#### **ENVIRONMENTAL PROTECTION**

WATER RESOURCE MANAGEMENT

DIVISION OF WATER SUPPLY AND GEOSCIENCE

Safe Drinking Water Act Rules; Regulations Governing the Certification of Laboratories and Environmental Measurements

Discretionary Changes to National Regulations; State-Specific Requirements for Total Coliform

Proposed Amendments: N.J.A.C. 7:10-1.3, 2.6, 5.1, 5.2, 5.4, 9.4, 10.5, 10.6, 11.5, and 11.10; and 7:18-4.6 and 5.6

Proposed New Rule: N.J.A.C. 7:10-5.8

Authorized By: Bob Martin, Commissioner, Department of Environmental Protection.

Authority: N.J.S.A. 13:1D-1 et seq., 58:10A-1 et seq., 58:11-9.1 et seq., 58:11-23 et seq., 58:11-64 et seq., and 58:12A-1 et seq.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

DEP Docket Number: 01-17-02.

Proposal Number: PRN 2017-039.

A **public hearing** concerning this proposal will be held on April 10, 2017, at 1:00 P.M. until the close of comments:

New Jersey Department of Environmental Protection

Public Hearing Room

NOTE: THIS IS A COURTESY COPY OF THIS RULE PROPOSAL. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE MARCH 20, 2017 NEW JERSEY REGISTER.

SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE

OFFICIAL VERSION OF THE PROPOSAL, THE OFFICIAL VERSION WILL GOVERN.

401 East State Street, 1st Floor

Trenton, New Jersey

Directions to the hearing room may be found at the Department's website,

http://www.state.nj.us/dep/where.htm.

Written comments may also be submitted at the public hearing. It is requested (but not

required) that anyone who testifies at the public hearing provide a copy of their comments to the

stenographer at the hearing.

Submit comments by May 19, 2017, electronically at http://www.nj.gov/dep/rules/comments.

The Department of Environmental Protection (Department) encourages electronic submittal of

comments. In the alternative, comments may be submitted on paper to:

Ryan H. Knapick, Esq.

Attn: DEP Docket Number: 01-17-02

Office of Legal Affairs

Department of Environmental Protection

401 East State Street, 7th Floor

Mail Code 401-04L

2

PO Box 402

Trenton, New Jersey 08625-0402

This notice of proposal may be viewed or downloaded from the Department's website at <a href="http://www.nj.gov/dep/rules">http://www.nj.gov/dep/rules</a>.

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 Safe Drinking Water Act rules at N.J.A.C. 7:10, which incorporate by reference the Federal Revised Total Coliform Rule (RTCR), 40 CFR Part 141, Subpart Y, to establish New Jersey-specific requirements for implementation of that rule, including a microbiological monitoring schedule, start-up procedures for seasonal water systems, Level 1 and Level 2 assessments, parties approved to perform Level 2 assessments, and the extension of the 24-hour limit for the collection of repeat samples on a case-by-case basis. The Department is proposing to update the program contact information at N.J.A.C. 7:10-2.6 and corresponding references to that information throughout the rules. The Department is also proposing to amend the Regulations Governing the Certification of Laboratories and Environmental Measurements, N.J.A.C. 7:18, with respect to the requirements governing the

notice certified laboratories must provide to the water system, local health authority, and the Department regarding *E. coli* water sample results and nitrate/nitrite water sample results.

Pursuant to the New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq., the Department has assumed primary enforcement responsibility for the National Regulations, promulgated by the U.S. Environmental Protection Agency (USEPA) under the Federal Safe Drinking Water Act, 42 U.S.C. §§ 300f et seq. (Federal Act). Under the Federal Act, USEPA is required to review and revise, if necessary, the National Regulations at least once every six years. The purpose of the review is to identify new health risk assessments, changes in technology, and other issues that would support rule revisions in order to maintain or improve public health protection. In accordance with this mandate, USEPA reviewed the 1989 Total Coliform Rule (TCR) and determined that revision of the rule was necessary. USEPA promulgated the Revised Total Coliform Rule (RTCR) in 2013 (see 78 Fed. Reg. 10,270) to provide greater public health protection than the 1989 TCR by (1) maintaining the objectives of the 1989 TCR, including the evaluation of water treatment, the determination of the integrity of the distribution system, and the indication of the possible presence of fecal contamination; (2) reducing the potential pathways of contamination into the distribution system; (3) using total coliform as an indicator of system operation and condition and using E. coli as an indicator of contamination; (4) requiring more stringent standards for systems to qualify for reduced monitoring; and (5) requiring systems that may be at risk for contamination, as indicated by their monitoring results and by the nature of their operation, such as seasonal water systems, to monitor more frequently and implement procedures that will minimize the incidence of contamination.

In developing this rulemaking, the Department held four meetings with stakeholders in the summer and fall of 2014. The Department sought input from small and large water systems, licensed operators, certified laboratories, municipal and regional health officers, the New Jersey Department of Health, the New Jersey American Water Works Association, the New Jersey Water Association, the New Jersey Campground Association, and the environmental community. The proposed amendments and new rule comport with many of the suggestions and recommendations of the stakeholders.

# **RTCR** requirements

In order to assume primary enforcement responsibility for the RTCR, the Department is required to inform USEPA how it will address certain discretionary elements in the RTCR. The Department has discretion to adopt New Jersey-specific requirements regarding eight elements of the RTCR listed at 40 CFR 142.16(q). These elements are sample siting plans, reduced monitoring criteria, assessments and corrective actions, invalidation of routine and repeat samples, parties approved to perform Level 2 assessments, special monitoring evaluations, monitoring and start-up procedures for seasonal water systems, and extension of the 24-hour limit for collecting repeat samples.

The Department is proposing New Jersey-specific requirements to implement the following elements of the RTCR: assessments and corrective actions, parties approved to perform Level 2 assessments, the extension of the 24-hour time limit to collect repeat samples, and start-up procedures for seasonal water systems. The Department has also determined that it

is not implementing discretionary reduced monitoring. As to the remaining elements (sample siting plans, invalidation of routine and repeat samples collected under the RTCR, and special monitoring evaluations), the requirements of the RTCR apply without modification.

## **Proposed New Jersey-specific requirements**

The existing New Jersey-specific monitoring requirements for total coliform are found at N.J.A.C. 7:10-5.2(a)2. N.J.A.C. 7:10-5.2(a)2 is proposed to be deleted and replaced to reference proposed new N.J.A.C. 7:10-5.8, where the additional State-specific total coliform requirements noted above are proposed. The existing monitoring requirements for public community and public noncommunity systems are proposed to be recodified at N.J.A.C. 7:10-5.8(a), with amendments (described below).

## Microbiological Monitoring Schedule

The Federal rule allows a state to reduce monitoring on a case-by-case basis only for public water systems using only groundwater and serving 1,000 or fewer persons based on specific criteria set forth at 40 CFR 141.854(e) for public noncommunity water systems, and at 40 CFR 141.855(d) for public community water systems. The Department's existing microbiological monitoring requirements at N.J.A.C. 7:10-5.2(a)2 require that monitoring be undertaken as set forth in the Federal rule, except that the Department will not reduce the sampling frequency for public community water systems serving 25 to 1,000 persons to less than once per month and will not reduce the sampling frequency for public noncommunity water systems using only groundwater sources(s) and serving 25 to 1,000 persons (whether transient or nontransient) to less than once per quarter. The Department is proposing to relocate these

requirements to N.J.A.C. 7:10-5.8(a) with amendments that bring them into alignment with the express terms of the Federal rule, but do not change the type of systems to which these provisions apply or the premise that the Department will not reduce the monitoring frequencies for these systems.

As noted, the Federal rule specifies that the systems for which a state may reduce monitoring on a case-by-case basis are limited to those using only groundwater and serving 1,000 or fewer persons. As proposed to be amended at N.J.A.C. 7:10-5.8(a)1, the qualifier from the Federal rule that the public community water systems covered by this requirement are those that use only groundwater source(s) is included. While the language of the existing requirement at N.J.A.C. 7:10-5.2(a)2i has lacked the groundwater source(s) only limitation, in fact the existing requirement could only apply to groundwater-only systems serving 1,000 or fewer because the Federal rule requires public community systems using surface water or using groundwater but serving more than 1,000 to monitor monthly and does not allow the states to reduce that monitoring frequency.

