

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 7 WASTEWATER AND WATER SUPPLY FACILITIES
PART 10 DRINKING WATER

20.7.10.1 ISSUING AGENCY: Environmental Improvement Board.
[20.7.10.1 NMAC - Rp 20 NMAC 7.1.I.1, 12/04/2002]

20.7.10.2 SCOPE: All persons who own or operate a public water system or for sections 200 and 201, any persons constructing a public water system project. This part shall apply to each public water system, unless the public water system meets all of the following conditions: (a) it consists of only distribution and storage facilities (and does not have any collection and treatment facilities); (b) it obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply; (c) it does not sell water to any person; and (d) it is not a carrier which conveys passengers in interstate commerce.
[20.7.10.2 NMAC - Rp 20 NMAC 7.1.I.2, 12/04/2002; A, xx/xx/2012]

20.7.10.3 STATUTORY AUTHORITY: NMSA 1978, Sections ~~[74-1-8]~~74-1-6, 74-1-8, 74-1-10, 74-1-13 and 74-1-13.1.
[20.7.10.3 NMAC - Rp 20 NMAC 7.1.I.3, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]

20.7.10.4 DURATION: Permanent.
[20.7.10.4 NMAC - Rp 20 NMAC 7.1.I.4, 12/04/2002]

20.7.10.5 EFFECTIVE DATE: December 4, 2002, except where a later effective date is indicated in the history note at the end of a section.
[20.7.10.5 NMAC - Rp 20 NMAC 7.1.I.5, 12/04/2002; A, 04/16/2007]

20.7.10.6 OBJECTIVE: The objective of Part 10 of Chapter 7 is to establish regulations for public water systems.
[20.7.10.6 NMAC - Rp 20 NMAC 7.1.I.6, 12/04/2002]

20.7.10.7 DEFINITIONS: In addition to ~~the~~any other terms defined in 40 CFR Parts 141 and 143, the following terms, as used in this part shall have the following meanings.

A. ~~["As built drawings" means construction drawings that show details of work as originally planned plus modifications and deviations to reflect actual construction.]~~"Definitions that begin with the letter "A."
"Appurtenances" include machinery, appliances, structures and other parts of the main structure necessary to allow the main structure to operate as intended, but not considered part of the main structure.

B. "Definitions that begin with the letter "B."
"Bag filters" has the meaning defined in 40 CFR Part 141.
"Best available technology or BAT" has the meaning defined in 40 CFR Part 141.
"Bureau" means the drinking water bureau of the New Mexico environment department.

C. "Definitions that begin with the letter "C."
"Cartridge filters" has the meaning defined in 40 CFR Part 141.
"CFR" means the code of federal regulations.

C. "Challenge test" means a study conducted to determine the removal efficiency (i.e., log removal value (LRV)) of a membrane material for a particular organism, particulate, or surrogate.
"Community water system" has the meaning defined in 40 CFR Part 141.
"Consecutive system" has the meaning defined in 40 CFR Part 141.
"Contaminant" has the meaning defined in 40 CFR Part 141.
"Cross-connection" means any unprotected actual or potential connection or structural arrangement between a public water system and any other source or system through which it is possible to introduce into any part of the public water system any contaminant or non-potable substance.

D. "CT or CTcalc" has the meaning defined in 40 CFR Part 141.

D. "Definitions that begin with the letter "D."
"Department" means the New Mexico environment department.
"Disinfectant" has the meaning defined in 40 CFR Part 141.
"Disinfectant contact time ("T" in CT calculations) " has the meaning defined in 40 CFR Part 141.

"Disinfection" has the meaning defined in 40 CFR Part 141.

E. "Definitions that begin with the letter "E."

F. "Definitions that begin with the letter "F."

"Filtration" has the meaning defined in 40 CFR Part 141.

"Finished water" has the meaning defined in 40 CFR Part 141.

G. "Definitions that begin with the letter "G."

"Ground water under the direct influence of surface water (GWUDI)" has the meaning defined in 40 CFR Part 141.

"Guidance document" means any manual or other document developed or adopted by the department for official use to provide general direction, instruction or advice to department employees in determinations regarding application of or compliance with regulations.

F. "determining generally acceptable standards for construction and operation of public water systems.

H. "Definitions that begin with the letter "H."

"Haloacetic acids (five) (HAA5)" has the meaning defined in 40 CFR Part 141.

"Human consumption" includes drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene. The term "bathing" means use of the water for personal hygiene purposes. The term "bathing" does not refer to situations such as (1) swimming in an open canal or (2) incidental, casual contact with water from an open canal in connection with outdoor activities such as agricultural work, canal maintenance, or lawn and garden care.

I. "Definitions that begin with the letter "I."

"Inactivation ratio" with respect to viruses, is the ratio that quantifies inactivation of viruses. The sum of the virus inactivation ratios, or total virus inactivation ratio shown as $\Sigma(CT_{calc})/(CT_{99.99})$. "CT or CT_{calc}" is the product of "residual disinfectant concentration" (C) in mg/l determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T". If a public water system applies disinfectants at more than one point prior to the first customer, it must determine the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or "total inactivation ratio." In determining the total inactivation ratio, the public water system must determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before any subsequent disinfection application point(s). "CT_{99.99}" is the CT value required for 99.99 percent (4-log) inactivation of viruses. CT_{99.99} for a variety of disinfectants and conditions appears in Tables D-7, D-9, D-11, D-13 and D-14 in the EPA Handbook for Optimizing Water Treatment Plant Performance Using the Composite Correction Program.

J. "Definitions that begin with the letter "J."

K. "Definitions that begin with the letter "K."

L. "Definitions that begin with the letter "L."

M. "Definitions that begin with the letter "M."

"Maximum contaminant level" has the meaning defined in 40 CFR Part 141.

"Membrane filtration" has the meaning defined in 40 CFR Part 141.

["Modification" means the replacing, changing, installing, adding to, or construction of a component of an existing public water system to increase or decrease the system's capacity to draw or supply water or to improve its performance or service life. Neither routine maintenance nor the replacement of electrical or mechanical equipment is a modification for purposes of this part.] "Modification" means a change, installation, addition, rehabilitation, or construction of a component of an existing public water system to increase or decrease the system's capability to draw or supply water. For the purposes of this part, "modification" does not include routine maintenance.

N. "Definitions that begin with the letter "N."

"Non-community water system" has the meaning defined in 40 CFR Part 141.

"Non-public water source" means a water source that is not regulated as a public water source.

~~[G. "Non public water system" means a system for the provision of water for human consumption for domestic purposes, if such system does not have at least fifteen service connections and does not regularly serve an average of twenty five individuals at least sixty days out of the year.]~~ "Non-public water system" means a water system that does not meet the definition of a public water system as defined in 40 CFR Part 141.

H. "Non-transient non-community water system or NTNCWS" has the meaning defined in 40 CFR Part 141.

O. "Definitions that begin with the letter "O."

P. "Definitions that begin with the letter "P."

"Performance demonstration" means documentation that proves the efficacy of a treatment technology.

"Person" has the meaning defined in 40 CFR Part 141.

"Pilot study" is a specific type of performance demonstration in which the efficiency of a treatment system is tested by using a full scale model of the treatment system.

"Plans and specifications" means the technical design drawings and precise standards of performance for construction work, materials and manufactured products certified by a registered professional engineer on behalf of the owner or operator of a public water system.

"Point-of-entry treatment device (POE)" has the meaning defined in 40 CFR Part 141.

"Point-of-use treatment device (POU)" has the meaning defined in 40 CFR Part 141.

"Pressure decay direct integrity test" means a physical test applied to a membrane where the response to a breach is measured as pressure loss over time. The measured response must be converted to a log removal value. Equation 4.9 of the USEPA membrane filtration guidance manual shall be used to make this conversion. This equation is a specialized form of the general equation in 40 CFR 141.719(b)(3)(iii)(A).

"Public water system" has the meaning defined in 40 CFR Part 141.

"Public water system project" or "project" means the construction of a new public water system, modification to an existing public water system, or conversion of a non-public water system to a public water system.

Q. "Definitions that begin with the letter "Q."

R. "Definitions that begin with the letter "R."

~~**I.** "Record drawings" means as built drawings certified by a registered professional engineer on behalf of a public water system.~~
"Record drawings" means drawings that show detail or work as originally planned plus modifications and deviations to reflect actual construction, certified by a registered professional engineer on behalf of the owner or operator of a public water system.

