary.

As noted previously, perchlorate inhibits the uptake of iodine into the thyroid gland in humans, which may lead to disturbance of thyroid function at sufficient doses. Pregnant women and infants are particularly sensitive to the effects of perchlorate, as the resulting hypothyroidism may have serious consequences on neurodevelopment. Accordingly, the Department is proposing to include perchlorate at N.J.A.C. 7:9E-4.1(a) to require laboratories to notify the

person requesting the test and the local health authority within 24 hours when the laboratory determines that the concentration of perchlorate exceeds the established MCL.

Regulations Governing the Certification of Laboratories and Environmental Measurements

The proposed amendment at N.J.A.C. 7:18-5.6(i) includes perchlorate in the list of contaminants for which a laboratory must notify various parties and the appropriate regulatory authority when exceedance of the MCL occurs. At N.J.A.C. 7:18-5.6(i)1 for public noncommunity water systems, this rapid notification must be given to the water purveyor and the municipal health agency within 24 hours or the next business day. At N.J.A.C. 7:18-5.6(i)2 for public community water systems, the rapid notification must be given to the water system and the Department's Safe Drinking Water Program within 24 hours or the next business day. At N.J.A.C. 7:18-5.6(i)3 for sampling conducted under the PWTA, notification must be given to the client requesting the analysis and the local health authority within 24 hours or during the next business day, whichever is sooner.

Existing N.J.A.C. 7:18-5.6(i)1 refers to both "non-transient non-community water systems" and "transient non-community water systems," which are the only categories of noncommunity water systems regulated under the SDWA rules at N.J.A.C. 7:10. Therefore, the paragraph applies to all categories of public noncommunity water systems. The Department proposes to amend N.J.A.C. 7:18-5.6(i)1 to eliminate the terms "non-transient" and "transient" noncommunity water systems and to insert "public" to refer to public community and public noncommunity water systems, to simplify the terminology. "Public noncommunity water systems" and "public community water systems" are defined at N.J.A.C. 7:18-1.7 as well as the SDWA rules at N.J.A.C. 7:18-1.3.

Proposed N.J.A.C. 7:18-9.4(b)13 specifies when perchlorate samples must be analyzed after collection. All annual, quarterly and confirmation samples must be analyzed within 48 hours of sample collection. This is consistent with the proposed amendment to N.J.A.C. 7:10-5.3(f)2.

Social Impact

The Department anticipates that the proposed rules will have a positive social impact through protecting public health by ensuring the quality of drinking water delivered to consumers.

The most significant improvement to drinking water quality is expected as a result of the proposed amendment to the SDWA rules to establish a perchlorate MCL of five µg/l, which will apply to all public and nonpublic water systems. The proposed amendments require all public community water systems and public nontransient noncommunity water systems to sample annually for perchlorate, with the initial sample collected by June 30, 2010 and December 31, 2010 for public community water systems and public nontransient noncommunity water systems, respectively. The proposed amendments also require all wells subject to the conditions of the

PWTA and sampled as part of a real estate transaction, and all wells sampled in order to comply with the lessor requirements of the PWTA to be analyzed for perchlorate. The proposed MCL for perchlorate and associated sampling requirements will have a positive social impact is lessening exposure to perchlorate in drinking water.

The proposed perchlorate monitoring requirements applicable to public community water supplies and public nontransient noncommunity water supplies will protect the general population and those most sensitive to perchlorate exposure (that is, pregnant women and infants). The required monitoring provisions will have a positive social impact because they will reduce or eliminate repeated human exposure to perchlorate from these types of water systems.

The proposed amendment to the SDWA rules that requires public community and public nontransient noncommunity water systems to provide rapid public notification when perchlorate is detected above the MCL will, similarly, have a positive social impact. The sub populations believed to be most sensitive to perchlorate, pregnant women and infants, are sensitive during the relatively narrow timeframe of pregnancy and infancy. This rapid public notice will ensure consumers are notified when they are most sensitive to the risk from perchlorate exposure.

The proposed perchlorate sampling requirements for all new public community, new public nontransient noncommunity and new nonpublic water systems will result in the consistent analysis of the raw water, especially from those new public nontransient noncommunity and nonpublic water systems that begin operation but that may not be subject to the PWTA because a property is not being sold. These amendments will provide the same degree of protection for new public noncommunity water systems and nonpublic water systems as is provided to wells subject to the PWTA and is expected to have a similarly positive social impact.

The proposed perchlorate sampling requirements applicable to all wells subject to the PWTA will result in the collection of more information on the water samples, and will ensure that all buyers and sellers of real property, whose potable water source is a well governed by the PWTA rules, obtain additional information regarding the quality of the well water and how that water quality compares to the State perchlorate MCL. The buyer and seller of real property will then be in a position to make better-informed decisions as to the potability of the well water and the issues, financial and otherwise, that may be involved in the transfer of a home and real property. Similarly, landlords of property where the source of potable water is a well subject to the PWTA will also be required to test for the additional parameter of perchlorate in all regions of the State and to advise tenants accordingly.

The proposed amendments to the Regulations Governing the Certification of Laboratories and Environmental Measurements will have a positive social impact due to the requirement that laboratories promptly notify their customer and the governmental authority with primary oversight for the water system when perchlorate is detected above the MCL. This provision is designed to enable health authorities to identify immediate health concerns related to perchlorate, and will enable local health authorities and the Department to determine the action necessary to protect public health.