At both N.J.A.C. 7:10-5.8(a)1 and 2, the Department is proposing to use the Federal rule's language that limits the systems covered to those serving 1,000 or fewer persons rather than the language at existing N.J.A.C. 7:10-5.2(a)2i and ii that expresses that limitation as those systems serving 25 to 1,000 persons. A system serving fewer than 25 persons is not a public water system and, therefore, is not governed by these provisions; the inclusion of 25 as the lower limit of the range of number of persons served is unnecessary.

The Department is proposing a new provision at N.J.A.C. 7:10-5.8(a)3 to make clear that it will not reduce the microbiological sampling frequency for seasonal water systems, which are a subcategory of public noncommunity systems for which specific provisions are now established under the RTCR and through these proposed amendments (described further below), to less than monthly. The Federal rule sets the sampling frequency for these systems at once per month, and as noted above, the Department is proposing to continue in its rules the prohibition on reducing microbiological monitoring frequencies for public water systems.

#### Assessments and Corrective Action

Under the RTCR, public water systems that detect microbial contamination through routine sampling and monitoring must conduct an assessment to identify sanitary defects and take corrective action. The National Regulations define a "sanitary defect" as a defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure in a barrier that is already in place. Examples of sanitary defects include, but are not limited to, improper operational practices, such as failure to follow operating procedures that are protective of the distribution system and sanitary conditions; disinfection issues, such as the inability to maintain disinfectant throughout a distribution system; storage issues, such as physical deficiencies in or on a water storage tank, or unprotected connections between a water source or sources and a water system; source water issues, such as physical damage to well components; physical damage to the components of a distribution system; and improper construction or installation of water system components. The RTCR establishes the minimum elements of an assessment to identify sanitary defects. An assessment must include

the identification and review of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system operation and maintenance that could affect distributed water quality (including water storage); water sources and water treatment considerations; existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing.

The RTCR establishes two levels of assessment depending on the coliform treatment technique triggers described in the rule. A Level 1 assessment is triggered by: (1) five percent or more total coliform-positive samples in a month for a public water system taking 40 or more samples per month; (2) two or more total coliform-positive samples in the same month for a public water system taking fewer than 40 samples per month; or (3) when a public water system fails to take every repeat sample required after any single total coliform-positive sample.

A Level 2 assessment is triggered by: (1) an *E. coli* maximum contaminant level (MCL) violation; or (2) a second Level 1 treatment technique trigger within a rolling 12-month period, unless the initial Level 1 treatment technique trigger was caused by an exceedance of the allowable number of total coliform-positive samples, the Department determined the reason for the positive sample(s), and the water system corrected the problem. Under the RTCR, a Level 2 assessment is also triggered by a Level 1 treatment technique trigger in two consecutive years for systems with state-approved reduced monitoring. However, since the Department is not proposing to implement any reduced monitoring for total coliform, that trigger will not apply under the Department's rules.

A Level 1 assessment is a basic, visual inspection of a public water system and is performed by the supplier of water from the water system or the designated representative of the supplier of water. A Level 2 assessment is a comprehensive, physical inspection of a public water system that, as discussed below in further detail, must be performed by a party approved by the Department or the Department by itself.

In accordance with the RTCR, the Department is proposing at N.J.A.C. 7:10-5.8(b) to require a supplier of water to conduct a Level 1 or Level 2 assessment within 30 days of receipt of notice of a sample result that constitutes an exceedance of a treatment technique trigger from either the Department or from a laboratory certified under N.J.A.C. 7:18, whichever is received first.

The RTCR requires public water systems to submit, within 30 days after being notified or otherwise learning that a treatment technique trigger has been exceeded, the results of the assessment to the Department, including any sanitary defect identified, any corrective action completed, and a timetable for completing any remaining corrective actions. Proposed N.J.A.C. 7:10-5.8(f) requires a supplier of water to submit the results of a Level 1 or Level 2 assessment on a form to the Department in accordance with proposed N.J.A.C. 7:10-2.6(b). On the assessment form, the supplier of water provides identifying information specific to the particular water system, and the results of the assessment conducted. The assessment form also requires the identification and certification of the individual(s) who performed the assessment and the date on which the individual(s) performed the assessment. The certification requirement will ensure that

each aspect of the assessment that is required and applicable to each water system has been completed.

A supplier of water must take corrective action to address any sanitary defect(s) identified during a Level 1 or Level 2 assessment. Under the RTCR, a water system must complete corrective action as soon as possible after being notified or otherwise learning of the exceedance of a Level 1 or Level 2 treatment technique trigger. Pursuant to proposed N.J.A.C. 7:10-5.8(c) and (d), the supplier of water must detail the corrective action in its assessment form. The type of corrective action to be taken is dependent on the sanitary defect that is the cause of contamination, as identified in the assessment. Examples of corrective action include, but are not limited to, the installation of backflow prevention devices to eliminate an unprotected connection to a source outside of the distribution system, cleaning storage tanks, and repairing, disinfecting, and flushing the affected segment of the system after a water main break.

For any corrective action(s) not completed by the time of submission of an assessment form, the supplier of water must include a timetable for completion in the assessment form. The supplier of water must notify the Department when the outstanding corrective action(s) has been completed. For example, if an assessment identifies a cracked well head or leak in the pitless adapter of a well, then the appropriate corrective action may be to replace the well cap or pitless adapter. If the defect is more substantial, such as a crack in the well casing, a new well might be required. In the latter scenario, corrective action could take more than 30 days (the timeframe for performance of an assessment), and the supplier of water would, thus, need to provide a

proposed completion schedule in the assessment form. The supplier of water would notify the Department once the new well is drilled.

# Parties Approved to Perform a Level 2 Assessment

Under the RTCR, a Level 2 assessment must be performed by a party approved by the Department or the Department by itself. The Department has determined that a party qualified to perform a Level 2 assessment must have familiarity with the components of a water system and its operation and maintenance. Proposed N.J.A.C. 7:10-5.8(e) sets forth the parties who are approved to perform a Level 2 assessment. The party that is approved to conduct the assessment depends on the type of water system, and may be, as explained further below, a licensed operator, a professional engineer, a well driller or a pump installer, or a municipal or regional agency certified under the County Environmental Health Act, N.J.S.A. 26:3A2-21 et seq., and implementing rules at N.J.A.C. 7:1H (CEHA-certified agency). At N.J.A.C. 7:10-1.3, the Department is proposing definitions for licensed operator, well driller and pump installer, and professional engineer. The definitions are those set forth, respectively, in the Department's Licensing of Water Supply and Wastewater Treatment System Operators rules (N.J.A.C. 7:10A), the Department's Well Construction and Maintenance; Sealing of Abandoned Wells rules (N.J.A.C. 7:9D), and the State Board of Professional Engineers and Land Surveyors rules (N.J.A.C. 13:40).

The Licensing of Water Supply and Wastewater Treatment System Operators rules at N.J.A.C. 7:10A require all public community and public nontransient noncommunity water systems to employ a licensed operator. Under N.J.A.C. 7:10A-1.2, a licensed operator is a

licensee approved by the Department holding any local title, designation, or job description who:

(1) is on-site at a water system a significant amount of time; (2) is involved and responsible for the operation and maintenance of the water system; and (3) holds a license equal to or superior to that required for the water system. Pursuant to N.J.A.C. 7:10A-1.12, a licensed operator must conduct routine inspections and preventative maintenance to preserve the integrity of the system and develop a detailed operation and maintenance plan. Thus, the Department has determined that a licensed operator is qualified to perform Level 2 assessments at public community and public nontransient noncommunity water systems.

