# **STATE OF MAINE**

# **RULES RELATING TO DRINKING WATER**

10-144 CODE OF MAINE REGULATIONS CHAPTER 231



DEPARTMENT OF HEALTH & HUMAN SERVICES MAINE CENTER FOR DISEASE CONTROL & PREVENTION DIVISION OF ENVIRONMENTAL HEALTH DRINKING WATER PROGRAM 11 STATE HOUSE STATION AUGUSTA, MAINE 04333

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### 10-144 CMR Chapter 231

### Drinking Water Program Division of Environmental Health Maine Center for Disease Control and Prevention Department of Health and Human Services

### STATE OF MAINE RULES RELATING TO DRINKING WATER

### SUMMARY STATEMENT

These rules contain the safe drinking water requirements for public water systems in the State of Maine. These requirements pertain to public water system operation, the quality of water produced by such systems, and enforcement remedies when violations of these regulations are committed. These rules also establish regulations for the quality of water supplying bottled water facilities and water vending machines.

#### **BASIS STATEMENT**

These rules are established to protect public health from unsafe public water systems and to require that public water systems notify the population served, if problems do exist.

#### **AUTHORITY**

22 M.R.S., Chapter 601, Subchapter I, §§2605 and Subchapter II, §§ 2611-2613, 2615 and Subchapter III § 2628.

#### **EFFECTIVE DATE**

These regulations were last amended May 9, 2016

Non-Discrimination Notice

In accordance with Title VI of the Civil Rights Act of 1964, as amended by the civil Rights Restoration Act of 1991 (42 U.S.C. 1981, 2000e et seq.) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101 et seq.), Title II of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.), and Title IX of the Education Amendments of 1972, the Maine Department of Human Services does not discriminate on the basis of sex, color, national origin, disability or age in admission or access to or treatment or employment in its programs and activities.

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### **SECTION 1: ADMINISTRATION**

A. Application and Scope

The provisions of these rules apply to all public water systems, unless specifically noted.

B. Constitutionality Clause

Should any section, paragraph, sentence, clause, or phrase of these regulations be declared unconstitutional or invalid for any reason, the remainder of said regulations will not be affected thereby.

- C. Licensed Water Operators
  - 1. Owners of all Community and Non-Transient Non-Community water systems shall place the direct supervision of their water system, including each treatment facility and/or distribution system, under the responsible charge of an operator holding a valid license with classification equal to or greater than the classification of the treatment facility and/or distribution system.
  - 2. Owners of all public water systems that use surface water as a source shall place the direct supervision of their water system, including each treatment facility and/or distribution system, under the responsible charge of an operator holding a valid license equal to, or greater than, the classification of the treatment facility and/or distribution system.
  - 3. The operator in responsible charge shall hold a valid license equal to, or greater than, the classification of their water system, including each treatment facility and distribution system as determined by the Department.
  - 4. The operator in responsible charge shall ensure that adequate operational and emergency response procedures are in place to enable licensed operating personnel to make appropriate process control system integrity decisions about water quality and quantity.
  - 5. All operating personnel making process control system integrity decisions about water quality or quantity that affect public health shall be licensed.
  - 6. A designated licensed operator shall be available for each operating shift.
  - 7. Transient Non-Community water systems serving ground water are generally not required to employ licensed operators; however, these water systems shall employ or designate individuals responsible for their operation, who are responsible for proper record-keeping, treatment maintenance and sample collection, as stated in these rules. If the Department finds that such transient water systems demonstrate

a lack of capacity (as described in Section 3(E) of these Rules) or pose an imminent hazard to public health (as described in Section 1(F) of these Rules), then the Department may require that the water system engage a licensed water operator holding an appropriate license for the system classification.

- 8. Whenever a licensed water operator is required, that operator shall maintain their licensure and shall comply with these Rules. If the Department finds that a water operator is not complying with these rules, then the Department may require that the water system obtain a different licensed operator.
- D. Departmental Laboratory Fees
  - 1. The Department will charge a fee for any examination, testing or analysis required under the rules and performed in the Department of Health and Human Services Health and Environmental Testing Laboratory. Such fees will be established and reviewed in accordance with the Maine Administrative Procedure Act at 5 M.R.S., Chapter 375.
  - 2. Any person required under this chapter to submit samples of water to the Department for analysis is required to pay the shipping charges thereon.
- E. Engineering Studies
  - 1. The Department is authorized to order a public water system to conduct engineering studies to correct deficiencies or violations to the Safe Drinking Water Act, or these rules.
  - 2. The Department is authorized to order that any or all of the recommendations in the study be carried out. Prior to such an order, an opportunity for a public hearing shall be provided by the Department.
- F. Imminent Hazards to Public Health
  - 1. Pursuant to 22 M.R.S. § 2617, the Department is authorized to issue orders to any person to comply with the requirements of these regulations, and is further authorized to petition the courts to compel compliance with such orders.
  - 2. Pursuant to 22 M.R.S. § 2614, upon receipt of information that there is an imminent endangerment to health due to the actual or threatened existence of contaminants in a public water system, or if for other reasons, the Department may take such actions, including, but not limited to, issuing necessary orders or commencing court action, as it deems necessary to protect the public health.
  - 3. Pursuant to 22 M.R.S. § 2614, upon receipt of information that there is an imminent endangerment to public health due to the actual or threatened existence of biological contaminants, as indicated by the presence of pathogenic

microorganisms or the presence of indicator organisms that indicate the potential presence of pathogenic microorganisms, in a public water system , or when, in the judgment of the Department, such a condition exists or is likely to exist in a public water system and will result in a serious risk to public health, the Department shall initiate "Boil Water Order" procedures. Upon the determination by the Department that conditions exist that would warrant the issuance of a "Boil Water Order," the public water system will be immediately notified of the determination. Upon notification by the Department of the "Boil Water Order," the public water system must immediately institute the "Boil Water Order" system\_wide, or as otherwise directed by the Department until such time as the Department makes the determination that the "Boil Water Order" may be lifted.

- a. Boil Water Order Procedures
  - i. The Department will provide the appropriate Boil Water Order language to the owner, manager, or other responsible individual by telephone, electronic notification, FAX or in person, for immediate distribution to consumers.
  - ii. If the Department is unable to contact an appropriate person then the Department's field staff may distribute handbills to consumers.
  - iii. The Department will follow-up by sending the Boil Water Order language and other requirements in writing via certified mail to the appropriate representative of the water system concerned.
  - iv. Nothing in these Boil Water Order procedures absolves the supplier of water from providing appropriate public notification to their consumers.
- b. When a water system is issued a "Boil Water Order" by the Department, that water system shall appropriately notify consumers within 24 hours of its issuance.
- c. Notification of the "Boil Water Order" shall be accomplished by publishing it in a daily newspaper of general circulation in the area the system serves water to the public; announcing it on a local radio; announcing it on television, or other methods approved by the Department; for non-community water systems, posting it in conspicuous places (i.e. employee bulletin boards, bathrooms, doors entering an establishment, and other appropriate places), by hand delivering it to each consumer or by other methods approved by the Department. The Department may require any combination of the above forms of notification that it deems necessary to sufficiently inform the consumers of water of the "Boil Water Order."

d. The following language shall be included in all "Boil Water Order" notices distributed by the system:

"Due to the possibility of unsafe water, public water system users are directed to Boil All Water for at least one minute at a rolling boil before drinking, making ice cubes, washing foods, brushing teeth or engaging in any other activity involving the consumption of water. The Order shall remain in effect until further notice.

Questions regarding this notice may be directed to the Public Water System at: Fill-in: Name of Contact Person Name of System Telephone # or to the Maine C.D.C. Drinking Water Program at (207) 287-2070.

e. The Department may lift the "Boil Water Order" if it determines that the imminent endangerment to public health has been remedied. Prior to lifting the "Boil Water Order", the Department will collect, or require the public water system to collect, the appropriate number of bacteria samples:

The required number of samples collected to lift a "Boil Order" shall correspond to the population requirement of the Total Coliform Rule and the Revised Total Coliform Rule in Section 7, but in no case shall be less than three. Population determination for the Boil Water Order shall be based upon the affected area of the Boil Water Order.

All samples shall test negative for *E. Coli*/Total Coliform/Fecal Coliform in order for the Department to lift the "Boil Water Order."

### SECTION 1-A: ALTERNATIVE FUNDING MECHANISM

Pursuant to 22 M.R.S. § 2660- E (1), the Commissioner may impose a fee upon each legal entity deemed a public water system in the State for the purpose of retaining primacy. The Department will establish fee formulas by rule, according to the Administrative Procedure Act (APA). Pursuant to 22 M.R.S. § 2660-E, the Department shall consult with and consider the advice of the Maine Public Drinking Water Commission (the Commission) in preparing the rules. The rules issued by the Department shall include the fee formulas and collection and transfer schedules developed by the Commission. Revenues derived through such fee formulas shall be referred to as Alternative Funding Mechanism (AFM) Fees. Further, pursuant to 22 M.R.S. § 2660-E revenues generated from collection of these fees shall be used for the purpose of retaining primacy, including the funding of Department positions as stated below.

### A. Fee Formulas

- 1. Pursuant to 22 M.R.S. §2660-E (Maine's Water for Human Consumption Act), the following AFM fee formula is established:
  - a. The AFM fee is equal to the base fee plus the per capita rate multiplied by the population capacity minus the exempt population.
  - b. AFM Fee = Base Fee + ((per capita rate) x (population capacity) (exempt population.))
  - c. The base fee assessed will not exceed \$75.
- 2. Pursuant to 22 M.R.S. Chapter 601(Maine's Water for Human Consumption Act), the following bottled water facility and treated water vending machines AFM fee formulas are established:
  - a. The fee schedule for in-state water bottlers shall be based on gallons produced. (Bottler Size Factor X Fee Rate per Bottler Size). The Drinking Water Commission and the Department will set the Fee Rate per Bottler Size Factor annually.
  - b. The base fee assessed will not exceed \$75.
  - c. The fee schedule for treated water vending machines shall be calculated at a rate of \$10.00 per machine, with a minimum fee of \$50 per vendor and not to exceed a maximum of \$150. (Based Fee + (Per-machine Rate X Number of Machines).
  - d. Production reports are subject to annual verification by the Department. Failure to comply may result in assessment of the maximum bottled water fee.

- B. Formula Parameters
  - 1. The following parameters will be used to determine and calculate the AFM fee for regulated public water systems:
    - a. The minimum fee will be equal to the base fee;
    - b. The base fee will be no more than \$75 per year per public water system;
    - c. The Commission and the Department will establish the per capita rate annually.
    - d. The population capacity will be based on, but not limited to, the population served, service connections, volume of water pumped or available seats, campsites, rooms or lots, and may include a fixed or graduated fee formula or combinations of the fee formulas; and
    - e. An exempt population may be determined to be part of the AFM and subtracted from the population capacity as determined by the Commission and the Department annually pursuant to 22 M.R.S.§ 2613.
  - 2. The following parameters shall be used to determine and calculate the Bottled Water and Treated Water Vending Machines AFM fee for regulated public water systems:
    - a. All in-state bottlers shall submit gallon production reports for the year ending December 31st, and such reports are due no later than March 1st.
    - b. The production report, which will provide the number of gallons produced for the sale of bottled water, shall be used to calculate the AFM fee.
    - c. Fees collected under this section cover a one-year period beginning July 1 and shall coincide with the State fiscal year.
- C. Fund Management
  - 1. The Fund will be managed within the following parameters:
    - a. The Public Drinking Water Fund is established as an interest-bearing dedicated revenue account;
    - b. All interest earned by the account becomes part of the fund;
    - c. All fees collected by the Commissioner under this subchapter must be deposited into the fund;
    - d. Any balance remaining in the fund at the end of the fiscal year does not lapse but is carried forward into subsequent fiscal years; and

- e. The Commission may use the fund only to support the cost incurred by the Department in managing the Fund, including the cost of salaries, benefits, travel, education, technical assistance, capital equipment and other allowable expenses incurred by the Department.
- 2. Collection and disposition of fees pursuant to 22 M.R.S. § 2660-F:
  - a. All public water systems shall pay an annual AFM fee.
  - b. Fees collected under this section cover a one year period beginning July 1 and shall coincide with the State fiscal year;
  - c. Fees collected under this section are State fees;
  - d. Fees shall be collected by each public water system in monthly, quarterly, or annual increments; and
  - e. The Department will establish schedules for the collection and transfer of fees to the State with the advice of the Commissioner.
- D. Alternative Funding Revenues to be Generated
  - 1. The fee structure shall be sufficient to generate funds to support no more than 10 positions for a full year.
- E. Collection and Remittance of Fees
  - 1. Any legal entity assessed a total fee of \$500 or more may exercise the option of remitting the assessed fee on a quarterly basis. Fees so remitted shall be due and payable July 1, October 1, January 1, and April 1. Legal entities opting to remit on a quarterly basis shall remit at least 25% of the total assessment each quarter. Fees shall be deemed delinquent 30 days after the due date.
  - 2. Any legal entity assessed a total fee of \$500 or more that opts not to pay fees on a quarterly basis shall pay fees to the Department annually. Such fees shall be due and payable by July 1 of each calendar year. Fees shall be deemed delinquent 30 days after the due date.
  - 3. Any legal entity assessed a total fee of less than \$500 shall remit the assessed fee on an annual basis. Fees remitted on an annual basis shall be due and payable July 1 and shall be deemed delinquent 30 days after the due date.
  - 4. Fees shall be made payable to the Treasurer, State of Maine and pursuant to 22 M.R.S. §2660-F shall be deposited in the Public Drinking Water Fund.
- F. Records Required
  - 1. Records documenting the collection and transfer of fees required in these rules shall be retained by the owner or other duly authorized person. The records shall be kept in-state and on-site of the public water system for a period of at least 5

years. If it is not possible to keep the records on-site, then the records must be kept such that an appropriate person from the Department may inspect such records upon request. Further, the records should be transferred to the new owner with the sale of the public water system.

- 2. Records documenting the collection and transfer of fees as required in these rules shall be made readily available by the owner or other duly authorized person for inspection by appropriate authorities at all times during normal business hours.
- 3. The Department will keep records documenting the collection and transfer of all fees assessed for at least 5 years.
- G. Failure to Remit Fees to the Department
  - 1. The Department may seek relief in a court of competent jurisdiction as provided in 22 M.R.S. §§ 2617 through 2620 or §2660-G for failure to remit fees in a timely manner.

## SECTION 1-B: ADVISORY RULING AND ADJUDICATORY PROCEEDINGS

- A. Advisory Rulings as Authorized Pursuant to 5 M.R.S. § 9001
  - 1. Upon written request, the Department may render an advisory ruling with respect to the interpretation and/or applicability of a Drinking Water Law, Rule, or Procedure administered by the Department.
  - 2. A request for an advisory ruling must be addressed to the Program Director, Drinking Water Program, Division of Environmental Health, Maine Center for Disease Control and Prevention, Department of Health and Human Services, 11 State House Station, Augusta, ME 04333-0011.
  - 3. The Department may refuse to issue an advisory ruling if it may harm its interests in any litigation to which it may become a party.
  - 4. An advisory ruling must be in writing and issued no more than 60 days from the date when the Department has received all information necessary for the ruling.
  - 5. A verbal opinion is not an advisory ruling. Verbal opinions will not be considered binding upon the Department in any manner.
- B. Adjudicatory Proceedings as Authorized Pursuant to 5 M.R.S. § 9051
  - 1. This section governs the means of appealing a decision made by the Department to the Fair Hearing Unit pertaining to an interpretation of the Department's Drinking Water Laws, Rules, or Procedures under 22 M.R.S. Chapter 601.
  - 2. Appeals by a Public Water System are limited to appeals contending that a decision by the Department misapplies applicable laws, procedures, or rules; or is based upon a significant factual error to the detriment of the Public Water System.
  - 3. Hearing requests shall be directed to the Director, Center for Disease Control and Prevention, 11 State House Station, Augusta, ME 04333-0011. The request shall state the specific issues being appealed. Within 14 days of its receipt, the Office Director shall forward the request for an administrative hearing to: Chief Hearings Officer, Office of Administrative Hearings, 11 State House Station, Augusta, ME 04333-0011. The request to the office of Administrative Hearings shall be accompanied by an administrative hearing report.
  - 4. A hearing officer shall conduct the administrative hearing.
  - 5. The hearing will be conducted pursuant to the rules of the Office of Administrative Hearings, as set forth in the Administrative Hearing Manual, and in conformity with the Administrative Procedures Act 5 M.R.S. § 8001, et seq.

- 6. A notice will inform the persons of the time, date, and place of the hearing. The hearing will be held in Augusta, unless otherwise noted. The hearing date will be at least 20 days following the date of the notice of the administrative hearing.
- 7. The hearing officer will issue a written decision of the administrative hearing to all parties.
- 8. Any person or party dissatisfied with the hearing officer's decision has the right of judicial review under the Maine Rules of Civil Procedure, Rule 80C.

### SECTION 1-C: SAFE DRINKING WATER ADMINISTRATIVE ENFORCEMENT

Pursuant to 22 M.R.S. §2617 the Department may seek and impose Administrative Remedies for any noncompliance with the state drinking water laws, regulations and rules. The purpose of the Administrative Remedies is to enable the Department to establish an effective enforcement program to meet primacy requirements of the United States Environmental Protection Agency and thereby to protect the public health. Pursuant to 22 M.R.S. §2620-C the Department is authorized to adopt rules regarding the notice and the issuance, amendment and withdrawal, of the Administrative Consent and Compliance Orders. Further, pursuant to 22 M.R.S. §2620 (2), the Department is authorized to adopt rules establishing a schedule of Administrative Penalties. In seeking and imposing enforcement actions, the Department may pursue any combination of administrative and judicial remedies depending upon the circumstances and gravity of each case and provided that the Department follows the procedures established by statute and further established by these rules. The penalties and remedies prescribed by 22 M.R.S. §2617 et seq. shall be deemed to be concurrent and the existence of an exercised remedy shall not prevent the Department from exercising any other remedy.

- A. Preconditions for Assessment of Administrative Remedies
  - 1. An Administrative Remedy discussed below may only be administered for a violation or a failure to comply that, at the time it occurred, constituted noncompliance with statutes or regulations under the jurisdiction of the Department's Drinking Water Program:
    - a. which was then in effect; and
    - b. to which the person was then subject; and
    - c. to which these rules apply.
  - 2. The imposition of Administrative Remedies shall not be deemed in any way to extend any deadline for compliance.
  - 3. A Notice of Non-Compliance shall be issued as part of the Administrative Remedy process, unless exempt under 22 M.R.S. §2620-B. A Notice of Non-Compliance will be issued by the Department within 30 days after a violation is identified under 22 M.R.S. §2601 et seq., and shall contain the following information:
    - a. Identification of the violation(s);
    - b. A compliance deadline; and
    - c. The possible consequences of continued noncompliance.
- B. Notice and Issuance, Amendment and Withdrawal of Administrative Consent Orders

- 1. The Department may propose an Administrative Consent Order after a Notice of Non-Compliance has been issued and after the system has failed to resolve the violation(s) cited in the Notice of Non-Compliance as specified below:
  - a. The Administrative Consent Order may be proposed by the Department and sent to the owner of the public water system; and
  - b. The Department's proposal of an Administrative Consent Order shall initiate the Department's effort to negotiate in good faith; and
  - c. The Administrative Consent Order shall be sent via certified mail and service shall be effective the date of receipt of the certified mail. If the certified mail is not received or claimed by the Public Water System Supplier, then the Department shall send the Administrative Consent Order by sheriff; and
  - d. The date of the Department's good faith effort shall be deemed to be initiated upon the date of the receipt of the certified mail; and
  - e. The Owner of the Water System shall have the responsibility to contact the Department to accept the offer to negotiate in good faith. Otherwise, after 10 calendar days if the Department has received no acceptance to negotiate in good faith from the owner of the Water System, then the Department shall be deemed to have fulfilled its good faith effort requirement; and
  - f. The Administrative Consent Order shall state with reasonable specificity the nature of the violation the public water system is alleged to have violated, specify a reasonable time frame for compliance, and clearly specify the terms under which the Department may cease to negotiate in good faith and therefore revoke the offer; and
  - g. Generally, the Department will be deemed to have fulfilled its obligation to negotiate in good faith if, after 60 calendar days from the date of receipt of notice, no agreement has been reached except for the following types of violations: monitoring violations, public notification violations and collection of fees. For monitoring violations, public notification violations, and collection of fees the Department's good faith effort obligation will be deemed to be fulfilled if after thirty calendar days the system has failed to enter into an agreement to rectify its non-compliance; and
  - h. If the Department has fulfilled its obligation to negotiate in good faith as specified above, then the Department may revoke its offer to enter into an Administrative Consent Order.

- 2. The Administrative Consent Order shall become final on the date of the last signatory. The Department shall be the last signatory.
- 3. The amendment of an Administrative Consent Order may only occur with the consent of both parties to the agreement. Any requests to amend the agreement must be placed in writing.
- C. Notice and Issuance, Amendment and Withdrawal of Administrative Compliance Orders
  - 1. The Department may issue an Administrative Compliance Order pursuant to 22 M.R.S. § 2617 et seq. as specified below, provided that the Department has issued a Notice of Non-Compliance, the Water System has failed to resolve the violations cited in the Notice of Non-Compliance, and the Department has fulfilled its good faith obligation or has made the determination that the violation creates a serious risk to public health as specified at 22 M.R.S. § 2620-B.
    - a. The Administrative Compliance Order may be issued by the Department and sent to the owner of the water system; and
    - b. The Administrative Compliance Order shall be sent via certified mail and service shall be effective the date of receipt of the certified mail; and
    - c. The Administrative Compliance Order shall state with reasonable specificity the nature of the violation the public water system is alleged to have violated, specify a reasonable time frame for compliance, provide the owner of the water system with an opportunity to request a hearing within 30 calendar days of receipt of notice and specify a penalty that shall be assessed if the system fails to comply with the order.
  - 2. Requests for Adjudicatory Hearings
    - a. Adjudicatory Hearings shall be conducted by the Department's Hearings Unit in accordance with the Administrative Procedure Act at 5 M.R.S. § 9051 et seq. A request for a Hearing shall be placed in writing and directed to the Director, Maine Center for Disease Control and Prevention; and
    - b. The Hearing Officer's decision shall be deemed to be the Department's final agency action and shall be binding on the Department. Otherwise a party aggrieved with the decision has a right to judicial review.
  - 3. The Administrative Compliance Order may only be amended by the Department. If a public water system desires an extension of time to the Administrative Compliance Order, then the system must place a request in writing to the Department prior to the passage of the deadline. The written request for an extension of time shall clearly specify actions taken by the system to attempt to

prevent the non-compliance with a deadline, establish that the delay in compliance is beyond the control of the water system, and the length of time needed for compliance. Otherwise, the passage of the deadline of an Administrative Compliance Order shall constitute non-compliance with the Administrative Compliance Order and shall trigger the notice of penalty assessment which shall contain a penalty.