Economic Impact

Costs incurred to comply with the SDWA rules have become standard business expenses for public water systems. In the case of public community water systems that directly charge for water services, these costs are ultimately passed on to consumers through water service rates. Any additional costs incurred by public water systems and nonpublic water systems over the years to comply with the rules must be balanced against the State's paramount mandate to protect the quality of drinking water and public health.

The proposed perchlorate MCL is expected to have a significant economic impact because currently there is no Federal or State drinking water quality standard or routine monitoring requirement for perchlorate. The costs to public community and public nontransient noncommunity water systems as a result of the proposed amendments fall into two categories: sampling expenses, which the water systems will incur in order to routinely test the quality of the drinking water for perchlorate; and expenses related to the installation and maintenance of adequate treatment to meet the new MCL.

The current cost for perchlorate analysis using USEPA Method 314.0 is approximately $100.00 to $150.00 per sample. The Department expects the cost of perchlorate analysis to decrease following promulgation of the perchlorate MCL, because more laboratories will purchase and/or upgrade the equipment necessary to perform perchlorate analysis and achieve laboratory certification by the Department.

Each public community and public nontransient noncommunity water system will be required to sample each point of entry to the distribution system annually. There are approximately 1,200 points of entry at the approximately 550 public community water systems that will be required to perform an annual test for perchlorate. Based upon its experience with previous sampling, the Department estimates that as many as 10 percent of the points of entry will require quarterly sampling, as a result of detection of perchlorate levels equal to or in excess of three µg/l; therefore, approximately 360 additional samples would have to be collected and analyzed, after the initial annual sample. The total cost of this initial year of sampling of public community water systems would be approximately $156,000. The Department estimates this would amount to an average of $0.10 per household in the first year, but could range from $0.01 per household to $1.50 per household based on the population served by the water system.

Nearly all of the approximately 900 public nontransient noncommunity water systems have a single point of entry. Examples of public nontransient noncommunity water systems are schools, factories, office buildings and hospitals that have their own water systems. If each point of entry at each of the 900 nontransient noncommunity water systems is sampled once in the first year of sampling, and 10 percent of the points of entry require an additional three samples, the sampling cost for all public nontransient noncommunity water systems would be approximately $117,000 in the first year. The cost to a nontransient noncommunity water system would be incurred by the system itself. Such public nontransient noncommunity water systems do not

generally directly sell water to consumers and therefore would likely make up the costs for providing water through the prices they charge for goods or services. Nontransient noncommunity water systems serve at least 25 of the same people at least 60 days of the year. This would amount to a cost of less than $0.50 per person served by these systems in the first year of sampling, averaged across all systems. A public nontransient noncommunity water system might pass this cost increase on to the persons that purchase their goods or services, for example in tuition fees for private schools or product prices for factories. The Department believes the cost of routine sampling costs at public community and public nontransient noncommunity water systems will decrease in subsequent years as systems are able to resume to annual sampling.

Some buyers, sellers, lessors, and tenants affected by the PWTA rules will also incur costs as a result of the requirement to test for perchlorate. PWTA testing costs under the existing rules range from $450 to $650, with the higher cost being incurred in those situations where testing for a radiological parameter is required. With the current cost of perchlorate analysis of $100.00 to $150.00 per sample, this will increase the total cost to comply with the PWTA between 15 percent and 30 percent. However, the Department expects the cost of perchlorate analysis to decrease significantly following promulgation of this MCL as more laboratories become certified to perform analysis of the contaminant. In addition, the cost of perchlorate sampling is small compared to overall average real estate closing costs, which are typically thousands of dollars.

Although the PWTA rules apply to residential and non-residential properties, the Department anticipates that most of the well test results that include the additional testing requirements mandated by the proposed amendments will result from sales of homes that use a private well as a source of potable water. The Department receives approximately 13,000 analyses each year. This number may increase as time passes and more buyers, sellers, lessors, tenants, and lenders become aware of the law. The total cost of routine perchlorate analysis under the PWTA is estimated at $1.3 million per year, and it could be less if, as noted above, the cost decreases over time.

The second category of expenses incurred by public community and public nontransient noncommunity water systems and owners of wells subject to the PWTA to meet the new perchlorate MCL will be to construct and maintain treatment. The Institute's Treatment Subcommittee reviewed extensive background material related to the remediation of perchlorate at U.S. Department of Energy and U.S. Department of Defense sites. Of the available treatment technologies that are employed to reduce the concentration of perchlorate contamination in ground water, the Treatment Subcommittee found three types of treatment technologies sufficiently developed and proven for use in public water systems. These technologies are ion exchange, granular activated carbon, and membrane technologies. The most widely used physical process was found to be ion exchange, either through a conventional method or a more perchlorate-selective method.

Samples collected from large (serving a population greater than 10,000) community water systems in New Jersey during implementation of USEPA's Unregulated Contaminant

Monitoring Rule showed that approximately five percent of the 123 systems sampled reported a concentration of four µg/l or higher, although most of these larger public water systems had more than one point of entry. If the same assumption is made that five percent of all 550 public community water systems that must sample for perchlorate will eventually exceed the MCL and be required to treat at least one point of entry, no more than 27 public community water systems will be required to provide treatment for perchlorate based on this rulemaking.

The Department estimates the average capital costs to install treatment for perchlorate on a public community water system point of entry to range from $200,000 to $500,000. Annual expenses are estimated at between $10,000 and $50,000, depending on the size of the system and the concentration of perchlorate in the source water and the analytical method used for ongoing monitoring. The total capital costs for 27 points of entry at public community water systems would range from $5.4 million to $13.5 million. The total of Statewide annual operating costs to public community water systems would range from $270,000 to $1.3 million. The average annual cost increase for a residential customer of a water system required to provide treatment for perchlorate would be approximately $20.00 The treatment costs for public nontransient noncommunity water systems would be similar to those for private wells, which are discussed below.

