This rule was filed as NMPSC Rule 750.

TITLE 17 PUBLIC UTILITIES AND UTILITY SERVICES

CHAPTER 12 WATER SERVICES

PART 750 MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND OPERATION OF

WATER UTILITIES

17.12.750.1 ISSUING AGENCY: New Mexico Public Service Commission [New Mexico Public Regulation

Commission].

[Recompiled 12/30/01]

17.12.750.2 SCOPE:

A. Applicability: NMPSC Rule 750 [17.12.750 NMAC] is applicable to all water utilities under the jurisdiction of the New Mexico Public Service Commission [New Mexico Public Regulation Commission].

B. Variances: In those cases where the application of any of the provisions of NMPSC Rule 750 [17.12.750 NMAC] results in undue hardship or expense to the utility, it may request specific relief from the Commission.

[Recompiled 12/30/01]

17.12.750.3 STATUTORY AUTHORITY:

[Recompiled 12/30/01]

17.12.750.4 **DURATION**:

[Recompiled 12/30/01]

17.12.750.5 EFFECTIVE DATE:

[Recompiled 12/30/01]

17.12.750.6 OBJECTIVE: The purpose of NMPSC Rule 750 [17.12.750 NMAC] is to promote good public utility practices, to encourage efficiency and economy, and to establish minimum standards to be observed in the design, construction, and operation of waterworks facilities by water utilities operating under the jurisdiction of the Commission. The standards herein prescribed are intended as minimum standards. The provisions hereof shall not be construed to require the replacement or abandonment of facilities in use at the time of the initial adoption of these provisions in former General Order No. 42 unless the Commission so directs.

[Recompiled 12/30/01]

17.12.750.7 **DEFINITIONS:**

[Recompiled 12/30/01]

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[Recompiled 12/30/01]

17.12.750.9 RECORDS AND REPORTS:

- A. System Maps: Each utility shall maintain on file drawings or maps of the water system. Such maps or drawings shall be clear and legible. Unless the Commission authorizes otherwise these records shall show the following:
- (1) location of all sources of supply, water treatment plants, pumping stations, storage facilities, distribution system - including valves, hydrants, and interconnections with other systems -- and size, material, and location of all mains;
- (2) location, size, and kind of each service pipe, including any pertinent items such as curb valves, meter pits, etc.;
- (3) layout of all principal pumping stations, water treatment, and filter plants to show size, location, and character of all major equipment, pipelines, connections, valves, and other equipment used in connection therewith; and
 - (4) delineation of special high pressure zones, if applicable.
- B. Construction Dates: Each utility shall maintain at its office the date of construction of all principal items of plant and extensions of mains.
- C. Meter Records: Each utility shall maintain at its office the installation and meter test history on each water meter.
- D. Other Records: Monthly records should be maintained on energy usage, water production, water purchases, and water consumption. Records of chemical usage should be maintained.
- E. Location of Records: All records required by NMPSC Rule 750 [17.12.750 NMAC] shall be kept at the principal office of the utility or other suitable storage place located within the state and shall be made available to representatives, agents, or employees of the Commission upon reasonable notice and at all reasonable hours.
- F. Reports to the Commission: The utility shall furnish the results of summaries of any tests required by NMPSC Rule 750 [17.12.750 NMAC] to the Commission at such times and in such form as the Commission may require. The utility shall also furnish the Commission with any information concerning the utility's facilities or operations which the Commission may request and need for determining rates or judging the practices of the utility. [Recompiled 12/30/01]

17.12.750.10 SAFETY:

A. Safety Requirements: Each utility shall exercise reasonable care to reduce the hazards to which its employees, its customers, and the general public may be subjected as a result of the utility's operations. The utility

shall require employees to use suitable tools and equipment for performing their work safely, shall instruct employees in safe methods of performing their work, and shall maintain suitable first aid equipment for employees.

B. Accident Reporting: The utility shall promptly notify the Commission in the event of a fatal accident involving the utility, and it shall notify the Commission of any other accidents when prescribed by the Commission.

[Recompiled 12/30/01]

17.12.750.11 WATER SUPPLY: Water Supply Requirements: Each utility shall furnish and maintain sufficient facilities to provide a continuous and adequate supply of water. The total supply system capacity shall meet the daily design maximum peak demand and shall meet the design average-day demand with the largest pump or well out of service. Unless other acceptable provisions are made, a minimum of two (2) supply sources shall be provided. [Recompiled 12/30/01]

17.12.750.12 PRESSURES:

- A. Pressure Required: Under normal conditions of use including the expected peak demands, water pressure at the customer's meter shall be not less than 30 p.s.i.g. nor more than 125 p.s.i.g.
- B. Main Sizing: As new mains are installed or as mains which have reached the end of their useful lives are replaced, the new or replacement main shall be sized and designed to accommodate the standards contained herein.
- C. Delineation of Minimum Normal Operating Pressures: Other minimum normal operating pressures are applicable within delineated areas as set forth on the utility's Commission- approved tariff sheets or as provided for in special agreements.
- D. Pressure Gauges: Each utility shall provide itself with one or more pressure gauges for each separate water system.
- E. Pressure Surveys: It is suggested that at regular intervals each utility make a survey of pressures in its distribution system at or near the time of maximum usage. The records of these surveys should show the date, time, and location of the test.
- F. Customer Transfer Pumps: No utility shall furnish water service to any customer who utilizes a transfer pump to pump water from the utility's water main into the customer's plumbing facilities unless backflow prevention is provided. Consideration shall be given both to deteriorating pressure in the mains and also to any potential hazard which might be created if contamination should be introduced into the system through a cross-connection when a negative pressure is induced in the water main by a customer's transfer pump. [Recompiled 12/30/01]