N.J.A.C. 7:10A does not require public transient noncommunity water systems to employ a licensed operator. However, the Department has determined that based on the requirements for licensure, licensed operators have the skills and knowledge necessary to perform a Level 2 assessment at a public transient noncommunity water system. Therefore, the Department is proposing that licensed operators who hold a license of a class equal to or superior to the license required pursuant to N.J.A.C. 7:10A-1.10 and 1.14 to operate a public community or public nontransient noncommunity water system with a treatment system and/or distribution system equivalent to that of the particular public transient noncommunity water system, are approved to perform Level 2 assessments at public transient noncommunity water systems.

In addition, the Department is proposing that three classes of well drillers licensed pursuant to the Well Construction and Maintenance; Sealing of Abandoned Wells rules at N.J.A.C. 7:9D, specifically, master well drillers, journeyman well drillers, and journeyman (Class B) well drillers, are approved to perform Level 2 assessments at public nontransient

noncommunity water systems and public transient noncommunity water systems. Public noncommunity water systems in New Jersey generally are small systems with limited distribution systems, and also typically use a well as a water source. The pathways for contamination at these systems are usually found at the well.

The Department is proposing that professional engineers (PE) are approved to perform a Level 2 assessment at any public water system. Under the standards for the construction of public water systems at N.J.A.C. 7:10-11 and 12, a permit application for the construction of a public water system must include an engineering report, prepared by a PE, that contains a description of the distribution, treatment, and storage components of the water system, as well as information regarding the water source or sources for the system. The preparation of this report requires familiarity with the water system. Further, under the State Board of Professional Engineers and Land Surveyors rules at N.J.A.C. 13:40-3.5, a PE is prohibited from performing work in disciplines for which the PE is not qualified by training, education, and experience. This ensures that a PE performing a Level 2 assessment will have the appropriate knowledge and experience to properly evaluate a public water system's components.

The Department is also proposing that CEHA-certified agencies are approved to perform assessments for public nontransient noncommunity and public transient noncommunity water systems. Under the Safe Drinking Water Act rules and the County Environmental Health Standards of Administrative Procedure and Performance, N.J.A.C. 7:1H, CEHA-certified agencies that are certified to conduct a potable water supply program are responsible for conducting routine inspections of the water systems and ensuring that the systems are in

compliance with State and Federal rules. Consequently, CEHA-certified agencies are familiar with the components and operational and maintenance practices of the systems they inspect.

Lastly, the Department is proposing that it may perform a Level 2 assessment for any public water system. Though the Department does not anticipate performing Level 2 assessments on a regular basis, there may be specific situations, such as persistent or chronic contamination, where it would be appropriate for the Department to conduct a Level 2 assessment to ensure that all water system components are adequately evaluated.

## Extension of the 24-hour Limit for Collection of Repeat Samples

The RTCR requires public water systems to collect repeat samples within 24 hours after being notified of a total coliform-positive test result. The system must collect at least three repeat samples for each routine sample that tests positive for total coliform. Under the RTCR, each state may either extend the 24-hour limit on a case-by-case basis or, alternatively, outline criteria for waiving the 24-hour limit to collect repeat samples if a water system has a logistical problem beyond its control in collecting the repeat samples within 24 hours.

Under proposed N.J.A.C. 7:10-5.8(g), a supplier of water may submit a request to the Department for an extension of the 24-hour limit for the collection of repeat samples. The Department will approve these requests on a case-by-case basis if, due to extreme weather conditions, it determines there is a significant risk to the health and safety of the individual or individuals responsible for the collection and transport of the repeat samples. The Department will notify the supplier of water in writing of its determination and specify the amount of additional time it is granting to collect repeat samples. The Department may also extend the 24-

hour limit for all water systems if the Department determines that, due to extreme weather conditions, there is a Statewide risk to the health and safety of the individual(s) responsible for the collection and transport of the repeat samples. Notice to the suppliers of water will be by email and publication on the Department's website.

## Start-up Procedures for Seasonal Water Systems

Under the RTCR, a seasonal water system must demonstrate completion of a stateapproved start-up procedure to ensure that the system is free of microbial contamination prior to
the beginning of its operating season. A seasonal water system is defined by the RTCR as a
public noncommunity water system that is not operated as a public water system on a year-round
basis and starts up and shuts down at the beginning and end of each operating season. A
seasonal water system may be more susceptible to water quality problems because this type of
water system is periodically inactive or is periodically depressurized. There is an increased risk
of microbial contamination in the distribution system during such periods, when water flow is
absent or stagnant.

The Department has identified approximately 450 seasonal water systems in New Jersey that do not operate on a year-round basis, and that shut down the entire water system at the end of the operating season. These systems include campgrounds, parks, and swim clubs. However, some public noncommunity water systems in New Jersey do have an operating season, but the entire water system is not shut down at the end of the operating season. For instance, a campground that is open all year but has a smaller population of users at certain times of the year might depressurize portions of the distribution system at the end of its main operating season but

continue to operate a part of the distribution system year round. The RTCR provides states with flexibility to establish requirements for public noncommunity systems that may not strictly meet the terms of the Federal definition of seasonal system but that present a similar risk of microbial contamination because there are periods when water flow in the distribution system is absent or stagnant. To ensure that the risk of microbial contamination associated with the kind of system described above is appropriately mitigated, the Department is proposing a definition of a seasonal water system at N.J.A.C. 7:10-1.3 that tracks the Federal definition but provides that the starting up and shutting down for the operating season may apply to either the system in its entirety or just a part of the system.

The Department is proposing new N.J.A.C. 7:10-5.8(h) to establish the start-up procedures for seasonal water systems, as those systems are proposed to be defined, so that the supplier of water from water systems that have an increased potential for contamination resulting from seasonal inactivity or decreased activity must undertake sampling prior to the operating season and, if necessary, take appropriate corrective action before water is served to the public.

Proposed N.J.A.C. 7:10-5.8(h) requires a supplier of water from a seasonal water system to collect a total coliform sample from each area of the distribution system identified in the system's sample siting plan and analyze the sample no more than 30 days prior to the beginning of each operating season. This timeframe ensures that the sample is collected close to the opening of the system and provides adequate time to identify and correct any problems. If the sample tests positive for total coliform, the supplier of water must then analyze the sample for *E. coli*. The supplier of water must submit to the Department a certification of completion of

sampling prior to the beginning of the system's operating season. The certification of completion must include the name of the seasonal water system, the identification number of the system, the identification number of the samples, and the results of the sample analysis.

If the sample is positive for *E. coli*, the supplier of water must conduct repeat sampling within 24 hours of being notified of the positive *E. coli* result to confirm the presence of *E. coli*. If any repeat sample is positive for total coliform or *E. coli*, the supplier of water must conduct a Level 2 assessment to identify the source of the contamination and take the appropriate corrective action to ensure that distributed water is safe for consumption.

The supplier of water of a seasonal water system must also conduct groundwater sampling and take corrective action in the case of an *E. coli*-positive sample. Because all New Jersey seasonal water systems use groundwater sources, within 24 hours of notification that a routine coliform sample has tested *E. coli*-positive, the supplier of water must collect a groundwater sample from all of its active wells and analyze those samples for *E. coli*. If a sample tests positive for *E. coli*, and the seasonal water system immediately identifies the cause of the contamination, the supplier of water may immediately implement corrective action. Otherwise, the supplier of water must collect five additional samples from the same source. If any of the five additional samples tests positive for *E. coli*, the supplier of water must consult with the Department within 30 days and implement the Department-approved corrective action no later than 60 days after being notified of the *E. coli*-positive sample, or by an alternative deadline established by the Department based on circumstances particular to the corrective action to be taken.

If a sample collected before the beginning of the operating season tests positive for *E. coli*, triggering the above-described repeat sampling, groundwater sampling, and corrective action, the supplier of water from a seasonal water system is prohibited from serving water to the public until the Department, or other administrative authority (as defined at N.J.A.C. 7:10-1.3), determines that the supplier of water has complied with the sampling and corrective action requirements and notifies the supplier of water in writing that it may serve water to the public.

# Regulations Governing the Certification of Laboratories and Environmental

#### Measurements

In the Department's Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18, the Department is proposing amendments to the records and data reporting provisions for microbiological and chemical testing.