Treatment for perchlorate at public water systems will produce liquid and/or solid residuals. The use of adsorption technologies produces a small amount of liquid waste, which can be recycled through the treatment system. The Department expects the expended filtration media to pass toxicity testing and will be able to be disposed of at a non-hazardous waste landfill. Large quantities of liquid waste (such as that generated by reverse osmosis), however, may need to be disposed of in a sanitary sewer or by direct discharge, which is regulated under the existing New Jersey Pollutant Discharge Elimination Systems rules at N.J.A.C. 7:14A. The quantities of waste produced and the willingness of wastewater treatment facilities to accept perchlorate waste will be a determining factor for public water systems in selecting the preferred treatment technology for removing perchlorate from drinking water.

Although neither the PWTA nor the implementing rules require remedial action where an MCL is exceeded, in many cases treatment is made a condition of sale or is mandated by the local health department. Additional costs will be incurred in those situations where perchlorate treatment is installed on a well. The Department estimates that the cost of perchlorate treatment at a private well could run as high as $3,000 to $4,000 for the initial installation of a perchlorate-specific ion exchange resin system for an entire house. Annual maintenance costs are expected to range between approximately $600 and $1,200 per year.

Currently, there are two State programs which assist private well owners with the remediation of potable wells: the Spill Compensation Fund ("Spill Fund"), which is administered by the Department, and the Potable Water Loan Program, which is administered by the New Jersey Housing and Mortgage Finance Agency (NJHMFA). The Spill Fund can provide immediate assistance to owners whose well water has been affected by contamination of hazardous substances from man-made sources. The NJHMFA loan program offers 10-year, no-interest loans up to $10,000 to homeowners whose well test fails to meet the primary drinking

water standards and some of the secondary drinking water standards. Currently, under the NJHMFA program, only owners of single family residences may apply for a loan. In addition, the NJHMFA program also requires that the applicant secure the loan as a second mortgage.

Local health authorities may also experience an economic impact from the proposed amendments to the PWTA rules. The local health authorities may become involved in overseeing well treatment and investigating well contamination within their jurisdiction for the additional well test failures that may occur for perchlorate from the proposed rules. The Department expects that failed well tests will result in an increase in workload at the local health authority level. County and local health authorities previously estimated their cumulative Statewide PWTA costs to be $3.1 million per year. Based on an assessment of the number of results submitted under the PWTA by the Department over the course of the program implementation to date, the Department now estimates the cost at approximately $1.5 million per year. An increase in this cost would occur due to implementation of the proposed amendments.

The proposed amendments may have a positive economic impact on laboratories certified by the State of New Jersey, because they could be called upon to analyze the additional samples that the proposed rules require, thereby generating increased revenue.

Environmental Impact

The Department anticipates a positive impact on the environment as a result of the proposed rules. Perchlorate is a strong oxidizer, and is thus used in the manufacture of solid propellant for rockets, missiles, and fireworks. It is also used in inflators for air bags, as well as in other applications. Large amounts of perchlorate have been disposed of throughout the United States since the 1950s. The current annual production of perchlorate is not available, as it is classified as a strategic compound. Natural sources of perchlorate, as reported in the "Drinking Water Quality Institute: Maximum Contaminant Level Recommendation for Perchlorate, October 5, 2005," include perchlorate detected as a natural contaminant in fertilizer products imported from Chile. It has also been found in the United States in lettuce (FDA, 2004) and in dairy milk. Perchlorate has recently been detected in human breast milk samples from throughout the United States including New Jersey. Recent studies suggest that perchlorate is found in rain and snow samples, and may be formed naturally in the atmosphere, which may account for its widespread presence at low levels. Perchlorate was used as a pharmaceutical in the past to treat thyroid disease, but is now rarely used for this purpose.

If perchlorate is detected as a result of testing under the proposed amendments to the SDWA and PWTA rules, local health agencies, the Department and/or the water supplier may become involved in investigating the origin of the contaminant. As a result, the areas of known perchlorate contamination will be better identified. This may result in more cases referred to the Department's Site Remediation Program for site investigation, more responsible parties identified, and more remedial activities initiated, as appropriate.
The proposed amendments that require testing for perchlorate will result in the installation of treatment units at some public water systems and some private wells, thereby removing the

contaminant from the environment. In other situations, such as when treatment units release contaminants from the treatment device back into the environment as part of the maintenance process, it may amount to a redistribution throughout rather than removal of the contaminant from the environment. However, the Department believes the overall risk to the public is lessened by the installation of treatment. As perchlorate is considered a hazardous substance in accordance with N.J.A.C. 7:1E – Appendix A, as noted previously in this summary, the Spill Fund can provide immediate assistance to owners whose well water has been affected by contamination of hazardous substances from man-made sources.

Federal Standards Analysis

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq., at 52:14B-23, 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.

There is no Federal requirement to test for perchlorate; however, the SDWA framework under which the proposed rules are promulgated is based upon the Federal rules. The Federal Safe Drinking Water Act (Federal SDWA) was enacted in 1974 (P.L. 93-523) and amended in 1986 and 1996. The first 18 interim drinking water standards were set in 1975 for six synthetic organic chemicals, ten inorganic chemicals, turbidity and total coliform bacteria. Interim standards for radionuclides were promulgated in 1976 and an interim standard for total trihalomethanes was set in 1979. 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 passage of the Federal SDWA, the State SDWA was enacted in 1977 and the New Jersey SDWA rules were adopted in 1979. In its rules, 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, 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 New Jersey's drinking water program is based on the Federal standards.