~~**J.** "Regulated contaminant" means a contaminant for which an action level, maximum contaminant level or treatment technique is provided in 40 CFR Part 141.~~

"Residual disinfectant concentration ("C" in CT calculations) " has the meaning defined in 40 CFR Part 141.

"Routine maintenance" includes activities associated with regularly scheduled and general upkeep of a building, equipment, machine, plant, or system against normal wear and tear.

S. "Definitions that begin with the letter "S."

"Sample tap" means a device where access, pressure, and volume can be controlled to the extent that the sample collected is representative of the water quality, e.g. sillcocks, storage tank hatches, sampling stations.

"Sanitary survey" means an onsite review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. Pursuant to 40 C.F.R. 141.401(c), a sanitary survey evaluates at least ~~nine~~ eight components: source; treatment; distribution system; finished water storage; pumps, pump facilities and controls; monitoring and reporting and data verification; system management and operation; and operator compliance with state requirements.

~~**K.** "Secondary contaminant" means a contaminant listed in 40 CFR Part 143.~~

"Secretary" means the secretary of the environment department, or an authorized representative.

~~**L.** "Service connection" means a pipe, hose, appurtenance, constructed conveyance or any other temporary or permanent connection between a public water system and a user.~~

M. "Service connection," in addition to the meaning given in 40 CFR Part 141, means, regardless of whether in use, a pipe, hose, appurtenance, constructed conveyance or any other temporary or permanent connection between a public water system and a user. Service connection, as used in the definition of public water system, does not include a connection to a system that delivers water by constructed conveyance other than a pipe 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 department determines that alternative water to achieve the equivalent level of public health protection provided by the applicable national primary drinking water regulation is provided for residential or similar uses for drinking and cooking; or (3) the department determines that the water provided for residential or similar uses for drinking, cooking, and bathing is centrally treated 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 national primary drinking water regulations.

"State" means the New Mexico environment department when used in 40 CFR Part 141 and 40 CFR Part 143 in lieu of the meaning set forth in 40 CFR Part 141 and 40 CFR 143.

"State act" means the ~~[Environment]~~Environmental Improvement Act, NMSA 1978, Section 74-1-1 et seq.

"Storage facility" means a compartment used to accumulate the product water from a water treatment unit so that sufficient quantity, pressure, or both are available for intermittent periods of higher flow-rate water use. A storage tank is also called a clearwell.

"Subpart H systems" has the meaning defined in 40 CFR Part 141.

"Supplier of water" has the meaning defined in 40 CFR Part 141.

"Surface water" has the meaning defined in 40 CFR Part 141.

T. "Definitions that begin with the letter "T."

"Total trihalomethanes (TTHM)" has the meaning defined in 40 CFR Part 141.

"Transient non-community water system or TWS" has the meaning defined in 40 CFR Part 141.

U. "Definitions that begin with the letter "U."

[N] "USEPA" means the United States environmental protection agency.

V. "Definitions that begin with the letter "V."

W. "Definitions that begin with the letter "W."

"Water hauler" means a person in the business of transporting by vehicle water intended for human consumption.

X. "Definitions that begin with the letter "X."

Y. "Definitions that begin with the letter "Y."

Z. "Definitions that begin with the letter "Z."

[20.7.10.7 NMAC - Rp 20 NMAC 7.1.I.103, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]

20.7.10.8 SUBMITTALS TO THE DEPARTMENT: The submittal to the department of any application, notification, or other information required in this Part shall be accomplished by submitting the required documents to the drinking water bureau within the department, unless otherwise specified.

[20.7.10.8 NMAC – N, xx/xx/2012]

20.7.10.9 DOCUMENTATION REQUIRED FOR POPULATION DETERMINATION:

A. Owners or operators of community water systems shall document, and make available to the department upon request, the population served by the water system. The residential portion of the population shall be calculated by multiplying the number of service connections (or in the case of water haulers, the number of residential accounts using water for human consumption) by the average household size in the county where the service connections are located. The most recent census conducted by the U.S. census bureau shall be the source of the average household size data.

B. In order to determine the population the water system serves, owners or operators of nontransient noncommunity water systems and transient noncommunity water systems shall document, and make available to the department upon request, the population served (e.g., number of employees, number of students, restaurant seating capacity, number of patrons, etc.)

C. Owners and operators of water systems may present written documentation to the department for consideration of a population that differs from that described in Subsection A or B of this section.

D. The department will document, in writing, approval or disapproval of any determination of a population that differs from the population determination described in Subsections A and B of this subsection.

E. Owners or operators of public water systems shall make the information required in this section available to the department upon request within 45 days of the request.

[20.7.10.9 NMAC – N, xx/xx/2012]

20.7.10.810 - 20.7.10.99 [RESERVED]

20.7.10.100 ADOPTION OF 40 CFR PART 141:

A. Except as otherwise provided in this section, the regulations of the USEPA set forth at 40 CFR Part 141 [through June 4, 2010] are hereby incorporated by reference into this part.

B. The term "state" means the New Mexico environment department when used in 40 CFR Part 141, in lieu of the meaning set forth in 40 CFR section 141.2 Part 141.

C. The term "service connection" has the meaning set forth in [Subsection L of] 20.7.10.7 NMAC, in addition to the meaning set forth in 40 CFR section 141.2 Part 141.

[20.7.10.100 NMAC - N, 12/04/2002; A, 04/16/2007; A, 10/15/2008; A, 10/28/2010; A, xx/xx/2012]

20.7.10.101 ADOPTION OF 40 CFR PART 143:

A. Except as otherwise provided, the regulations of the USEPA set forth at 40 CFR Part 143 [through July 1, 2007] are hereby incorporated by reference into this part.

B. The term "state" means the New Mexico environment department when used in 40 CFR Part 143, in lieu of the meaning set forth in 40 CFR ~~section 143.2~~Part 143.

[20.7.10.101 NMAC - N, 12/04/2002; A, 04/16/2007; A, 10/15/2008; A, xx/xx/2012]

20.7.10.102 GUIDANCE DOCUMENTS: The current editions of the following materials, including all future editions and amendments are used by the department as guidance documents [for determining generally acceptable standards for construction and operation of public water systems.]

~~**A.** *Standards for disinfecting water mains, wells, water storage facilities, and water treatment plants,* American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.~~

~~**B.** *Manual for the certification of laboratories analyzing drinking water for microbiological parameters,* New Mexico Environment Department, Drinking Water Bureau, 525 Camino de Los Marquez, Santa Fe, Suite 4, New Mexico 87501.~~

~~**C.** *Laboratory certification manual for chemistry and radiochemistry parameter, drinking water analysis,* New Mexico Environment Department, Drinking Water Bureau, 525 Camino de Los Marquez, Santa Fe, Suite 4, New Mexico 87501.~~

~~**DA.** *Recommended standards for water works,* ("10 States Standards"), Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, P.O. Box 7126, Albany, New York 12224.~~

~~**E.** *Recommended standards for water facilities,* Construction Programs Bureau, New Mexico Environment Department, 1190 St. Francis Drive, Santa Fe, New Mexico 87503.~~

~~**F.** NSF listings *drinking water treatment chemicals – health effects,* American National Standards Institute, NSF/ANSI 60, 25 West 43rd Street, New York, NY 10036.~~

~~**G.** NSF listings *drinking water system components – health effects,* American National Standards Institute, NSF/ANSI 61, 25 West 43rd Street, New York, NY 10036.~~

~~**H.** NSF listings *drinking water treatment units – health effects,* American National Standards Institute, NSF/ANSI 42, 44, 53, 58, 67, 177, 25 West 43rd Street, New York, NY 10036.~~

~~**I.** NSF listings *plumbing system components – health effects,* American National Standards Institute, NSF/ANSI 14, 24, 25 West 43rd Street, New York, NY 10036.~~

~~**J.** List of approved backflow prevention assemblies, University of Southern California Foundation for Cross Connection Control and Hydraulic Research, University of Southern California, Kaprielian Hall 200, Los Angeles, CA 90089-2531.~~

~~**K.** UL listings *drinking water treatment additives,* Underwriters Laboratory, 333 Pfingston Road, Northbrook, IL 60062-2096.~~

~~**L.** UL listings *drinking water treatment/filtration units,* Underwriters Laboratory, 333 Pfingston Road, Northbrook, IL 60062-2096.~~

~~**M.** UL listings *drinking water system components and additives,* Underwriters Laboratory, 333 Pfingston Road, Northbrook, IL 60062-2096.~~

~~**N.** UL listings *distribution and plumbing products,* Underwriters Laboratory, 333 Pfingston Road, Northbrook, IL 60062-2096.~~

~~**OB.** *Cross connection control manual,* USEPA, Washington D.C., 20460, EPA 816-R-03-002. [20.7.10.102 NMAC - N, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]~~

20.7.10.103 AVAILABILITY OF REGULATIONS AND MATERIALS INCORPORATED BY

REFERENCE: Regulations, materials incorporated by reference into this part and guidance documents are available for inspection at the New Mexico Environment Department Drinking Water Bureau, 525 Camino de Los Marquez, Suite 4, Santa Fe, New Mexico 87501.