N.J.A.C. 7:18-4.6 governs the records and data reporting by certified laboratories with respect to microbiological testing. At N.J.A.C. 7:18-4.6(k), the Department is proposing to replace the reference to the TCR at 40 CFR 141.63(b) with a reference to the RTCR at 40 CFR 141.858(b). Under existing N.J.A.C. 7:18-4.6(k)1, a certified laboratory is required to notify the water purveyor (that is, the water system) and the municipal or county health agency within 24 hours or during the next business day if the presence of fecal coliform or *E. coli* is detected in a drinking water sample collected at a nontransient noncommunity or a transient noncommunity water system. The Department is proposing to amend N.J.A.C. 7:18-4.6(k)1 to require a certified laboratory to also provide notification to the Department by telephone in accordance with proposed N.J.A.C. 7:10-2.6(d). At N.J.A.C. 7:18-4.6(k)2, which requires a certified

laboratory to provide notification to the water system's superintendent and the Department's Bureau of Safe Drinking Water within 24 hours or during the next business day if a sample collected at a community water system is *E. coli*-positive, the Department is proposing that the notice to the Department be accomplished by telephone in accordance with proposed N.J.A.C. 7:10-2.6(d). At both N.J.A.C. 7:18-4.6(k)1 and 2, the Department is proposing to delete the alternative of providing notice during the next business day. An *E. coli* positive water sample presents an immediate health risk that needs to be reported as soon as possible. The amendment avoids the possibility that an *E. coli* result determined on a Friday would not be reported until perhaps as much as 48 hours later on Monday, the next business day. These changes are intended to help ensure the water systems meet their obligation under the RTCR (40 CFR 141.858(b)) to notify the Department of an *E. coli*-positive sample in a timely manner so that any immediate risk to public health is addressed promptly.

The Department is proposing similar changes at N.J.A.C. 7:18-5.6, which governs the records and data reporting by certified laboratories with respect to chemical testing. Under existing N.J.A.C. 7:18-5.6(i)1, a certified laboratory is required to notify the water purveyor (that is, the water system) and municipal or county health agency within 24 hours or during the next business day if the concentration of nitrate, nitrite, or nitrate/nitrite exceeds the MCL in a water sample collected at a nontransient noncommunity or transient noncommunity water system. The Department is proposing to amend N.J.A.C. 7:18-5.6(i)1 to require a certified laboratory to also provide notification to the Department by telephone in accordance with proposed N.J.A.C. 7:10-2.6(d). At N.J.A.C. 7:18-5.6(i)2, which requires a certified laboratory to provide notification to a

community water system's superintendent and the Department's Bureau of Safe Drinking Water within 24 hours or during the next business day if a sample collected at a community water system shows a concentration of nitrate, nitrite, or nitrate/nitrite that exceeds the MCL, the Department is proposing that the notice to the Department be accomplished by telephone in accordance with proposed N.J.A.C. 7:10-2.6(d). Also, the Department is proposing to delete the alternative at N.J.A.C. 7:18-5.6(i)1 and 2 of providing notice during the next business day, because of the potential health risk that an MCL exceedance presents.

#### **Social Impact**

The Department anticipates that the proposed amendments and new rule will have an overall positive social impact.

As explained in the notice of proposal Summary above, the proposed amendments and new rule in the Safe Drinking Water Act rules at N.J.A.C. 7:10 relating to the analytical, monitoring, treatment, and other requirements for total coliform applicable to public water systems incorporate by reference the Federal Revised Total Coliform Rule (RTCR), and include certain provisions that reflect the Department's exercise of discretion, as contemplated by the RTCR, to establish state-specific requirements. The proposed New Jersey-specific requirements govern monitoring frequency, assessments and corrective actions for sanitary defects, the parties approved to perform Level 2 assessments, extensions of the time limit to collect repeat samples where there has been a coliform-positive sample result, and start-up procedures for seasonal water systems.

With respect to monitoring frequency, the proposed amendments and new rule continue the provisions of the existing rules that provide that the Department will not reduce the microbiological sampling frequencies applicable under the RTCR for public community and public noncommunity water systems using only ground water source(s) and serving 1,000 or fewer persons. Regarding assessments and corrective actions for sanitary defects, the proposed amendments and new rule require that if sample results from the routine total coliform monitoring exceed certain thresholds for total coliform or E. coli levels established in the RTCR (treatment technique triggers), the supplier of water must conduct an assessment (Level 1 or Level 2, depending on the severity of the triggering event) to identify the sanitary defect in the water system that caused the total coliform positive sample results, submit a report of the assessment to the Department, and institute corrective action to eliminate the defect. Because the RTCR requires the states to approve the parties who will perform Level 2 assessments, which are triggered by an E. coli MCL violation or repeated total coliform sample results and require familiarity with the components and operation and maintenance of the system, the proposed amendments and new rule set forth the Department-approved parties who may perform the assessment that depend on the type and complexity of the particular water system. With regard to extending the 24-hour deadline to collect repeat total coliform samples after a total coliform positive test result, the proposed amendments and new rule provide that the Department will allow such an extension if it determines extreme weather presents a significant risk to the health and safety of the persons collecting and transporting the repeat samples. Finally, the proposed amendments and new rule establish start-up procedures for seasonal water systems that require

total coliform sampling no more than 30 days prior to the beginning of the operating season and the submittal to the Department of a certification of completion of sampling. If there is a positive total coliform result, the seasonal system must test for *E. coli*, and in the event of repeat sampling confirming the presence of *E. coli*, the system must conduct a Level 2 assessment and take appropriate corrective action to address the sanitary defect prior to serving water to the public. These proposed New Jersey-specific total coliform requirements will have a positive social impact because they will ensure public water systems identify and correct sanitary defects that pose a direct threat to public health.

The proposed amendments to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to require that the laboratory notify the Department by telephone within 24 hours of an *E. coli*-positive drinking water sample result or of a nitrate/nitrite sample result that exceeds the maximum contaminant level will have a positive social impact because timely notice will help ensure any risk to public health can be addressed promptly.

# **Economic Impact**

Costs incurred by public water systems to comply with the Safe Drinking Water Act rules, including the proposed amendments and new rule relating to total coliform, are standard business expenses and are necessitated by the statutory mandate at N.J.S.A. 58:12A-2 to ensure the provision of safe drinking water and protect public health.

In accordance with the RTCR and the proposed rules, a Level 1 assessment of the public water system is required where there are multiple positive total coliform sample results in the same month (five percent or more positive samples for systems taking 40 or more samples per month or two or more positive samples for systems taking fewer than 40 samples per month) or the system has not taken all the required repeat samples after a single total coliform positive result. The supplier of water, or the designated representative of the supplier of water, may perform a Level 1 assessment. Because the supplier of water is the primary entity responsible for the water system's operation and is expected to be onsite, the requirement for a Level 1 assessment is not expected to create an additional cost for the public water system. If the designated representative performing the Level 1 assessment is the system operator, there should be no additional cost because the operator is already employed by the system. The RTCR requires that a Level 2 assessment, which is triggered by an E. coli MCL violation or repeated Level 1 assessment triggers within a rolling 12-month period and which requires familiarity with the components and operation and maintenance of the water system, must be conducted by a party approved by the Department or the Department by itself. In the proposed amendments and new rule, the Department establishes the approved parties who may perform Level 2 assessments based on the type and complexity of the particular water system. This requirement will ensure public water systems retain the individual who has the appropriate skills and expertise to identify and address the sanitary defect that is the cause of the microbial contamination. Cost savings through adequately and promptly addressing health risks before they result in more substantial and economically burdensome corrective measures or closures are expected to offset costs to hire

an appropriate qualified professional approved by the Department for conducting Level 2 assessments.

The Department does not anticipate any economic impact from the proposed extension of the 24-hour limit to collect repeat samples, which is intended to ensure the safety of the individuals collecting and transporting repeat samples.