Because there were numerous Superfund sites identified in New Jersey, and the prevalence of ground water contamination was increasing, the State Legislature amended the State's SDWA in 1983, directing the establishment of MCLs for a selected list of contaminants. The Institute is authorized to review all health-related, analytical method and treatment technology data on contaminants and to recommend standards to the Department. The Department is authorized to promulgate MCLs based on those recommendations. Under the existing rules, the Department has MCLs for 14 contaminants that are more stringent than the Federal standards and for five contaminants for which no Federal standard has been established. Perchlorate will be the sixth contaminant to have a State-established MCL where no Federal standard exists.

The State standard-setting process is very similar to the Federal one, but there are some differences, as noted below. The Institute considers three factors when recommending MCLs:

health effects, technological ability to measure the contaminant level, and ability of existing treatment technologies to meet the MCL. For chemicals causing effects other than cancer (noncarcinogens), the goal is the elimination of all adverse health effects resulting from ingestion, within the limits of practicability and feasibility. The Federal standard-setting process considers these factors and an additional economic factor. The Institute evaluated the most current information available regarding perchlorate in drinking water before recommending to the Department a perchlorate MCL of five μg/l.

The PWTA rules, N.J.A.C. 7:9E, are not promulgated under the authority of, or in order to implement, comply with, or participate in any program established under Federal Law or under a State statute that incorporates or refers to Federal law, Federal standards, or Federal requirements. Therefore, the Department has determined that a Federal standards analysis is not required.

The Regulations Governing the Certification of Laboratories and Environmental Measurements, N.J.A.C. 7:18-1, establishes a certification program for laboratories seeking to become certified environmental laboratories. These rules also establish administrative procedures to be followed by certified environmental laboratories when performing environmental analyses conducted in conformance with the Safe Drinking Water Act and the Private Well Testing Acts. The Federal government does not administer a corresponding laboratory certification program, and has no law that corresponds to this aspect of either the current rules or the proposed amendments. Therefore, no Federal standards analysis is required.

Jobs Impact

The proposed rules will have a positive economic impact on businesses involved in water sampling and testing, such as laboratories certified by the State of New Jersey to conduct analyses of drinking water samples. Other small businesses that may derive some economic benefit from the proposed amendments are New Jersey certified well drillers and pump installers, environmental consultants, and sellers of water treatment equipment. The positive impact upon these businesses may result in increased employment opportunities.

In the water industry, both public and nonpublic water systems will be affected by the proposed amendments. Since the regulated community has been required to comply with the existing SDWA rules for decades, the establishment of the perchlorate MCL is not anticipated to have a significant impact on employment. Additional treatment may be required as a result of the perchlorate MCL, and there may be an increase in jobs in related industries, such as certified testing laboratories and engineering consulting firms.

Agricultural Industry Impact

The proposed amendments to the SDWA rules are not expected to have an impact upon the agricultural industry. The water quality of agricultural wells (typically used for irrigation) is not subject to the MCLs set forth in the SDWA rules. In general, public water systems are not used as a water source for agricultural purposes. To the extent that a farm may use water from a

public water system, the farm would incur any system costs that may be passed on to the consumer for the monitoring and treatment of perchlorate, if such were to occur.

Most water systems that serve migrant farm workers are classified as nonpublic water systems. Although these water systems may serve many people during any given day during the farming season, these systems may not meet the definition of a public water system, which is one that serves more than 25 people for at least 60 days out of the year. These nonpublic water systems would not be impacted by the new perchlorate monitoring requirements under the SDWA rules. Migrant farm camps that are public transient noncommunity water systems would likewise not be impacted by the perchlorate monitoring requirements as monitoring is not proposed to be required for these systems. The new MCL, however, would apply to a nonpublic water system or a public transient noncommunity water system if the water system monitored voluntarily or if testing is conducted under the requirements of N.J.A.C. 7:10-12.3(a), (b) or (c) upon completion of construction of the water system.

If farm camps were classified as public nontransient noncommunity water systems, the system would be required to test for perchlorate under the SDWA rules and thus will incur costs associated with monitoring and if necessary, treatment as discussed above in the Economic Impact Statement. The Department is not aware of any public nontransient noncommunity water systems that are part of the agricultural industry in New Jersey.

The sale or lease of homes or other structures located on agricultural lands is subject to the proposed amendments to the PWTA rules in the same way as the sale or rental of any real property in the State where the potable water supply is a private well or a nonpublic water system. The PWTA rules require the lessor of any real property, the potable water supply for which is a private well for which testing of the water is not required pursuant to any other State law, to test that water supply for certain parameters as set forth under N.J.S.A. 7:9E and, within 30 days of receipt of the test results, provide a written copy of the results to each rental unit and each new lessee. Farm camps served by non-public water systems that rent dwellings to migrant farm workers will be required to sample for perchlorate as part of the landlord testing requirements under the PWTA. Consequently, the proposed testing requirements may have an impact on these farm camps.

Regulatory Flexibility Statement

Approximately 800 of the public water systems in the State are considered small businesses, as defined under the Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. However, as this proposal for the MCL for perchlorate will not apply to public transient noncommunity water systems, the number of small businesses affected by the proposal is much smaller. The small businesses affected by this rule are small water companies, mobile home parks or homeowners associations. The Board of Public Utilities regulates the water rates charged by small water companies, and allows the companies to recover the costs associated with complying with new Department requirements through rate increases. Mobile home parks that operate public water systems usually cannot recover the costs of complying with new Department requirements as easily because they are paid by customers who rent their property,

and the mobile home parks may be prohibited from recovering costs under local rental ordinances. Compliance costs per household served for complying with the perchlorate MCL are discussed in the Economic Impact, above, In these instances, costs for complying with new Department requirements might be recovered through amendment of local rental ordinances or the increase in prices for other products and services provided by these water systems.