- 4. If the Department determines that a violation creates a serious risk to public health, then the Department is exempt from issuing a Notice of Non-Compliance and from offering to negotiate an Administrative Consent Order in good faith and may immediately issue an Administrative Compliance Order.
  - a. The term "serious risk to public health" may include, but not be limited to, an MCL or Treatment Technique Violation.
- D. Procedures for Imposing Administrative Penalties
  - 1. In the case of a violation of a requirement of a statute, rule, or order for which the applicable statute authorizes an Administrative Penalty and which imposes an affirmative duty on a person, the person upon whom the duty is imposed by the statute, rule or order shall be subject to the imposition of an Administrative Penalty.
  - 2. In the case of a violation of a requirement of a statute, rule, or order for which the applicable statute authorizes an Administrative Penalty and which prohibits one or more specified acts, any person who commits the act(s) shall be subject to the imposition of an Administrative Penalty.
- E. Assessment of Administrative Penalties Generally
  - 1. An Administrative Penalty shall be assessed via a Notice of Penalty Assessment. An Administrative Penalty may be assessed as part of an Administrative Compliance Order and shall be assessed as a result of a violation of an Administrative Compliance Order.
  - 2. The earliest that an Administrative Penalty may be assessed is at the date good faith efforts cease and the Department has failed to enter into an Administrative Consent Order or on the date that a public water system fails to comply with an Administrative Compliance Order.
  - 3. In the event that a penalty is not specified for a particular violation, the Department may assess a penalty for the violation that reflects the Type of violation. The penalty assessed may be no greater than \$750 per violation per day except that for public water systems serving more than 10,000 people, an administrative penalty may not be less than \$1,000 per violation per day. Each day that a violation remains uncorrected may be counted as a separate violation.

- F. Assessment of Administrative Penalties
  - 1. The Penalty assessed for public water systems serving more than 10,000 people shall be determined by the Type of violation. A violation shall be deemed either as Type 1, a Type 2, or a Type 3 violation. In no case shall the penalty assessed pursuant to this subsection be less than \$1,000 per violation per day.
    - a. A Type 1 violation shall be deemed to have a direct impact on public health, a serious risk to public health and/or immediate threat to public health. The maximum penalty for Type 1 violation shall be \$2,000 per violation per day.
    - b. Type 2 violations may have a direct impact on public health, but are mainly non-compliance with technical safeguards. The maximum penalty shall be \$1,500 per violation per day. Such violations include, but are not limited to, the following:
      - i. failure to comply with monitoring requirements; and/or
      - ii. failure to complete public notification.
    - c. Type 3 violations may have an indirect impact on public health and are generally related to poor record keeping. The penalty shall be \$1,000 per violation per day. Such violations include, but are not limited to, the following:
      - i. failure to submit monitoring or other required reports;
      - ii. late submittal of monitoring or other required reports; and/or
      - iii. failure to keep records on file as required
  - 2 The Penalty assessed for public water systems serving less than 10,000 people shall be determined by the Type of violation. A violation shall be deemed either as a Type 1, a Type 2, or a Type 3 violation.
    - a. A Type 1 violation shall be deemed to have a direct impact on public health, a serious risk to public health and/or an immediate threat to public health. The maximum penalty for Type I violations shall be \$750 per violation per day.
    - b. Type 2 violations may have a direct impact on public health, but are mainly non-compliance with technical safeguards. Such violations include, but are not limited to, the following:
      - i. failure to comply with monitoring requirements; and/or

ii. failure to complete public notification.

The maximum penalty shall be \$350 per violation per day.

- c. Type 3 violations may have an indirect impact on public health and are generally related to poor record keeping. Such violations include, but are not limited to, the following:
  - i. failure to submit monitoring or other required reports;
  - ii. late submittal of monitoring or other required reports; and/or
  - iii. failure to keep records on file as required.

The maximum penalty shall be \$50 per violation per day.

- 3. The Department may reduce the maximum penalty assessed based on, but not limited to, the following criteria:
  - a. Whether steps were taken by the public water system to prevent the violation;
  - b. Whether steps were taken by the public water system to remediate or mitigate damages resulting from the violation;
  - c. The financial condition of the public water system; and
  - d. The best interest of the public.
- 4. However, for public water systems serving more than 10,000 people, the penalty must not be reduced to less than \$1,000 per day per violation. The Department may increase the maximum penalty established for each violation provided that no penalty assessed shall be greater than \$750 per violation per day for public water systems serving fewer than 10,000 people based on, but not limited to, the following:
  - a. The nature and duration of the violation;
  - d. The level of assessment necessary to ensure immediate and continued compliance;
  - e. Whether the public water system has a history of violations;
  - f. Whether or not compliance is less costly than committing the violation; and
  - e. Deterrence of future noncompliance.

- G. Assessment of Administrative Penalties Hearing
  - 1. Any person against whom the Department seeks to assess an Administrative Penalty for a violation of a statute, rule, or order has the right to request a Hearing. The request for a Hearing must be filed with the Department within 30 days after the service of Notice of Penalty Assessment.
  - 2. The Hearing Officer's decision shall be deemed to be the Department's final agency action and shall be binding on the Department. Otherwise, a party aggrieved with the decision has a right to judicial review.
- H. Assessment of Administrative Penalties Enforcement
  - 1. The Department's issuance of an Administrative Penalty shall be a binding order on the person issued the Penalty by the Department upon the person's election to waive, or failure to timely request, an Adjudicatory Hearing on the violation and/or the penalty. Each day during which the person fails to pay said penalty, or otherwise fails to comply with an order of the Department, constitutes a separate and distinct violation.
- I. Administrative Penalty Schedule
  - 1. Type 1 Violations:
    - a. For failure to complete an engineering study/engineering order as required by 22 M.R.S. §2612(4)/10-144 CMR 231 Section 1(E)(1).
    - b. For a violation of an Emergency Order/Boil Order as required at 22 M.R.S. §2614/10-144 CMR 231 Section 1(F).
    - c. For failure to apply appropriate disinfection to water treatment plants at 10-144 CMR 231 Section 3(F)(2)(c).
    - d. For failure to apply appropriate disinfection of wells prior to the use of the wells as a source of public drinking water as required at Section 3(F)(2)(d).
    - e. For failure to appropriately disinfect a surface water source as required at 10-144 CMR 231 Sections 3(H)(1)(a) and 7(H)(3).
    - f. For systems using ground water sources that fail to install facilities for chlorinating as required at 10-144 CMR 231 Section 3(H)(2)(a).

- g. For systems using ground water sources that fail to store or use hazardous chemicals outside of the proximity of the well, as required at 10-144 CMR 231 Section 3(H)(2)(b).
- h. For failure to immediately report to the Department the occurrence of spills of hazardous chemicals within the wellhead protection area, as required at 10-144 CMR 231 Section 3(H)(2)(d) and Section 3(I)(2).
- i. For failure to continuously disinfect a dug well or spring, if required by the Department at 10-144 C.M.R. 231, Section 4(D).
- j. For failure of a community water system to provide a minimum positive pressure of 20 p.s.i. at the curb stop (curb cock), as required at 10-144 CMR 231 Section 4(A).
- k. For failure to comply with the Maximum Contaminant Level requirements for inorganic chemicals, as required at 10-144 CMR 231 Section 7(B)(1).
- 1. For failure to comply with the Maximum Contaminant Level requirements for organic chemicals, as required at 10-144 CMR 231 Section 7(B)(2).
- m. For failure to comply with the Maximum Contaminant Level requirements for radionuclides, as required at 10-144 CMR 231 Section 7(B)(6).
- n. For failure to comply with the Maximum Contaminant Level for organic contaminants, as required at 10-144 CMR 231 Section 7(G)(2).
- o. For failure to comply with the Maximum Contaminant Level for inorganic contaminants, as required at 10-144 CMR 231 Section 7(G)(3).
- p. For failure to comply with the Maximum Contaminant Level for microbiological contaminants, as required at 10-144 CMR 231 Section 7(G)(4) and 7(Y). For failure to comply with Level 1 or Level 2 Assessments under Section 7(Y).
- q. For failure to meet criteria for avoiding filtration, as required at 10-144 CMR 231 Section 7(H)(2).
- r. For failure to meet disinfection requirements, as required at 10-144 CMR 231 Section 7(H)(3).
- s. For failure to meet filtration requirements, as required at 10-144 CMR 231 Section 7(H)(4).
- t. For failure to meet source water treatment requirements, as required at 10-144 CMR 231 Section 7(I)(4).

- u. For failure to meet Treatment Technique requirements for lead and copper, as required at 10-144 CMR 231 Section 7(K).
- v. For failure to meet MCL and Maximum Residual Disinfection Level (hereafter MRDL) requirements, as required at 10-144 C.M.R. 231, Section 7(L).
- w. For failure to follow specifications for the disinfection of water mains, as required at 10-144 CMR 231 Section 3(F)(2)(a).
- For failure to follow specifications for the disinfection of a water storage facility prior to being placed in service 10-144 CMR 231 Section 3(F)(2)(b).
- y. For failure of a transient non-community water system that is in operation seasonally to complete required water tests for coliform bacteria and nitrate during the first 30 days of operation, as required at 10-144 CMR 231, Section 3(J)(1).
- z. For failure of a new transient water system to complete appropriate tests prior to utilizing the source as a water supply, as required at 10-144 CMR 231, Section 3(J)(2).
- a-1. For failure to maintain appropriate disinfectant residual or application rate, as required at 10-144 CMR 231, Section 4(D).
- b-1. For failure to meet MRDL requirements for disinfection byproducts, as required at 10-144 CMR 231, Section 7(G)(6).
- c-1. For failure to meet MCL requirements for residual disinfectant, as required at 10-144 CMR 231, Section 7(G)(7).
- d-1 For failure to meet Treatment Technique requirements for disinfection byproducts, as required at 10-144 CMR 231 Section 7(L)(6).
- 2. Type 2 Violations:
  - a. For failure to employ a licensed water operator as required by 22 M.R.S. §§ 2623, 2625, and 2630 and 10-144 CMR Section 1(C).
  - b. For failure to submit plans to be reviewed and approved by the Department specified at 10-144 CMR 231 Section 3 (C).
  - c. For failure to submit for approval plans to protect the surface supply watersheds as required at 10-144 CMR 231 Section 3(G)(1)(a).

- d. For failure to submit a map for approval that shows the watershed area delineation and potential sources of contamination, as required at 10-144 CMR 231 Section 3(G)(1)(b).
- e. For failure to submit for approval a Preliminary New Well/Final New Well Approval Form, as required at 10-144 CMR 231 Section 10-144 CMR 231 Section 3(G)(2).
- f. For failure to discharge water softeners or other treatment techniques in an approved manner, as required at 10-144 CMR 231 Section 3(H)(2)(e).
- g. For failure of a community water system to have a sanitary seal at the termination of the well casing, as required at 10-144 CMR 231 Section 3(H)(2)(f).
- h. For failure to appropriately cover, disinfect and screen vents of reservoirs, as required at 10-144 CMR 231 Section 4(B).
- i. For failure to obtain a permit for a cross connection, as required at 10-144 CMR 231 Section 4(F).
- j. For failure to appropriately add fluoride, as required at 10-144 CMR 231 Section 4(J).
- k. For failure to comply with rules for bottling water for consumption, as required at 10-144 CMR 231 Section 4(K).
- 1. For failure to monitor for Coliform, as required at 10-144 CMR 231 Section 7(C)(1).
- m. For failure to monitor for Turbidity, as required at 10-144 CMR 231 Section 7(C)(2).
- n. For failure to monitor for Inorganic Chemicals, as required at 10-144 CMR 231 Section 7(C)(3).
- o. For failure to monitor for Organic Chemicals, as required at 10-144 CMR 231 Section 7(C)(4).
- p. For failure to monitor for Radionuclides, as required at 10-144 CMR 231 Section (7)(C)(6).
- q. For failure to monitor for Total Trihalomethanes, as required at 10-144 CMR 231 Section (7)(C)(4).

- r. For failure to complete special monitoring for inorganic and organic chemicals, as required at 10-144 CMR 231 Section 7(E)(1).
- s. For failure to complete special monitoring for sodium, as required at 10-144 CMR 231 Section 7(E)(2).
- t. For failure to complete special monitoring for corrosivity characteristics, as required at 10-144 CMR 231 Section 7(E)(3).
- u. For failure to comply with the prohibition on use of lead pipes, solder and flux, as required at 10-144 CMR 231 Section 7(E)(4).
- v. For failure to meet analytical and monitoring requirements for filtration and disinfection, as required at 10-144 CMR 231 Section 7(H)(5).
- w. For failure to meet the monitoring requirements for lead and copper in tap water, as required at 10-144 CMR 231 Section 7(I)(7).
- x. For failure to meet the monitoring requirements for water quality parameters, as required at 10-144 CMR 231 Section 7(I)(8).
- y. For failure to meet monitoring requirements for lead and copper in source water, as required at 10-144 CMR 231 Section 7(I)(9).
- z. For failure to comply with the requirements regarding Non-Centralized Treatment Devices, as required at 10-144 CMR 231 Section 7(J).
- a-2. For failure to comply with the siting requirements, as required at 10-144 CMR 231 Section 7(A)(5).
- b-2. For failure to comply with MCL requirements for turbidity, as required at 10-144 CMR 231 Section 7(B)(3).
- c-2. For failure to meet lead service line replacement requirements, as required at 10-144 CMR 231 Section 7(I)(5).
- d-2. For failure to meet public education and supplemental monitoring requirements, as required at 10-144 CMR 231 Section 7(I)(6).
- e-2. For failure to install and maintain appropriate hydrants, as required at 10-144 CMR 231 Section 4(G).
- f-2. For failure to install appropriate curb stops (curb cocks), as required at 10-144 CMR 231 Section 4(H).

- g-2. For failure to monitor for disinfectant residuals, as required at 10-144 CMR 231 Section 7(L)(3).
- h-2 For failure to comply with the compliance requirements regarding Disinfection Byproducts, as required at 10-144 CMR 231 Section 7(L)(4).
- i-2 For failure to meet filtration sampling requirements, as required at 10-144 CMR 231 Section 7(P)(5).
- j-2 For failure to submit disinfection profiling and benchmarking, as required at 10-144 CMR 231 Section 7(P)(3).
- k-2 For failure to comply with the recycle provisions, as required at 40 C.F.R. 141.76 and 10-144 CMR 231 Section (7)(H)(7).
- 3. Type 3 Violations:
  - a. For failure of a system to keep water analyses results, as required at 10-144 CMR 231 Section 5(A).
  - b. For failure of a system to keep records of actions taken by the system to correct violations of drinking water regulations, as required at 10-144 CMR 231 Section 5(B).
  - c. For failure of a system to keep records of sanitary surveys, as required at 10-144 CMR 231 Section 5(C).
  - d. For failure of a system to keep records regarding a variance or exemption, as required at 10-144 CMR 231 Section 5(D).
  - e. For failure of a system to maintain daily operational records, as required at 10-144 CMR 231 Section 5(E).
  - f. For failure to comply with any reporting requirements, as required at 10-144 CMR 231 Section 6(A).
  - g. For failure to report analytical testing requirements by the tenth day of the following month in which the samples were analyzed, as required at 10-144 CMR 231 Section 6(B).
  - h. For failure of community water systems serving municipalities or districts or any public water system that adds chemicals on a continuous basis to file with the Department no later than the 10<sup>th</sup> day of each month, monthly operational reports, as required at 10-144 CMR 231 Section 6(C).

- i. For failure to report test results, as required at 10-144 CMR 231 Section 7(D)(1).
- j. For failure to provide appropriate public notification, as required at 10-144 CMR 231 Section 7(Q)(1).
- k. For failure to appropriately maintain records, as required at 10-144 CMR 231 Section 7(D)(3).
- 1. For failure to provide appropriate public notice pertaining to lead, as required at 10-144 CMR 231 Section 7(I)(6).
- m. For failure to report or provide public notification for certain unregulated contaminants, as required at 10-144 CMR 231 Section 7(E)(1).
- n. For failure to meet reporting or record keeping requirements, as required at 10-144 CMR 231 Section 7(H)(6).
- o. For failure to meet reporting requirements for lead and copper, as required at 10-144 CMR 231 Section 7(I)(11).
- p. For failure to meet record keeping requirements for lead and copper, as required at 10-144 CMR 231 Section 7(I)(12).
- q. For failure to meet the reporting requirements, as required at 10-144 CMR 231 Section 7(O).
- r. For failure to submit payment to the Department of the Alternative Funding Fee, as required at 10-144 CMR 231 Section 1-A.
- s. For failure to have sanitary surveys conducted as part of the Watershed, as required at 10-144 CMR 231 Section 3(H)(1)(C).
- t. For failure to meet reporting and recordkeeping requirements for Disinfection Byproducts, as required at 10-144 CMR 231 Section 7(L)(5).
- u. For failure to meet reporting and record keeping requirements for Turbidity, as required at 10-144 CMR 231 Section 7(P)(6).

## **SECTION 2: DEFINITIONS**

**ACT**: means the Public Health Service Act, as amended by the Safe Drinking Water Act, Public Law 93-523.

**ACTION LEVEL**: The concentration of lead or copper in water specified in 40 C.F.R. §141.80 (c), which determines, in some cases, the treatment requirements contained in Subpart I of § 141.80 (c) that a water system is required to complete.

**ADMINISTRATIVE COMPLIANCE ORDER**: An administrative order that is issued by the Commissioner against a public water system in violation of State drinking water laws, regulations or rules.

**ADMINISTRATIVE CONSENT ORDER**: An order issued by the Commissioner pursuant to a bilateral agreement between the Commissioner and a public water system in violation of State drinking water laws, regulations or rules.

**ADMINISTRATIVE PENALTY**: A fine imposed by the Commissioner against a public water system in violation of state drinking water laws, regulations or rules.

**ADMINISTRATIVE REMEDY**: An administrative compliance order, an administrative consent order or an administrative penalty.

APA: The State of Maine Administrative Procedure Act.

**AVAILABLE**: Based on the system size, complexity and source water quality, a licensed operator must be on site or able to be contacted as needed to initiate the appropriate action in timely manner.

**AWWA**: The American Water Works Association located at 6666 W. Quincy Avenue, Denver, CO 80235 (303) 794-7711.

**BEST AVAILABLE TECHNOLOGY or BAT**: The best technology, treatment techniques, or other means that the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration). For the purposes of setting MCLs for synthetic organic chemicals, any BAT must be at least as effective as granular activated carbon.

**BOTTLED WATER:** Water intended for human consumption and placed in sanitary bottles, packages or other containers and offered for sale to the public.

**BOTTLER SIZE FACTOR:** Category assigned to in-state bottled water companies to determine annual fees assessed by the Department.

**CAPACITY**: The technical, financial and managerial resources of a water system necessary to enable the system to consistently provide safe drinking water for its users.

- 1. Technical Capacity: The physical infrastructure of the water system, including but not limited to source water adequacy, infrastructure adequacy (including wells, source water intakes, and collection, treatment, storage and distribution), and the ability of system personnel to implement the requisite technical knowledge necessary to operate the system to consistently provide safe drinking water.
- 2. Financial Capacity: The financial resources of the water system, including but not limited to revenue sufficiency, credit worthiness and fiscal management and controls.
- 3. Managerial Capacity: The management structure of the water system, including but not limited to ownership accountability, staffing and organization, and the effectiveness of interactions of system personnel with customers, regulators and other entities, and the awareness of system personnel of available external resources, such as technical and financial assistance.

**CERTIFIED LABORATORY:** A laboratory approved by the Maine Department of Health and Human Services, pursuant to 22 M.R.S. §567.

**CLEAN COMPLIANCE HISTORY:** For the purpose of these Rules, this term refers to the Revised Total Coliform Rule, (referenced in Section 7(Y) of these Rules). A public water system with this status demonstrates a record of no MCL violations within the last 12 months; no monitoring violations within the last 12 months; and no coliform treatment technique trigger exceedances or treatment technique violations within the last 12 months.

**CODE OF FEDERAL REGULATIONS (C.F.R.):** The Code of Federal Regulations means the compilations of the general and permanent rules of the executive departments and agencies of the federal government, published in the Federal Register and then annually by the U.S. Government Printing Office. Sections of the C.F.R. that this Rule specifically refers to and incorporates by reference are various sections of Title 40 C.F.R. Parts 141-143, which include the National Primary Drinking Water Regulations. In this Rule, any citations incorporating sections of the C.F.R. the edition published in July 2014. Copies of the referenced sections of the C.F.R. are available upon request from the Department at (207) 287-2070, and are also accessible on line at the following website links:

• Part 141:

http://www.eC.F.R..gov/cgibin/retrieveEC.F.R.?gp=&SID=9e4a156b7319cd6c8ac2dd97 9970f305&mc=true&r=PART&n=pt40.23.141;

- Part 142: <u>http://www.eC.F.R..gov/cgibin/retrieveEC.F.R.?gp=&SID=9e4a156b7319cd6c8ac2dd97</u> <u>9970f305&mc=true&r=PART&n=pt40.23.142</u>; and
- Part 143: <u>http://www.eC.F.R..gov/cgibin/retrieveEC.F.R.?gp=&SID=9e4a156b7319cd6c8ac2dd97</u> <u>9970f305&mc=true&r=PART&n=pt40.23.143</u>.