Other than for seasonal water systems, the microbial monitoring requirements for public water systems under the proposed amendments and new rule are not changed from those required under the existing rules, and, likewise, the requirement to ensure water quality results are acceptable before serving water to the public is not new. Seasonal water systems will be required to sample for total coliform once a month during their operating season, as opposed to once per quarter under the existing rules. The proposed amendments and new rule also require seasonal water systems to conduct total coliform sampling and, if necessary, to take corrective action prior to the beginning of the operating season. Sampling costs are anticipated to be minimal (approximately \$100.00 per sample), and must be balanced against the paramount goal of the RTCR to protect the customers of seasonal businesses from coliform-related illness.

The proposed amendments to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to provide for notice to the Department by telephone within 24 hours of an *E. coli* positive drinking water sample result or of a nitrate/nitrite MCL exceedance are not expected to have any economic impact on the laboratories, since the changes are a minor

adjustment to the method and timing of notice to the Department that is intended to help ensure any risk to public health can be addressed promptly.

Overall, the Department expects public water systems to incur limited costs resulting from the proposed amendments and new rule relating to total coliform monitoring, assessment, and corrective action. These small economic impacts are balanced by the need to comply with the new Federal standards in the RTCR and to protect the public health and safety.

### **Environmental Impact**

The Department anticipates that the proposed amendments and new rule will have a positive environmental impact to the extent that the requirements for public water systems to conduct microbiological monitoring and, where necessitated by total coliform positive results, assess the condition of the water system and correct any sanitary defect(s), create an incentive for systems that have control over the sources of water for their systems to protect the integrity and purity of those sources. There will be no environmental impact from the proposed changes to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to provide for notice to the Department by telephone within 24 hours of an *E. coli* positive drinking water sample result or of a nitrate/nitrite MCL exceedance.

#### **Federal Standards Statement**

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65), require State agencies that adopt, readopt, or amend State rules that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis.

The Department's Safe Drinking Water Act rules at N.J.A.C. 7:10 incorporate by reference the National Regulations 40 CFR 141, as amended and supplemented, promulgated by the U.S. Environmental Protection Agency (USEPA) pursuant to the Federal Safe Drinking Water Act (Federal Act), 42 U.S.C. §§ 300f et seq., including all siting requirements, filtration and disinfection requirements, maximum contaminant levels, monitoring and analytical requirements, reporting requirements, public notification requirements, and recordkeeping requirements as the New Jersey primary drinking water rules, applicable to all public water systems. The Department's safe drinking water rules are, therefore, the Federal standards, except with respect to those areas in which the Department has exercised the discretion that the National Regulations allow and has established in its rules New Jersey-specific requirements.

As explained in the Summary, the Department's existing rules do not allow for reduced microbiological monitoring for those public water systems (that is, public water systems using only groundwater and serving 1,000 or fewer persons) for which the National Regulations do allow states to reduce monitoring on a case-by-case basis based on certain criteria. The Department is proposing to continue the existing monitoring requirements with amendments that bring them into alignment with the express terms of the Federal Revised Total Coliform Rule (RTCR), but do not change the types of systems to which these provisions apply or the premise

that the Department will not reduce the microbiological monitoring frequencies for those systems. The Department is also proposing a new provision to make clear that it will not reduce the monitoring frequency for seasonal water systems, which are a subcategory of public noncommunity systems for which specific provisions are now established under the RTCR, including a requirement to sample monthly during the operating season. As the Department's proposed amendments and new rule comport with the monitoring frequencies in the Federal rule, the Department has determined that the proposed microbiological monitoring provisions do not exceed any Federal standards or requirements.

The RTCR gives the states discretion to either extend the 24-hour limit to collect repeat samples on a case-by-case basis or, alternatively, outline criteria for waiving the 24-hour limit to collect repeat samples if a water system has a logistical problem beyond its control. The Department is proposing to extend the 24-hour limit to collect repeat samples either on a case-by-case or Statewide basis if, due to extreme weather conditions, it determines there is significant risk to the health and safety of the individual or individuals responsible for the collection and transport of the samples. As the Department's proposed rule comports with the criteria in the Federal rule, the Department has determined that the proposed rule for the extension of the 24-hour limit proposed microbiological monitoring provisions does not exceed any Federal standards or requirements.

The Department is proposing New Jersey-specific start-up procedures for seasonal water systems. The RTCR requires seasonal water systems to comply with a state-approved start-up procedure, but provides each state with the discretion to establish what those start-up procedures

will entail. Accordingly, as the Department's proposed amendments and new rule comport with the requirements of the Federal rule, the Department has determined that the proposed New Jersey-specific start-up procedures for seasonal water systems do not exceed any Federal standards or requirements.

The Department is proposing a definition of a seasonal water system that tracks the definition of seasonal system in the RTCR, but provides that the starting up and shutting down for the operating season may apply to either the system in its entirety or just a part of the system. USEPA has acknowledged that its definition of seasonal system does not include systems that operate year-round but shut down part of their distribution system for a portion of the year. (See 78 Fed. Reg. 10,277). However, USEPA anticipated that such systems may pose the same or similar risks as systems that are expressly included in the Federal definition, and left the decision of establishing requirements that mitigate risks associated with the operation of these systems open to the states. Because of the lack of water or stagnation of water in the portions of public water systems that are shut down between operating seasons, the Department has determined that such systems do have the same or similar contamination risks as seasonal systems that, as defined in the Federal rule, entirely shut down after the operating season, and that such systems must comply with start-up procedures prior to serving water to the public.

Under the Department's proposed rule, seasonal water systems, including those systems that shut down only part of their distribution systems between operating seasons, are required to perform monthly microbiological monitoring during the operating season. As noted in the Economic Impact above, sampling costs are anticipated to be minimal (approximately \$100.00)

per sample), and must be balanced against the paramount goal of both the RTCR and the Department's rules of protecting the customers of seasonal businesses from coliform-related illness. By requiring systems that shut down in part to comply with New Jersey-specific monitoring requirements and the seasonal start-up procedures, the proposed rule will help ensure protection of public health and decrease the contamination risks associated with opening parts of water systems that have been shut down after the end of the operating season. In the absence of such procedures, health risks may not be identified until after the public has been exposed to contaminated water.

The proposed changes to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to provide for notice to the Department by telephone within 24 hours of an *E. coli* positive drinking water sample result or of a nitrate/nitrite MCL exceedance do not exceed any Federal standard or requirement because no Federal law or regulation governs the standards or procedures for the certification of laboratories to perform environmental analyses.

#### **Jobs Impact**

The Department anticipates that the proposed amendments and new rule will have minimal impact on job creation and retention in New Jersey. The proposed amendments and new rule require public water systems to regularly conduct microbiological monitoring, undertake assessments where there are positive total coliform sample results, and perform corrective action as necessary. The monitoring requirements are not changed from the existing

rules, and, likewise, the requirement to ensure the water quality results are acceptable before serving water to the public is not new. To the extent a water system must hire a person approved by the Department to perform a Level 2 assessment because there is an *E. coli* MCL violation or repeated Level 1 assessment triggers within a rolling 12-month period, there may be some limited positive impact on employment for the licensed operators, professional engineers, and well drillers or pump installers so employed. However, the Department does not anticipate that there will be so many systems that must undertake a Level 2 assessment that there would be a meaningful increase in employment for the professionals performing the assessments.

The proposed changes to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to provide for notice to the Department by telephone within 24 hours of an *E. coli* positive drinking water sample result or of a nitrate/nitrite MCL exceedance will have no impact on jobs.

# **Agricultural Industry Impact**

Pursuant to N.J.S.A. 52:14B-4, the Department has evaluated this rulemaking to determine the nature and extent of the impact of the proposed amendments and new rule on the agricultural industry. The proposed amendments and new rule are not anticipated to have any impact on agriculture in New Jersey. Water for agricultural purposes is typically sourced from irrigation wells, which, because they are nonpotable water supply wells, are not subject to the Safe Drinking Water Act rules. A water system that meets the definition of a public water

system under the Safe Drinking Water Act rules must comply with the microbial monitoring and other requirements of the proposed rules, even as they must do so under the existing rules, since the potential health risk of microbial contamination must be addressed irrespective of whether the water from the public water system is used for irrigation or other agricultural purposes.