Water systems may have to employ outside services to perform the required water sample tests, required reporting and recordkeeping and, if facility improvements are needed to meet the standards, professionals such as engineers and construction contractors would likely be needed. The costs of any of these services would vary significantly based upon the type and extent of services required. Smaller systems must provide safe drinking water to the citizens and visitors to the State; therefore, they must meet the same basic water quality and testing standards as large water systems. Neither Federal nor State law allows for lesser standards to be applied to water systems that are small businesses. In light of this and of the importance of ensuring an adequate supply of safe drinking water generally, it is not feasible for the Department to regulate large and small businesses differently under the proposed rules. However, the SDWA rules overall are designed to minimize impacts on small water systems through lower fees, reduced design criteria, reduced testing frequency requirements and lower penalties.

The Department anticipates that implementation of the proposed amendments to the PWTA rules will also have an effect upon small businesses other than public water systems. The impact on small businesses that own or lease properties supplied by potable wells subject to testing under the proposed amendments to the PWTA rules will be the same as it is upon homeowners. When properties are sold or leased, they will be subject to the same testing requirements and potential expenditures for treatment discussed in the Economic Impact above. In cases of failed well tests, owners of small businesses and rental properties would have the same potential liabilities and expenditures for remediation as other entities and homeowners.

The proposed rules are not expected to have significant impact on small laboratory businesses certified by the State of New Jersey under N.J.A.C. 7:18 to perform sampling and analysis of perchlorate. There may be some additional testing, recordkeeping and reporting required for these laboratories if they elect to conduct additional perchlorate testing or if they choose to obtain certification as a result of this proposed rule. However, the cost of that testing can be passed on to those requesting the laboratory services.

Smart Growth Impact

Executive Order No. 4 (2002) requires State agencies that adopt, amend or repeal any rule to describe the impact of the proposed rule on the achievement of smart growth and implementation of the New Jersey State Development and Redevelopment Plan (State Plan). The Department has evaluated this rulemaking to determine the nature and extent of the rules' impact on smart growth and implementation of the State Plan.

The purpose of the New Jersey SDWA rules is to ensure that the drinking water available to consumers meets the drinking water standards and that the quantity and delivery pressure of

potable water is sufficient for the safety and protection of public health. The State does not anticipate that the proposed amendments, including the proposed new MCL for perchlorate, will affect the State land use and development policies in a way that would either encourage or discourage any development or redevelopment contrary to the guiding principles of the State Plan. As a result, the Department does not expect the proposed SDWA amendments to have an impact on the State's achievement of smart growth or implementation of the State Plan.

The Department has also evaluated the proposed amendments to the PWTA rules to determine any impact on smart growth and the implementation of the State Plan. Most of the real properties subject to the PWTA rules and these proposed amendments are expected, by their nature, to be located in rural or less developed areas of the State. Therefore, the impact to the redevelopment of urban and suburban areas is expected to be minimal.

The additional information that the Department garners as a result of the proposed amendments to the PWTA rules provides an indirect benefit to ensure environmental protection and public health and safety. The Department reviews and evaluates the data submitted under the PWTA program and uses the information to evaluate the safety of the water being consumed, to evaluate the frequency of occurrence of these contaminants in private wells, and to determine the presence of contaminant plumes in aquifers used as potable sources. Therefore, by adding perchlorate to the list of the required parameters Statewide, the proposed amendments will help the Department, local health agencies and private citizens obtain more information about drinking water quality supplied to individual homes and across larger geographical areas. In turn, this will allow better informed decisions to be made about future growth and development.

The proposed amendments to the Regulations Governing the Certification of Laboratories and Environmental Measurements require laboratories to report perchlorate results to their client and the administrative authority in an expedited time frame. As a result, the Department does not expect the proposed changes to the Regulations Governing the Certification of Laboratories and Environmental Measurements in this rulemaking to have an impact on the State's achievement of smart growth or implementation of the State Plan.

Housing Affordability Impact Analysis

Pursuant to N.J.S.A. 52:14B-4(a), the Department has evaluated the proposed amendments to determine their impact, if any, on the affordability of housing. The Department has determined that the rules will have an insignificant impact. The rules establish an additional testing parameter in an existing drinking water monitoring program. Where perchlorate is detected in a public water system and the costs of monitoring and treatment are passed on to the residential customer, the average cost increase for a residential customer of a water system required to provide treatment for perchlorate is estimated to be approximately $20 per year. PWTA testing costs under the existing rules ranges from $450 to $650, with the higher cost being incurred in those situations where testing for a radiological parameter is required. With the current cost of perchlorate analysis of $100 to $150 per sample, this will increase the total cost to comply with the PWTA between 15 percent and 30 percent. However, the Department expects the cost of perchlorate analysis to decrease significantly following promulgation of the MCL as

more laboratories become certified to perform analysis of the contaminant. In addition, the cost of perchlorate sampling is small compared to overall average real estate closing costs, which are typically thousands of dollars. Therefore, there is an extreme unlikelihood that the rules will evoke a change in the average costs associated with housing.