[20.7.10.103 NMAC - Rp 20 NMAC 7.1.XIII.1306, 12/04/2002; A, 04/16/2007]

20.7.10.104 REFERENCES: The current editions of the following materials, including all future editions and amendments form a part of this rule to the extent referenced.

A. *Standards for disinfecting water mains (AWWA C651),* American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.

- B. standards for *disinfection of water-storage facilities* (AWWA C652), American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.
- C. Standards for *disinfection of water treatment plants* (AWWA C653), American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.
- D. Standards for *disinfection of wells* (AWWA C654), American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.
- E. *Drinking water laboratory certification program guidance manual*, New Mexico Environment Department, Drinking Water Bureau, 525 Camino de los Marquez, Santa Fe, Suite 4, New Mexico 87501.
- F. *Drinking water laboratory certification program guidance manual appendix A – certification application*, New Mexico Environment Department, Drinking Water Bureau, 525 Camino de Los Marquez, Santa Fe, Suite 4, New Mexico 87501.
- G. *Recommended standards for water facilities*, Construction Programs Bureau, New Mexico Environment Department, 1190 St. Francis Drive, Santa Fe, New Mexico 87503.
- H. NSF/ANSI Standard 60 - *drinking water treatment chemicals - health effects*, American National Standards Institute, NSF/ANSI 60, 25 West 43rd Street, New York, NY 10036.
- I. NSF/ANSI Standard 61 - *drinking water system components - health effects*, American National Standards Institute, NSF/ANSI 61, 25 West 43rd Street, New York, NY 10036.
- J. NSF listings - *drinking water treatment chemicals - health effects*, American National Standards Institute, NSF/ANSI 60, 25 West 43rd Street, New York, NY 10036.
- K. NSF listings - *drinking water system components - health effects*, American National Standards Institute, NSF/ANSI 61, 25 West 43rd Street, New York, NY 10036.
- L. NSF listings - *drinking water treatment units - health effects*, American National Standards Institute, NSF/ANSI 44 cation exchange water softeners, 53 health effects, 58 reverse osmosis, 62 distillation, 25 West 43rd Street, New York, NY 10036.
- M. NSF listings - *plumbing system components - health effects*, American National Standards Institute, NSF/ANSI 14, 24, 25 West 43rd Street, New York, NY 10036.
- N. Devices listed in the American society of sanitary engineering seal authorization booklet, American society of sanitary engineering, 901 Canterbury Road, Suite A, Westlake, OH 44145.
- O. *Handbook for optimizing water treatment plant performance using the composite correction program*, EPA/625/6-91/027, U.S. EPA/NSCEP, P.O. Box 42419, Cincinnati, OH 45242-041.
- P. *USEPA membrane filtration guidance manual*, EPA 815-R-06-009 November 2005, 26 West Martin Luther King Dr., Cincinnati, OH 45268.
- Q. *Environmental technology verification (ETV) program information and guidance for vendors*, Drinking Water Systems (DWS) center February 2004, NSF International, 789 N. Dixboro Road, Ann Arbor, Michigan 48105.
- R. *Source water assessment and protection program report of a New Mexico water utility, July 2004 (ground water)*, New Mexico environment department drinking water bureau, 525 Camino de los Marquez, suite 4, Santa Fe, NM 87501.
- S. *Source water assessment and protection program report of a New Mexico water utility, February 2004 (surface water template)*, New Mexico environment department drinking water bureau, 525 Camino de los Marquez, suite 4, Santa Fe, NM 87501.
- T. *New Mexico Environment Department Drinking Water Bureau Application for Ground Water Rule 4-log Certification*, New Mexico environment department drinking water bureau, 525 Camino de los Marquez, suite 4, Santa Fe, NM 87501.
- [20.7.10.104 NMAC - N, xx/xx/2012]

20.7.10.1045 - 20.7.10.199 [RESERVED]

20.7.10.200 [PUBLIC WATER SYSTEM PROJECTS:]

- A. Except as provided in Subsections B and C of this section, no person shall undertake a public water system project without first obtaining written approval from the department.
- B. The following public water system projects do not require approval from the department:
- (1) a modification that involves the replacement or construction of less than 1,000 feet of distribution piping and appurtenances during any sixty calendar day period; or
 - (2) a modification that involves the replacement or construction of only distribution lines and appurtenances, pump stations, or pressure regulating facilities for which the public water system employs a water

utility staff that includes, either by contract or direct employment, a professional engineer registered in New Mexico who is responsible for the project;

~~(3) on going operation and maintenance procedures; the following activities are considered to be on-going operation and maintenance procedures:~~

~~(a) pipeline leak repair;~~

~~(b) replacement of existing deteriorated pipeline where the new pipeline segment is the same size and alignment as the pipeline to be replaced;~~

~~(c) distribution pipeline additions where the pipeline size is the same as the main supplying the addition, the length is less than 500 feet and contiguous segments of new pipe total less than 1,000 feet in any sixty calendar day period;~~

~~(d) entry into a drinking water storage facility for the purposes of cleaning and maintenance;~~

~~(e) the replacement of chemical feed pumps and associated appurtenances;~~

~~(f) the replacement of electrical or mechanical equipment in an existing public water supply system; and~~

~~(g) the replacement of equipment or pipeline appurtenances with the same type, size and rated capacity (fire hydrants, valves, pressure regulators, meters, service laterals, chemical feeders and booster pumps including deep well pumps).~~

~~C. The plan approval requirement in this section may be waived for transmission, storage, and distribution projects proposed for implementation that are certified to be in conformance with a "master design plan" previously approved by the department. Such master design plans may be approved upon submission to the department and must at a minimum contain:~~

~~(1) identification of existing system components and service area;~~

~~(2) a complete set of standard plans, details, and specifications for any component or facility to be eligible for a waiver under this section; and~~

~~(3) written verification that the standard plans, details, and specifications have been adopted by ordinance or resolution in such a manner as to require their use in all associated projects.~~

~~D. All changes to the standard plans, details, or specifications must be approved by the department prior to being eligible for a waiver under this section.~~

~~E. To obtain a waiver, the owner of the system must submit, in lieu of the application materials in 20.7.10.201 NMAC, a written summary of the project and certification that the project will be installed in accordance with the approved drawings and specifications, signed by a registered professional engineer who is responsible for the design, development, or maintenance of the public water system. All waiver requests shall be properly documented prior to receiving the department's approval.]~~ **PUBLIC WATER SYSTEM PROJECTS – DEPARTMENT NOTIFICATION AND APPROVAL:**

A. Any person undertaking a public water system project shall submit an application to the Department and shall not use the new or modified facility to produce, treat, store or distribute water for human consumption until the department has approved the application in writing, except that:

(1) a person conducting the activities under Subsection B of this section need not submit an application or obtain department approval; and

(2) a person undertaking the water projects under Subsection C of this section must submit an application but may undertake the project without written approval from the department.

The department will respond to each application within the period specified in subsection K of Section 201 of this part.

B. The following activities are considered on-going operation and maintenance procedures. These activities are not considered public water system projects. There is no requirement to notify or seek approval of the department for these activities.

(1) pipeline leak repair;

(2) replacement of existing deteriorated pipeline, or addition of distribution pipeline, if such replacements or additions, or both, total less than 1,000 feet in any 60 calendar day period;

(3) entry into a drinking water storage facility for the purposes of cleaning and maintenance;

(4) the replacement of chemical feed pumps and associated appurtenances;

(5) the replacement of electrical or mechanical equipment in an existing public water supply system; and

(6) the replacement of equipment or pipeline appurtenances with the same type, size and rated capacity (fire hydrants, valves, pressure regulators, meters, service laterals, chemical feeders and booster pumps including deep well pumps).

C. Any person proposing to undertake the following public water system projects must give the department written notice by submitting an application. Department approval is not required.