The proposed changes to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to provide for notice to the Department by telephone within 24 hours of an *E. coli* positive drinking water sample result or of a nitrate/nitrite MCL exceedance will have no impact on agriculture.

# **Regulatory Flexibility Analysis**

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has evaluated the reporting, recordkeeping, and other compliance requirements that the proposed amendments and new rule would impose on small businesses.

As defined by the Regulatory Flexibility Act, a "small business" is one that is independently owned and operated and employs fewer than 100 full-time employees. The Department estimates that of the 3,723 public water systems in New Jersey, approximately 2,500 are small businesses.

The proposed amendments and new rule require suppliers of water from public water systems to sample for total coliform and, if there are total coliform positive results, to conduct an assessment of the system and take any necessary corrective action to address the sanitary defect

that caused the positive test result. If the public water system has a severe or chronic total coliform problem, the system must undertake a Level 2 assessment, which must be performed by one of the professionals approved by the Department as set forth in the proposed amendments and new rule. The category of professional approved to perform the assessment at a particular water system depends on the type and complexity of that system.

For seasonal water systems, the proposed amendments and new rule require microbiological sampling to be conducted once per month during the operating season. Suppliers of water from seasonal water systems will also be required to perform sampling prior to the beginning of each operating season, and, if necessary, to take corrective action. Some of these systems may choose to retain outside services, such as certified laboratories, to collect samples. Additionally, suppliers of water from seasonal water system must retain a certified laboratory to analyze the water samples. Lastly, if corrective action is necessary, the suppliers of water may need to retain qualified professionals, such as engineers or licensed operators. The costs of these services vary based upon the type and extent of service required.

Microbial monitoring, assessment, and corrective action requirements must be met by all public water systems to ensure the provision of safe drinking water to the public. Consequently, the Department has determined it is not appropriate to establish different standards for small businesses.

The proposed changes to the Regulations Governing the Certification of Laboratories and Environmental Measurements at N.J.A.C. 7:18 that modify the microbiological and chemical testing reporting provisions to provide for notice to the Department by telephone within 24 hours

of an *E. coli* positive drinking water sample result or of a nitrate/nitrite MCL exceedance do not impose additional reporting, recordkeeping, or other compliance requirements on any laboratories that are small businesses. The changes are a minor adjustment to the method and timing of notice to the Department that is intended to help ensure any risk to public health can be addressed promptly.

# **Housing Affordability Impact Analysis**

In accordance with N.J.S.A. 52:14B-4, the Department has evaluated the proposed amendments and new rule to determine their impact, if any, on the affordability of housing. The proposed rules establish New Jersey-specific requirements for implementation of the Federal RTCR, which is applicable to public water systems and requires monitoring for total coliform and, if sample results are positive, assessment of the water system and implementation of corrective action to address the sanitary defect that caused the total coliform positive result. The proposed amendments and new rule also adjust the method and timing of notice to the Department by certified laboratories regarding microbial and chemical test results. The Department anticipates the proposed amendments and new rule will have no impact on the affordability of housing because it is extremely unlikely that the amendments and new rule will evoke a change in the average costs associated with housing.

#### **Smart Growth Development Impact Analysis**

In accordance with N.J.S.A. 52:14B-4, the Department has evaluated the proposed amendments and new rule to determine their impact, if any, on housing production within Planning Areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan. The proposed amendments and new rule establish New Jersey-specific requirements for implementation of the Federal RTCR, which is applicable to public water systems and requires monitoring for total coliform and, if sample results are positive, assessment of the water system and implementation of corrective action to address the sanitary defect that caused the total coliform positive result. The proposed amendments and new rule also adjust the method and timing of notice to the Department by certified laboratories regarding microbial and chemical test results. The Department anticipates the proposed rules will have no smart growth development impact because it is extremely unlikely that the rules will evoke a change in housing production in Planning Areas 1 or 2, or within designated centers.

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

#### CHAPTER 10

SAFE DRINKING WATER ACT

SUBCHAPTER 1. GENERAL PROVISIONS

7:10-1.3 Definitions

The following words and terms, when used in this chapter shall have the following meanings unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:10-11, 12, and 13 are set forth at N.J.A.C. 7:10-11.4, 12.3, and 13.2, respectively.

•••

"Licensed operator" has the same meaning as the definition of the term in the Licensing of Water Supply and Wastewater Treatment System Operators rules at N.J.A.C. 7:10A-1.2.

•••

"Professional engineer" has the same meaning as the definition of the term in the State Board of Professional Engineers and Land Surveyors rules at N.J.A.C. 13:40-1.3.

...

"Pump installer" has the same meaning as the definition of the term in the Well Construction and Maintenance; Sealing of Abandoned Wells rules at N.J.A.C. 7:9D-1.5.

...

"Seasonal water system" means a public noncommunity water system that is not operated as a public water system on a year-round basis and starts up and shuts down in its entirety or in part at the beginning and end of each operating season.

...

"Well driller" has the same meaning as the definition of the term in the Well Construction and Maintenance; Sealing of Abandoned Wells rules at N.J.A.C. 7:9D-1.5.

SUBCHAPTER 2. GENERAL REQUIREMENTS

# 7:10-2.6 Program information

- (a) Unless otherwise specified, [any questions concerning the requirements of this chapter shall be directed to the Bureau of Safe Drinking Water, Water Supply Administration, New Jersey Department of Environmental Protection, PO Box 426, Trenton, NJ 08625-0426, (609) 292-5550. All forms referenced in these rules can be obtained from the Bureau.] forms, checklists, and other information related to this chapter can be requested from the Division of Water Supply and Geoscience at the address in (b) below, by telephone at (609) 292-5550, by fax at (609) 292-1654, by e-mail at <a href="watersupply@dep.nj.gov">watersupply@dep.nj.gov</a>, or obtained through the Division's website at <a href="www.nj.gov/dep/watersupply">www.nj.gov/dep/watersupply</a>. Further information about the Department can be accessed at <a href="www.nj.gov/dep/watersupply">www.nj.gov/dep/watersupply</a>.
- (b) Applications, fees, forms, and correspondence related to this chapter shall be submitted to the New Jersey Department of Environmental Protection, Division of Water Supply and Geoscience, Mail Code 401-04Q, PO Box 420, Trenton, NJ 08625-0420, or by e-mail at watersupply@dep.nj.gov.
- (c) Applications, forms, or other materials sent or delivered to the Department at an address other than as listed in (b) above shall not be deemed to have been received for the purposes of calculating application review deadlines or other time periods under this chapter.
- (d) Notification to the Department required pursuant to the Regulations Governing the Certification of Laboratories and Environmental Measurements, N.J.A.C. 7:18, of a nitrate, nitrite, or nitrate/nitrite drinking water sample result exceeding the MCL or an *E*.

coli-positive drinking water sample result shall be made by telephone to (609) 292-5550 during business hours, or, if outside of normal business hours, to the Department's hotline at 1-877-WARNDEP (1-877-927-6337).

# 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 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, Department of Environmental Protection, PO Box 426, Trenton, New Jersey 08625-0426, (609) 292-5550] Department in accordance with N.J.A.C. 7:10-2.6.

# 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. (No change)
- [2. Microbiological monitoring shall be undertaken as required under the National Regulations, except:
- i. The Department will not reduce the microbiological sampling frequency to less than one sample per month for a public community water system serving 25 to 1000 persons; and
- ii. The Department will not reduce the microbiological sampling frequency to less than one sample per quarter for a public noncommunity water system (transient or nontransient) using only ground water source(s) and serving 25 to 1000 persons.]
- 2. Subject to N.J.A.C. 7:10-5.8, the analytical, monitoring, treatment, and other requirements for total coliform shall be those established under the National Regulations.

3.-13. (No change.)

(b) (No change.)