Smart Growth Development Impact Analysis

Pursuant to N.J.S.A. 52:14B-4(a), the Department has evaluated the proposed amendments to determine their impact, if any, on smart growth development. The rules establish an additional testing parameter in an existing drinking water monitoring program. Where perchlorate is detected in a public water system and the costs of monitoring and treatment are passed on to the residential customer, the average cost increase for a residential customer of a water system required to provide treatment for perchlorate is estimated to be approximately $20.00 per year. With regard to impacts to homes with private wells, under the requirements of the PWTA, as noted above, the cost of perchlorate sampling is small compared to overall average real estate closing costs, which are typically thousands of dollars. Therefore, there is an extreme unlikelihood that the rules will evoke a change in housing production in Planning Areas 1 or 2, or within designated centers under the State Development and Redevelopment Plan.

Full text of the proposed amendments follows (additions indicated on boldface **thus**; deletions indicated in brackets [thus]):

CHAPTER 9E
PRIVATE WELL TESTING ACT RULES

SUBCHAPTER 2. SAMPLING AND TESTING REQUIREMENTS

7:9E-2.1 Parameters for which testing is required

(a) Each water sample shall be analyzed for the following parameters:

1. - 6. (No change.)

7. All volatile organic compounds for which maximum contaminant levels (MCLs) have been established under the Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq., and implementing rules, N.J.A.C. 7:10[; and]

8. Lead[.]**; and**

9. As of (90 days after the effective date of this amendment), perchlorate.

(b) - (c) (No change.)

(d) In addition to the parameters listed at (a) above, water samples collected from Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Middlesex, Monmouth, Ocean, and Salem County locations shall be tested for gross alpha particle activity.

[1. For Cumberland and Gloucester counties, testing for this parameter shall be required as of (a date that is 180 days after the effective date of the rule establishing a 48-hour rapid gross alpha test at N.J.A.C. 7:18).

2. For Atlantic, Burlington, Camden, and Salem counties, testing for this parameter shall be required as of (a date that is one year after the effective date of the rule establishing a 48-hour rapid gross alpha test, N.J.A.C. 7:18).
3. For Cape May, Hunterdon, Mercer, Middlesex, Monmouth, and Ocean counties, testing for this parameter shall be required as of (a date that is 18 months after the effective date of the rule establishing a 48-hour rapid gross alpha test, N.J.A.C. 7:18).]

CHAPTER 4. NOTIFICATION PROCESS

7:9E-4.1 Notification by laboratories and the Department

(a) If analysis shows an acute parameter, as defined at N.J.A.C. 7:9E-1.2**, or perchlorate**, at a level above the MCL, the certified laboratory responsible for analyzing the water sample shall, within 24 hours of obtaining the test results, notify the person(s) who requested the water test, and the appropriate local health authority in accordance with N.J.A.C. 7:18-4.6 and 5.6.

(b) (No change.)

CHAPTER 10
SAFE DRINKING WATER ACT
SUBCHAPTER 5 STATE PRIMARY DRINKING WATER REGULATIONS

7:10-5.1 Applicability of National Regulations

Except as provided in this subchapter, the Department adopts and incorporates herein by reference the National Primary Drinking Water Regulations, 40 CFR Part 141, as amended and supplemented, including all siting requirements, filtration and disinfection requirements, maximum contaminant levels, monitoring and analytical requirements, reporting requirements, public notification requirements, recordkeeping requirements, and the National Primary Drinking Water Regulations Implementation, 40 CFR 142 Subparts E, F, G and K, for variance and exemption requirements as the New Jersey primary drinking water regulations, applicable to all public water systems. All maximum contaminant levels and action levels in this subchapter shall apply to all public and nonpublic water systems, and shall be subject to monitoring requirements established by the appropriate administrative authority. Copies of the National Regulations may be obtained from either the Drinking Water Section of the Water Programs Branch, U.S. Environmental Protection Agency, 290 Broadway, New York, New York 10007-1861, (212) 637-3880; or the [Bureau of Safe Drinking Water, Water Supply Administration] **Division of Water Supply**, [PO Box 426,] Department of Environmental Protection, **PO Box 426,** Trenton, New Jersey 08625-0426, (609) 292-5550.

7:10-5.2 Discretionary changes to National Regulations

(a) In accordance with the discretionary authority permitted by the National Regulations, for compliance with the State primary drinking water regulations, the following shall apply:
1. – 2. (No Change)

3. MCLs and monitoring requirements for inorganic chemicals (IOCs) shall be those established under the National Regulations and at (a)7 below, except for the **following** State-regulated [contaminant arsenic, for which an MCL of five µg/l shall apply.] **contaminants:**
   i. For arsenic, the MCL shall be five µg/l. Monitoring requirements are those set forth at (a)7 below; and
   ii. For perchlorate, the MCL shall be five µg/l. Monitoring requirements are those set forth at (a)14 and 15 below.

4. – 6. (No change.)

7. As required pursuant to 40 CFR 142.16, the monitoring period for each contaminant group, specifically, inorganics (except asbestos, nitrate [and] nitrite**, and perchlorate**), volatile organic compounds, synthetic organic compounds, and radionuclides shall be as follows. Monitoring for radionuclides shall begin on January 1, 2005.

Monitoring Period	Water System Type
Year one of the three year Federal compliance period (that is, 2002, 2205, 2008, 2011).	All public community water systems (PCWS) using a surface water source(s) or all PCWS serving a population greater than 10,000.
Year two of the three year Federal compliance period (that is 2003, 2006, 2009, 2012)	All public community water systems using a groundwater source(s) serving a population Equal to or less than 10,000
Year three of the three year Federal compliance period (that is, 2004, 2007, 2010, 2013).	Public nontransient noncommunity water systems.