17.12.750.13 TRANSMISSION AND DISTRIBUTION SYSTEM:

- A. Transmission Systems: The transmission pipelines from sources of supply shall be designed to deliver in combination with related storage facilities and to the limits of the capacity of those sources of supply the maximum requirements of that portion of the system which is dependent upon such transmission pipelines.
 - B. Distribution System:
- (1) Minimum Pipe Sizes: The distribution system shall be of adequate size and designed in conjunction with related facilities so as to maintain the minimum pressures required herein.
- (2) Depth of Mains: Water mains should be installed below the frost line to prevent freezing and should have adequate cover over the top of the pipe for protection against surface loads.
- (3) Dead Ends: Insofar as practicable the utility shall design its distribution system so as to avoid dead ends in its mains. Where dead ends are necessary the utility shall provide a means for flushing the mains. Mains with dead ends shall be flushed as often as necessary to maintain the proper quality of the water.
- (4) Segmentation of System: Valves shall be provided in distribution mains at reasonable intervals so that repairs may be effected by the utility with interruptions to the service of a minimum number of customers. At intersections valves shall be installed on all connecting mains.
- (5) Grid Systems: Wherever feasible the distribution system shall be laid out in a properly segmented grid so that in case of breaks or repairs the interruption of service to customers can be kept to a minimum. [Recompiled 12/30/01]

17.12.750.14 DESIGN AND CONSTRUCTION:

- A. Minimum Requirements for Materials, Equipment, and Installation: Materials, equipment, and installation shall be suitable for the pressures experienced and shall meet minimum requirements prescribed by the New Mexico Environmental Improvement Division and any other governmental body with jurisdiction over the facility.
- B. Standardizing: To preclude costly duplication of stocked piping material the utility may properly require that a specific material shall be used throughout at the discretion of the utility. Special consideration shall be given to standardization of valve and hydrant opening direction and to units of registration on water meters.
- C. Systems Used for Fire Protection: When fire protection is provided by the utility as a part of the water service, the utility shall not misrepresent its fire protection capabilities.
 - D. Service Connections:
- (1) The size, design, material, and installation of the service pipe shall conform to the reasonable requirements of the utility, provided that the minimum size of the pipe shall not be less than 3/4-inch. The minimum size of meters shall be 5/8-inch.
- (2) Whenever feasible all service pipes shall be installed below the frost line to prevent freezing and at a depth adequate to protect the pipes from surface activity, gardening, etc.
- (3) Service connections should not be connected to hydrant branch lines and should not cross intervening properties even with the protection of easements.
- E. General Construction: The design and construction of the utility's water plant shall conform to standard acceptable engineering practices. It shall be designed and operated to provide adequate and safe service to customers and shall conform to the requirements of the New Mexico Environmental Improvement Division with reference to sanitation and potability of water.
- F. Disinfection of Facilities: All new mains, pumps, tanks, wells, other facilities for handling potable water and, insofar as practicable, repaired mains and other facilities shall be thoroughly disinfected before being connected to the system. The method of disinfection shall be as approved by the New Mexico Environmental Improvement Division.

 [Recompiled 12/30/01]

17.12.750.15 WATER SUPPLY MEASUREMENT:

- A. Measuring Devices: Each utility shall install a suitable totalizing measuring device or otherwise determine production at each source of supply so that an accurate record may be maintained of the quantity of water produced by each source, the quantity treated by the utility, and the quantity distributed into the mains.
- B. Records: At least once each month the quantity produced from each source of supply shall be determined. Twelve-month totals by sources shall be recorded and transmitted to the Commission in the utility's Annual Report. Such records shall further show actual annual metered consumption and any other properly estimated revenue-producing unmetered water, and the difference between these figures shall be shown as a percentage of nonrevenue (unaccounted-for) water. Unaccounted-for water exceeding fifteen percent (15%) of the total production should be given special attention in order to reduce excessive losses of water. [Recompiled 12/30/01]
- **17.12.750.16** [HISTORY: NMPUC Case No. 2086, order dated June 30, 1988, unless otherwise noted; amended by NMPUC Case No. 2636, Order dated August 7, 1995. Formerly part of NMPUC General Order 42, superseded for purposes of rule reorganization and codification.] [Recompiled 12/30/01]

HISTORY OF 17.12.750 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.

General Order No. 42, Regulations Governing Water Utilities, 5/2/84.

NMPSC Rule 750, Minimum Standards For Design, Construction, And Operation Of Water Utilities, 6/30/88.

History of Repealed Material: [RESERVED]