#### 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:] in accordance with N.J.A.C. 7:10-2.6.

[Bureau of Safe Drinking Water

Water Supply Administration

New Jersey Department of Environmental Protection

PO Box 426

Trenton, New Jersey 08625-0426]

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

## 7:10-5.8 State-specific requirements for total coliform

- (a) Microbiological monitoring shall be undertaken as required under the National Regulations, except that the Department will not reduce the microbiological sampling frequency to less than:
  - 1. One sample per month for a public community water system using only groundwater source(s) serving 1,000 or fewer persons;
  - 2. One sample per quarter for a public noncommunity water system (transient or nontransient) using only groundwater source(s) and serving 1,000 or fewer persons; and

- 3. One sample per month for a seasonal water system during its operating season.
- (b) Within 30 days after a supplier of water receives notice of a sample result that constitutes an exceedance of a treatment technique trigger, as set forth at 40 CFR 141.859, from either the Department or from a laboratory certified under N.J.A.C. 7:18, whichever notice is received first, a supplier of water shall conduct a Level 1 or Level 2 assessment in accordance with (c), (d), and (e) below to identify the presence of sanitary defects and the likely reason that the system triggered the assessment. The supplier of water shall submit the results of the assessment to the Department in accordance with (f) below.
- (c) A supplier of water, or the designated representative of a supplier of water, shall conduct a Level 1 assessment as follows:
  - Conduct a visual inspection of the system components, devices, water source(s), and storage facilities;
  - 2. Review records, including, where applicable, those required to be maintained pursuant to the Licensing of Water Supply and Wastewater System Operators rules at N.J.A.C. 7:10A-1.12, from within at least one year prior to the assessment date, such as operation and maintenance records and tank inspection reports;
  - 3. Review sample collection and processing protocols as specified in the sample siting plan of the public water system;
  - 4. Review water quality data from within at least one year prior to the assessment date;

- 5. Evaluate any operational activities, conditions, and unusual events from within one year prior to the collection of the total coliform-positive sample that may have caused the positive sample result;
- 6. Identify the sanitary defect(s) suspected to be the cause of the total coliform-positive sample;
- 7. Identify and implement corrective action;
- 8. Consult with the Department regarding any outstanding corrective actions to be taken and establish a timetable for completion; and
- 9. Notify the Department when each corrective action identified in the timetable at (c)8 above is completed.
- (d) A supplier of water shall conduct a Level 2 assessment in accordance with (d)1 through 9 below. The Level 2 assessment shall be performed by a party approved by the Department in accordance with (e) below:
  - Conduct a physical inspection of the system components, devices, water source(s), and storage facilities;
  - 2. Review records including, where applicable, those required to be maintained pursuant to the Licensing of Water Supply and Wastewater System Operators rules at N.J.A.C. 7:10A-1.12, from at least one year prior to the assessment date, such as operation and maintenance records, tank inspection reports, and information related to the physical condition of the distribution system;

- 3. Review sample collection and processing protocols as specified in the sample siting plan of the public water system;
- 4. Review water quality data from within at least one year prior to the assessment date;
- 5. Evaluate any operational activities, conditions, and unusual events from within one year prior to the collection of the total coliform-positive sample that may have caused the positive sample result;
- 6. Review past Level 1 and Level 2 assessments of the public water system;
- 7. Identify sanitary defect(s) suspected to be the cause of the total coliform-positive or Escherichia coli (*E. coli*)-positive sample;
- 8. Identify and implement corrective action;
- Conduct additional sampling to ensure that any corrective action taken has addressed the sanitary defect;
- 10. Consult with the Department regarding any outstanding corrective action to be taken and establish a timetable for completion; and
- 11. Notify the Department when each corrective action identified in the timetable at (d)10 above is completed.
- (e) A Level 2 assessment shall be performed only by a party approved by the Department, as set forth in the table below:

Water system type	Licensed operator	Professional engineer	Well driller <sup>3</sup> or pump installer	CEHA- certified agency <sup>4</sup>	DEP
Public community	x <sup>1</sup>	X			X
Public nontransient noncommunity	x <sup>1</sup>	X	X	X	X
Public transient noncommunity	x <sup>2</sup>	X	X	X	X

<sup>&</sup>lt;sup>1</sup> For a public community or a public nontransient noncommunity water system, the licensed operator who performs the assessment shall hold a license of a class equal to or superior to the license required pursuant to N.J.A.C. 7:10A-1.10 and 1.14 to operate the particular public community or public nontransient noncommunity water system.

<sup>&</sup>lt;sup>2</sup> For a public transient noncommunity water system, the licensed operator who performs the assessment shall hold a license of a class equal to or superior to the license required pursuant to N.J.A.C. 7:10A-1.10 and 1.14 to operate a public community or public nontransient noncommunity water system with a treatment system and/or distribution system equivalent to that of the particular public transient noncommunity water system.

<sup>&</sup>lt;sup>3</sup> The licensed well driller who performs the assessment shall be a master well driller, journeyman well driller, or journeyman (Class B) well driller pursuant to the Well Construction and Maintenance rules, N.J.A.C. 7:9D.

<sup>&</sup>lt;sup>4</sup> The CEHA-certified agency that performs the assessment shall be certified pursuant to N.J.A.C. 7:1H-3.6 to conduct a potable water supply control program.

- (f) A supplier of water shall complete a Level 1 or Level 2 assessment form, available from the Department in accordance with N.J.A.C. 7:10-2.6(a). In addition to the results of the Level 1 or Level 2 assessment conducted in accordance with (b) through (e) above, the form shall include the information specified at (f)1 through 4 below. The supplier of water shall submit the completed form to the Department in accordance with N.J.A.C. 7:10-2.6(b).
  - 1. Public water system information, including the type of public water system, the identification number of the public water system (PWSID), the type of water source for the public water system, and the number of people served by the public water system;
  - 2. The type of assessment and the applicable treatment technique trigger;
  - 3. For a Level 1 assessment, a certification by the supplier of water that the information contained in the form is true, accurate, and complete to the best of his or her knowledge and belief; and
  - 4. For a Level 2 assessment, a certification by a Department-approved party pursuant to (e) above that the information contained in the form is true, accurate, and complete to the best of his or her knowledge and belief.
- (g) The Department will extend the 24-hour limit for the collection of repeat samples in the following circumstances:
  - 1. Upon request by a supplier of water, where the Department determines that, because of extreme weather conditions, there is a significant risk to the health and

safety of the individual(s) responsible for the collection and transport of the repeat samples. The Department shall notify the supplier of water in writing of its determination and specify the amount of additional time the supplier of water has to collect the repeat samples.

- 2. For all suppliers of water, where the Department determines that, because of extreme weather conditions, there is a Statewide risk to the health and safety of the individual(s) responsible for the collection and transport of the repeat samples. The Department shall notify the suppliers of water by electronic mail and publication on the Department's website.
- (h) A supplier of water from a seasonal water system shall comply with the following sampling and, if applicable, corrective action procedures:
  - 1. No more than 30 days prior to the beginning of each operating season, a supplier of water from a seasonal water system shall collect and analyze a sample for total coliform from each area of the distribution system identified in the seasonal water system sample siting plan.
  - 2. If the sample collected pursuant to (h)1 above tests positive for total coliform, the supplier of water shall analyze the sample for *E. coli*.
  - 3. Upon completion of the requirements in (h)1 and 2 above, and prior to the beginning of each operating season, submit to the Department, at the address at N.J.A.C. 7:10-2.6(b), a certification of completion of total coliform testing form.
    The form includes the name of the seasonal water system, the identification number

of the seasonal water system (PWSID), the identification number of any water samples submitted to the Department, and the results of the analysis of any water samples submitted to the Department.