(1) a modification that involves only the replacement or construction of more than 1,000 feet of distribution lines, or of appurtenances, pump stations, or pressure regulating facilities for which the public water system employs, either by contract or direct employment, a professional engineer registered in New Mexico who is responsible for the project;

(2) installation of a hypochlorination system, excluding on-site hypochlorination generation systems, in a public water system under the following conditions:

(a) water is supplied by ground water that is not under the direct influence of surface water;

(b) the owner or operator of the system employs, by contract or direct employment, a water operator certified in New Mexico at the level required in the Utility Operator Certification Regulations, 20.7.4 NMAC; and

(c) the certified operator is responsible for the project and certifies the inactivation ratio achieved by the hypochlorination system. The water system operator shall calculate the inactivation ratio and document the calculation in the *department application for groundwater rule 4-log certification*.

D. In order to expedite future public water system projects, a public water system with the legal authority to adopt construction plans, details, and specifications by ordinance or resolution may submit a master design plan to the department for approval. Such plan must at a minimum contain:

(1) identification of any existing system components and service area;

(2) a complete set of plans, details, and specifications for any component or facility to be eligible for consideration under this section; and

(3) written verification that the plans, details, and specifications have been adopted by ordinance or resolution in such a manner as to require their use in all associated projects.

E. The approval requirement in Subsection A of Section 201 of this part is satisfied when transmission, storage, and distribution projects are proposed for implementation that are certified to be in conformance with a master design plan previously approved by the department. For a project to be considered under this subsection, the owner or operator of the system must submit, in lieu of the application materials in Section 201 of this part, a written summary of the project and certification that the project will be installed in accordance with the approved drawings and specifications, signed by a registered professional engineer who is responsible for the design, development, or maintenance of the public water system. Project requests under Subsection D shall include all of the documentation listed in this subsection.

[20.7.10.200 NMAC - Rp 20 NMAC 7.1.V.501 and 502, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]

20.7.10.201 [APPLICATIONS FOR PUBLIC WATER SYSTEM PROJECT APPROVAL:

~~A. Any person proposing to undertake a public water system project that requires the review and approval of the department shall complete, sign and submit an application to the department as described in this section.~~

~~B. The applicant shall submit an application to the department no less than thirty days prior to advertising the public water system project for bid or, if the project is not advertised for bid, not less than thirty days prior to the commencement of construction, except that the department may permit an applicant to advertise for bids or commence construction of a public water system project prior to the submission of a written application if, in the judgment of the department, exigent circumstances warrant a waiver of the thirty day notice requirement. Permission to advertise for bids or commence construction without first submitting an application shall expire if the applicant does not submit a written application to the department that meets the requirements of this section within fifteen days of the date of permission.~~

~~C. The application shall be made on forms furnished by the department and shall include:~~

~~(1) one set of complete plans and specifications for the project; the plans and specifications must be prepared under the direct supervision of and sealed by a professional engineer registered in New Mexico;~~

~~(2) an engineering design summary which shall include engineering information that sets forth the basis of the project design;~~

~~(3) a plan to disinfect the system and sample for the presence of bacterial contamination following completion of the project and prior to providing water to the public; the criteria used by the department to review the adequacy of the plan shall include the current standards of the American water works association for disinfecting water mains, wells, water storage facilities and water treatment plants;~~

~~(4) an inventory of existing and planned sources of actual and potential contamination located within one thousand (1,000) feet of a water source proposed to be utilized by the public water system; and~~

~~_____ (5) all other relevant information as needed by the department to determine compliance with this part.~~

~~_____ **D.** The department shall require an applicant proposing to undertake a public water system project to submit, in addition to the materials set forth in Subsection C of this section:~~

~~_____ (1) for projects involving the construction of a new public water system, documents demonstrating that the public water system has sufficient technical, managerial and financial capacity, such as a certified operator, testing equipment required to meet regulatory treatment techniques, ownership accountability, staffing and organization, revenue sufficiency, credit worthiness and fiscal management; and~~

~~_____ (2) for projects involving the construction of a new water source, analytical results of nitrate sampling conducted during exploratory drilling or aquifer testing and prior to commencement of construction;~~

~~_____ (3) for projects involving the construction of distribution facilities, provision shall be made to include sufficient hydrants or blow-offs to provide for complete flushing of the newly constructed facilities; this may include reference to existing flushing appurtenances.~~

~~_____ **E.** The department shall either approve an application, approve an application subject to conditions or deny an application, and shall notify the applicant by mail of such determination within thirty days after filing of a complete application pursuant to this section. The department shall not condition or in any manner require as part of an approval that the applicant use a specific process or type of equipment.~~

~~_____ **F.** The department may deny an application for a public water system project, in whole or in part, if the department determines that:~~

~~_____ (1) any maximum contaminant level (MCL) or treatment technique set forth at 40 CFR Part 141 will not be met after completion of the project;~~

~~_____ (2) any other requirement of 20.7.10 NMAC will not be met after completion of the project;~~

~~_____ (3) the design of the project is inconsistent with generally acceptable standards for construction of public water systems and their components including, but not limited to, the recommended standards for water facilities, Construction Programs Bureau, New Mexico Environment Department, 1190 St. Francis Drive, Santa Fe, New Mexico 87502;~~

~~_____ (4) the design of the project will not meet project goals;~~

~~_____ (5) the public water system does not demonstrate sufficient technical, managerial or financial capacity; or~~

~~_____ (6) an existing or planned source of actual or potential contamination may adversely impact a water source proposed to be utilized by the system. To make this determination, the department may require the applicant to submit analyses relating to hydrogeological, soil or ground water conditions at the site, and/or information regarding proposed technology or installation methods that may be employed to prevent or mitigate the impact of the contaminant source on the water source.~~

~~_____ **G.** The department's approval of an application is limited to the sanitary features of design and other features of public health significance. The department's approval of an application does not imply a guarantee of any type for the constructed project nor does it relieve the applicant from the responsibility for the overall integrity of the project, the adequacy of the project's design, or from the responsibility of complying with any of the provisions of this part or other applicable state and federal laws or regulations.~~

~~_____ **H.** The department is not responsible for increased costs resulting from defects in the plans, design drawings and specifications or any other contract documents.~~

~~_____ **I.** The applicant shall notify the department in writing when work on the public water system project is initiated. The department may inspect the project during construction and at completion to ensure compliance with the approved plans and specifications.~~

~~_____ **J.** If a public water system project receives approval from the department but does not commence construction within one year after the date of department approval, the supplier of water must submit a new application to the department.~~

~~_____ **K.** Any deviations from approved plans or specifications affecting capacity, operating units, the functioning of water treatment processes, or the quality of water to be delivered, shall be reported to the department in writing. If deemed appropriate, the department may require that revised plans and specifications be submitted for review. Revised plans or specifications shall be submitted to the department in time to permit the review and approval of such plans or specifications before any construction work, which will be affected by such changes, is begun. In the event that this requirement would result in construction delays, verbal approval by the department may be given followed by written approval within 30 days. The applicant must submit a copy of the completed change order to the department as soon as possible for review, final approval and filing.~~

~~_____ **L.** Staff from the department, after reasonable notice and presentation of credentials, may make visits to the work site to assure compliance with these rules. In the event deficiencies are noted, the engineer will be~~

notified in writing of any deficiency. All deficiencies must be resolved prior to the start-up of the system or component of the system.

~~M. The department shall be informed when a public water supply system project, or well defined phase thereof, is at or near completion. The new or modified facility shall not be used to produce, store, distribute, or treat potable water for public consumption until the department has been notified in writing. This notification shall consist of:~~

~~(1) a written statement from a registered professional engineer or representative of the water system that all conditions of project approval were accomplished;~~

~~(2) evidence of proper flushing and disinfection in accordance with the appropriate ANSI/AWWA Standard, including bacteriological sampling results;~~

~~(3) other water quality data where appropriate;~~

~~(4) all other documentation which may have been required during the plan review process; and~~

~~(5) confirmation that the water system owner has been provided with an operation and maintenance manual for the new facility, where appropriate.~~

~~N. The supplier of water shall submit record or as-built plans and certification of project completion to the department within ninety days after completion of the project.]~~ **PUBLIC WATER SYSTEM PROJECTS - APPLICATIONS:**

A. Any person proposing to undertake a public water system project for which an application is required under Section 200 of this Part shall complete, sign and submit an application to the department as described in this section.