**COMMISSION**: The Maine Public Drinking Water Commission.

**COMMISSIONER**: The Commissioner of the Maine Department of Health and Human Services.

**COMMUNITY WATER SYSTEM**: A public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

**CONSECUTIVE PUBLIC WATER SYSTEM:** A public water system that buys or otherwise receives at least some of its finished water from another public water system. Public water systems that are interconnected only for emergencies are not considered "consecutive public water systems."

**CONTAMINANT**: Any physical, chemical, biological or radiological substance or matter in water.

**CONVENTIONAL FILTRATION TREATMENT**: A series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

**DEPARTMENT**: Maine Department of Health and Human Services.

**DESIGNATED OPERATOR IN RESPONSIBLE CHARGE:** An individual who is appropriately licensed for treatment and distribution classification of the public water system. The operator's licensure must meet the applicable classification of the public water system's treatment or distribution system. Also referred to as a Designated Operator or D.O.

**DISINFECTION:** The application of any oxidant, including, but not limited to chlorine, chlorine dioxide, chloramines, and ozone, that is added to water in any part of the treatment or distribution process and is intended to kill or inactivate pathogenic microorganisms. Disinfection treatment includes ultraviolet (UV) treatment.

**DISINFECTION PROFILE**: A summary of daily *Giardia lamblia* inactivation through the treatment plant. The procedure for developing a disinfection profile is contained in 40 C.F.R. § 141.172.

**DIVISION**: The Division of Environmental Health within the Maine Center for Disease Control and Prevention, Department of Health and Human Services.

**ENGINEERING STUDY:** A technical evaluation by a licensed professional of a public water system's source, treatment, pumpage, distribution and/or storage, to identify deficiencies which limit or prohibit a public water system's ability to reliably provide water of acceptable quality and/or quantity. Licensed professionals include engineers, well drillers, electricians, plumbers, water operators, geologists, and other licensed professionals approved by the Department. The engineering study also recommends a course of action to implement improvements as needed.

**FLUORIDATION:** The addition of a chemical to increase the concentration of fluoride ion in drinking water to a predetermined optimum range to reduce the incidence of dental caries (tooth decay).

FUND: The Public Drinking Water Fund.

**GROSS ALPHA PARTICLE ACTIVITY**: The total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

GROUND WATER: Water underground in the soil or in pores and crevices in rock.

**GROUND WATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER**: Any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* or (for subpart H systems serving at least 10,000 people only) Cryptosporidium, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence must be determined for individual sources in accordance with criteria established by the Department. The Department determination of direct influence may be based on site-specific measurements of water quality and/or documentation of well construction characteristics and geology with field evaluation.

**HEARING**: An adjudicatory hearing conducted by the Administrative Hearings Unit within the Department.

**HEARING OFFICER**: An impartial and independent person designated by the Department to conduct hearings.

**HYDROFRACTURING:** A process of applying hydraulic pressure on the bedrock surrounding the drilled well for the purpose of increasing the yield of the well.

**ISL:** In-State Large Bottled Water Company serving more than 20 million gallons of bottled water per year.

**ISM:** In-State Medium Bottled Water Company serving more than 250,000 gallons but less than 20 million gallons of bottled water per year.

**ISS**: In-State Small Bottled Water Company serving less than or equal to 250,000 gallons of bottled water per year.

**LABORATORY SAMPLING FORM:** This form provides documentation as to when, where and by whom water samples were collected.

**LEVEL 1 ASSESSMENT:** An evaluation of a public water system under the Revised Total Coliform Rule, to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the public water system triggered the assessment. This Assessment is conducted by the public water system

operator or owner and must minimally include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The public water system must conduct the Level 1 Assessment consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

LEVEL 2 ASSESSMENT: An evaluation of a public water system under the Revised Total Coliform Rule, to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. A Level 2 Assessment provides a more detailed examination of the public water system (including its monitoring and operational practices) than a Level 1 Assessment, through the use of more comprehensive investigation and review of available information, additional internal and external resources, and other relevant practices. Level 2 Assessments are conducted by an individual approved by the Department, which may include the system operator. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The public water system must conduct the Level 2 Assessment consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system. The public water system must comply with any expedited actions or additional actions required by the Department in the case of an E. coli MCL violation.

**MAXIMUM CONTAMINANT LEVEL (MCL)**: The maximum permissible level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of a public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system.

**NATURAL FLUORIDE LEVEL:** The concentration of fluoride that is present in the water source from naturally occurring fluoride.

**NEW PUBLIC WATER SYSTEM SOURCE**: "New public water system source" means any newly constructed well, intake, or other structure intended as a supply of water for a public water system. Any existing well, intake or other structure intended for use as a source of water for a public water system that has not been actively regulated by the Department in the previous five years shall be considered a new source. All new sources of water intended for use by a public water system shall be subject to the new source approval provisions of these rules. **NOTICE OF NON-COMPLIANCE**: A formal written complaint or a notice of violation of state drinking water laws, regulations, or rules.

**NSF/ANSI:** NSF International and the American National Standards Institute. The American National Standards Institute acts as a certifying agency and determines which laboratories may certify these standards. NSF/ANSI Standards 60 and 61 apply to chemical and equipment approval.

**OPERATING SHIFT**: That period of time during which operator decisions that affect public health are necessary for proper operation of the system.

**OUTSTANDING PERFORMANCE**: A system shall be deemed to be in "outstanding performance" if during the time frame covered by the preceding two sanitary surveys, the system did not have any significant deficiencies identified, did not have any failure to monitor violations and met all required testing parameters.

**PER-MACHINE RATE:** The rate used to determine annual fees assessed by the Department for water vending machines.

**PERSON**: An individual, association, partnership, company, public or private corporation, political subdivision or agency of the State, department, agency or instrumentality of the United States or any other legal entity.

**PICOCURIE** (**pCi**): That quantity of radioactive material producing 2.22 nuclear transformations per minute.

**PRIMACY**: The federally delegated primary enforcement authority to adopt, implement and enforce federally mandated drinking water standards promulgated pursuant to the federal Safe Drinking Water Act as amended.

PROGRAM: The Maine Public Drinking Water Program.

### **PUBLIC WATER SYSTEM:**

A. "Public water system" means any publicly or privately owned system of pipes or other constructed conveyances, structures and facilities through which water is obtained for or sold, furnished or distributed to the public for human consumption, if such a system has at least 15 service connections, regularly serves an average of at least 25 individuals daily at least 60 days out of the year or bottles water for sale. Any publicly or privately owned system that only stores and distributes water, without treating or collecting it; obtains all its water from, but is not owned or operated by, a public water system." The term "public water system" includes any collection, treatment, storage or distribution pipes or other constructed conveyances, structures or facilities under the control of the supplier of water and used primarily in connection with such a system, and any collection or pretreatment storage facilities not under that control that are used primarily

in connection with such a system. The system does not include the portion of service pipe owned and maintained by a customer of the public water system.

- 1. **Community Water System**: A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
- 2. **Non-Community Water System**: A public water system that is not a community water system. There are two types of Non-Community Water Systems. These are:

a. **Non-Transient, Non-Community Water Systems**: A Non-Community water system that serves at least 25 of the same persons for 6 months or more per year and may include, but is not limited to, a school, factory, industrial park or office building, and

b. **Transient Non-Community Water Systems**: A Non-Community water system that serves at least 25 persons, but not necessarily the same persons, for at least 60 days per year and may include, but is not limited to, a highway rest stop, seasonal or year-round restaurant, seasonal or year-round motel, golf course, park or campground. A bottled water company is a transient, non-community water system.

- **B.** Connection: For purposes of subparagraph (A), a connection to a system that delivers water by a constructed conveyance other than a pipe shall not be considered a connection, if
  - 1. The water is used exclusively for purposes other than residential uses (consisting of drinking, bathing, and cooking, or other similar uses);
  - 2. the Commissioner determines that alternative water to achieve the equivalent level of public health protection provided by the applicable state primary drinking water regulation is provided for residential or similar uses for drinking and cooking; or
  - 3. The Commissioner determines that the water provided for residential or similar uses for drinking, cooking, and bathing is centrally or treated at the point of entry by the provider, a pass-through entity, or the user to achieve the equivalent level of protection provided by the applicable state primary drinking water regulations.

**RAW SOURCE WATER:** For the purposes of the Groundwater Rule, this term refers to water drawn directly from a spring, drilled well, or dug well prior to disinfection, filtration, storage or other treatment processes.

**RESPONSIBLE CHARGE**: The Operator(s) in Responsible Charge is defined as the person(s) designated by the owner to be the licensed operator(s) who makes decisions regarding the daily

operational activities of a public water system, water treatment facility and/or distribution system, that will directly impact the quality and/or quantity of drinking water.

**REVISED TOTAL COLIFORM RULE:** This rule establishes a maximum contaminant level for E. coli and uses total coliform and E. coli to intitiate a "find-and-fix" approach to address fecal contamination that could enter a public water system by requiring public water systems to perform Level 1 and Level 2 Assessments, to identify sanitary defects and take action to correct them. This rule is effective April 1, 2016.

**SAMPLE; WATER SAMPLE**: An amount of untreated (raw) source water or finished (treated) drinking water that is examined for the presence of a contaminant.

**SANITARY DEFECT:** A particular condition that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a sanitary or treatment barrier that is already in place.

**SANITARY SEAL WELL CAP:** A well cap sealed with a gasket between the cap and the well casing. The connection between the well cap and the electrical conduit is tight, to prevent insects or other vermin from entering the well.

**SANITARY SURVEY**: The Department's on-site inspection of the water source, facilities, and treatment equipment, with a focus on the operation and maintenance of a public water system for the purpose of evaluating the protection of the source; and the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. The Department performs sanitary surveys for community public water systems every three years, and for non-community public water systems every five years, except for bottled water facilities (which are performed every three years). Bottled water sanitary surveys entail the inspection of any source water, operations and treatment equipment from the source, leading up to the bottling process.

**SEASONAL SYSTEM:** A non-community public 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.

**SECONDARY MAXIMUM CONTAMINANT LEVEL (SMCL):** The maximum recommended level of a contaminant in water which is delivered to the free flowing outlet of the ultimate user of the public water system. The SMCLs are non-mandatory limits established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. The contaminants with established SMCLs are not considered to present a risk to human health at the SMCL.

**SIGNIFICANT DEFICIENCY**: Any defect in a system's design, operation, maintenance or administration, as well as any failure or malfunction of any system component, that the State determines to cause, or have the potential to cause, an unacceptable risk to health or that could affect the reliable delivery of safe drinking water.

**SPRING WATER:** Water derived from an underground formation from which water flows naturally to the surface of the earth. Spring water must comply with the U.S. E.P.A. National Primary and Secondary Drinking Water Standards, 40 C.F.R. §141-143 and U.S. Food and Drug Administration Regulations at 21 C.F.R. §165.110 (a)(vi). Spring water must be collected only at the spring or through a borehole tapping the underground formation feeding the spring. There must be a natural force causing the water to flow to the surface through a natural orifice. The location of the spring must be identified and such identification must be maintained in the plant's records. Spring water collected with the use of an external force must be from the same underground stratum as the spring, as shown by a measurable hydraulic connection, using a hydrogeologically valid method between the bore hole and the natural spring, and must exhibit all of the physical properties before treatment, and be of the same composition and quality as the water that flows naturally to the surface of the earth. A water chemistry comparison is typically performed by plotting cations and anions for both the spring and borehole on a "Piper Diagram". If spring water is collected with the use of an external force, water must continue to flow naturally to the surface of the earth through the spring's natural orifice. Upon request by regulatory officials, bottled water plants must demonstrate, by using a hydrogeologically valid method, that an appropriate hydraulic connection exists between the natural orifice of the spring and the borehole. Such a demonstration must be submitted by a hydrogeologist certified to perform this type of work in the State of Maine.

**SURFACE WATER:** All water naturally open to the atmosphere (rivers, lakes, reservoirs, streams, impoundments, seas, estuaries, etc.) and all springs, wells or other collectors which are directly influenced by surface water.

**SUPPLIER OF WATER; WATER SUPPLIER; SUPPLIER**: Any person who controls, owns, or generally manages a public water system.

SYSTEM: A public water system.

**SYSTEM DESIGN CAPACITY:** "System Design Capacity" for authorized Community Water Systems withdrawing from surface waters shall be determined by the Department of Health And Human Services as the amount of water that is available for Community Water System purposes expressed as annual withdrawal in total gallons per year taking into consideration actual documented annual withdrawal, and the investments in and limits of the existing system infrastructure, that provides a safe and dependable supply of water for public use. Existing system infrastructure includes water treatment and distribution facilities and other necessary structures that determine how much water can be safely and dependably supplied that is present or in the process of being acquired such as through an investment bond, contractual agreement, or purchase order as of the effective date of 06-096 CMR Chapter 587.

**THEORETICAL FLUORIDE CONCENTRATION:** The calculated concentration of fluoride ion in a distribution system which includes the theoretical fluoride dose plus the natural fluoride level.

**THEORETICAL FLUORIDE DOSE:** The calculated dose of fluoride ion added to a drinking water source or supply.

**VIOLATION**: Noncompliance with state drinking water laws, regulations and rules regardless of whether that noncompliance is intentional, negligent or otherwise.

**WATER VENDING MACHINES:** Any self-service device located in a retail store, which is a public water system or is served by a public water system, which, upon insertion of coins or tokens, dispenses unit servings of water into a customer's container.

## **SECTION 3: FACILITIES APPROVAL**

Before a person initiates construction of a new public water system, or modifies any existing system in a manner which may affect the quality of water produced, that person, pursuant to 22 M.R.S. §2612, shall submit such proposals to the Department for approval.

A. Review Period

All plans submitted under this section shall be submitted in a timely manner to allow the Department at least a 30-day review period. Such submission shall occur at least 30 days prior to the bid opening and at least 45 days prior to the start of construction of the project.

- B. Siting Requirements
  - 1. See Section (7)(A)(5).
- C. Plan Submission
  - 1. Submission of Engineering Plans
    - a. No new construction, addition, or alteration involving the source, treatment, or storage of water in any system shall be commenced until the plans and specifications have been submitted to and approved in writing by the Department (per the review schedule stated in A. above), unless such construction, addition, or alteration is exempted by paragraph 3 of this sub-section. In granting approval of plans and specifications, the Department may require modifications, conditions, or procedures to insure, as far as feasible, the protection of the public health.
    - b. Changes in treatment processes which involve the addition or deletion of any chemicals require prior approval by the Department.
    - c. The Water System shall provide the Department for review documentation of the preliminary engineering estimates of the costs of siting, engineering and operating the utility's proposed facility or water treatment system, or modification or alteration of any existing system, including identification of the costs of all modifications to existing waterworks, justification of the water utility's proposal and such further information as may be requested by the Department;
    - d. For the purposes of comparison with the proposal submitted pursuant to paragraph (a), the Water System shall provide the Department with documentation of the preliminary engineering estimates of the costs of siting, engineering and operating the next best alternative facility or water treatment system, or modification or alteration of any existing system,

including identification of the costs of all modifications to existing waterworks and such other information as may be requested by the commissioner;

- e. The Water System shall make available for public review upon request at a location and in a manner convenient to the water utility's ratepayers all information provided to the Department pursuant to paragraphs (a) and (b).
- 2. Preparation of Engineering Plans
  - a. Plans and specifications for Public Water Systems shall be prepared by a qualified professional and shall bear the seal of a professional engineer as required by 32 M.R.S., Chapter 19.
- 3. Exemptions
  - a. The following activities are exempt from the requirement for approval by the Department:
    - i. Maintenance activities for existing facilities, which do not involve the storage or treatment of finished water, i.e., water that has been processed (filtered, treated, etc.) and is available for human consumption.
    - ii. Replacement of water mains or installation of new water mains provided they are disinfected and pressure tested in accordance with the AWWA Standards indicated in section F.

Examples of items that should be reported to and approved by the Department include, but are not limited to the painting and/or repair of standpipes, reservoirs, or any storage facility that has contact with finished water.

- D. General Operations Permit
  - 1. Any new community or non-transient, non-community public water system commencing operation after October 1, 1999, shall first obtain a General Operations Permit from the Department.
    - a. The owner of a new community or new non-transient, non-community public water system shall secure a General Operations Permit after demonstrating satisfactory capacity, and prior to operation of the system.
    - b. To obtain a General Operations Permit for a new community or nontransient, non-community public water system, the owner, or the owner's

designee, shall submit sufficient plans, specifications, and documentation to ensure adequate technical, financial and managerial capacity.

- c. Applications for General Operations Permits shall be made on forms provided by the Department. These forms shall be submitted and approved by the Department before the public water system begins operations.
- 2. In the event that a public water system requiring a permit is ready to begin operation before receiving the General Operations Permit, the Department may, at its discretion, issue a conditional, temporary permit.
  - a. A conditional, temporary permit will be issued with a defined deadline of 30, 60, or 90 days. Only one conditional, temporary permit will be issued for each new community or non-transient, non-community water system.
  - b. Public water systems shall demonstrate capacity and secure a General Operations Permit at the expiration of a conditional, temporary permit.
- E. Demonstration of Capacity

The following public water systems shall first obtain a General Operations Permit from the Department by demonstrating technical, managerial, and financial capacity: new community and non-transient, non-community water systems commencing operation after October 1, 1999, and transient, non-community water systems with surface water sources.

- 1. Technical Capacity may be demonstrated by a number of methods, including, but not limited to, the following:
  - a. engineering plans or schematics and drawings of treatment facilities;
  - b. adequate drawings, diagrams, schematics and maps of the distribution system or plumbing components;
  - c. an adequate number of state-licensed operators of the requisite classification;
  - d. source water protection plans and maps of the watershed or wellhead protection area; and
  - e. any other relevant documentation requested by the Department.
- 2. Financial Capacity may be demonstrated by a number of methods, including, but not limited to, the following:
  - a. annual and projected budgets;
  - b. identification of individual(s) responsible for water system operations, including procedures related to financial decisions effecting the water system;
  - c. copies of rate case determination documents for water systems regulated by the Public Utilities Commission; and
  - d. any other relevant financial information requested by the Department.

- 3. Managerial Capacity may be demonstrated by a number of actions, including, but not limited to, the following:
  - a. knowledge of the number of water system service connections and the population served, recorded on the permit application form;
  - b. clear, definitive identification of the water system owner(s);
  - c. identification of the primary contact person(s) responsible for communicating with the Department;
  - d. identification of personnel responsible for daily operations of the water system;
  - e. plans for continuing education, training or professional development or staff;
  - f. formalized routine operations and maintenance procedures in the form of written standard operating procedures and policies;
  - g. description of record keeping procedures employed;
  - h. written emergency procedures and/or an emergency response plan, including identification of persons or organizations contacted in the event of an emergency; and
  - i. any other relevant information requested by the Department.
- F. Construction Standards
  - 1. Applicable standards such as those established by the American Water Works Association (AWWA), the Recommended Standards for Water Works, and NSF / ANSI Standards for Drinking Water Treatment Units should be consulted when available, as well as engineering standards published by other generally accepted organizations.
  - 2. Disinfection
    - a. The AWWA C-651-05 specification for the disinfection of water mains shall be utilized for all water main construction except that the "tablet method" shall not be used unless specifically approved in writing by the Department.
    - b. AWWA C-652-02 specification for the disinfection of water storage facilities shall be utilized prior to having any storage facility go into service.
    - c. AWWA C-653-03 shall be utilized for disinfection of water treatment plants prior to providing water for consumption.
    - d. AWWA C-654-03 shall be utilized for the disinfection of wells prior to the use of those wells as a source of public drinking water.
  - 3. All water mains and services being used for the purposes of transporting potable water shall be pressure tested in accordance with AWWA Standard for pressure testing.

- 4. The Department may, from time to time, establish lists of acceptable products for use in the water works industry.
- 5. Well Construction
  - a. All newly constructed wells and wells modified by additional drilling casing alterations or hydrofracturing shall be constructed or altered in compliance with the Maine Well Drillers and Pump Installers Rules (10-144 CMR, Chapter 232 and one of the following standards:
    - i. AWWA's Standard A100-06, Recommended Standards for Water Works, 2003 Edition; or
    - ii. The National Ground Water Association's Manual of Water Well Construction Practices (2<sup>nd</sup> Edition)

In the event that one of the above standards conflicts with state or federal rules, the state or federal rules shall take precedent.

- b. Newly constructed wells serving community, transient non-community and non-transient, non-community water systems shall be constructed as described in the Preliminary Approval Process. The Department may require wells with reduced setbacks from septic system components or other potential sources of contamination to include additional steel casing or a PVC liner and top and bottom well seals, as described in Maine's Well Drillers and Pump Installers Rules at 10-144 C.M.R. 232, Chapter 4.
- c. Wells determined by the Department to pose significant risk from sources of contamination are required to be grouted using methods and materials described in Maine's Well Drillers and Pump Installers Rules at 10-144 CMR 232, Section 400.7.3.
- 6. Abandonment of Wells

The Department may require a public water system to abandon a well if the Department determines that the well constitutes a significant threat to public health. Abandonment shall meet the requirements of 10-144 C.M.R. Chapter 232 Well Drillers and Pump Installers Rules.

- 7. NSF/ANSI Standard 60:
  - All chemicals added to drinking water must be certified to meet NSF/ANSI Standard 60 - 2013: Drinking Water Treatment Chemicals – Health Effects. Certification shall be by an ANSI-Accredited, third-party testing and certification organization.