8. – 13. (No change).

14. Monitoring requirements for perchlorate are as follows:
   i. Monitoring for perchlorate at public community water systems and public nontransient noncommunity water systems shall be conducted as follows:
      (1) The supplier of water from a ground water system shall take a minimum of one sample at every point of entry to the distribution system that is representative of each well after treatment (hereafter called a sampling point) annually.
      (2) The supplier of water from a surface water system shall take a minimum of one sample at every point of entry to the distribution system annually.
      (3) Where a sample collected in accordance with (a)14i(1) or (2) above indicates a concentration of perchlorate of three µg/l or greater, the supplier of water shall sample for perchlorate in each subsequent calendar quarter, at the same sampling point.
         (A) The supplier of water may reduce the frequency of sampling to once annually if the results of four consecutive quarterly samples are each

less than three µg/l, in which case the subsequent annual samples shall be collected in the quarter in which the highest prior concentration was recorded.

(B) Quarterly sampling shall be resumed if the result of any one sample is three µg/l or greater.

(4) If any sample collected in accordance with (a)14i(1) through (3) above exceeds the MCL for perchlorate, the supplier of water shall take a confirmation sample from the same sampling point within 72 hours of the supplier's receipt of notification of the analytical result for the first sample.

(5) Public community water systems shall collect and analyze the first annual sample in accordance with (a)14i(1) or (2) above by June 30, 2010. Public nontransient noncommunity water systems shall collect and analyze the first annual sample in accordance with (a)14i(1) or (2) above by December 31, 2010

15. Based on the results of the monitoring conducted in accordance with (a)14 above, a supplier of water shall be considered in violation of the MCL for perchlorate as provided in (a)15i and/or ii below, as applicable. Any supplier of water that is in violation of the perchlorate MCL under this paragraph is subject to enforcement action under N.J.A.C. 7:10-3, and shall comply with the public notification requirements of N.J.A.C. 7:10-5.5(c).

i. The perchlorate concentration in any sample collected pursuant to (a)14i(1), (2), or (3) that exceeds the MCL and the perchlorate concentration in the confirmation sample collected pursuant to (a)14i(4) above shall be averaged. If the result exceeds the MCL, then the supplier of water shall be considered in violation of the MCL.

ii. If the perchlorate concentration in any sample collected pursuant to (a)14i(1), (2), or (3) above exceeds the MCL and the supplier of water does not collect or does not timely collect the confirmation sample required pursuant to (a)14i(4) above, then the supplier of water shall be considered in violation of the MCL.

(b) The National Regulations, at 40 C.F.R. 141.151, require each community water system to annually develop and deliver to its customers a Consumer Confidence Report (CCR) which provides information on the quality of the water delivered by the system and characterizes the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner. In addition to the standards and requirements in the National Regulations for the development and distribution of the CCR, the following requirements shall apply:

1. - 3. (No change)

4. In addition to the contaminants regulated by the National Regulations, for which the Department has either adopted by reference the Federal MCL or has adopted a lower MCL, there are **[**five**]** additional contaminants regulated by the Department, at N.J.A.C 7:10-5, but not regulated by the National Regulations. The Consumer

Confidence Report shall include information concerning the **[**five**]** additional contaminants regulated in New Jersey as set forth below:

Contaminant	New Jersey MCL (ppb)	MCL in CCR units	Major Sources in Drinking Water	Health Effects Language
meta-Dichlorobenzene	600	600	Discharge from industrial chemical factories	Some people who drink water containing 1,3-Dichlorobenzene in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory system.
1,1-Dichloroethane	50	50	Discharge from metal degreasing sites and other factories	Some people who drink water containing 1,1 Dichloroethane in excess of the MCL over many years could experience problems with their kidneys.
Methyl *tertiary* butyl ether (MTBE)	70	70	Leaking underground gasoline and fuel oil tanks, gasoline and fuel oil spills	Some people who drink water containing MTBE in excess of the MCL over many years could experience problems with their kidneys.
Naphthalene	300	300	Discharge from industrial chemical factories, exposure to mothballs	Some people who drink water containing Naphthalene in an excess of the MCL over many years could experience problems with cataracts and hemolytic anemia.
1,1,2,2-Tetrachloroethane	1	1	Discharge from industrial chemical factories	Some people who drink water containing 1,1,2,2 Tetrachloroethane in excess of the MCL over many years could experience problems with their liver, kidneys, and central nervous system.

Perchlorate	**5**	**5**	**Discharge from the manufacture of explosives and some fuels, run-off from fertilizers originating in Chile, and possible natural occurrence.**	**Perchlorate can impair thyroid function by decreasing the uptake of iodine into the thyroid gland. At high enough doses, this can lead to decreased production of thyroid hormones and symptoms of hypothyroidism (decreased thyroid function). Pregnant women and infants are especially sensitive to the effects of hypothyroidism, since sufficient levels of thyroid hormone are needed for normal mental and physical development of the fetus and the infant.**

7:10-5.3 Analytical Requirements

(a) - (e) No change

(f) For any method used to determine compliance with the MCL for perchlorate, the following shall apply:

1. The reporting limit, which is the lowest measured concentration of a substance that can be reliably measured using a given analytical method, shall be less than three µg/l. The reporting limit can be no lower than the concentration of the lowest calibration standard, and can be used only if acceptable quality control criteria for this standard are met.