B. The application shall be made on forms furnished by the department and shall include:

(1) one set of complete plans and specifications for the project; the plans and specifications must be prepared under the direct supervision of and sealed by a professional engineer registered in New Mexico;

(2) an engineering design summary which shall include engineering information that sets forth the basis of the project design;

(3) a plan to disinfect the system and sample for the presence of bacterial contamination following completion of the project and prior to providing water to the public; the criteria used by the department to review the adequacy of the plan shall include the current standards of the American water works association for disinfecting water mains, wells, water-storage facilities and water treatment plants;

(4) any other relevant information requested by the department in order to determine compliance with this part.

C. For projects involving the construction of a new public water system or conversion of an existing water system to a public water system, an applicant proposing to undertake a public water system project shall submit, in addition to the materials set forth in Subsection B of this section documents demonstrating that the public water system has sufficient technical, managerial and financial capacity, such as a certified operator, testing equipment required to meet regulatory treatment techniques, ownership accountability, staffing and organization, revenue sufficiency, credit worthiness and fiscal management.

D. For projects involving storage facilities or distribution facilities, the applicant shall submit an application to the department no less than 30 days prior to advertising the public water system project for bid. If the project is not advertised for bid, the applicant shall submit an application to the department not less than 30 days prior to commencement of construction. In addition to the materials set forth in Subsection B and Subsection C of this section the application shall include:

(1) a geotechnical report for storage facilities

(2) plans and specifications showing sufficient hydrants or blow-offs to provide for complete flushing or cleaning of the newly constructed facilities; this may include reference to existing flushing appurtenances.

E. For projects that involve construction of a new water source or conversion of an existing non-public source to a public source, in addition to the materials set forth in Subsection B and Subsection C of this section the application shall include:

(1) the appropriate state engineer office permit;

(2) analytical results for regulated and secondary contaminants sampling prior to commencement of construction; this section requires sampling for those regulated and secondary contaminants that are monitored at the source or at the entry point(s).

F. For projects involving ground water sources that are not under the direct influence of surface water, the applicant shall submit an application to the department no less than 30 days prior to advertising the public water system project for bid or, if the project is not advertised for bid, not less than 30 days prior to commencement of construction.

(1) In addition to the requirements in Subsection E of this section, projects involving a new ground water source that is not under the direct influence of surface water or conversion of an existing ground water source that is not under the direct influence of surface water must include an inventory of existing and planned facilities and land uses that are actual or potential sources of contaminants of concern located within 1,000 feet of a water source.

(2) At a minimum, potential sources of contamination and land uses in Appendix K of the NMED source water assessment and protection program report, July 2004 (ground water) template must be considered.

G. For projects involving 40 CFR Part 141 Subpart H sources, including existing non-public surface water sources and non-public ground water sources x under the direct influence of surface water that are converted to public 40 CFR Part 141 Subpart H sources, the applicant shall submit: (1) an application to the department no less than 60 days prior to advertising the public water system project for bid or, if the project is not advertised for bid, not less than 60 days prior to commencement of construction.

(2) an inventory of existing and planned facilities and land uses that are actual or potential sources of contaminants of concern, located within the delineation specified in source water assessment and protection program report of a New Mexico water utility, February 2004 (surface water template) New Mexico Environment Department, Drinking Water Bureau.

H. For projects using best available technologies identified in 40 CFR Part 141 for treatment of chemical, radiological or microbiological contaminants, except for *Cryptosporidium*, the application shall be submitted to the department no less than 45 days prior to advertising the public water system project for bid or, if the project is not advertised for bid, not less than 45 days prior to commencement of construction. Treatment using a point-of-entry treatment device (POE) or a point-of-use treatment device (POU) will be considered only for treatment of chemical contaminants, except nitrate, nitrite and chlorine dioxide, within systems serving not more than 100 service connections.

I. For projects involving treatment of *Cryptosporidium* and projects involving treatment of chemical, radiological or microbiological contaminants that use technologies other than those identified in 40 CFR Part 141 as best available technologies, the applicant shall submit an application to the department no less than 120 days prior to advertising the public water system project for bid. If the project is not advertised for bid, the applicant shall submit an application to the department not less than 120 days prior to commencement of construction. The application shall include a performance demonstration. Pilot studies submitted as performance demonstrations shall have been conducted by a field testing organization in accordance with Subsection J of this section.

(1) Test protocols to demonstrate the performance of *Cryptosporidium* treatment shall meet the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule, 40 CFR Part 141 Section 715 (microbial toolbox options for meeting *Cryptosporidium* treatment requirements).

(2) For projects involving treatment of *Cryptosporidium* using bag, or cartridge filters or membrane filtration, the application shall also include a challenge test demonstrating performance, pursuant to 40 CFR § 141.719 (a)(2) through (a)(10) or (b)(2) as applicable.

(3) For projects involving treatment of *Cryptosporidium* using membrane filtration, pursuant to 40 CFR § 141.719 (b)(3) the application shall include documentation of the log removal that can be verified by direct integrity testing in addition to the challenge test required in Paragraph 2 of Subsection I of Section 201 of this part.

(4) For projects described in Paragraphs I (2) and I (3) of this subsection submitted by public water systems that serve at least 10,000 people: (a) turbidity shall be measured; (b) a surface water microscopic particulate analysis (MPA) shall be conducted; and (c) removal efficiencies for *E. coli* (analyzed by an enumeration method) and *Cryptosporidium* shall be determined.

(5) For the requirements of Paragraph I (4) of this subsection plant detention time should be factored into the sample collection.

(6) For projects described in Paragraphs I (2) and I (3) of this subsection, public water systems that serve fewer than 10,000 people shall:

(a) determine the removal efficiencies for *E. coli* (analyzed by an enumeration method); and

(b) factor plant detention time into the sample collection.

(7) Test protocols for demonstrating performance for treatment of chemical, radiological and microbiological contaminants developed by the "USEPA environmental technology verification program" will be accepted by the department for all contaminants except *Cryptosporidium*. The department will also consider other test protocols.

J. A pilot study submitted pursuant to Subsection I of Section 201 of this part must be conducted by a field testing organization with the following qualifications:

(1) professional engineer with experience in conducting a minimum of three drinking water pilot studies who will oversee field testing operations;

(2) experience in conducting drinking water pilot studies for a state or an organization conforming to the requirements of that state. The studies must have been satisfactorily performed, as indicated by the governing state agency. Examples of the studies or project's report(s) shall be submitted to demonstrate the organization's capability to prepare acceptable documentation of conducted studies;

(3) experience in preparing and executing a project-specific QA/QC plan (i.e., a quality assurance project plan (QAPP)) for a package drinking water treatment project or pilot study under the direction of the USEPA, water research foundation, national water research institute or other relevant organization;

(4) demonstrated timeliness in delivery of documents and testing activities;

(5) demonstrated responsiveness in following schedules and addressing review comments; and

(6) proven adherence to protocols provided in Subsection I of Section 201 of this part.

K. Incomplete applications will not be reviewed. The applicant will be notified within 15 days of the need to submit a complete application. The department shall either approve the application, approve the application subject to conditions or deny the application and shall notify the applicant of such determination. The department shall not condition or in any manner require as part of an approval that the applicant use a specific process or type of equipment.

(1) For projects involving storage facilities, or for projects involving distribution facilities, the department shall notify the applicant of the determination within 30 days after receipt of the complete application.

(2) For projects involving ground water sources that are not under the direct influence of surface water, the department shall notify the applicant of the determination within 30 days after receipt of the complete application.

(3) For projects involving a surface water source or a ground water source that is under the direct influence of surface water, the department shall notify the applicant of the determination within 60 days after receipt of the complete application.

(4) For projects using best available technologies identified in 40 CFR Part 141 for treatment of chemical, radiological or microbiological contaminants, except for *Cryptosporidium*, the department shall notify the applicant of the determination within 45 days after receipt of the complete application.

(5) For projects involving treatment of *Cryptosporidium* and projects involving treatment of chemical, radiological or microbiological contaminants that use technologies other than those identified in 40 CFR Part 141 as best available technologies, the department shall notify the applicant of the determination within 120 days after receipt of the complete application.

L. If in the judgment of the department, exigent circumstances warrant a waiver of the requirement for approval of an application prior to construction, the department may permit a prospective applicant to commence construction of a public water system project upon receipt of written permission from the department. The owner or operator of the public water system must submit an application within 30 days of receipt of the permission.