- b. The Department reserves the authority to waive this certification Standard 60 certification requirement on a case-by-case basis, in accordance with applicable law.
- c. Evidence for this requirement shall be met if the chemical shipping container labels or material safety data sheets include:
  - i. Chemical name, purity and concentrations, Supplier name and address; and
  - ii. Labeling indicating compliance with NSF/ANSI Standard 60.
- d. Compliance with these standards shall be met at the point of delivery.
- 8. NSF/ANSI Standard 61:
  - All materials, products and coatings that contact drinking water installed or applied shall be certified to meet NSF/ANSI Standard 61-2013: Drinking Water System Components – Health Effects. Certification must be granted by an ANSI-Accredited, third-party testing and certification organization.
  - b. Exemptions may include the following:
    - i. Miscellaneous valves and fittings, three-inch diameter and smaller, may be exempt from this requirement if NSF/ANSI 61 Certified products are not readily available;
    - ii. Steel well casing;
    - iii. Existing stocks of materials. When stocks need to be reordered, the new materials must comply with this section;
    - iv. A concrete structure, tank, or treatment tank basin constructed onsite that is not normally coated or sealed. If a coating or sealant is specified by the design engineer, the coating or sealant must be certified to comply with ANSI/NSF Standard 61;
    - v. An earthen reservoir or canal located upstream of water treatment;
    - vi. A synthetic tank constructed of material that meets Food and Drug Administration standards for a material that comes into contact with drinking water or aqueous food, or a galvanized steel tank, either of which is:
      - 1. Less than 15,000 gallons in capacity, and
      - 2. Used in a public water system with 500 or fewer service connections; or
    - vii. A pipe, treatment plant component, or water distribution system component made of lead-free stainless steel; and
    - viii. Any other conditions deemed appropriate by the Department, in accordance with applicable law.

- 9. All new community public water systems shall install a flow meter that will provide continuous, cumulative measurement of the water system flow and maintain records of flow.
- 10. All new public water systems shall install a raw water (prior to any treatment or storage) sampling port, if one is not present.
- G. New Sources
  - 1. Surface Water Supplies
    - a. Plans for the protection of surface supply watersheds shall be submitted prior to the approval of any surface water supply. These plans shall include the following:
      - i. A description of public education procedures and materials the system plans to implement or distribute to inform its consumers and all parties that come in contact with the watershed or water supply of watershed issues that affect the water quality of the surface water supply.
      - ii. The duly responsible person of the public water system shall, to the satisfaction of the Department, demonstrate sufficient control over the watershed. Sufficient control shall be deemed as either:
        - 1) ownership of the property;
        - 2) a contractual agreement with the owners of the property that ensures that the surface water supply shall not be negatively impacted by the watershed; or
        - 3) a plan presented to the Department for approval showing how the watershed shall be sufficiently protected. The plan shall be submitted to the Department in writing and be prepared by an appropriate individual qualified to prepare such a plan.
      - iii. A description of other appropriate protection measures to assure that the source will maintain high quality water.
    - b. Maps shall be submitted with the request for approval, which show the watershed area delineation and potential sources of contamination and their types and land ownership. Potential sources of contamination should include, but not be limited to, sanitary landfills, dumps, oil storage facilities, chemical storage facilities, septage disposal areas, spray irrigation areas, farming operations which utilize large amounts of

pesticides, all enterprises which require hazardous waste permits, major industries, and highways commonly used in the transport of hazardous materials.

- c. Analysis
  - i. Final Approval of the finished surface water source may be granted by the Department only after all required water quality analyses are completed and it is further determined that the source is in compliance with all applicable Primary Drinking Water Regulations.
  - ii. Untreated water samples shall be analyzed by a certified laboratory, prior to source approval, for the following parameters:
    - **Microbiological Contaminants:** (Per approved methods authorized in the July 2014 edition of the National Primary Drinking Water Regulations at 40 C.F.R. §141.21);
    - **Inorganic Contaminants:** Antimony, arsenic, barium, beryllium, cadmium, chloride, chromium, color, copper, cyanide (as free cyanide), fluoride, hardness, iron, lead, manganese, mercury, nickel, nitrates, nitrites, selenium, silver, sodium, sulfate, thallium, turbidity, and zinc (Per approved methods authorized in the July 2014 edition of the National Primary Drinking Water Regulations at 40 C.F.R. §141.23);
    - Volatile Organic Compound (VOC) Screen: 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Xylenes, Total Dichloromethane, O-Dichlorobenzene, P-Dichlorobenzene, Vinyl Chloride, 1,1-Dichloroethylene, Trans-1,2-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Styrene, & Methyl Tert-Butyl Ether (MTBE) (Per approved methods authorized in the July 2014 edition of the National Primary Drinking Water Regulations at 40 C.F.R. §141.24);
    - Synthetic-Volatile Organics (SOC) Screen: 2,4-D, 2,4,5-TP (Silvex), adipate, atrazine, BHC-Gamma (Lindane), Carbofuran, Dalapon, Di(2-ethylhexyl) Di(2-ethylhexyl) phthalate, Dinoseb, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lasso (Alachlor), Methoxychlor, Simazine, PCBs (as

decachlorobiphenyl), or PCBs (as aroclors), Pentachlorophenol, Picloram, Oxamyl (Vydate), &Velpar (Per approved methods authorized in the July 1, 2014 edition of the National Primary Drinking Water Regulations at 40 C.F.R. §141.24); and

- **Radionuclides:** gross alpha, radon, & uranium. (Per approved methods authorized in the July 1, 2014 edition of the National Primary Drinking Water Regulations at 40 C.F.R. §141.25).
- iii. Water quality measurements for turbidity, free chlorine residual, temperature and pH may be performed by any person acceptable to the Department. The ability of individuals to properly conduct tests for these parameters shall be evaluated by program staff during sanitary surveys.
- d. Treatment Required (See Section (7)(H) regarding filtration and disinfection requirements).
- e. All new community surface water systems shall evaluate their System Design Capacity and submit to the Department for review a report on forms provided by the Department. The Department will determine System Design Capacity for each surface water source as part of new system and source approval.
- f. The Department will approve an intake located within two miles of a public boat launch, only if the public water system submits a risk assessment that is satisfactory to the Department.
- 2. Ground Water Supplies
  - a. Transient Non-Community Water Systems and Non-Transient Non-Community Water Systems
    - Transient Non-Community Water Systems and Non-Transient Non-Community Water Systems shall submit a completed Request for Preliminary Approval Form (Note: the Form can be obtained from the Department) along with required documentation at least 30 days prior to the proposed date of installation. Required documentation shall include Request for Preliminary Approval Form, a location map and a site plan showing all potential sources of contamination within 300 feet of the proposed well location. Other documentation may be requested on a case-by-case basis if the Department makes the determination that such information is necessary to get a better understanding of the conditions of the

proposed well location or otherwise for the protection of the public health.

- ii. The Request for Preliminary Approval shall be reviewed by the Department to determine the adequacy of the well location to provide safe and healthy drinking water to the public. No production well shall be installed prior to preliminary approval being granted in writing by the Department.
- iii. New wells shall be located at least 300 feet away from potential contamination sources and at least 1,000 feet from Underground Storage Tanks regulated by the Department of Environmental Protection (DEP) Chapter 691, unless a waiver is obtained from the Department and the Maine Department of Environmental Protection (DEP).
- iv. If circumstances exist where a proposed well location must be placed closer than 300 feet from a potential contamination source, then the Department may grant a setback waiver on a case-by-case basis. The Department must receive information from an appropriate qualified professional sufficient to make a determination on all waiver requests. Any well proposed less than 150 feet from one or more subsurface disposal fields must include a Maine Certified Geologist's hydrogeologic assessment presented to the Department for review and approval, which must include a description of the local surficial geology, a pre-pumping water table contour map, a map showing the water table contours under pumping conditions and an evaluation of the site's physical characteristics which mitigate any potential impacts to the well from the disposal field(s), or submit plans for an Advanced Treatment Unit (ATU) designed to pre-treat all septic system effluent prior to discharge to the septic system disposal field, to be reviewed and evaluated by the Department. Any pretreatment system proposed as mitigation for reduced setbacks from septic system components must be shown to significantly reduce nitrate, nitrite, and bacteria levels and include a plan for ongoing maintenance. The Department may waive these requirements on a case-by-case review or require additional information to insure the suitability of the proposed well for use as a public water supply source. The Department may place conditions on a waiver granted, which may include increased water quality monitoring for specific contaminants at a schedule and frequency to be determined by the Department.
- v. Treatment for all new wells may also be required as described in Section (3)(G)(2)(j).

- vi. The Department may deny a proposed well location after determining that a proposed well location is not safe from threats of contamination or potential threats of contamination even with increased monitoring for those contaminants.
- vii. The methods and standards described in the Manual for Water Well Construction Practices, 2<sup>nd</sup> Edition, (published in 1998 by the National Ground Water Association), shall be used for the proper development and determination of safe yield for all proposed Transient Non-Community and Non-Transient Non-Community wells. A copy of this Manual is available at the Department's office in Augusta, Maine. All water quality samples shall be collected after proper well development, disinfection, and the conclusion of continuous pumping on the well for a sufficient period of time so that a minimum of three well bore volumes have been removed. The Department may, on a case-by-case basis, require a report be prepared by an appropriately qualified person or firm evaluating the well which may include: a description of the site geology and any sources of contamination in the area; a map of the area showing all wells installed and any potential sources of contamination in the area; drilling logs for each well installed; pump test drawdown data if available; recommendations for wellhead protection area delineations; and all required water quality analysis results. The report shall be submitted to the Department for review with the request for Final Approval.
- viii. Final Approval of the proposed well location may be granted only after all required water quality analyses have been completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
- ix. A Final Approval Form or equivalent must be submitted along with all water quality analyses results, any maps or reports required and a completed Wellhead Protection Self Evaluation Form to the Department for review and approval. Wellhead protection area delineations must be made using one or more methodologies approved by the Department.
- x. Unless final approval of the proposed well is granted in writing by the Department, no water may be served. The Department may grant conditional approval on a case-by-case basis. The Department may also require additional treatment, testing or other requirement that the Department deems necessary for the protection of the public health.

- b. Water quality analyses to be completed for Non-Transient Non-Community Water Systems prior to Final Approval of all proposed wells.
  - i. Final Approval of the proposed well location may be granted by the Department only after all required water quality analyses are completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
  - ii. Untreated water samples shall be analyzed by a certified laboratory, prior to source approval and after proper well development and determination of safe for the following parameters:
    - Microbiological Contaminants: Total Coliform. If total coliform results are positive, then samples must be analyzed for E. Coli. If the Department determines that there is potential groundwater under the influence of surface water, then samples must be analyzed for Heterotrophic Plate Count (HPC), per approved methods authorized in 40 C.F.R. §141.21;
    - **Inorganic Contaminants:** Antimony, arsenic, barium, beryllium, cadmium, chloride, chromium, color, copper, cyanide (as free cyanide), fluoride, hardness, iron, lead, manganese, mercury, nickel, nitrates, nitrites, selenium, silver, sodium, sulfate, thallium, turbidity, & zinc (Per approved methods authorized in 40 C.F.R. §141.23);
    - Volatile Organic Compounds: (VOC) Screen: 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Xylenes, Total Dichloromethane, O-Dichlorobenzene, P-Dichlorobenzene, Vinyl Chloride, 1,1-Dichloroethylene, Trans-1,2-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Styrene, & Methyl Tert-Butyl Ether (MTBE) (Per approved methods authorized in 40 C.F.R. §141.24);
    - Synthetic Volatile Organics (SOC) Screen: 2,4-D, 2,4,5-TP (Silvex), adipate, atrazine, BHC-Gamma (Lindane), Carbofuran, Dalapon, Di(2-ethylhexyl) Di(2-ethylhexyl) phthalate, Dinoseb, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lasso(Alachlor),Methoxychlor, Simazine, PCBs (as decachlorobiphenyl), or PCBs (as aroclors),

Pentachlorophenol, Picloram, Oxamyl (Vydate), &Velpar; (Per approved methods authorized in 40 C.F.R. §141.24); and

- **Radionuclides:** gross alpha, radon, and uranium, per approved methods authorized in 40 C.F.R. §141.25.
- iii. The Department may modify the list of required water quality test parameters prior to approval if the determination is made that the testing required will insure that the well can produce safe and potable water or otherwise for the protection of the public health.
- c. Water quality analyses to be completed for Transient Non-Community Water Systems prior to Final Approval of all proposed new wells:
  - i. Final Approval of the proposed well location may be granted only after all required water quality analyses are completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
  - ii. Untreated water samples shall be analyzed by a certified laboratory, prior to source approval and after proper well development and safe-yield determination, for the following parameters:
    - **Microbiological Contaminants:** Total Coliform. If total coliform results are positive, then samples must be analyzed for E. Coli. If the Department determines that there is potential groundwater under the influence of surface water, then samples must be analyzed for Heterotrophic Plate Count (HPC), per approved methods authorized in 40 C.F.R. §141.21;
    - **Inorganic Contaminants:** nitrates, nitrites, fluoride, chloride, hardness, antimony, iron, manganese, and arsenic, per approved methods authorized in 40 C.F.R. §141.23;
    - Volatile Organic Compounds: the Department knows of a possible petroleum underground storage tank or spill within 1,000 feet of the well, the public water system must test for 1,2,4-Trichlorobenzine, Cis-1,2-Dichloroethylene, Xylenes, Total Dichloromethane, O-Dichlorobenzene, P-Dichlorobenzene, Vinyl Chloride, 1,1-Dichloroethylene, Trans-1,2-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene,

Ethylbenzene, Styrene, & Methyl Tert-Butyl Ether (MTBE), per approved methods authorized in 40 C.F.R. §141.24);

- Physical Parameters: pH; and
- **Radionuclides:** uranium, per approved methods authorized in 40 C.F.R. §141.25, per approved methods authorized in 40 C.F.R. §141.25.
- iii. The Department may require additional testing, if a contamination event has occurred in the area.
- d. Community Public Water Systems Serving Fewer Than 250 People
  - i. Community Public Water Systems serving fewer than 250 people shall submit a completed Preliminary Approval Form (Note: the Preliminary Approval Form may be obtained from the Department) for each proposed well along with required documentation at least 30 days prior to the proposed date of installation. Required documentation shall include, but is not limited to, the following: the Preliminary Approval Form, location map, estimated quantity of water required from the well in gallons per minute or gallons per day, and a site plan showing all potential sources of contamination within 1,000 feet of the well. The Department may require a preliminary hydrogeologic investigation of a well location if the Department makes the determination that additional information is necessary to evaluate the adequacy of the site to provide a safe and healthful supply of water to the public or otherwise to protect the public health.
  - ii. The Preliminary Approval Form shall be reviewed by the Department to determine the adequacy of the well location to provide safe and healthy drinking water to the public. No production well shall be installed prior to preliminary approval being granted in writing by the Department.
  - iii. New wells shall be located at least 300 feet away from potential contamination sources and at least 1,000 feet from Underground Storage Tanks regulated by DEP Chapter 691, unless a waiver is obtained from the Department and DEP.
  - iv. If circumstances exist where a proposed well location must be placed closer than 300 feet from a potential contamination source, then the Department may grant a setback waiver on a case-by-case basis, based on an evaluation of geologic conditions, individual land use, and other factors that potentially affect water quality. The

Department must receive information from an appropriate qualified professional sufficient to make a determination on all waiver requests. Any well proposed less than 150 feet from one or more subsurface disposal fields must include a Maine Certified Geologist's hydrogeologic assessment that is presented to the Department for review and approval, which includes a description of the local surficial geology, a pre-pumping water table contour map, a map showing the water table contours under pumping conditions and an evaluation of the physical characteristics of the site which mitigate any potential impacts to the well from the disposal field(s), or submit plans for an Advanced Treatment Unit (ATU) designed to pre-treat all septic system effluent prior to discharge to the septic system disposal field, to be reviewed and evaluated by the Department. Any pretreatment system proposed as mitigation for reduced setbacks from septic system components must be shown to significantly reduce nitrate, nitrite and bacteria levels and include a plan for ongoing maintenance. The Department may waive these requirements on a case-by-case review or require additional information to insure the suitability of the proposed well for use as a public water supply source. The Department may place conditions on a waiver granted, which may include increased water quality monitoring for specific contaminants at a schedule and frequency to be determined by the Department.

- v. Treatment for all new wells may also be required as described in Section(3)(G)(2)(j).
- vi. The Department may deny a proposed well location after determining that a proposed well location is not safe from threats of contamination or potential threats of contamination even with increased monitoring for those contaminants.
- vii. The methods and standards described in the Manual for Water Well Construction Practices, 2<sup>nd</sup> Edition, (published in 1998 by the National Ground Water Association), shall be used in proper development and determination of safe yield for all proposed Community wells serving fewer than 250 people. A copy of the Manual is available in the Department's office in Augusta, Maine. The process for determining safe yield shall be approved by the Department prior to drilling the well. All water quality samples shall be collected after proper well development, disinfection, and at the conclusion of continuous pumping on the well for a sufficient period time so that a minimum of three well bore volumes have been removed. The Department may, on a case-bycase basis, require a report to be prepared by a Certified Geologist

or Professional Engineer evaluating the well, based on an evaluation of geologic conditions, individual land use, and other factors that potentially affect water quality. This report may be required to include: a description of the site geology and any sources of contamination in the area; a map of the area showing all wells installed and any potential sources of contamination in the protection areas; drilling logs for each well installed; pump test drawdown data if available; recommendations for wellhead protection area delineations; and all required water quality analysis results. The report shall be submitted to the Department for review with the request for Final Approval.

- viii. A. For all production wells for community water systems serving fewer than 250 people the owner, operator or other duly responsible representative of the public water supply shall by some legal document acquire sufficient land use controls of, at least, all land within the minimum wellhead protection areas specified in the pump test report prior to Final Approval. Sufficient land use control shall be deemed as either:
  - 1) Ownership of the property;
  - 2) A contractual agreement or easement with the owners of the property that ensures that the well shall not be negatively impacted by activities in the contributing area; or
  - 3) A plan presented to the Department for review and approval showing how the contributing area shall be sufficiently protected. The plan shall be submitted to the Department in writing and be prepared by an appropriately qualified individual.
  - B. In addition, a description of public education procedures and materials the system plans to implement or distribute to inform its consumers and owners of property within the identified protection areas of water quality and wellhead protection issues shall be provided to the Department. The Department may provide technical assistance to water systems drafting these educational strategies.
- ix. Final Approval of the proposed well location may be granted only after all required water quality analyses have been completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
- x. A Final Approval Form or equivalent must be submitted along with all water quality analysis results, evidence of land use controls (viii), all required maps and reports and a completed

Wellhead Protection Self Evaluation Form to the Department for review and approval.

- xi. Unless final approval of the proposed well is granted in writing by the Department, no water may be served. The Department may grant conditional approval on a case-by-case basis, if no potential contamination is identified. The Department may also require additional treatment, testing or other requirements that the Department deems necessary for the protection of the public health, based on an evaluation of geologic conditions, individual land use and other factors that potentially affect water quality.
- e. Water quality analyses to be completed for Community Water Systems Serving Fewer Than 250 People
  - i. Final Approval of the proposed well location may be granted by the Department only after all required water quality analyses are completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
  - ii. Untreated water samples shall be collected and analyzed by a certified laboratory, prior to source approval, and after proper well development and determination of safe yield-for the following parameters:
    - Microbiological Contaminants Total Coliform. If total coliform results are positive, then samples must be analyzed for E. Coli. If the Department determines that there is potential groundwater under the influence of surface water, then samples must be analyzed for Microscopic Particulate Analysis (MPA), per approved methods authorized in 40 C.F.R. §141.21);
    - **Inorganic Contaminants**: Antimony, arsenic, barium, beryllium, cadmium, chloride, chromium, color, copper, cyanide (as free cyanide), fluoride, hardness, iron, lead, manganese, mercury, nickel, nitrates, nitrites, selenium, silver, sodium, sulfate, thallium, turbidity& zinc (Per approved methods authorized in 40 C.F.R. §141.23);
    - Volatile Organic Compounds (VOC) Screen: 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Xylenes, Total Dichloromethane, O-Dichlorobenzene, P-Dichlorobenzene, Vinyl Chloride, 1,1-Dichloroethylene, Trans-1,2-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-

Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Styrene, & Methyl Tert-Butyl Ether (MTBE), per approved methods authorized in 40 C.F.R. §141.24;

- Synthetic-Volatile Organics (SOC) Screen: 2,4-D, 2,4,5-TP (Silvex), adipate, atrazine, BHC-Gamma (Lindane), Carbofuran, Dalapon, Di(2-ethylhexyl) Di(2-ethylhexyl) phthalate, Dinoseb, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lasso(Alachlor), Methoxychlor, Simazine, PCBs (as decachlorobiphenyl), or PCBs (as aroclors), Pentachlorophenol, Picloram, Oxamyl (Vydate), &Velpar; and
- **Radionuclides:** gross alpha, radon and uranium, per approved methods authorized in 40 C.F.R. §141.25.
- f. Community Public Water Systems Serving 250 People or More
  - i. Community Public Water Systems serving 250 people or more shall submit a completed Preliminary Approval Form (Note: the Preliminary Approval Form may be obtained from the Department) along with required documentation at least 30 days prior to the proposed date of installation. Required documentation shall include but is not limited to the following: the Preliminary Approval Form, location map, estimated quantity of water required from the well in gallons per minute, and a site plan showing all potential sources of contamination within 2,500 feet of the proposed well location. The Department may require a preliminary hydrogeologic investigation of a site if it determines that additional information is required to evaluate the adequacy of the well to provide a safe and healthful supply of water to the public or otherwise to protect the public health.
  - ii. The Preliminary Approval Form must be reviewed by the Department to determine the adequacy of the well location to provide safe and healthy drinking water to the public. No production well shall be installed prior to Preliminary Approval being granted by the Department.
  - iii. New wells must be located at least 300 feet away from potential contamination sources and at least 1,000 feet from Underground Storage Tanks regulated by DEP Chapter 691, unless a waiver is

obtained from the Department and DEP, after both departments evaluate geologic conditions, individual land and use and other factors potentially affecting water quality. If the Department determines that a setback distance greater than 300 feet is required to protect public health, a greater setback distance may be required.

iv. If circumstances exist where a proposed well location must be placed closer than the setback distance of 300 feet from a potential contamination source, then the Department may grant a setback waiver on a case-by-case basis, based on an evaluation of geologic conditions, individual land use and other factors potentially affecting water quality. The Department must receive information from an appropriate qualified professional sufficient to make a determination on all waiver requests. Any well proposed less than 150 feet from one or more subsurface disposal fields must include a Maine Certified Geologist's hydrogeologic assessment that is presented to the Department for review and approval, which includes a description of the local surficial geology (and bedrock geology, if applicable), a pre-pumping water table contour map, a map showing the water table contours under pumping conditions and an evaluation of the physical characteristics of the site which mitigate any potential impacts to the well from the disposal field(s), or submit plans for an Advanced Treatment Unit (ATU) designed to pre-treat all septic system effluent prior to discharge to the septic system disposal field, to be reviewed and evaluated by the Department.