2. Analysis for all annual, quarterly and confirmation samples shall be conducted within 48 hours of sample collection.

7:10-5.4 Reporting requirements

(a) Except where a shorter reporting period is required by the National Regulations, each supplier of water shall submit a compliance sampling report to the Department within the first 10 calendar days of the month following the month in which any test, measurement or analysis is made. The compliance sampling report, containing the sampling results for microbiological contaminants, inorganic compounds, volatile organic compounds, synthetic organic compounds, radionuclides and lead and copper analyses, shall be prepared in a format prescribed by**,** and on forms available from and submitted to[,] the Department at the following address:

[Bureau of Safe Drinking Water]
[Water Supply Administration] **Division of Water Supply**
New Jersey Department of Environmental Protection
PO Box 426
Trenton, New Jersey 08625-0426

(b) - (f) (No change.)

7:10-5.5 Public Notification

(a) Each supplier of water shall provide public notification of any violation or any MCL or monitoring requirement in accordance with the National Regulations pursuant to 40 CFR 141[. 32]**, Subpart Q**.

(b) Any supplier of water from a public noncommunity water system which the administrative authority determines is not in compliance with any primary drinking water regulation, including any monitoring requirement, shall immediately post a notice of such failure in a place conspicuous to consumers in a format prescribed in the National Regulations pursuant to 40 CFR 141[. 32]**, Subpart Q**. The notice shall remain posted until the administrative authority determines that the system is restored to compliance.

(c) A supplier of water from a public community water system or public nontransient noncommunity water system shall provide public notification of any violation of the MCL or monitoring requirements for perchlorate as follows:

1. For a violation of the perchlorate MCL under N.J.A.C. 7:10-5.2(a)15, the supplier of water shall comply with the Tier 2 public notice requirements of 40 CFR 141, Subpart Q. In addition, the supplier of water shall:

i. Notify the Department as soon as practical, but no later than 24 hours after the supplier of water is notified in accordance with N.J.A.C. 7:18-5.6(i);

ii. Provide the public notice as soon as practical but no later than 14 days after the supplier of water is notified of the violation, rather than no later than 30 days after the supplier is notified of the violation as specified at 40 CFR 141.203(b)1; and

iii. In the public notice, use the Health Effects language for perchlorate in N.J.A.C. 7:10-5.2(b)4 to satisfy the requirement of 40 CFR 141.205(a)3.

2. If the supplier of water fails to collect an annual or quarterly perchlorate sample as required under N.J.A.C. 7:10-5.2(a)14, the supplier of water shall comply with the Tier 3 public notification requirements of 40 CFR 141.204.

SUBCHAPTER 12. STANDARDS FOR THE CONSTRUCTION OF PUBLIC NONCOMMUNITY WATER SYSTEMS AND NONPUBLIC WATER SYSTEMS

7:10-12.30 Water quality analysis and treatment

(a) (No change)

(b) The owner of a public noncommunity water system shall sample and analyze the raw water from the system for inorganics, volatile organic compounds (VOCs), **perchlorate,** and radionuclides in accordance with N.J.A.C. 7:10-5 and for secondary contaminants in accordance with N.J.A.C. 7:10-7. If the system uses a surface water source, the administrative authority will require the system owner to sample and analyze the water for disinfection by-products and pesticides regulated pursuant to N.J.A.C. 7:10-5.

(c) The owner of a nonpublic water system shall sample and analyze the raw water from the system for the parameters listed at (c)1 through [9] **10** below. The administrative authority may require sampling and analysis for inorganic chemicals, volatile organic compounds and/or radionuclides as appropriate based on the region and the aquifer in which the water source is located.

1. – 9. (No change)

10. Perchlorate

(d) – (i) (No change)

NOTE: THIS IS A COURTESY COPY OF THIS RULE PROPOSAL. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE MARCH 16, 2009 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE PROPOSAL, THE OFFICIAL VERSION WILL GOVERN.

CHAPTER 18
REGULATIONS GOVERNING THE CERTIFICATION OF LABORATORIES AND ENVIRONMENTAL MEASUREMENTS

SUBCHAPTER 5. CHEMICAL TESTING

7:18-5.6 Requirements for records and data reporting

(a) – (h) (No change.)

(i) When the laboratory determines that the concentration of nitrate, nitrite, **[**or**]** nitrate/nitrite**, or perchlorate** in a regulatory drinking water sample exceeds the MCL, the laboratory shall notify the affected parties as follows:

1. For **[**non-transient**] public** non-community **[**and transient non-community**]** water systems, the laboratory shall notify the water purveyor and the municipal health agency (or, if there is no municipal health agency for the municipality in question, the county health agency) within 24 hours or during the next business day;
2. For **public** community water systems, the laboratory shall notify the water system's superintendent and the Department's Bureau of Safe Drinking Water within 24 hours or during the next business day or;
3. (No change.)

(j) – (n) (No change.)

7:18-9.4 Requirements for sample handling and preservation for specific parameters

(a) (No change.)

(b) Drinking water samples shall be handled and preserved in accordance with the requirements of Table 9.1 and the requirements of (b)1 through 12 below. Table 9.1 includes applicable requirements from 40 CFR 141.23, 141.24 and 143.4, and from the USEPA's September 1992 "Labcert Bulletin," EPA-814-k-92-002. If there is any conflict between Table 9.1 and the USEPA rule or publication (including any amendments or supplements) on which any part of Table 9.1 is based, the USEPA rule or publication shall control.

1. – 12. (No change.)

13. Analysis for perchlorate in drinking water samples, including those analyzed for purposes of the PWTA, shall be conducted within 48 hours of sample collection, as required by N.J.A.C. 7:10-5.3(f)2.