M. The department may deny an application for a public water system project, in whole or in part, if the department determines that:

(1) any maximum contaminant level (MCL) or treatment technique set forth at 40 CFR Part 141 will not be met after completion of the project;

(2) any other requirement of 20.7.10 NMAC will not be met after completion of the project;

(3) the design of the project is inconsistent with generally acceptable standards for construction of public water systems and their components including, but not limited to, *the recommended standards for water facilities, construction programs bureau*, New Mexico environment department;

(4) the design of the project will not meet project goals;

(5) the public water system does not demonstrate sufficient technical, managerial or financial capacity;

(6) an existing or planned source of actual or potential contamination may adversely impact a water source proposed to be utilized by the system. To make this determination, the department may require the applicant to submit to the department analyses relating to hydrogeological, soil or ground water conditions at the site, and information regarding proposed technology or installation methods that may be employed to prevent or mitigate the impact of the contaminant source on the water source; or

(7) a regulated contaminant will be injected into the source (e.g., chlorine pellet drop system).

N. The department's approval of an application is limited to the sanitary features of design and other features of public health significance. The department's approval of an application does not imply a guarantee of any type for the constructed project nor does it relieve the applicant from the responsibility for the overall integrity of the project, the adequacy of the project's design, or from the responsibility of complying with any of the provisions of this part or other applicable state and federal laws or regulations.

O. The department is not responsible for increased costs resulting from defects in the plans, design drawings and specifications or any other contract documents.

P. The applicant shall notify the department in writing when work on the public water system project is initiated. The department may inspect the project during construction and at completion to ensure compliance with the approved plans and specifications.

Q. If a public water system project receives approval from the department but does not commence construction within one year after the date of department approval, the supplier of water must submit a new application to the department.

R. Any deviations from approved plans or specifications affecting capacity, operating units, the functioning of water treatment processes, or the quality of water to be delivered, shall be reported to the department in writing. If deemed appropriate, the department may require that revised plans and specifications be submitted for review. Revised plans or specifications shall be submitted to the department in time to permit the review and approval of such plans or specifications before any construction work, which will be affected by such changes, is begun. In the event that this requirement would result in construction delays, verbal approval by the department may be given followed by written [approval] review within 30 days. The applicant must submit a copy of the completed change order to the department as soon as possible for review, final approval and filing.

S. Staff from the department, after reasonable notice and presentation of credentials, may make visits to the work site to assure compliance with these rules. In the event deficiencies are noted, the applicant will be notified in writing of any deficiency. All deficiencies must be resolved prior to the start-up of the system or component of the system.

T. The department shall be notified when a public water supply system project, or well-defined phase thereof, is at or near completion. This notification shall consist of:

(1) a written statement from a registered professional engineer representing the water system that all conditions of project approval were accomplished;

(2) evidence of proper flushing and disinfection in accordance with the appropriate ANSI/AWWA standard, including bacteriological sampling results;

(3) other water quality data where appropriate;

(4) all other documentation which may have been required during the plan review process;

(5) confirmation that the water system owner has been provided with an operation and maintenance manual for the new facility, where appropriate; and

(6) documents filed with the state engineer office, including the well log and proof of completion of well for ground water sources, and a proof of completion of works for surface water sources. These documents are required when the project includes construction of a new source or incorporation of an existing source into a public water supply system.

U. For projects requiring department approval, the supplier of water shall submit record drawings and certification of project completion in an electronic format acceptable to the department within 120 days after completion of the project.

[20.7.10.201 NMAC - Rp 20 NMAC 7.1.I.109 and 20 NMAC 7.1.V.502, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]

20.7.10.202 APPLICATION FOR WATER HAULERS THAT ARE NOT OWNED OR OPERATED BY ANOTHER PUBLIC WATER SYSTEM:

A. This section applies to each water hauler meeting the definition of a public water system, as defined in 40 CFR Part 141, that is not owned or operated by a system meeting that definition based on operations other than water hauling. This section does not apply to the transport of bottled water regulated pursuant to 21 C.F.R. Part 165.

B. Any person proposing to commence a water hauling operation under this section shall complete, sign and submit an application to the department no later than 30 days prior to entering a service contract for delivering water for human consumption. The water hauler shall not produce, withdraw, store, transport or deliver water for human consumption until the department has approved the application in writing.

C. The application shall be made on forms furnished by the department and shall include:

(1) evidence that the system has an operator, who meets or exceeds the appropriate level of certification required to operate the system under 20.7.4 NMAC, Utility Operator Certification;

(2) shop drawings and specifications from the tank manufacturer describing the water tank portion and other water delivery components of the vehicle;

(3) certification that the water tank and other water delivery components are approved for water for human consumption;

(4) verification that the water tank and other water delivery components have never come into contact with a non-potable or non-food grade product;

(5) contracts with active public water systems in New Mexico authorizing receipt of water or documentation of ownership of a public water system;

(6) a description of water hauling operation including the procedures for obtaining, storing, treatment of and delivery of water; and

(7) a disinfection plan for routine and seasonal disinfection of each tank.

[20.7.10.202 NMAC – N, xx/xx/2012]

20.7.10.203 - 20.7.10.299 [RESERVED]

20.7.10.300 COMPLIANCE; EMERGENCY POWERS:

A. No public water system shall supply drinking water to the public unless the system is operated and maintained in compliance with this part.

B. Powers of the secretary.

(1) The secretary may take any action necessary to protect the health of persons who are or may be served by a public water system, including but not limited to issuing orders, assessing penalties or commencing a civil action for appropriate relief:

(a) if the public water system fails to meet any requirement of this part;

(b) upon receiving information that a contaminant, whether or not listed in 40 CFR Part 141, Subparts B and G, is present in or likely to enter the public water system, that the presence of such contaminant may present an imminent and substantial endangerment to the health of persons served by the system, and that appropriate local authorities have not acted to protect the health of such persons; or

(c) in response to a civil emergency involving public drinking water; the secretary's response shall be coordinated, when appropriate, with other state emergency response and relief efforts.

(2) If the secretary determines that treatment of water is necessary for a public water system to meet the maximum contaminant levels set forth at 40 CFR Part 141, Subparts B and G, such treatment shall be continuously maintained until the public water system can demonstrate to the secretary that such treatment is no longer necessary.

[20.7.10.300 NMAC - Rp 20 NMAC 7.1.II.201, 12/04/2002; A, 04/16/2007]

20.7.10.301 - 20.7.10.399 [RESERVED]

20.7.10.400 GENERAL OPERATING REQUIREMENTS:

A. Protection of public water systems during routine maintenance or replacement of electrical or mechanical equipment. The owner or operator of a public water system shall prevent contamination of the water in the system while undergoing routine maintenance or replacement of electrical or mechanical equipment.

B. Security and protection of a public water system. All devices with lines or openings to the atmosphere without an approved backflow prevention device shall vent above the flood level and be fitted with a fine corrosion-resistant screen (24 mesh or smaller). Any part or component of a public water system including but not limited to spring junction boxes, well houses, storage reservoirs, collection devices, pump facilities, and treatment facilities shall be constructed, operated and maintained to prevent ~~unauthorized entry to, flooding of, and contamination of, the water supply;~~

(1) unauthorized entry to the water supply;

(2) flooding of the water supply; and

(3) contamination of, the water supply.

C. Protection of a public water system well. A ground water supply well serving a public water system shall have a sanitary seal installed at the wellhead to protect against entry of storm water and other non-potable fluids or foreign materials and against access by insects, rodents, birds or other vermin. ~~[Well vents shall be screened with a fine corrosion resistant screen (24 mesh or smaller).]~~ All vents installed in the well casing shall be protected against entrance of foreign material. Well vents shall be above the flood level. If the well is completed in a subsurface vault, the casing shall extend above the flood level. All cracks, joints or other openings at the wellhead and all penetrations to the casing at or near the ground surface shall be tightly sealed with an impermeable material. The well seal will include a concrete pad with a minimum surface area of four (4) square feet. The pad shall be

centered around the well, be at least four (4) inches thick and slope away from the well. When surface casing is used, the surface pad should seal the top of the annular space between the production casing and the surface casing.

D. Finished water storage facilities. A finished water storage facility shall be protected from flooding or infiltration of raw or non-potable water and from entry by birds, insects, rodents or other vermin. Overflow pipes and vents shall be screened with a corrosion-resistant material or be fitted with an acceptable flap valve. Access hatches or openings that are below the maximum operating water level shall be fitted with a watertight cover or appropriate seal or gasket. Roof hatches or other openings above the maximum operating water level shall be fitted with a watertight cover, appropriate seal or gasket, or framed above the surface of the tank at the opening. Framed hatches must be fitted with a solid cover that overlaps the framed opening and extends down around the frame. All framed hatches must restrict the entry of vermin or water.