Any pretreatment system proposed as mitigation for reduced setbacks from septic system components must be shown to significantly reduce nitrate, nitrite, and bacteria levels and include a plan for ongoing maintenance. The Department may waive these requirements on a case-by-case review or require additional information to insure the suitability of the proposed well for use as a public water supply source. This waiver is only granted, after an evaluation of geologic conditions, individual land use and other factors potentially affecting water quality. The Department may place conditions on a setback waiver which may include increased water quality monitoring for specific contaminants at a schedule and frequency to be determined by the Department.

- v. Treatment for all new wells may also be required as described in Section(3)(G)(2(j).
- vi. The Department may deny a proposed well location after determining that a proposed well location is not safe from threats of contamination or potential threats of contamination even with increased monitoring for those contaminants.

- vii. For all proposed wells, a prolonged pump test shall be required prior to Final Approval. The requirements of the pump test are described in subsequent parts of this section.
- viii. For all production wells for community water systems serving more than 250 people a plan showing all test well locations and a description of the pump test methodology shall be submitted to the Drinking Water Program for approval at least two weeks prior to the running of the prolonged pump test. Drawdown readings must be taken in the production well.
- ix. For all surficial wells the pump test shall be run for at least 48 hours and continue until stabilization has been reached or for 5 days, whichever is less. Stabilization is considered to be reached when the drawdown reading at an observation well near the production well or the production well has not varied by more than 1/2 inch during the preceding 24 hour period. An alternative definition of stabilization may be proposed by the applicant and must be reviewed and approved by the Department prior to implementation. The proposal must be prepared by an appropriately qualified person or firm.
- x. For all surficial wells, a report describing and evaluating the pump test shall be prepared by an appropriately qualified person or firm and shall include: a description of the site geology and all potential sources of contamination in the area; a map showing the locations of all monitoring and production wells used for the pump test, the pre-pumping ground water contours, potential sources of contamination in the area; a map showing ground water contours under pumping conditions; and wellhead protection area delineations. Wellhead protection area delineations must be made using one or more methodologies approved by the Department.
- xi. For all surficial wells, the safe yield, area of influence, and minimum protective zone of the well must be presented in the pump test report.
- xii. For all bedrock wells, a prolonged pump test of not less than 48 hours shall be performed terminating when the safe yield of the well can be reasonably estimated by an appropriately qualified person of firm.
- xiii. For all bedrock wells, a report describing and evaluating the pump test shall be prepared by a Certified Geologist or Professional Engineer and shall include: a description of the site geology and all

potential sources of contamination in the area; a map showing the locations of all monitoring and production wells, and recommendations for wellhead protection.

- xiv. A. For all production wells, for community water systems serving more than 250 people the owner, operator or other duly responsible representative of the public water supply shall by some legal document acquire sufficient land use controls of, at least, all land within the minimum wellhead protection areas specified in the pump test report prior to Final Approval. Sufficient land use control shall be deemed as either:
  - 1) Ownership of the property;
  - 2) A contractual agreement or easement with the owners of the property that ensures that the well shall not be negatively impacted by activities in the contributing area; or
  - 3) A plan presented to the Department for review and approval showing how the contributing area shall be sufficiently protected. The plan shall be submitted to the Department in writing and be prepared by an appropriately qualified individual.
  - B. In addition, a description of public education procedures and materials the system plans to implement or distribute to inform its consumers and owners of property within the identified protection areas of water quality and wellhead protection issues shall be provided to the Department. The Department may provide technical assistance to water systems drafting these educational strategies.
- xv. Water quality samples are to be collected at the conclusion of the prolonged pump test. Final Approval of the proposed well may be granted only after all required water quality analyses have been completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
- xvi. A Final Approval Form or equivalent must be submitted along with all water quality analyses results, evidence of land use controls (xiv), all required maps and reports and a completed Wellhead Protection Self Evaluation Form to the Department for review and approval.
- xvii. Unless final approval of the proposed well is granted in writing by the Department, no water may be served. The Department may grant conditional approval on a case-by-case basis, based on an evaluation of geologic conditions, individual land use and other

factors potentially affecting water quality. The Department may also require additional treatment, testing or other requirements that the Department deems necessary for the protection of the public health.

- g. Water quality parameters to be completed for all Community Water Systems Serving More Than 250 People.
  - i. Final Approval of the proposed well location may be granted only after all required water quality analyses have been completed and it is further determined that the well is in compliance with all applicable Primary Drinking Water Regulations.
  - ii. Untreated water samples shall be analyzed by a certified laboratory, prior to source approval and after proper well development and safe-yield determination for the following parameters:
    - **Microbiological Contaminants:** Total Coliform. If total coliform results are positive, then samples must be analyzed for E. Coli. If the Department determines that there is potential groundwater under the influence of surface water, then samples must be analyzed for Microscopic Particulate Analysis (MPA), per approved methods authorized in 40 C.F.R. §141.21);
    - **Inorganic Contaminants:** nitrate, nitrite, chloride, hardness, fluoride, copper, iron, manganese, zinc, arsenic, barium, cadmium, chromium, lead, mercury, silver, selenium, sodium, color, nickel, antimony, beryllium, sulfate, cyanide, thallium and turbidity (Per approved methods authorized in 40 C.F.R. §141.23);
    - Volatile Organic Compounds;1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Xylenes, Total Dichloromethane, O-Dichlorobenzene, P-Dichlorobenzene, Vinyl Chloride, 1,1-Dichloroethylene, Trans-1,2-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Styrene, & Methyl Tert-Butyl Ether (MTBE) (Per approved methods authorized in 40 C.F.R. §141.24);
    - Synthetic Volatile Organics Screen: 2,4-D, 2,4,5-TP (Silvex), adipate, atrazine, BHC-Gamma (Lindane), Carbofuran, Dalapon, Di(2-ethylhexyl) Di(2-ethylhexyl)

phthalate, Dinoseb, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lasso(Alachlor), Methoxychlor, Simazine, PCBs (as decachlorobiphenyl), or PCBs (as aroclors), Pentachlorophenol, Picloram, Oxamyl (Vydate), &Velpar (Per approved methods authorized in 40 C.F.R. §141.24); and

- **Radionuclides:** gross alpha, uranium and radon, per approved methods authorized in 40 C.F.R. §141.25).
- h. New Dug Wells and Springs for all Public Water Systems.
  - i. All proposed dug wells and springs shall be considered surface water supplies and meet the requirements of the surface water source approval section of these rules (Section 3 (G)(1)).
- i. Well Termination
  - i. All public water system wells shall terminate no less than 18 inches above the ground surface or be contained in a sealed, water tight pit, and have a sanitary seal well cap with a protected, screened vent at the termination of the well casing.
- j. Treatment Required
  - i. All community water systems that use ground water sources and serve municipalities and/or districts must have chlorination facilities.
  - All new community ground water supplies serving municipalities and/or districts may be required by the Department to continuously chlorinate for a period of 2 months following initial utilization. The Department may require further raw water testing following the 2-month period of chlorination.
  - iii. Prior to source approval, a treatment technique, approved by the Department, shall be installed for any contaminant found to be in excess of the maximum contaminant level. This section shall not apply to sodium. See Section (7)(E)(2) regarding sodium.
  - iv. The Department may, at its option, require the installation of treatment equipment if a contaminant is present in sufficient quantity to constitute a public health concern in the future, even if the contaminant level does not exceed the current maximum

contaminant level. The Department, in such cases, shall provide opportunity for appeals, hearings and reviews.

- v. All public drinking water systems determined to be ground water sources under the direct influence of surface waters shall comply with the requirements listed in Section (7)(H) regarding filtration and disinfection.
- k. Review period for plans submitted either for preliminary or final well approval.
  - i. The Department will review and make a decision on an application within 30 days. The review and approval period shall begin after the Department has received all information requested and the information provided is sufficient for the Department to make an informed decision.

### H. Existing Sources

- 1. Surface Water Systems
  - a. All existing public surface water systems, including systems serving ground water under the direct influence of surface water, shall be filtered and continuously disinfected with chlorine or by some other means approved by the Department unless the water system meets all criteria for avoiding filtration (See Section (7)(H) regarding filtration and disinfection requirements).
  - b. Areas within 200 feet of intakes should be land-use restricted by means of deed, easement, or other legal document.
  - c. Unfiltered public water systems serving surface water and/or ground water under the direct influence of surface water shall have a sanitary survey of the watershed conducted at reasonable intervals, with a report of said survey submitted to the Department. Such a watershed survey should include an annual inspection of the watershed and should evaluate water source protection, associated facilities and equipment and review operational procedures and maintenance records for the purpose of evaluating the adequacy of programs and procedures, such as source water protection, facilities and equipment operations and maintenance, etc., to produce and distribute safe drinking water. (See Section (7)(H)(1-6), i.e., 40 C.F.R. Sections 141.70 through 141.75 for additional information.)
  - d. All community surface water supplies shall evaluate their System Design Capacity and submit a report on forms provided by the Department for review, in order to determine System Design Capacity.

- 2. Ground Water Systems
  - a. All community water systems using ground water sources shall provide facilities for chlorination.
  - b. Hazardous chemicals (e.g. pesticides, petroleum products, degreasers, etc.) shall not be used or stored in the proximity of the well, except when used in water treatment.
  - c. Any hazardous chemical used in water treatment shall be stored in such a manner that it will be completely contained and not enter the aquifer.
  - d. The occurrence of spills of hazardous substances within the wellhead protection area shall be immediately reported to the Department by the water supplier upon knowledge of such an accident.
  - e. All discharges from water softeners or other treatment techniques shall be made in an approved manner.
  - f. All public water system wells shall have a sanitary seal well cap with a protected, screened vent at the termination of the well casing.
  - g. All existing public water system wells which are modified, altered or repaired, including hydrofacturing, in a manner that may change the yield or chemistry of the water served must comply with Section 3(F)(3) and be approved by the Department prior to commencement of the modifications, alterations, repairs or hydrofracturing. The Department may require, based on an evaluation of geologic conditions, individual land use and other factors potentially affecting water quality, additional testing to demonstrate safe water quality following such modifications. The Department may require water treatment to insure compliance with these Rules.
- I. Protective Measures
  - 1. Public water suppliers shall have an active program for watershed and wellhead protection. Emergency response plans shall be designed by the respective supplies. The Department will provide guidance these areas.
  - 2. The occurrence of spills of hazardous substances within the watershed shall be immediately reported to the Department by the water supply upon knowledge of such an incident. Emergencies may be reported to the Division of Environmental Health, Drinking Water Program at (207) 287-2070 during normal office hours, or at the 24 hour emergency number (207) 557-4214.

#### J. Bottled Water Approval

- 1. General Requirements: No person may extract or treat water for bottling in the State of Maine without first obtaining Department approval by demonstrating that the treatment and raw source water quality meet the requirements of these Rules. Approval consists of an application review process, where the applicant must provide to the Department the following documentation:
  - a. Application. A completed application, which must be submitted to, and approved by, the Department before bottling;
  - b. Water Quality Results. Any test results that the Department deems necessary, due to surrounding environmental conditions or other circumstances that may indicate a threat of contamination to the well and potentially result in an adverse health impact on customers. Such monitoring must be performed at regular intervals, as determined by the Department, with testing/monitoring results reported to the Department within the established timeframes; and
  - c. Hydrogeologic Report. A report on the regional geology surrounding the site and the specific site geology is necessary for source approval and must include a description of the vertical and horizontal extent of the source aquifer using existing data. The information will be used to define the recharge area of the aquifer, or, in the case of regional aquifers, the zone of influence of the subject source. A report detailing the development of the source; the method of construction, including spring design, well installation, surface catchment, and intake structures; and transmission facilities as appropriate, is required. A watershed survey of the recharge area or zone of influence of subject source that identifies and evaluates actual and potential sources of contamination must be provided to the Department. A minimum 48-hour pump test must be conducted on each well, to determine safe yield. Based on the findings in the hydrogeologic report, a plan may be required for special monitoring of any significant contamination source and for taking restrictive preventative or corrective measures, as appropriate, to protect the source water. Such a report must be completed and submitted by a Maine-certified geologist. Water vending machines are exempt from this requirement to submit a Hydrogeologic Report.
- 2. Significant Groundwater Well Permit for New Sources. The Maine Department of Environmental Protection ("DEP") requires Groundwater Well Permits for new sources under the following circumstances, except when water is withdrawn for firefighting:
  - a. New Sources withdrawing at least 75,000 gallons during any week, or at least 50,000 gallons on any day, and is located at a distance of 500 feet or less from a coastal or freshwater wetland, great pond, significant vernal pool habitat, public

water system well not owned or controlled by the applicant, or river, stream or brook; or

- b. New Sources withdrawing at least 216,000 gallons during any week, or at least 144,000 gallons on any day, and is located at a distance of more than 500 feet from a coastal or freshwater wetland, great pond, significant vernal pool habitat, public water system well not owned or controlled by the applicant, or river, stream or brook;
- c. "Significant Groundwater Well" does not apply to or include, the following:
  - i. A public water system well, except for those public water systems solely bottling water for sale;
  - ii. Individual home domestic supply;
  - iii. Agricultural use or storage;
  - iv. Development or part of a development requiring a permit, pursuant to Article 6, Article 7, or Article 8-A; or
  - v. A structure or development requiring a permit from the Maine Land Use Planning Commission.
- 3. Approval of Bottled Water Sources
  - a. Approval Required. The source water (i.e. spring, bore hole, well, etc.) of all bottled or bulk water offered or exposed for sale or distribution within the State of Maine, or meeting the definition of a public water system, must receive prior approval from the Department.
  - b. General Source Requirements. All sources must meet the Department's water quality requirements in Appendix A of these Rules. Final approval of the proposed sources may be granted only after all required water quality analyses have been completed and it is further determined that the well is in compliance with Appendix A of these Rules.
- 4. Approval of Bottled Water Facilities
  - a. Springs. All new spring construction and/or modifications to existing springs must meet the following minimum requirements:
    - i. A watertight wall must completely surround the spring and be at least 18 inches above the highest point off the ground and extending down through the overburden to water-bearing stratum. The top of the surrounding wall must be constructed in such a manner as to accommodate a cover.

- ii. A tight-fitting, locked cover must be installed on top of the encircling wall to protect against contamination or vandalism.
- iii. Where the spring is protected by a springhouse, the building must be rodent and insect-proof and must be kept locked.
- iv. A ditch, or ditches, must be dug to divert surface waters away from the spring. These ditches must be maintained free of debris that would interfere with proper diversion of surface water.
- b. Drilled Wells. Drilled wells must be properly located with reference to surrounding sanitary conditions, properly developed, and protected against contamination. Drilled wells must meet the minimum following requirements:
  - i. The drilled well must be sealed watertight to the depth necessary to prevent surface contamination, and to seal off contamination of undesirable strata.
  - ii. The top of the well casing must be at least 18 inches above ground level, unless otherwise protected.
  - iii. A sanitary seal must be installed at the joint where the discharge pipe passes through the well casing.
  - iv. A sanitary seal well cap, vented with a screen, must be installed on top of the well casing.
- c. Dug Wells or Driven Well Points. Dug wells or driven well points in shallow aquifers are not recommended as sources of water. If these are in use, then they must meet the following minimum requirements:
  - i. Dug wells and driven well points must be properly constructed according to good sanitary engineering practices and protected against potential contamination.
  - ii. Dug wells and driven well points must have a watertight lining extending at least six (6) feet below the ground surface. Dug wells must be back filled with clay from the ground surface to a depth of not less than four (4) feet.
- 5. Groundwater Under the Influence of Surface Water. Any source meeting the definition of "surface water" (or "Groundwater under the influence of surface water") must comply with the regulations pursuant to Section 7(H) of these Rules and 40 C.F.R. §141.70 of the C.F.R.. New (i.e. previously unregulated by the Department) dug wells are considered surface water. Springs, well points and drilled wells may be classified as surface water, based on testing requirements, as defined above.

# SECTION 4: OPERATION, MAINTENANCE AND DISINFECTION

A. Water Pressure

All community water systems shall be operated and maintained to provide minimum positive pressure of 20 p.s.i. at the curb stop (curb cock), except as otherwise provided for in limited service agreements.

B. Covered Reservoirs

All finished water reservoirs shall be covered and the vents to the reservoirs shall be adequately screened. Variances to this sub-section are not allowed.

- C. Flushing
  - 1. Newly constructed water distribution mains and finished water storage facilities shall be flushed and disinfected before use in accordance with the appropriate AWWA standard (See Section (3)(F)(2)).
  - 2. No spring basin, collecting basin, well, infiltration gallery, water main, pump, standpipe or reservoir may be placed in service following cleaning or repairs until it has been properly disinfected.
- D. Disinfection

When any water system fails to meet the proper coliform level, the Department may designate the disinfectant residual or application rate to be maintained by the system. Public water systems with ground water supplies may be required by the Department to be disinfected. Disinfection residual compliance measurements may be accomplished by use of a DPD colorimetric test kit or any other method as approved by the Department. All treatment techniques shall be approved by the Department.

- E. Separations and Crossings of Water Mains and Sewers
  - 1. Water mains shall be laid at least 10 feet horizontally from any existing or proposed sewer measured edge to edge. In cases where it is not practical to maintain a ten foot separation, the Department may allow a waiver to this requirement on a case-by-case basis, if supported by data from the design engineer. Such waivers may allow installation of the water main closer to a sewer, provided that the water main is laid in a separate trench or on an undisturbed earth shelf located on one side of the sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the sewer. Concrete encasement of the sewer joints may be required.
  - 2. Water mains crossing sewers shall be laid to provide a minimum vertical distance of 18 inches of free earth between the water main and the sewer. This requirement

applies\_where the water main is either above or below the sewer. At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. Special structural support for the water and sewer pipes may be required. In such crossings, the Department may require sewer pipe of like material as the water pipe, plus concrete encasement.

- 3. There shall be at least a 10-foot horizontal separation between water mains and existing or future sanitary sewer force mains. There shall be an 18-inch vertical separation at crossings, as required in Section (4)(E)(2) of these Rules.
- 4. No water pipe may pass through or come in contact with any part of a sewer manhole.
- F. Cross-Connection

Public water systems shall comply with the applicable provisions of 10-144 C.M.R. Ch. 226 Cross-Connection Rules and 02-395 C.M.R. Ch. 4 Internal Plumbing Code.

G. Hydrants

All new or replacement hydrants shall be of the type having no drain or shall have the drain plugged prior to installation. The barrels of the hydrants shall be pumped dry during freezing weather or protected with propylene glycol or food safe glycerin.

H. Curb Stops

Curb stops (Curb Cocks) for new or replacement installations shall be of the type manufactured with pluggable drains and plugged or without drain holes.

- I. Emergency Changes
  - 1. The supplier of water shall not take, use, or cause to be taken for use, water from any alternate source or change other treatment processes which involve the addition or deletion of any chemicals, without the approval of the Department. The Department shall advise the supplier of water and interested local officials of the approved action or proposed action by the supplier of water to protect the public health. If there is no person from the Department available at the time of an emergency, such action shall be taken only by a designated operator, licensed by the Board of Licensure of Water System Operators, who shall notify the Department at the earliest possible business hour.
  - 2. A printed copy of this section shall be conspicuously posted by the supplier of water and shall be readily available to any water operator. Such posting shall include the address and phone number of the Drinking Water Program, Division of Environmental Health, Maine Center for Disease Control and Prevention, Department of Health and Human Services.

#### J. Fluoridation

- 1. Authorization: In those municipalities which have authorized the addition or discontinuation of fluoride to their water supply pursuant to 22 M.R.S. §2653, the municipal clerk shall inform the water system in writing of the municipality's authorization, within 10 days of the final tabulation by the Secretary of State, pursuant to 22 M.R.S.§2656(3). The water system shall inform the Department in writing within 7 days of the water system receiving such notice from the municipal clerk.
- 2. Optimum Level: The target level of fluoride for dental benefit is 0.7 milligrams per liter (mg/l) in drinking water in Maine.
- 3. Recommended Control Range: The recommended control range is 0.5 to 1.2 mg/l (parts per million) of the optimum level. The recommended control range helps maintain optimal fluoridation.
- 4. Monitoring: All public water systems that fluoridate must monitor and report the daily fluoride concentration at each application on days in which fluoride is added. The measurement at the fluoride application point should be performed by an accepted analytical method. Theoretical calculations have value as a quality control measure and can be substituted in the event of analytical method malfunction, not to exceed 10 days in a month.
- 5. Daily Analytical Measurement: Public water systems that measure for a daily analytical shall continuously monitor for fluoride ion concentration at each fluoride application point, unless the conditions of Section 4(J)(5)(b) are met. Automated continuous monitoring shall include or meet the following:
  - a. Continuous monitors may adapt a specified fluoride testing methodology, provided the chemistry, precision and accuracy are equal to or greater than the original testing methodology. See Section 7(C)(3) for testing methodology requirements. Calibration shall be according to manufacturer's recommendations.
  - b. Instrumentation providing for notification of water operator if fluoride concentration is outside of optimum range.
  - c. Instrumentation providing for notification of water operator if there is a failure of the continuous monitoring.
  - d. In lieu of continuous monitoring, a representative daily grab sample(s) may be collected from each fluoridation application point and analyzed daily for fluoride ion concentration.