- 4. If a sample tests positive for *E. coli* under (h)2 above, a supplier of water from a seasonal water system shall:
  - i. Undertake repeat monitoring, assessment, and corrective action as follows:
    - (1) Within 24 hours after being notified of the positive sample result, collect three repeat samples from each area of the distribution system identified in the seasonal water system sample siting plan and analyze those samples for total coliform and *E. coli*;
    - (2) Complete a Level 2 assessment if any of the repeat samples test positive for total coliform or *E. coli*; and
  - (3) Correct any sanitary defect(s) identified through the Level 2 assessment; and ii. Undertake groundwater sampling and corrective action as follows:
    - (1) Within 24 hours after being notified of the positive sample result, collect a sample from each groundwater source used by the seasonal water system and analyze for *E. coli*;
    - (2) If the sample collected in accordance with (h)4ii(1) above tests positive for *E. coli*, collect five additional samples from the same groundwater source within 24 hours after being notified of the *E. coli* positive sample result and analyze

the samples for *E. coli*, unless the system immediately identifies the cause of contamination and implements corrective action; and

- (3) If any of the five additional samples collected in accordance with (h)4ii(2) above tests positive for  $E.\ coli$ , the seasonal water system shall:
  - (A) Within 30 days after being notified of the *E. coli*-positive sample result, consult with the Department regarding appropriate corrective action and;
  - (B) No later than 60 days after being notified of the *E. coli*-positive sample result, or by an alternative deadline established by the Department based on circumstances particular to the corrective action to be taken at the seasonal water system, implement the Department-approved corrective action.
- 5. If a sample tests positive for *E. coli* under (h)2 above, a supplier of water from a seasonal water system shall not serve water from the source from which the *E. coli*-positive sample was taken to any person, until the Department or other administrative authority, as applicable, determines that the supplier of water has completed all requirements under (h)4 above and notifies the supplier of water in writing that it may serve water to the public.

SUBCHAPTER 9. SURFACE WATER TREATMENT REQUIREMENTS

7:10-9.4 Monitoring requirements and criteria for determination for ground water sources under the direct influence of surface water

(a)-(e) (No change.)

(f) A sampling report, including the raw water monitoring results in tabular form and a written description of the monitoring results, shall be submitted to the Department by mail at the address at N.J.A.C. 7:10-2.6(b) within 30 calendar days after the completion of monitoring conducted pursuant to this section. [The report shall be sent to:

Bureau of Safe Drinking Water

New Jersey Department of Environmental Protection

PO Box 426

Trenton, New Jersey 08625-0426]

SUBCHAPTER 10. PHYSICAL CONNECTIONS AND CROSS CONNECTION CONTROL
BY CONTAINMENT

7:10-10.5 Physical connection permit application and renewal procedures

(a) Initial physical connection permit regulations are as follows:

1. Prior to the installation of a physical connection, the owner of the facility where the installation is to be made shall submit to the Department and to the owner of the public community water system a completed application form for an initial physical connection permit. The application form may be obtained from the Department [at the Division of

49

Water Supply, PO Box 426, Trenton, New Jersey 08625-0426, or from the Department's website at www.state.nj.us/dep/watersupply] in accordance with N.J.A.C. 7:10-2.6(a).

- 2. 8. (No change.)
- (b) (e) (No change.)

7:10-10.6 Inspection and testing requirements and procedures for physical connection installations

- (a) (No change.)
- (b) The inspection and testing required pursuant to (a) above shall be conducted either by an authorized representative of the owner of the facility where the backflow prevention device is installed in the presence of an authorized representative of the administrative authority and/or the supplier of water, or by a certified tester who holds a valid backflow prevention device tester certificate issued by a certifying agency approved by the Department pursuant to N.J.A.C. 7:10-10.8.
  - 1. 2. (No change)
- 3. If the tests and inspections are performed by a certified tester, the owner of the facility shall mail copies of the Quarterly Physical Connection Test and Maintenance Report to the administrative authority and to the supplier of water within five days of conducting the tests and inspections. The Quarterly Physical Connection Test and Maintenance Report form may be obtained from the Department [at the Bureau of Safe Drinking Water, PO Box 426, Trenton, New Jersey 08625-0426] in accordance with N.J.A.C. 7:10-2.6(a).

(c) - (h) (No change.)

SUBCHAPTER 11. STANDARDS FOR THE CONSTRUCTION OF PUBLIC COMMUNITY WATER SYSTEMS

7:10-11.5 Permit requirement; application contents

- (a) (b) (No change.)
- (c) A complete permit application shall include all of the following:
- 1. A completed Standard Application Form obtained from the Department as provided at (c)1ii below, which shall include the name and address of the applicant, the licensed professional engineer's description of the project with an estimate of the project cost, and signatures of the applicant and the licensed professional engineer. Machine copies are not acceptable.
  - i. (No change.)
- ii. The Standard Application form, administrative and technical checklists, and instructions for completing the Standard Application form can be obtained from the Department [at the Water Supply Administration, 401 East State Street, PO Box 426, Trenton, N.J. 08625-0426, or from the Department's website at <a href="www.state.nj.us/dep/watersupply/permit.htm">www.state.nj.us/dep/watersupply/permit.htm</a>] in accordance with N.J.A.C. 7:10-2.6(a).
  - 2. 7. (No change.)
- (d) (No change.)
- (e) Except for a non-capacity-related water system modification, a firm capacity and water allocation analysis for the proposed water system shall be submitted on the form available from

the Department [at the Division of Water Supply, 401 East State Street, PO Box 426, Trenton, N.J. 08625-0426, or from the Department's website at <a href="www.state.nj.us/dep/watersupply">www.state.nj.us/dep/watersupply</a>] in accordance with N.J.A.C. 7:10-2.6(a). The firm capacity and water allocation analysis shall demonstrate that either (e)1 and 2 below are both met, or, as an alternative to (e)1 and 2 below, that (e)3 below is met:

- 1. 4. (No change.)
- (f) (n) (No change.)

7:10-11.10 Permit requirements and standards for the construction of distribution systems; master permits

- (a) (No change.)
- (b) For any distribution system improvement, such as water main extension and/or replacement, transmission main, or interconnection not covered by a master permit issued pursuant to (a) above, the supplier of water shall comply with the following:
- 1. For any water main extension or connection to an existing water main, which includes new residential service to more than 30 realty improvements, but less than 50 new service connections, or generates a new non-residential average demand of more than 12,000 gallons per day determined pursuant to Table 1 at N.J.A.C. 7:10-12.6(b), submit a completed permit Standard Application Form pursuant to N.J.A.C. 7:10-11.5(c)1, the Simplified Water Main Certification Form, available from the Department [at Division of Water Supply, PO Box 426, Trenton, New Jersey 08625-0426, or from the Department's website at

www.state.nj.us/dep/watersupply] in accordance with N.J.A.C. 7:10-2.6(a), the permit application review fee specified at N.J.A.C. 7:10-15.3(d)2, and a plan showing the location of existing and proposed water mains. The Simplified Water Main Certification Form includes the following information:

- i. iv. (No change.)
- 2. 4. (No change.)
- (c) (g) (No change.)

### CHAPTER 18

# REGULATIONS GOVERNING THE CERTIFICATION OF LABORATORIES AND ENVIRONMENTAL MEASUREMENTS

## SUBCHAPTER 4. MICROBIOLOGICAL TESTING

- 7:18-4.6 Requirements for records and data reporting
- (a) (j) (No change.)
- (k) When the laboratory determines the presence of [fecal coliform or] *E. Coli* in a drinking water sample, pursuant to 40 CFR [141.63(b)] **141.858(b)**, the laboratory shall notify the affected parties as follows:
- 1. For non-transient 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), and the

**Department** within 24 hours [or during the next business day;]. **Notice to the Department** shall be by telephone in accordance with N.J.A.C. 7:10-2.6(d); or

2. For community water systems, the laboratory shall notify the water system's superintendent and the [Department's Bureau of Safe Drinking Water] **Department** within 24 hours [or during the next business day]. **Notice to the Department shall be by telephone in accordance with N.J.A.C. 7:10-2.6(d).** 

(l) - (m) (No change.)

### 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 in a regulatory drinking water sample exceeds the MCL, the laboratory shall notify the affected parties as follows:
- 1. For non-transient 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) and the **Department** within 24 hours [or during the next business day;]. **Notice to the Department** shall be by telephone in accordance with N.J.A.C. 7:10-2.6(d);
- 2. For community water systems, the laboratory shall notify the water system's superintendent and the [Department's Bureau of Safe Drinking Water] **Department** within 24

hours [or during the next business day;]. Notice to the Department shall be by telephone in accordance with N.J.A.C. 7:10-2.6(d); or

- 3. (No change.)
- (j) (n) (No change.)