E. Notice to the department. If the safety precautions or preventive measures required to be employed under this section fail to protect the public water system from unauthorized entry or contamination, or if the water supply is endangered for any reason, the supplier of water shall immediately notify the department and take appropriate action to protect the supply.

F. Disinfection following the completion of a public water system project requiring department approval. Any part or component of a public water system that has undergone construction or modification requiring department approval shall be flushed, disinfected and sampled for the presence of bacterial contaminants upon completion of the project and prior to providing water to the public. Disinfection and sampling shall be conducted in accordance with a plan submitted to and approved by the department pursuant to Paragraph (3) of Subsection [C]B of 20.7.10.201 NMAC.

G. Disinfection following construction, modification or repair not requiring department approval. Any part or component of a public water system that has undergone repair, construction or modification not requiring department approval shall be flushed, disinfected and sampled in accordance with the current editions of the *standards for disinfecting water mains*, American water works association; *standards for disinfection of wells*, American water works association; *standards for disinfection of water-storage facilities*, American water works association; and *standards for disinfection of water treatment plants*, American water works association.

H. Disinfection of seasonally operated facilities. A public water system that operates on a seasonal basis shall be flushed and disinfected following the non-use period and shall conduct special sampling to demonstrate the absence of bacterial contaminants in the system prior to providing drinking water to the public. During the public water system's non-use period, the public water system shall be maintained to prevent unauthorized entry to, and contamination of, the water supply.

I. Maintenance and disinfection of storage structures. All materials used to re-coat or repair the interior of water storage structures must be suitable for potable water contact. After the interior of a storage structure has undergone maintenance or re-coating, the storage structure must be flushed and disinfected pursuant to Subsection G of this section.

J. Prohibition of iodine as a disinfectant. No public water system shall use iodine as a disinfectant.

K. ~~[Direct and indirect additives. A component, material, treatment chemical or other substance that may come into contact with drinking water shall be certified by an independent, third party certifier accredited by ANSI as meeting at a minimum the most recent version of NSF/ANSI standard 60: drinking water treatment chemical health effects, or NSF/ANSI standard 61: drinking water system components health effects.]~~Standards for additives, materials and equipment – Direct additives. Each product added directly to water during production or treatment, including treatment in storage and distribution, shall conform to American national standards institute (ANSI) or national sanitation foundation international (NSF) Standard 60. Products covered by this subsection include but are not limited to:

- (1) coagulation and flocculation chemicals;
- (2) chemicals for corrosion and scale control;
- (3) chemicals for softening, precipitation, sequestering, and pH adjustment;
- (4) disinfection and oxidation chemicals;
- (5) chemicals for fluoridation, defluoridation, algae control, and dechlorination;
- (6) dyes and tracers;
- (7) antifreezes, antifoamers, regenerants, and separation process scale inhibitors and cleaners;
- (8) water well drilling and rehabilitation aids; and
- (9) well pump lubricants and well sealants.

L. Standards for additives, materials and equipment – Indirect Additives. Except as identified in Subsections N and O, a material or product that comes into contact with water or water treatment chemical shall

conform to ANSI/NSF Standard 61. Products and materials covered by this subsection include but are not limited to:

- (1) process media, such as carbon and sand;
- (2) joining and sealing materials, such as solvents, cements, welding materials, and gaskets;
- (3) mechanical plumbing devices such as lubricants;
- (4) pipes and related products, such as pipe and fittings;
- (5) mechanical devices used in treatment, transmission, or distribution systems such as tanks, valves, chlorinators, and separation membranes; and
- (6) protective (barrier) materials such as coatings.

M. Standards for additives, materials and equipment – Certification. The appearance on the product or product package of a seal of a certifying entity that is accredited by the ANSI/NSF to provide the certification or inclusion of the product in the NSF product and service listings shall be considered as evidence that a product conforms to the requirement of this section.

N. Standards for additives, materials and equipment – Alternative Certification. In those instances where chemicals, additives and drinking water system components that come into contact with drinking water are essential to the design, construction or operation of the drinking water systems and have not been certified by the NSF, the operator may utilize the alternatives given in this subsection.

(1) A water system owner or operator may submit evidence that chemicals not included in NSF Standard 60 such as EPI-DMA polyamines, anhydrous monosodium phosphate, permanganates other than potassium permanganate and sodium fluorosilicate meets standards consistent with NSF Standard 60. This provision does not apply to any chemical name covered by NSF Standard 60, i.e. acetic acid, bentonite, chlorine, ferric chloride, hydrofluosilicic acid, sulfuric acid, zinc orthophosphate, etc. must be NSF certified.;

(2) A water system owner or operator may submit evidence that a component is made entirely of components certified under NSF Standard 61; and

(3) A water system owner or operator may submit evidence that a component meets standards consistent with NSF Standard 61.

O. Standards for additives, materials and equipment – Exemptions. The following materials and products are exempt from the requirement to conform to ANSI/NSI Standard 61.

(1) a concrete structure, tank or treatment basin that is constructed onsite if the structure, tank, or basin is not normally coated or sealed and the construction materials used in the concrete are consistent with Subsection N; if a coating or sealant is specified by the design engineer, the coating or sealant shall comply with ANSI/NSF Standard 61;

(2) an earthen reservoir or canal located upstream of water treatment; and

(3) a water treatment plant that is comprised of components that comply with Subsections L or N.

~~**L-P.** Cross-connections. Cross-connections to a public water system or within a public water system shall be prohibited, unless the public water system is protected by a method acceptable to the department using either a device listed by the foundation for cross-connection control and hydraulic research in the American Society of Sanitary Engineering seal authorization booklet or a device acceptable to the department to prevent the back flow of water.~~

~~**M-Q.** Operator certification. Public water systems shall comply with the utility operator certification requirements in the Utility Operator Certification Act, NMSA 1978, 61-33-1 et seq. as amended, and in regulations and program requirements adopted pursuant to the Safe Drinking Water Act.~~
[20.7.10.400 NMAC - Rp 20 NMAC 7.1.II.208, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]

20.7.10.401 GENERAL OPERATING REQUIREMENTS FOR WATER HAULERS THAT ARE NOT OWNED OR OPERATED BY ANOTHER PUBLIC WATER SYSTEM:

A. This section applies to each water hauler meeting the definition of a public water system, as defined in 40 CFR Part 141, that is not owned or operated by a system meeting that definition based on operations other than water hauling.

B. A water hauler subject to this section shall obtain for delivery disinfected water only from public water systems that are part of the department safe drinking water information system (SDWIS) inventory and do not pose an acute health threat based on violation of a maximum contaminant level or treatment technique.

C. A water hauler subject to this section shall:

(1) disinfect each tank, before filling the tank for delivery, if it has not been used for more than eight (8) consecutive days;

(2) disinfect each tank after every three (3) months of continuous operation;

(3) measure and record the disinfectant residual at the same time and place water is obtained from the wholesaler and when the water is delivered to the customer;

(4) maintain a record of the date and time that each water hauling truck is disinfected;

(5) comply with the sampling requirements applicable to consecutive systems in accordance with Subsection E of Section 500 of this part; and

(6) make each vehicle used for water hauling available for inspection by the department. At the time of the inspection the tank shall be empty and have a hatch or other opening to facilitate internal inspection.

D. A water hauler subject to *this* section shall use only water tanks with the following features:

(1) Hatches or openings must have water tight covers.

(2) The tank drain must allow for complete draining of the tank.

(3) All hoses and other dispensing units must be equipped with water tight caps.

[20.7.10.401 NMAC – N, xx/xx/2012]

20.7.10.4012 - 20.7.10.499 [RESERVED]

20.7.10.500 [SAMPLING]MONITORING REQUIREMENTS:

A. Pursuant to NMSA 1978, 74-1-13.1, the department shall test non-transient non-community water systems for arsenic, fluoride and radionuclides. The reporting and public notification requirements for non-community water systems for these contaminants shall be identical to those for community water systems as set forth in 40 CFR Subpart Q. This section applies when the system has the treatment, storage and distribution (main) capacity required to supply water for human consumption to 15 or more service connections, regardless of whether the service connections are complete.

B. ~~[A supplier of water shall begin routine sampling in accordance with 40 CFR Part 141 within ninety days after commencing operation of a public water system]~~Each supplier of water shall begin routine sampling in accordance with 40 CFR Part 141 within 90 days after providing water for human consumption.