- e. If the result of a fluoride analysis is outside the optimum range, the sampling and measurement shall be confirmed by re-sampling as soon as practicable.
  - i. If the repeat sample is greater than 2.0 mg/l, the operator shall take appropriate action to correct the problem and inform the Department within 72 hours.
  - ii. If the repeat sample is less than 0.5 mg/l, then the operator shall correct the problem and provide a note on the Monthly Operating Report, describing the problem and the corrective action.
- 6. Daily Analytical Samples: If the daily analytical measurements or substituted theoreticals are outside the optimum range (0.5 to 1.2 mg/l) for more than 10 days during the month, then the public water system shall notify the Department of the intended course of action, including technical assistance or increased monitoring to address quality assurance.
  - a. In addition to the daily monitoring requirements, a monthly compliance sample of fluoridated water from the distribution system shall be submitted at least once each month to a laboratory certified to analyze fluoride. The Department may require additional testing, based on sample results and compliance history.
  - b. If two consecutive monthly compliance samples are outside the optimum range of 0.5 to1.2 mg/l, then the public water system shall report 4 weekly additional samples that are within the range of 0.5 to 1.2 mg/l.
- 7. Temporary Suspension of Fluoride: If a public water system suspends the addition of fluoride for more than 30 consecutive days, then the public water system must provide public notification as soon as practicable, or within 30 days, whichever is sooner, with appropriate public notification language. Modifications to the following text must be approved by the Drinking Water Program.

PUBLIC NOTIFICATION TEMPORARY FLUORIDATION SUSPENSION

Dear User, The fluoridation adjustment in your community drinking water will be (or has been) temporarily suspended due to: ( ). Fluoridation is scheduled to be restored by the following date: ( ).

8. Compliance Sample Results: Based upon the analytical results from a certified laboratory, the following will be used to determine the necessary enforcement action.

Fluoride Level	Action
< 0.5  or > 1.2  mg/l for  1  month	Call to Department for quality assurance.
< 0.5  or > 1.2  mg/l for  2  consecutive	Test weekly for 4 weeks and Post Public
months.	Notice in Consumer Confidence Report
$> 2.0 \text{ mg/l} \text{ and } \leq 4.0 \text{ mg/l}$	Post Public Notice in Consumer Confidence
	Report
> 4.0 mg/l	Tier 2 Violation: Post Public Notice within 30
	Days

- 9. Use of Consumer Confidence Report /Public Notification Language: Failure to Monitor: If a public water system fails to collect any compliance sample(s), the public water system must provide public notification of the failure to monitor or report in the annual Consumer Confidence Report.
  - a. The following statement must be included in the public water system's annual Consumer Confidence Report:
    - i. Fluoride Monitoring/Reporting Violations: The public water system must state the following: "In (identify reporting period), our water system failed to test and report monthly fluoride results to the State of Maine Drinking Water Program. Fluoride levels must be maintained between 0.5 to 1.2 mg/l, for those water systems that fluoridate the water. Since this violation, fluoride testing and monthly reporting have resumed on schedule.
    - ii. Fluoride Compliance Samples Outside Optimum Range of 0.5 1.2 mg/l for 2 Consecutive Months: The public water system must state the following: "During (identify months out of range), our water system failed to report fluoride levels within the optimum range of 0.5 to 1.2 mg/l."
  - b. Water systems that have temporarily taken their fluoridation off-line due to malfunctions or maintenance are not required to collect a compliance sample while fluoridation equipment is off-line.
- K. Bottled Water

Public water systems which bottle water for consumption shall comply with this section and any other relevant section of these Rules.

- 1. Ongoing Water Quality Monitoring/Reporting for Bottled Water Facilities
  - a. General Requirements. All plants producing bottled water must be responsible for sampling and testing for all physical, chemical, microbiological and radiological parameters specified in Appendix A of

these Rules. Water quality results must be reported below all maximum contaminant levels set within Appendix A.

- Analyses must be conducted by a certified laboratory in accordance with the testing and methodological requirements specified by the U.S. E.P.A.'s National Primary Drinking Water Regulations under 40 C.F.R. Sections 141-143.
- ii. Raw samples from each source must be analyzed by a certified laboratory as often as necessary, to identify evidence of any change in water quality, but at a minimum frequency of quarterly, for total coliform bacteria and annually for chemical, physical, and radiological contaminants, which are listed in Appendix A of these Rules.
- iii. Finished water (production water) monitoring frequency will be determined by the Department, based on raw water quality results, treatment, and deficiencies identified.
- b. Reduced Testing for Bottled Water Facilities: The Department may reduce the frequency of water quality testing requirements on a case-by-case basis, after reviewing the source conditions and water quality results for each source and determining no potential health risks. The Department also reserves the right to reduce the monitoring frequency of post-treated water after determining no potential health risks from water quality results.
- c. Additional Testing for Bottled Water Facilities: Notwithstanding any over provision of these Rules, the Department may require any bottler, distributor or vendor of bottled water to test and submit results to the Department for any substance at any time, when the Department determines that the substance may be present in a water source and threaten public health. The Department reserves the right to increase testing/monitoring frequency, based upon an evaluation of geologic conditions, individual land use and other factors potentially affecting water quality.
- d. Cease Production Orders: When there is a violation of the Department's primary drinking water regulations, or when, in the judgment of the Department, a condition exists in a public water system which will cause a violation and potentially cause a serious risk to public health, the Department may require the bottler to cease water production. This term refers to one of the following events:
  - i. Confirmed e. coli in the source water without meeting 4-log virus inactivation, including a detectable chlorine residual;

- ii. Bottled water after treatment and prior to bottling which contains a drinking water contaminant exceeding the Maximum Contaminant Level (MCL) regulated by the Department within these Rules;
- iii. An unprotected direct cross-connection with the sanitary sewer; or
- iv. Any other violation that poses a potential imminent threat to public health, as determined by the Department, which is authorized.
- L. Sanitary Surveys
  - 1. Community Water Systems must have a Sanitary Survey conducted no less frequently than every three years.
    - a. The Department reserves the right, based on 40 C.F.R. Parts 141 and 142, to conduct some community sanitary surveys every five years.
  - 2. Non-Community Water Systems shall have a Sanitary Survey conducted no less frequently than every five years. Bottled water facilities are subject to sanitary surveys every three years.
  - 3. Sanitary Surveys conducted shall address the following eight components as part of the on-site process:
    - a. Evaluation of the source and protective measures in place to insure acceptable quality and quantity;
    - b. Evaluation of the treatment processes in place to insure adequate water quality;
    - c. Evaluation of the distribution system;
    - d. Evaluation of the finished water storage facilities, including quantity;
    - e. Evaluation of pumps, pump facilities and controls;
    - f. Review of monitoring and reporting results and data verification process;
    - g. Evaluation of system management practices and operations; and
    - h. Review of Operator Certification compliance with State regulations.
  - 4. During all sanitary surveys, the following parties shall be present:
    - a. Administrative Contact or other management personnel;
    - b. One or more licensed designated operators, for all systems required to have a licensed designated water operator; and
    - c. Other individuals as required by the Department.
  - 5. If a system is required to prepare a disinfection profile under the requirements of the Enhanced Filtration and Disinfection rules pursuant to 10-144 CMR Ch. 231, Section 7(N); 40 C.F.R. 141.170 § Subpart (P), the profile shall be reviewed as part of the sanitary survey.

- 6. If a "significant deficiency" is identified in the Sanitary Survey Report, the system must report to the Department within forty-five (45) days of receipt of the report to explain how the system will address the deficiency and when the repairs will occur.
- 7. If a system is required to develop a "Disinfection Profile," the system shall consult with the Department prior to making any significant change to its disinfection practice. The term "any significant change" may include, but not be limited to, any of the following:
  - a. changes to the point of disinfection addition;
  - b. changes to the disinfectant used in the treatment process;
  - c. changes to the disinfectant process; or
  - d. any other modification identified by the Department.
- 8. For public water systems serving ground water to a population under 1,000, the Department's sanitary surveys will evaluate the appropriateness of the public water system's monitoring schedule. The Department may modify these particular monitoring schedules, as necessary, based on historical water quality testing results, or if changes in the number of, and/or location of, potential sources of contamination are identified during the sanitary survey.
- 9. The Department may identify sanitary defects during a sanitary survey under the Revised Total Coliform Rule. If the system fails to correct such sanitary surveys within the time frame set, then the Department will rescind any reduced monitoring status held by the system.
- M. Ongoing Water Testing Requirements for Water Vending Machines
  - 1. Pursuant to 22 M.R.S.§2613(3), a bacteriological sample of a water vending machine shall be submitted to the Department at least every three (3) months.
  - 2. If the water vending machine reports at least one year of clean results (i.e. no coliform bacteria contamination), then the Department may reduce the frequency of sampling to one sample per year.
- N. Tanks and Clearwells: Repairs, Coating, Painting of Surfaces Touching Finished Water.
  - 1. Public water systems with new water storage tanks poured in place or constructed on site shall test for Volatile Organic Compounds (VOC's) and report satisfactory results before such tanks are placed into service.
  - 2. Public Water Systems with coated or painted tanks shall test for VOC's and report satisfactory results to the Department before being placed into service.
  - 3. Repairs or changes requiring a petroleum-based chemical to be used for tanks, requires a VOC test with satisfactory results, before such tanks may be placed back into service.

# **SECTION 5: RECORD MAINTENANCE**

Any owner or operator of a system shall retain specific records on his or her premises, or at a convenient location near the premises. Such records (indicated below) shall be made available to the public for their review.

- A. Water Analyses
  - 1. Records of bacteriological analyses made pursuant to these regulations shall be kept for not less than 5 years. Records of chemical analyses made pursuant to these regulations shall be kept for not less than 10 years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:
    - a. Name of public water system and public water system ID number (PWSID);
    - b. The date, place, and time of sampling and the name of person who collected the sample
    - c. Identification of the sample as to whether it was a routine distribution system sample, check sample, raw process water sample, or other special purpose sample;
    - d. Date and time that lab received sample;
    - e. Date and time of analysis;
    - f. Laboratory and person responsible for performing analysis;
    - g. The analytical technique/method used;
    - h. Minimum Detection Limits (MDL); and
    - i. The results of the analysis with, where appropriate, the units of measurement.
  - 2. Certified laboratories must submit forms to the Department in a format approved by the Department, which includes hard-copy or electronic forms.
  - 3. Records of lead analyses and of copper analyses made pursuant to these regulations, as pertinent to requirements of the Federal Lead and Copper Rule, shall be kept for not less than 12 years.
- B. Violations

Records of action taken by the system to correct violations of drinking water regulations shall be kept for a period of not less than 3 years after the last action taken with respect to the particular violation involved and made available to the public upon demand.

#### C. Sanitary Surveys

Copies of any written reports, summaries, or communications relating to sanitary surveys of the system conducted by the system itself, by a private consultant, or by any local, State, or Federal agency, shall be kept for a period of not less than 10 years after completion of the sanitary survey involved and made available to the public upon demand.

D. Variances and Exemptions

Records concerning a variance or exemption granted to the system shall be kept for a period ending not less than 5 years following the expiration of said variance or exemption and made available to the public upon demand.

E. Operational Period

Each system shall maintain daily operational records, which shall be available for inspection and review by the Department and the public. Community systems using wells as a source of supply should maintain records on drawdown and static water level in each well.

F. Assessments Required By the Revised Total Coliform Rule

Systems must maintain copies of any Level 1 and Level 2 Assessment Forms performed, along with records of any associated corrective actions, for five (5) years after completion of the assessment or the corrective action.

# **SECTION 6: REPORTING REQUIREMENTS**

A person who owns or operates a system shall make reports to the Department as follows:

A. Failure to Comply

All public water systems must report any failure to comply with the rules and regulations directly to the Department, including the failure to monitor or report water analyses, within the designated timeframes outlined in 40 C.F.R. 141, Subpart Q, unless the Department performed the analysis and reported the results.

B. Laboratory Sampling Forms

All public water systems must submit water samples to a certified laboratory with a Laboratory Sampling Form. Information may not be transferred to another Form, unless the primary certified laboratory is subcontracting the analysis. The public water system supplier must report the following information on the Laboratory Sampling Form:

- 1. Public water system name, address and telephone number;
- 2. Public water system identification number assigned by the Department;
- 3. Sample site location;
- 4. Sample identification (if any);
- 5. Analysis requested;
- 6. Purpose of sample ("compliance" or "operation/maintenance")
- 7. Sample Type ("routine distribution system sample", "repeat sample", "raw water" or "processed water", or other special purpose sample);
- 8. Date and time of sample collection;
- 9. Name of sampler;
- 10. Disinfectant residual;
- 11. Any remarks specifying relevant details of the sample;
- 12. Signature of sampler
- C. Analysis Reporting
  - 1. Unless a shorter period is specified, the results of tests, measurements, and

analyses required by Sections 7, 8 and 9 of these regulations shall be reported to the Department by the tenth day of the month following the month in which the samples were required to be analyzed.

- 2. Certified laboratories shall report the following results to the Department within 24 hours the day that the results are known:
  - a. Positive total coliform results;
  - b. Inorganic compound exceedances of the Maximum Contaminant Level;
  - c. Organic compound exceedances of the Maximum Contaminant Level; and
  - d. Radionuclide exceedances of the Maximum Contaminant Level.
- 3. Certified laboratories shall report the following results for acute contaminants to the Department on the same day that the results are known:
  - a. E. coli positive results;
  - b. Nitrate exceedances of the Maximum Contaminant Level; and
  - c. Nitrite exceedances of the Maximum Contaminant Level.
- 4. All reports of laboratory analyses for compliance purposes shall be submitted to the Department by the certified laboratory contracted by the public water system to analyze the samples. Any portion of the analysis sub-contracted to another certified laboratory shall be reported by the primary contracted laboratory. The primary contracted laboratory shall submit the final report to the Department.
- 5. Certified laboratories shall-submit forms to the Department in a format approved by the Department, which includes hard-copy or electronic forms.
- 6. The Department may require any bottler, distributor, or vendor of bottled water to test and submit results to the Department for any substance at any time, when the Department has reason to believe that the substance may be present in a water source and may threaten public health. The Department reserves the right to increase testing/ monitoring frequency, based upon the potential health risk.
- D. Monthly Report to Department
  - 1. Each community system serving municipalities and/or Districts shall file with the Department no later than the tenth day of each month, a monthly operational report. The reports shall be made on forms provided or approved by the Department and shall include, but not be limited to: records of daily test results,

daily water production and usage, daily chemical usage, any change in normal treatment procedure, and other pertinent information.

- 2. All public water systems which are not included in Section (6)(D)(1) that add chemicals on a continuous basis shall submit monthly reports on forms provided by or approved by the Department or via electronic means, as approved by the Department. These monthly reports shall be submitted to the Department no later than the tenth day of each month and include, but not be limited to, the following: records of daily test results, daily chemical usage, any change from the normal treatment procedure, and any other pertinent information. Based upon the complexity, size, and compliance history, the Department may reduce a public water system's daily monitoring requirements, but in no case shall it be reduced to less than twice per week.
- 3. If a Designated Operator is required to oversee a public water system that submits monthly operating reports, then that Designated Operator is required to sign all monthly reports. In some limited circumstances, such as with large municipal public water systems, the Department may authorize the Designated Operator to delegate an agent to sign the monthly operating reports.
- E. Change in Ownership
  - 1. All current owners of public water systems shall notify the Department of a change in ownership 60 days prior to the transfer.
  - 2. New owners of community and non-transient, non-community public water systems must contact the Department within sixty (60) days of an ownership transfer for a review of the water system's technical, managerial, and financial capacity.
- F. Security Reports

Public water systems must notify the Department and law enforcement officials immediately to report any act of potential or suspected tampering.

# SECTION 7: NATIONAL PRIMARY DRINKING WATER REGULATIONS (40 C.F.R. – PART 141)

#### A. General Provisions

1. Applicability

Title 40 Code of Federal Regulations (hereinafter referred to as "C.F.R."), Section 141.1, published July 2014, is hereby incorporated herein by this reference.

2. Definitions

Title 40 C.F.R.\_Section 141.2, published July 2014, is hereby incorporated herein by this reference, with the exceptions, additions or changes as set forth below.

"Act" means the Maine Water for Human Consumption Act at 22 Maine Revised Statutes, Chapter 601.

"Administrator" means the Commissioner of the Department of Health and Human Services or the designated representative thereof.

"Person" means person, as defined in Section 2 of these rules.

"Public water system" means a public water system as defined in Section 2 of these rules.

"State" means the State of Maine.

3. Coverage

Title 40 C.F.R. Section 141.3, published July 2014, is hereby incorporated herein by this reference.

4. Variances and exemptions

Title 40 C.F.R. Section 141.4, published July 2014, is hereby incorporated herein by this reference.

5. Siting requirements

Title 40 C.F.R. Section 141.5, published July 2014, is hereby incorporated herein by this reference.

6. Effective dates

Title 40 C.F.R. Section 141.6, published July 2014, is hereby incorporated herein by this reference.

- B. Maximum Contaminant Levels
  - 1. Maximum contaminant levels for inorganic chemicals

Title 40 C.F.R. Section 141.11, published July 2014, is hereby incorporated herein by this reference.

2. Maximum contaminant levels for total trihalomethanes (TTHM) and haloacetic acids (HAA5) (organic chemicals)

Title 40 C.F.R. Section 141.65, published July 2014, is hereby incorporated herein by this reference.

3. Maximum contaminant levels for turbidity

Title 40 C.F.R. Section 141.13, published July 2014, is hereby incorporated herein by this reference.

- 4. *Deleted*
- 5. Maximum contaminant levels for uranium, radium-226, radium-228, and gross alpha particle radioactivity in community water systems

Title 40 C.F.R. Section 141.66, published July 2014, is hereby incorporated herein by this reference.

6. Maximum contaminant levels for beta particle and photon radioactivity from manmade radionuclides in community water systems.

Title 40 C.F.R. Section 141.66, removed and effective December 8, 2003, is hereby incorporated herein by this reference.

- C. Monitoring and Analytical Requirements
  - 1. Coliform Sampling and Analysis

Title 40 C.F.R. Section 141.21, published July 2014, is hereby incorporated herein by this reference.

2. Turbidity sampling and analytical requirements

Title 40 C.F.R. Section 141.22, published July 2014, is hereby incorporated herein by this reference.

3. Inorganic chemical sampling and analytical requirements

Title 40 C.F.R. Section 141.23, published July 2014, is hereby incorporated herein by this reference.

4. Organic chemicals sampling and analytical requirements

Title 40 C.F.R. Section 141.24, published July 2014, is hereby incorporated herein by this reference. TTHM and HAA5: Title 40 C.F.R., Section 141.30, is hereby incorporated herein by this reference.

5. Analytical methods for radiochemistry

Title 40 C.F.R. Section 141.25, published July 2014, is hereby incorporated herein by this reference.

6. Monitoring frequency and compliance requirements for radionuclides in community water systems.

Title 40 C.F.R. Section 141.26, published July 2014, is hereby incorporated herein by this reference.

7. Alternate analytical techniques

Title 40 C.F.R. Section 141.27, published July 2014, is hereby incorporated herein by this reference.

8. Certified laboratories

Title 40 C.F.R. Section 141.28, published July 2014, is hereby incorporated herein by this reference.

9. Monitoring of consecutive public water systems

Title 40 C.F.R. Section 141.29, published July 2014, is hereby incorporated herein by this reference.

- 10. Monitoring and analytical requirements for methyl tertiary-butyl ether for community and non-transient non-community water systems
  - a. The sampling frequency for methyl tertiary-butyl ether for community water systems and non-transient non-community water systems shall be the same as outlined at 10-144 CMR 231 Section 7(C)(4) above and 40 C.F.R. §141.24 for Volatile Organic Contaminants (VOCs). MTBE monitoring will begin with the next compliance period for VOC's in accordance with the system's VOC testing schedule.

- b. The analytical method utilized to test for methyl tertiary-butyl ether shall be EPA method 524.2. Only samples analyzed utilizing testing method 524.2 shall be accepted by the Department for determining compliance with 10-144 CMR 231 Section 7(G)(5).
- D. Reporting, Public Notification and Record Keeping
  - 1. Reporting requirements
    - a. Title 40 C.F.R. Section 141.31, published July 2014, is hereby incorporated herein by this reference.
    - b. The supplier of water shall submit results of tests, measurements, or analyses to the Department for methyl tertiary-butyl ether in accordance with 10-144 CMR 231 Section 6(B) and 10-144 CMR 231 Section 7-D(1)(a) above. The reporting requirements shall be the same as that set for Volatile Organic Contaminants.
  - 2. Reporting MTBE
    - a. The owner or operator of a public water system shall complete public notification for any failure to monitor or exceedance of the MCL for methyl tertiary-butyl ether. Public notification shall be completed with the same form, manner, and frequency as required by the Public Notification Rule for Volatile Organic Contaminants at 40 C.F.R. 141, Subpart Q. The mandatory health effect language as specified at 10-144 CMR 231 Section 7-D (2)(b) for methyl tertiary-butyl ether is to be placed in the public notification for any exceedance of the methyl tertiary-butyl ether MCL.
    - b. Mandatory health effect language for methyl tertiary-butyl ether:

The State of Maine has set an enforceable drinking water standard (MCL) for methyl tertiary-butyl ether known as "MTBE." MTBE generally contaminates drinking water from leaking underground fuel tanks and accidental spills. This chemical has been shown to have adverse effects on laboratory animals after long term exposure to high levels. Chemicals which cause adverse effects in laboratory animals may also cause adverse effects in humans who are exposed at lower levels over long periods of time. The Department has set an enforceable drinking water standard for MTBE of 35 parts per billion to reduce the risk of adverse effects which have been observed in animals. Drinking water which meets this standard is associated with little to no risk and should be considered safe for human consumption.