C. All public water systems shall conduct sampling at the rates set forth in 40 CFR Part 141, Subpart C, except that non-transient non-community systems shall conduct coliform sampling at the same rates as like-sized community water systems in 40 CFR 141.21(a)(2) and consecutive systems (including water haulers) shall sample as required in Subsection E of Section 500 of this part. The department may order a supplier of water, when necessary, to conduct more frequent sampling than is required under 40 CFR Part 141.

D. The department may order a public water system that uses two or more water sources to collect special purpose samples directly from the water sources, in addition to routine samples from sampling points as required under 40 CFR Part 141.

E. Consecutive systems shall collect samples for those contaminants for which monitoring is required in the distribution system. This includes measurement of disinfectant residuals and collection of samples for total coliform, lead and copper, and disinfection byproducts.

F. All public water systems must have sampling taps to collect water representative of each applicable facility: source, treatment, storage and entry point. Sample taps shall be:

(1) located outside of confined spaces; and

(2) labeled with the sampling point number identified in the safe drinking water information system (SDWIS) database; the labels shall be permanent and legible.

G. For systems subject to triggered monitoring under 40 CFR Part 141 ground water rule, at least one ground water source sample from each ground water source in use at the time a total coliform-positive sample was collected must be collected for each total coliform positive sample from the distribution system.

[20.7.10.500 NMAC - Rp 20 NMAC 7.1.III.301, 12/04/2002; A, 04/16/2007; A, xx/xx/2012]

20.7.10.501 LABORATORIES:

A. ~~The department may certify or decertify laboratories to conduct microbiological, chemical and radiological analyses in accordance with most recent editions of the department's "Manual for the Certification of Laboratories Analyzing Drinking Water for Microbiological Parameters" and "Laboratory Certification Manual for Chemistry and Radiochemistry Parameter, Drinking Water Analysis."~~ Certification issued by the department under this Section shall be valid for no longer than three years.

B. ~~The department may accept any sample for purposes of determining compliance with this part if such sample has been analyzed by a laboratory certified by the USEPA or the department.~~

[20.7.10.501 NMAC - Rp 20 NMAC 7.1.III.309, 12/04/2002; Repealed, xx/xx/2012]

20.7.10.502 VALIDATION OF ANALYTICAL DATA OR CONDITIONS: The department may take any action it deems necessary to validate the results of a sample taken pursuant to this part. Data that the department determines to be invalid shall not be used to determine compliance with this part.
[20.7.10.502 NMAC - Rp 20 NMAC 7.1.III.311, 12/04/2002]

20.7.10.503 DEPARTMENT MONITORING AND SAMPLING: Nothing in this part shall be construed to preclude the department from taking samples or from using the results from such samples to determine compliance with this Part or in an enforcement proceeding for violation of this part.
[20.7.10.503 NMAC - Rp 20 NMAC 7.1.III.312, 12/04/2002]

20.7.10.504 INSPECTIONS, INVESTIGATIONS AND SANITARY SURVEYS:

A. The secretary may, upon the presentation of proper credentials and after receiving consent from the supplier of water, enter at reasonable times upon or through the premises of any public water system to conduct a sanitary survey, inspection or investigation and during such survey, inspection or investigation:

- (1) have access to and copy, at reasonable times, any records required to be kept pursuant to this part;
- (2) inspect or review any monitoring equipment or methods required under this part;~~and~~
- (3) sample or otherwise test the water supplied by such system; and
- (4) have access to public water system facilities for visual inspection.

B. If permission to enter a public water system to conduct a sanitary survey, inspection or investigation in accordance with Subsection A of this section is denied, the secretary may apply to a court of competent jurisdiction for an order allowing for such entry.

C. To aid the secretary in conducting sanitary surveys, inspections or investigations pursuant to this part, the supplier of water or his duly authorized representative shall, prior to the commencement of such inspection or investigation, be given the opportunity to accompany the inspector upon or through the premises of the public water system.

[20.7.10.504 NMAC - Rp 20 NMAC 7.1.I.108, 12/04/2002; A, xx/xx/2012]

20.7.10.505 REPORTING: In addition to complying with any other reporting requirements in 40 CFR Part 141, operators of public water systems shall submit the following reports electronically on forms furnished by the department:

A. monthly operating reports required of 40 CFR 141 Subpart H systems;

B. pressure decay direct integrity testing required of 40 CFR Part 141 Subpart H systems that use membrane filtration.

[20.7.10.505 NMAC – N, xx/xx/2012]

20.7.10.505~~6~~ - 20.7.10.599 [RESERVED]

20.7.10.600 PUBLIC NOTIFICATION:

A. Non-transient non-community water systems that exceed the MCL for arsenic or radionuclides set forth at 40 CFR sections 141.11, 141.62 and 141.66 or exceed one-half the MCL for fluoride set forth at 40 CFR section 141.62 shall comply with the public notification requirements set forth at 40 CFR Subpart Q.

B. A supplier of water shall notify persons served by the public water system to boil water used for drinking or culinary purposes if routine coliform samples indicate the presence of bacterial contamination which would not otherwise trigger the public notice requirements set forth at 40 CFR Subpart Q but which, in the judgment of the department, poses a threat to public health and safety. If the supplier of water fails to provide notice on its own, or at the direction of the department, the department may directly notify the persons served by the system.

C. If the safety of a water supply is endangered for any reason, the supplier of water shall notify persons served by the public water system of appropriate action to protect themselves against any waterborne hazards. If the supplier of water fails to take such action on its own, or at the direction of the department, the department may directly notify the persons served by the system.

[20.7.10.600 NMAC - Rp 20 NMAC 7.1.IV.402, 12/04/2002; A, 04/16/2007]

20.7.10.601 - 20.7.10.699 [RESERVED]

20.7.10.700 SEVERABILITY: The provisions of this part shall be severable, and if any section, subsection, paragraph, subparagraph, sentence, clause, subclause or item of this part, or the applicability thereof to any person or

circumstance, shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, and the application thereof, but shall be confined in its operation to the section, subsection, paragraph, subparagraph, sentence, clause, subclause or item thereof, or to the person or circumstance directly involved in the controversy in which such judgment shall have been rendered.

[20.7.10.700 NMAC - Rp 20 NMAC 7.1.XIII.1301, 12/04/2002]

20.7.10.701 SAVING CLAUSE: Repeal of 20 NMAC 7.10 shall not affect any administrative or judicial enforcement action pending on the effective date of this part.

[20.7.10.701 NMAC - Rp 20 NMAC 7.1.XIII.1305, 12/04/2002]

20.7.10.702 CONSTRUCTION: This part shall be liberally construed to effectuate the purpose of the state act.

[20.7.10.702 NMAC - Rp 20 NMAC 7.1.XIII.1303, 12/04/2002]

20.7.10.703 COMPLIANCE WITH OTHER REGULATIONS: Compliance with this part does not relieve a person from the obligation to comply with other applicable state and federal regulations.

[20.7.10.703 NMAC - Rp 20 NMAC .1.XIII.1302, 12/04/2002]

20.7.10.704 EFFECT OF STAY OR INVALIDATION OF INCORPORATED FEDERAL STANDARDS: If any federal standard or regulation incorporated by reference in this part is stayed, invalidated or otherwise rendered unenforceable, in whole or in part, by action of a federal court or USEPA, such incorporated federal standard or regulation shall be enforceable by the department only to the extent it is enforceable by USEPA.

[20.7.10.704 NMAC - N, 12/04/2002]

HISTORY OF 20.7.10 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the Commission of Public Records-State Records Center and Archives:

EIB 77-1, Regulations Governing Water Supplies, filed 12-12-77;

WSR 1, Regulations Governing Water Supplies, filed 3-11-85;

EIB/WSR 1, Regulations Governing Water Supplies, filed 7-16-86;

EIB/WSR 2, Regulations Governing Water Supplies, filed 9-12-88;

EIB/WSR 3, Water Supply Regulations, filed 4-16-91.

History of Repealed Material:

20 NMAC 7.1, Wastewater and Water Supply Facilities - Drinking Water, 1-1-95.

Other History:

EIB/WSR 3, Water Supply Regulations, filed 4-16-91 was renumbered, amended, and replaced by 20 NMAC 7.1, Wastewater And Water Supply Facilities - Drinking Water, filed 12-01-94.

20 NMAC 7.1, Wastewater And Water Supply Facilities - Drinking Water, filed 12-01-94, **replaced** by 20.7.10 NMAC, Wastewater And Water Supply Facilities - Drinking Water, effective 12/04/2002.