3. Record maintenance

- a. Title 40 C.F.R. Section 141.33, published July 2014, is hereby incorporated herein by this reference.
- b. Any owner or operator of a public water system shall retain on its premises, or a convenient location near its premises, the records of analyses for methyl tertiary-butyl ether in the same form, manner, and frequency as that required for the Volatile Organic Contaminants at 40 C.F.R. 141.33 and as incorporated by reference in these rules at 10-144 CMR 231 Section 7(D)(3)(a) above.
- 4. *Reserved*
- 5. Reporting and public notification for certain unregulated contaminants

Title 40 C.F.R. Section 141.35, published July 2014, is hereby incorporated herein by this reference.

- E. Special Regulations, Including Monitoring Regulations and Prohibition on Lead Use
  - 1. Special monitoring for inorganic and organic chemicals

Title 40 C.F.R. Section 141.40, published July 2014, is hereby incorporated herein by this reference.

2. Special monitoring for sodium

Title 40 C.F.R. Section 141.41, published July 2014, is hereby incorporated herein by this reference.

3. Special monitoring for corrosivity characteristics

Title 40 C.F.R. Section 141.42, published July 2014, is hereby incorporated herein by this reference.

4. Prohibition on use of lead pipes, solder and flux

Title 40 C.F.R. Section 141.43, published July 2014, is hereby incorporated herein by this reference.

- F. Maximum Contaminant Level Goals and Maximum Residual Disinfectant Level Goals
  - 1. Maximum contaminant level goals for organic contaminants

Title 40 C.F.R. Section 141.50, published July 2014, is hereby incorporated herein by this reference.

2. Maximum contaminant level goals for inorganic contaminants

Title 40 C.F.R. Section 141.51, published July 2014, is hereby incorporated herein by this reference.

3. Maximum contaminant level goals for microbiological contaminants

Title 40 C.F.R. Section 141.52, published July 2014, is hereby incorporated herein by this reference.

4. Maximum contaminant level goals for disinfection byproducts

Title 40 C.F.R. Section 141.53, published July 2014, is hereby incorporated herein by this reference.

5. Maximum residual disinfection level goals for disinfectants

Title 40 C.F.R. Section 141.54, published July 2014, is hereby incorporated herein by this reference.

6. Maximum contaminant level goals for radionuclides

Title 40 C.F.R. Section 141.55, published July 2014, is hereby incorporated herein by this reference.

- G. National Revised Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels
  - 1. Effective dates

Title 40 C.F.R. Section 141.60, published July 2014, is hereby incorporated herein by this reference.

2. Maximum contaminant levels for organic contaminants

Title 40 C.F.R. Section 141.61, published July 2014, is hereby incorporated herein by this reference.

3. Maximum contaminant levels for inorganic contaminants

Title 40 C.F.R. Section 141.62, published July 2014, is hereby incorporated herein by this reference.

4. Maximum contaminant levels (MCLs) for microbiological contaminants

Title 40 C.F.R. Section 141.63, published July 2014, is hereby incorporated herein by this reference.

- 5. Maximum contaminant level for methyl tertiary-butyl ether (MTBE) in community and non-transient non-community water systems:
  - a. The maximum contaminant level for methyl tertiary-butyl ether is applicable to both community water systems and non-transient non-community water systems.
  - b. The maximum contaminant level for methyl tertiary-butyl ether is 35 parts per billion.
  - c. The best technology, treatment technique or other means available for achieving compliance with the maximum contaminant level for methyl tertiary-butyl ether shall be either: the Best Available Technologies (BATs) established by the United States Environmental Protection Agency or in the interim, technologies approved by the Department.
- 6. Maximum contaminant levels for disinfection byproducts

Title 40 C.F.R. Section 141.64, published July 2014, is hereby incorporated herein by this reference.

7. Maximum residual disinfectant levels

Title 40 C.F.R. Section 141.65, published July 2014, is hereby incorporated herein by this reference.

8. Maximum contaminant levels for radionuclides

Title 40 C.F.R. Section 141.66, published July 2014, is hereby incorporated herein by this reference.

#### H. Filtration and Disinfection

1. General requirements

Title 40 C.F.R. Section 141.70, published July 2014, is hereby incorporated herein by this reference.

2. Criteria for avoiding filtration

Title 40 C.F.R. Section 141.71, published July 2014, is hereby incorporated herein by this reference.

3. Disinfection

Title 40 C.F.R. Section 141.72, published July 2014, is hereby incorporated herein by this reference.

4. Filtration

Title 40 C.F.R. Section 141.73, published July 2014, is hereby incorporated herein by this reference.

i. Other Filtration Technologies

The Department may require other filtration technologies to meet the combined and/or individual filtration turbidity requirements of conventional or direct filtration, as detailed in Title 40 Code of Federal Regulations, Section 141.550-141.571. Failure to meet the turbidity requirements may result in the re-evaluation of the previously approved log-removal credit. The Department may grant exceptions to other filtration technologies that were approved, based upon higher turbidity limits.

The Department may require public water systems with other filtration technologies that include a clarification process prior to filtration to remove additional total organic carbon (TOC), similar to the requirements for conventional filtration technologies, at 40 C.F.R. 141.135, if, during any quarter, compliance sample results for Total Trihalomethanes (TTHM) and/or Haloacetic Acids (HAA5) exceed their respective MCLs. The public water system may be triggered into a minimum of 12 months of TOC removal testing (to include a source water TOC, source water alkalinity, and a finished water TOC), along with additional treatment or operational modifications, as required by the Department.

6. Analytical and monitoring requirements

Title 40 C.F.R. Section 141.74, published July 2014, is hereby incorporated herein by this reference.

7. Reporting and record keeping requirements

Title 40 C.F.R. Section 141.75, published July 2014, is hereby incorporated herein by this reference.

8. Recycle provisions

Title 40 C.F.R. Section 141.76, published July 2014, is hereby incorporated herein by this reference.

- I. Control of Lead and Copper
  - 1. General requirements

Title 40 C.F.R. Section 141.80, published July 2014, is hereby incorporated herein by this reference.

2. Applicability of corrosion control treatment steps to small, medium-size and large water systems

Title 40 C.F.R. Section 141.81, published July 2014, is hereby incorporated herein by this reference.

3. Description of corrosion control treatment requirements

Title 40 C.F.R. Section 141.82, published July 2014, is hereby incorporated herein by this reference.

4. Source water treatment requirements

Title 40 C.F.R. Section 141.83, published July 2014, is hereby incorporated herein by this reference.

5. Lead service line replacement requirements

Title 40 C.F.R. Section 141.84, published July 2014, is hereby incorporated herein by this reference.

6. Public education and supplemental monitoring requirements

Title 40 C.F.R. Section 141.85, published July 2014, is hereby incorporated herein by this reference.

7. Monitoring requirements for lead and copper in tap water

Title 40 C.F.R. Section 141.86, published July 2014, is hereby incorporated herein by this reference.

8. Monitoring requirements for water quality parameters

Title 40 C.F.R. Section 141.87, published July 2014, is hereby incorporated herein by this reference.

9. Monitoring requirements for lead and copper in source water

Title 40 C.F.R. Section 141.88, published at July 2014, is hereby incorporated herein by this reference.

10. Analytical methods

Title 40 C.F.R. Section 141.89, published July 2014, is hereby incorporated herein by this reference.

11. Reporting Requirements

Title 40 C.F.R. Section 141.90, published July 2014, is hereby incorporated herein by this reference.

12. Record keeping requirements

Title 40 C.F.R. Section 141.91, published July 2014, is hereby incorporated herein by this reference.

- J. Use of Non-Centralized Treatment Devices
  - 1. Criteria and procedures for public water systems using point-of-entry devices

Title 40 C.F.R. Section 141.100, published July 2014, is hereby incorporated herein by this reference.

2. Use of bottled water

Title 40 C.F.R. Section 141.101, published July 2014, is hereby incorporated herein by this reference.

#### K. Treatment Techniques

1. General requirements

Title 40 C.F.R. Section 141.110, published July 2014, is hereby incorporated herein by this reference.-

2. Treatment techniques for acrylamide and epichlorohydrin

Title 40 C.F.R. Section 141.111, published July 2014, is hereby incorporated herein by this reference.

- L. Disinfectant Residuals, Disinfectant Byproducts and Disinfection Byproducts Precursors
  - 1. General requirements

Title 40 C.F.R. Section 141.130, published July 2014, is hereby incorporated herein by this reference.

2. Analytical requirements

Title 40 C.F.R. Section 141.131, published\_July 2014 is hereby incorporated herein by this reference.

3. Monitoring requirements

Title 40 C.F.R. Section 141.132, published July 2014, is hereby incorporated herein by this reference.

4. Compliance requirements

Title 40 C.F.R. Section 141.133, published July 2014, is hereby incorporated herein by this reference.

5. Reporting and recordkeeping requirements

Title 40 C.F.R. Section 141.134, published July 2014, is hereby incorporated herein by this reference.

6. Treatment technique for control of disinfection byproducts (DBP) precursors

Title 40 C.F.R. Section 141.135, published July 2014, is hereby incorporated herein by this reference.

#### Subparts M-N [Reserved]

- O. Consumer Confidence Reports
  - 1. This rule requires community water systems to deliver annual consumer confidence reports to the persons served by their water system, pursuant to 22 M.R.S. § 2615-A.

Title 40 C.F.R. Parts 141 and 142, Subpart O, Appendix A, published July 2014, is hereby incorporated herein by this reference.

2. Purpose and applicability of this subpart

Title 40 C.F.R. Section 141.151, published July 2014, is hereby incorporated herein by this reference.

3. Effective dates

Title 40 C.F.R. Section 141.152, published July 2014, is hereby incorporated herein by this reference.

4. Content of the reports

Title 40 C.F.R. Section 141.153, published July 2014, is hereby incorporated herein by this reference.

5. Required additional health information

Title 40 C.F.R. Section 141.154, published July 2014, is hereby incorporated herein by this reference.

6. Report delivery and recordkeeping

Title 40 C.F.R. Section 141.155, published July 2014, is hereby incorporated herein by this reference.

- P. Enhanced Filtration and Disinfection Systems Serving 10,000 or More People
  - 1. General requirements

Title 40 C.F.R. Section 141.170, published July 2014, is hereby incorporated herein by this reference.

2. Criteria for avoiding filtration

Title 40 C.F.R. Section 141.171, published July 2014, is hereby incorporated herein by this reference.

3. Disinfection profiling and benchmarking

Title 40 C.F.R. Section 141.172, published July 2014, is hereby incorporated herein by this reference.

4. Filtration

Title 40 C.F.R. Section 141.173, published July 2014, is hereby incorporated herein by this reference.

5. Filtration sampling requirements

Title 40 C.F.R. Section 141.174, published July 2014, is hereby incorporated herein by this reference.

6. Reporting and recording keeping requirements

Title 40 C.F.R. Section 141.175, published July 2014, is hereby incorporated herein by this reference.

- Q. Public Notification of Drinking Water Violations
  - 1. General public notification requirements

Title 40 C.F.R. Section 141.201, published is hereby incorporated by this reference.

2. *Tier 1 Public Notice* – Form, manner, and frequency of notice

Title 40 C.F.R., Part 141.202, published July 2014, is hereby incorporated by this reference.

3. *Tier 2 Public Notice* – Form, manner, and frequency of notice

Title 40 C.F.R., Part 141.203, published July 2014, is hereby incorporated by this reference.

4. *Tier 3 Public Notice* – Form, manner, and frequency of notice

Title 40 C.F.R., Part 141.204, published July 2014, is hereby incorporated by this reference, except that non-community public water systems shall provide Tier 3 public notification to the public within 30 days of learning of the violation or situation. A copy of the public notification and certification statement must be provided to the Department within 10 days after providing initial or repeat notice to the public.

5. Content of the Public Notice

Title 40 C.F.R., Part 141.205, published July 2014, is hereby incorporated by this reference.

6. Notice to new billing units or new customers

Title 40 C.F.R., Part 141.206, published July 2014, is hereby incorporated by this reference.

7. Special Notice of the availability of unregulated contaminant monitoring results

Title 40 C.F.R., Part 141.207, published July 2014, is hereby incorporated by this reference.

8. Special notice for exceedance of the SMCL for fluoride

Community water systems that exceed the secondary maximum contaminant level ("SMCL") of 2 mg/l as specified in 40 C.F.R. 143.2 (determined by the last single sample taken in accordance with §141.23), but do not exceed the MCL of 4 mg/l

for fluoride (as specified in §141.62), must provide the public notice in 40 C.F.R. 141.208(c) to persons served. Public notice must be provided as soon as practical but no later than 12 months from the day the public water system learns of the exceedance. A copy of the notice must also be sent to all new billing units and new customers at the time service begins and to the Department. The public water system must repeat the notice at least annually for as long as the SMCL is exceeded, but in no case less than seven days (even if the exceedance is eliminated). On a case-by-case basis, the Department may require an initial notice sooner than 12 months and repeat notices more frequently than annually. Title 40 Code of Federal Regulations, Part 141.208, published at 65 FR 26035, May 4, 2000, is hereby incorporated by this reference.

9. Special notice for nitrate exceedances above MCL by non-community water systems (NCWS), where granted permission by the primacy agency under §141.11(d).

Title 40 C.F.R., Part 141.209, published July 2014, is hereby incorporated by this reference.

10. Notice by primacy agency on behalf of the public water system.

Title 40 C.F.R., Part 141.210, published, is hereby incorporated by this reference.

11. Special notice for repeated failure to conduct monitoring of the source water for *Cryptosporidium* and for failure to determine bin classification or mean *Cryptosporidium* level

Title 40 C.F.R., Part 141.211, published at is hereby incorporated by this reference.

12. NPDWR Violations and Other Situations Requiring Public Notice

Title 40 C.F.R., Part 141, Subpart Q, Appendix A, published at July 2014, is hereby incorporated by this reference.

13. Standard Health Effects Language for Public Notification

Title 40 C.F.R., Part 141, Subpart Q, Appendix B, published July 2014, is hereby incorporated by this reference.

14. List of Acronyms Used in Public Notification Regulation

Title 40 C.F.R., Part 141, Subpart Q, Appendix C, published July 2014, is hereby incorporated by this reference.

#### Subpart R [Reserved]

- S. Ground Water Rule
  - 1. General requirements and applicability:

Title 40 C.F.R. Section 141.400, published July 2014, is hereby incorporated herein by this reference.

2. Sanitary surveys for ground water systems:

Title 40 C.F.R. Section 141.401, published is hereby incorporated herein by this reference.

3. Ground water source microbial monitoring and analytical methods:

Title 40 C.F.R. Section 141.402, published July 2014, is hereby incorporated herein by this reference.

4. Treatment technique requirements for ground water systems:

Title 40 C.F.R. Section 141.403, published July 2014, is hereby incorporated herein by this reference.

5. Treatment technique violations for ground water systems:

Title 40 C.F.R. Section 141.404, published July 2014, is hereby incorporated herein by this reference.

6. Reporting and recordkeeping for ground water systems:

Title 40 C.F.R., Section 141.405, published July 2014, is hereby incorporated herein by this reference.

- T. Enhanced Filtration and Disinfection Systems Serving Fewer Than 10,000 People
  - 1. General requirements

Title 40 C.F.R. Section 141.500, published July 2014, is hereby incorporated herein by this reference.

2. Who is subject to the requirements of subpart T?

Title 40 C.F.R. Section 141.501, published July 2014, is hereby incorporated herein by this reference.

3. When must my system comply with these requirements?

Title 40 C.F.R. Section 141.502, published July 2014, is hereby incorporated herein by this reference.

4. What does subpart T require?

Title 40 C.F.R. Section 141.503, published July 2014, is hereby incorporated herein by this reference.

5. Is my system subject to the new finished water reservoir requirements?

Title 40 C.F.R. Section 141.510, published July 2014, is hereby incorporated herein by this reference.

6. What is required of new finished water reservoirs?

Title 40 C.F.R. Section 141.511, published is hereby incorporated herein by this reference.

7. Is my system subject to the updated watershed control requirements?

Title 40 C.F.R. Section 141.520, published July 2014, is hereby incorporated herein by this reference.

8. What update watershed control requirements must my unfiltered system implement to continue to avoid filtration?

Title 40 C.F.R. Section 141.521, published July 2014, is hereby incorporated herein by this reference.

9. How does the State determine whether my system's watershed control requirements are adequate?

Title 40 C.F.R. Section 141.522, published July 2014, is hereby incorporated herein by this reference.

10. What is a disinfection profile and who must develop one?

Title 40 C.F.R. Section 141.530, published July 2014, is hereby incorporated herein by this reference.

11. What criteria must a State use to determine that a profile is unnecessary?

Title 40 C.F.R. Section 141.531, published July 2014, is hereby incorporated herein by this reference.

12. How does my system develop a disinfection profile and when must it begin?

Title 40 C.F.R. Section 141.532, published July 2014, is hereby incorporated herein by this reference.

13. What data must my system collect to calculate a disinfection profile?

Title 40 C.F.R. Section 141.533, published July 2014, is hereby incorporated herein by this reference.

14. How does my system use this data to calculate an inactivation ratio?

Title 40 C.F.R. Section 141.534, published July 2014, is hereby incorporated herein by this reference.

15. What if my system uses chloramines, ozone, or chlorine dioxide for primary disinfection?

Title 40 C.F.R. Section 141.535, published July 2014, is hereby incorporated herein by this reference.

16. My system has developed an inactivation ratio; what must we do now?

Title 40 C.F.R. Section 141.536, published July 2014, is hereby incorporated herein by this reference.

17. Who has to develop a disinfection benchmark?

Title 40 C.F.R. Section 141.540, published July 2014, is hereby incorporated herein by this reference.

18. What are significant changes to disinfection practice?

Title 40 C.F.R. Section 141.541, published July 2014, is hereby incorporated herein by this reference.

19. What must my system do if we are considering a significant change to disinfection practices?

Title 40 C.F.R. Section 141.542, published July 2014, is hereby incorporated herein by this reference.

20. How is the disinfection benchmark calculated?

Title 40 C.F.R. Section 141.543, published July 2014, is hereby incorporated herein by this reference.

21. What if my system uses chloramines, ozone, or chlorine dioxide for primary disinfection?

Title 40 C.F.R. Section 141.544, published July 2014, is hereby incorporated herein by this reference.

22. Is my system required to meet subpart T combined filter effluent turbidity limits?

Title 40 C.F.R. Section 141.550, published July 2014, is hereby incorporated herein by this reference.

23. What strengthened combined filter effluent turbidity limits must my system meet?

Title 40 C.F.R. Section 141.551, published July 2014, is hereby incorporated herein by this reference.

24. My system consists of "alternative filtration" and is required to conduct a demonstration - what is required of my system and how does the State establish my turbidity limits?

Title 40 C.F.R. Section 141.552, published July 2014, is hereby incorporated herein by this reference.

25. My system practices lime softening – is there any special provision regarding my combined filter effluent?

Title 40 C.F.R. Section 141.553, published July 2014, is hereby incorporated herein by this reference.

26. Is my system subject to individual filter turbidity requirements?

Title 40 C.F.R. Section 141.560, published July 2014, is hereby incorporated herein by this reference.

27. What happens if my system's turbidity monitoring equipment fails?

Title 40 C.F.R. Section 141.561, published July 2014, is hereby incorporated herein by this reference.

28. My system only has 2 or fewer filters – is there any special provision regarding individual filter turbidity monitoring?

Title 40 C.F.R. Section 141.562, published July 2014, is hereby incorporated herein by this reference.

29. What follow-up action is my system required to take based on continuous turbidity monitoring?

Title 40 C.F.R. Section 141.563, published July 2014, is hereby incorporated herein by this reference.

30. My system practices lime softening – is there any special provision regarding my individual filter turbidity monitoring?

Title 40 C.F.R. Section 141.564, published July 2014, is hereby incorporated herein by this reference.

31. What does subpart T require that systems report to the State?

Title 40 C.F.R. Section 141.570, published July 2014, is hereby incorporated herein by this reference.

32. What records does subpart T require my system to keep?

Title 40 C.F.R. Section 141.571, published July 2014, is hereby incorporated herein by this reference.

- U. Initial Distribution System Evaluations
  - 1. General Requirements:

Title 40 C.F.R. Section 141.600, published July 2014, is hereby incorporated herein by the reference.

2. Standard Monitoring:

Title 40 C.F.R. Section 141.601, published July 2014, is hereby incorporated herein by the reference.

3. System Specific Studies:

Title 40 C.F.R. Section 141.602, published July 2014, is hereby incorporated herein by the reference.

4. 40/30 Certification:

Title 40 C.F.R. Section 141.603, published July 2014, is hereby incorporated herein by the reference.

5. Very Small System Waivers:

Title 40 C.F.R. Section 141.604, published July 2014, is hereby incorporated herein by the reference.

6. Subpart V Compliance Monitoring Location Recommendations:

Title 40 C.F.R. Section 141.605, published July 2014, is hereby incorporated herein by the reference.

- V. Stage 2 Disinfection Byproducts Requirements:
  - 1. General Requirements:

Title 40 C.F.R. Section 141.620, published July 2014, is hereby incorporated herein by this reference.

2. Routine Monitoring:

Title 40 C.F.R. Section 141.621, published July 2014, is hereby incorporated herein by this reference.

3. Subpart V Monitoring Plan:

Title 40 C.F.R. Section 141.622, published July 2014, is hereby incorporated herein by this reference.

4. Reduced Monitoring:

Title 40 C.F.R. Section 141.623, published July 2014, is hereby incorporated herein by this reference.

- 5. Additional Requirements for Consecutive Systems: Title 40 C.F.R. Section 141.624, published July 2014, is hereby incorporated herein by this reference.
- Conditions Requiring Increased Monitoring: Title 40 C.F.R. Section 141.625, published at July 2014, is hereby incorporated herein by this reference.
- 7. Operational Evaluation Levels:

Title 40 C.F.R. Section 141.626, published July 2014, is hereby incorporated herein by this reference.

8. Requirements for Remaining on Reduced TTHM and HAA5 Monitoring Based on Subpart L Results:

Title 40 C.F.R. Section 141.627, published July 2014, is hereby incorporated herein by this reference.

9. Requirements for Remaining on Increased TTHM and HAA5 Monitoring Based on Subpart L Results:

Title 40 C.F.R. Section 141.628, published July 2014, is hereby incorporated herein by this reference.

10. Reporting and Recordkeeping Requirements:

Title 40 C.F.R. Section 141.629, published July 2014, is hereby incorporated herein by this reference.

- W. Enhanced Treatment for Cryptosporidium:
  - 1. General Requirements:

Title 40 C.F.R. Section 141.700, published July 2014, is hereby incorporated herein by this reference.

2. Source water monitoring requirements:

Title 40 C.F.R. Sections 141.701 through 141.707, published July 2014, is hereby incorporated herein by this reference.

3. Disinfection Profiling and Benchmarking Requirements:

Title 40 C.F.R. Sections 141.708 and 141.709, published July 2014, is hereby incorporated herein by this reference.

4. Treatment Technique Requirements:

Title 40 C.F.R. Sections 141.710 through 141.714, published July 2014, is hereby incorporated herein by this reference.

5. Requirements for Microbial Toolbox Components:

Title 40 C.F.R. Sections 141.715 through 141.720, published July 2014, is hereby incorporated herein by this reference.

6. Reporting and Recordkeeping Requirements:

Title 40 C.F.R. Sections 141.721 and 141.722, published July 2014, is hereby incorporated herein by this reference.

7. Requirements for Sanitary Surveys Performed by EPA:

Title 40 C.F.R. Section 141.723, published July 2014, is hereby incorporated herein by this reference.

- X. [Reserved]
- Y. Revised Total Coliform Rule
  - 1. General:

Title 40 C.F.R. Section 141.851, published July 2014, is hereby incorporated herein by this reference.

2. Analytical Methods and Laboratory Certification

Title 40 C.F.R. Section 141.852, published July 2014, is hereby incorporated herein by this reference.

3. General Monitoring Requirements for All Public Water Systems:

Title 40 C.F.R. Section 141.853, published July 2014, is hereby incorporated herein by this reference.

4. Routine Monitoring Requirements for Non-Community Water Systems Serving 1,000 or Fewer People Using Only Ground Water:

Title 40 C.F.R. Section 141.854, published July 2014, is hereby incorporated herein by this reference.

5. Routine Monitoring Requirements for Community Water Systems Serving 1,000 or Fewer People Using Only Ground Water:

Title 40 C.F.R. Section 141.855, published July 2014, is hereby incorporated herein by this reference.

6. Routine Monitoring Requirements for Subpart H Public Water Systems Serving 1,000 or Fewer People:

Title 40 C.F.R. Section 141.856, published July 2014, is hereby incorporated herein by this reference.

7. Routine Monitoring Requirements for Public Water Systems Serving More Than 1,000 People:

Title 40 C.F.R. Section 141.857, published July 2014, is hereby incorporated herein by this reference.

8. Repeat Monitoring and *E. coli* Requirements:

Title 40 C.F.R. Section 141.858, published July 2014, is hereby incorporated herein by this reference.

9. Coliform Treatment Technique Triggers and Assessment Requirements for Protection Against Potential Fecal Contamination:

Title 40 C.F.R. Section 141.859, published July 2014, is hereby incorporated herein by this reference.

10. Violations:

Title 40 C.F.R. Section 141.860, published July 2014, is hereby incorporated herein by this reference.

11. Reporting and Recordkeeping:

Title 40 C.F.R. Section 141.861, published July 2014, is hereby incorporated herein by this reference.

#### SECTION 8: NATIONAL PRIMARY DRINKING WATER REGULATIONS – IMPLEMENTATION (40 C.F.R. – PART 142)

#### A. General Provisions

1. Applicability

Title 40 C.F.R. Section 142.1, published July 2014, is hereby incorporated herein by this reference.

2. Definitions

Title 40 C.F.R. Section 142.2, published July 2014, is hereby incorporated herein by this reference, with the exceptions, additions or changes as set forth below.

"Act" means the Maine Water for Human Consumption Act at 22 Maine Revised Statutes, Chapter 601.

"Administrator" means the Commissioner of the Department of Health and Human Services or the designated representative thereof.

"Agency" means the Department of Health and Human Services.

"Indian Tribe" refers to the Department of Health and Human Services.

"Public water system" means a public water system as defined in Section 2 of these rules.

"State" means the State of Maine.

3. Scope

Title 40 C.F.R. Section 142.3, published July 2014, is hereby incorporated herein by this reference.

4. State and local authority

Title 40 C.F.R. Section 142.4, published July 2014, is hereby incorporated herein by this reference.

- B. Primary Enforcement Responsibility
  - 1. Requirements for a determination of primary enforcement responsibility

Title 40 C.F.R. Section 142.10, published July 2014, is hereby incorporated herein by this reference.

2. Initial determination of primary enforcement responsibility

Title 40 C.F.R. Section 142.11 published July 2014, is hereby incorporated herein by this reference.

3. Revision of State programs

Title 40 C.F.R. Section 142.12 published July 2014, is hereby incorporated herein by this reference.

4. Public hearing

Title 40 C.F.R. Section 142.13, published July 2014, is hereby incorporated herein by this reference.

5. Records kept by States

Title 40 C.F.R. Section 142.14 published July 2014, is hereby incorporated herein by this reference.

6. Reports by States

Title 40 C.F.R. Section 142.15 published July 2014, is hereby incorporated herein by this reference.

7. Special primacy requirements

Title 40 C.F.R. Section 142.16, published July 2014, is hereby incorporated herein by this reference.

8. Review of State programs and procedures for withdrawal of approved primacy programs

Title 40 C.F.R. Section 142.17, published July 2014, is hereby incorporated herein by this reference.

9. EPA review of State monitoring determinations

Title 40 C.F.R. Section 142.18, published July 2014, is hereby incorporated herein by this reference.

10. EPA review of State implementation of national primary drinking water regulations for lead and copper

Title 40 C.F.R. Section 142.19, published July 2014, is hereby incorporated herein by this reference.

- C. Review of State-Issued Variances and Exemptions
  - 1. State-issued variances and exemptions

Title 40 C.F.R. Section 142.20, published July 2014, is hereby incorporated herein by this reference.

2. State consideration of a variance or exemption request

Title 40 C.F.R. Section 142.21, published July 2014, is hereby incorporated herein by this reference.

3. Review of State variances, exemptions and schedules.

Title 40 C.F.R. Section 142.22, published July 2014, is hereby incorporated herein by this reference.

4. Notice to State

Title 40 C.F.R. Section 142.23, published July 2014, is hereby incorporated herein by this reference.

5. Administrator's rescission

Title 40 C.F.R. Section 142.24, published at July 2014, is hereby incorporated herein by this reference.

- D. Federal Enforcement
  - 1. Failure by State to assure enforcement

Title 40 C.F.R. Section 142.30, published July 2014, is hereby incorporated herein by this reference.

- 2. *Reserved*
- 3. Petition for public hearing

Title 40 C.F.R. Section 142.32, published July 2014, is hereby incorporated herein by this reference.

4. Public hearing

Title 40 C.F.R. Section 142.33, published July 2014, is hereby incorporated herein by this reference.

5. Entry and inspection of public water systems

Title 40 C.F.R. Section 142.34, published July 2014, is hereby incorporated herein by this reference.

- E. Variances Issued By the Administrator Under Section 1415 (a) of the Act
  - 1. Requirements for a variance

Title 40 C.F.R. Section 142.40, published July 2014, is hereby incorporated herein by this reference.

2. Variance Request

Title 40 C.F.R. Section 142.41, published July 2014, is hereby incorporated herein by this reference.

3. Consideration of a variance request

Title 40 C.F.R. Section 142.42, published July 2014, is hereby incorporated herein by this reference.

4. Disposition of a variance request

Title 40 C.F.R. Section 142.43, published July 2014, is hereby incorporated herein by this reference.

5. Public hearings on variances and schedules

Title 40 C.F.R. Section 142.44, published July 2014, is hereby incorporated herein by this reference.

6. Action after hearing

Title 40 C.F.R. Section 142.45, published July 2014, is hereby incorporated herein by this reference.

7. Alternative treatment techniques

Title 40 C.F.R. Section 142.46, published July 2014, is hereby incorporated herein by this reference.

- F. Exemptions Issued By the Administrator
  - 1. Requirements for an exemption

Title 40 C.F.R. Section 142.50, published July 2014, is hereby incorporated herein by this reference.

2. Exemption request

Title 40 C.F.R. Section 142.51, published July 2014, is hereby incorporated herein by this reference.

3. Consideration of an exemption request

Title 40 C.F.R. Section 142.52, published July 2014, is hereby incorporated herein by this reference.

4. Disposition of an exemption request

Title 40 C.F.R. Section 142.53, published July 2014, is hereby incorporated herein by this reference.

5. Public hearings on exemption schedules

Title 40 C.F.R. Section 142.54, published July 2014, is hereby incorporated herein by this reference.

6. Final schedule

Title 40 C.F.R. Section 142.55, published July 2014, is hereby incorporated herein by this reference.

7. Extension of date for compliance

Title 40 C.F.R. Section 142.56, published July 2014, is hereby incorporated herein by this reference.

8. Bottled water, point-of-use, and point-of-entry devices

Title 40 C.F.R. Section 142.57, published July 2014, is hereby incorporated herein by this reference.

- G. Identification of Best Technology, Treatment Techniques or Other Means Generally Available
  - 1. Variances from the maximum contaminant level for total trihalomethanes

Title 40 C.F.R. Section 142.60, published July 2014 is hereby incorporated herein by this reference.

2. Variances from the maximum contaminant level for fluoride

Title 40 C.F.R. Section 142.61, published July 2014, is hereby incorporated herein by this reference.

3. Variances and exemptions from the maximum contaminant levels for organic and inorganic chemicals and exemptions from the treatment technique for lead and copper

Title 40 C.F.R. Section 142.62, published July 2014, is hereby incorporated herein by this reference.

4. Variances and exemptions from the maximum contaminant level for total coliform

Title 40 C.F.R. Section 142.63, published July 2014, is hereby incorporated herein by this reference.

5. Variances and exemptions from the requirements of Part 141, Subpart H - Filtration and Disinfection

Title 40 C.F.R. Section 142.64, published July 2014, is hereby incorporated herein by this reference.

6. Variances and exemptions from the maximum contaminant levels for radionuclides

Title 40 C.F.R. Section 142.65, published July 2014, is hereby incorporated herein by this reference.

#### H. Indian Tribes

1. Requirements for Tribal Eligibility

Title 40 C.F.R. Section 142.72, published July 2014, is hereby incorporated herein by this reference.

2. Request by an Indian Tribe for a determination of treatment as a State

Title 40 C.F.R. Section 142.76, published July 2014, is hereby incorporated herein by this reference.

3. Procedure for processing an Indian Tribe's application for treatment as a State

Title 40 C.F.R. Section 142.78, published July 2014, is hereby incorporated herein by this reference.

- I. Administrator's Review of State Decisions That Implement Criteria Under Which Filtration is Required
  - 1. Review Procedures

Title 40 C.F.R. Section 142.80, published July 2014, is hereby incorporated herein by this reference.

2. Notice to the State

Title 40 C.F.R. Section 142.81, published July 2014, is hereby incorporated herein by this reference.

- J. Reserved
- K. Variances For Small Systems
  - 1. What is a small system variance?

Title 40 C.F.R. Section 142.301, published July 2014, is hereby incorporated herein by this reference.

2. Who can issue a small system variance?

Title 40 C.F.R. Section 142.302, published July 2014, is hereby incorporated herein by this reference.

3. Which size public water systems can receive a small system variance?

Title 40 C.F.R. Section 142.303, published July 2014, is hereby incorporated herein by this reference.

4. For which of the regulatory requirements is a small system variance available?

Title 40 C.F.R. Section 142.304, published July 2014, is hereby incorporated herein by this reference.

5. When can a small system variance be granted by a State?

Title 40 C.F.R. Section 142.305, published July 2014, is hereby incorporated herein by this reference.

6. What are the responsibilities of the public water system, State and the Administrator in ensuring that sufficient information is available and able for evaluation of a small system variance application?

Title 40 C.F.R. Section 142.306, published July 2014, is hereby incorporated herein by this reference.

7. What terms and conditions must be included in a small system variance?

Title 40 C.F.R. Section 142.307, published July 2014, is hereby incorporated herein by this reference.

8. What public notice is required before a State or the Administrator proposes to issue a small system variance?

Title 40 C.F.R. Section 142.308, published July 2014, is hereby incorporated herein by this reference.

9. What are the public meeting requirements associated with the proposal of a small system variance?

Title 40 C.F.R. Section 142.309, published July 2014, is hereby incorporated herein by this reference.

10. How can a person served by the public water system obtain EPA review of a State proposed small system variance?

Title 40 C.F.R. Section 142.310, published July 2014, is hereby incorporated herein by this reference.

11. What procedures allow the Administrator to object to a proposed small system variance or overturn a granted small system variance for a public water system serving 3,300 or fewer persons?

Title 40 C.F.R. Section 142.311, published July 2014, is hereby incorporated herein by this reference.

12. What EPA action is necessary when a State proposes to grant a small system variance to a public water system serving a population of more than 3,300 and fewer than 10,000 persons?

Title 40 C.F.R. Section 142.312, published July 2014, is hereby incorporated herein by this reference.

13. How will the Administrator review a State's program under this subpart?

Title 40 C.F.R. Section 142.313, published July 2014, is hereby incorporated herein by this reference.

# SECTION 9: NATIONAL SECONDARY DRINKING WATER REGULATIONS (40 C.F.R., PART 143)

#### A. General Provisions

1. Purpose

Title 40 C.F.R. Section 143.1, published July 2014, is hereby incorporated herein by this reference.

2. Definitions

Title 40 C.F.R. Section 143.2, published at July 2014, is hereby incorporated herein by this reference with the exceptions, additions or changes set forth below.

"Administrator" means the Commissioner of the Department of Health and Human Services or the designated representative thereof.

"Public water system" means a public water system as defined in Section 2 of these rules.

"State" means the State of Maine.

3. Secondary maximum contaminant levels

Title 40 C.F.R. Section 143.3, published July 2014, is hereby incorporated herein by this reference.

4. Monitoring

Title 40 C.F.R. Section 143.4, published July 2014, is hereby incorporated herein by this reference.

#### SECTION 10: LABORATORY CERTIFICATION

All laboratories performing water testing for compliance purposes must be certified under the Maine Comprehensive Environmental Laboratory Certification Rules, at 10-144 CMR 263, authorized under 22 M.R.S., Chapter 157-A.

#### SECTION 11: EMERGENCY RESPONSE PLANS AND NOTIFICATION PROCEDURES FOR PUBLIC WATER SYSTEMS

Title IV of the Public Health Security and Bioterrorism Response Act of 2002 (Bioterrorism Act), which amends the Safe Drinking Water Act, requires all public water systems serving more than 3,300 persons to complete Vulnerability Assessments and develop or revise Emergency Response Plans.

All public water systems in Maine should prepare and implement or update existing emergency and security plans to include foreseeable and unforeseeable disturbance relating to production and supply of safe drinking water.

- A. Emergency and Security Planning
  - 1. Emergency situations include, but are not limited to the following situations:
    - a. A failure or significant interruption in the production of drinking water;
    - b. A natural disaster that disrupts the water supply;
    - c. A chemical spill or biological substance introduced into the water source, that increases the potential for contamination;
    - d. The failure of cross connections;
    - e. Intentional physical intrusions of the water system;
    - f. Any other activity that disturbs the production and supply of safe drinking water.
  - 2. All public water systems serving a population of more than 3,300 persons in Maine that are required to prepare and implement or update an existing emergency response plan (ERP) must make the plan available for inspection by Department staff upon request.
  - 3. The ERP shall include, but not by way of limitation, the following information to be utilized in the event of a terrorist or other intentional act perpetrated against the public water system:
    - a. Actions, plans, procedures and equipment to be utilized to lessen the impact of the intentional act;

b.Emergency contact information;

c. Any other information deemed necessary to deal with the emergency.

- B. Security Breaches and Emergency Notification Requirements
  - 1. All public water systems reporting security breaches, tampering events or other emergencies affecting water system components to law enforcement must report the incidents to the Department.
  - 2. All Public Utilities Commission (PUC)-regulated water systems reporting securityrelated incidents to law enforcement agencies must report such incidents to both the Department and the PUC.
  - 3. All public water systems experiencing emergency events involving biological or chemical contamination of water system components must report said events to the Department.

#### **EFFECTIVE DATE:**

January 13, 1980

#### **AMENDED:**

April 20, 1980 June 17, 1981 November 22, 1983 October 29, 1991 January 2, 1993 June 8, 1994 February 6, 1995 August 26, 1995

#### **ELECTRONIC CONVERSION:**

May 5, 1996

#### **AMENDED:**

June 25, 1998 - Section 7 (C,D,G) June 19, 1999 - Sections 2 (APA, CAPACITY), 3 (A,D,E) June 20, 2001 - Section 1-A, Sections 7 and 8 June 20, 2001 October 24, 2001 November 4, 2002 August 18, 2003 – Sections 1, 1-B, 2, 3, 4, 6, 11 November 2, 2004 September 17, 2006 March 12, 2008 November 30, 2009 February 21, 2012 May 9, 2016

# **APPENDIX** A

#### MAXIMUM CONTAMINANT LEVELS FOR BOTTLED WATER FACILITIES

Untreated water samples must be analyzed, (prior to the Department's source approval), by a laboratory certified by the State of Maine, for the following contaminants. These contaminants and corresponding maximum contaminant levels and maximum exposure guidelines are regulated by the Department.

#### 1. MICROORGANISMS:

CONTAMINANT	MAXIMUM CONTAMINANT LEVEL (MCL)/ ACTION LEVEL (AL) / TREATMENT TECHNIQUE (TT)
Total Coliform ( <i>E. coli</i> required if Total Coliform results are positive)	Absent/Present
Turbidity	TT: Conventional/Direct Filtration - 1NTU ( $\leq 0.3$ NTU or 95% of samples/ month) Other Filtration - 5 NTU

### 2. INORGANIC CHEMICALS:

CONTAMINANT	MCL / AL / TT
Antimony	0.006 milligrams (mg)/liter (L)
Arsenic	0.010 mg/L
Barium	2 mg/L
Beryllium	0.004 mg/L
Cadmium	0.005 mg/L
Chromium (Total)	0.1 mg/L
Copper	AL: 1.3 mg/L
Fluoride	4.0 mg/L
Lead	AL: 0.015 mg/L
Mercury	0.002 mg/L
Nitrates (Measured as Nitrogen)	10 mg/L
Nitrites (Measured as Nitrogen)	1 mg/L
Selenium	0.05 mg/L
Thallium	0.002 mg/L

CONTAMINANT	MCL / AL / TREATMENT TECHNIQUE
Acrylamide	TT: 0.05% dosed at 1 mg/L (or equivalent)
Alachlor	0.002 mg/L
Atrazine	0.003 mg/L
Benzene	0.005 mg/L
Benzo(a)pyrene (PAH's)	0.0002 mg/L
Carbofuran	0.04 mg/L
Carbon Tetrachloride	0.005 mg/L
Chlordane	0.002 mg/L
Chlorobenzene	0.1 mg/L
2, 4-D	0.07 mg/L
Dalapon	0.2 mg/L
1, 2-Dibromo-3- chloropropane (DBCP)	0.0002 mg/L
o-Dichlorobenzene	0.6 mg/L
p-Dichlorobenzene	0.075 mg/L
1,2-Dichloroethane	0.005 mg/L
1,1-Dichloroethylene	0.007 mg/L
Cis-1,2-Dichloroethylene	0.07 mg/L
Trans-1,2-Dichloroethylene	0.1 mg/L
Dichloromethane	0.005 mg/L
1,2-Dichloropropane	0.005 mg/L
Di (2-ethylhexyl) adipate	0.4 mg/L
Di (2-ethylhexyl) phthalate	0.006 mg/L
Dinoseb	0.007 mg/L
Dioxin (2,3,7,8-TCDD)	0.00000003 mg/L
Diquat	0.02 mg/L
Endothall	0.1 mg/L
Endrin	0.002 mg/L
Epichlorohydrin	Treatment Technique: 0.01% dosed at 20 mg/L
1 5	(or equivalent)
Ethylbenzene	0.7 mg/L
Ethylene dibromide	0.00005 mg/L
Glyphosate	0.7 mg/L
Heptachlor	0.0004 mg/L
Heptachlor epoxide	0.0002 mg/L
Hexachlorobenzene	0.001 mg/L
Hexachlorocyclopentadiene	0.05 mg/L
Hexazanone (Velpar)	200 parts per billion (ppb)
Lindane	0.0002 mg/L
Methoxychlor	0.04 mg/L
MTBE	35 ppb
Oxamyl (Vydate)	0.2 mg/L
Polychlorinated biphenyls (PCBs)	

## 3. ORGANIC CHEMICALS:

CONTAMINANT	MCL / AL / TREATMENT TECHNIQUE
Pentachlorophenol	0.001 mg/L
Picloram	0.5 mg/L
Simazine	0.004 mg/L
Styrene	0.1 mg/L
Toluene	1 mg/L
Toxaphene	0.003 mg/L
2,4,5 – TP (Silvex)	0.05 mg/L
1,2,4- Trichlorobenzene	0.07 mg/L
1,1,1-Trichloroethane	0.2 mg/L
1,1,2-Trichloroethane	0.005 mg/L
Trichloroethylene	0.005 mg/L
Vinyl chloride	0.002 mg/L
Xylenes (total)	10 mg/L

## 4. RADIONUCLIDES:

CONTAMINANT	MAXIMUM CONTAMINANT LEVEL ACTION LEVEL / TREATMENT TECHNIQUE
Gross Alpha	15 Picocuries/Liter (pCi/L)
Uranium	30 ug/L
Radium (Combined)	5 pCi/L
Radon	4,000 Pci/L

2. The Department may modify the list of required water quality test parameters prior to approval, if it determines that the testing schedule required will insure that the well can produce safe and potable water, or, otherwise, for the protection of public health.