

ORIGINAL

Decision No. 60104

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Investigation )  
 on the Commission's own motion to )  
 consider the adoption of Service )  
 Standards and Service Rules for )  
 water utilities under its jurisdiction )

Case No. 5663

SUPPLEMENTAL ORDER  
AMENDING PARAGRAPH III 5 d of GENERAL ORDER NO. 103

Paragraph III 5 of the Commission's General Order No. 103 relates to standards of design for materials and specifications.

Being of the opinion that the two references in Paragraph III 5 d(1) and III 5 d(2) to American Water Works Association Specification No. C204 should be amended as follows:

- (1) (a) Coal tar enamel wrapped as specified by American Water Works Association Specification No. 6294 C203.
- (2) (a) Coal tar enamel in accordance with American Water Works Association Specification No. 6294 C203.

Being of the further opinion that Paragraph III 5 d, Minimum Requirements for Steel Pipeline, should be amended as follows:

d. Minimum Requirements for Steel Pipeline

- (6) Exception for Non-corrosive Soils. Where maximum operating pressures will not exceed 200 p.s.i.g. and where soil resistivities are not less than 2,500 ohms/cm<sup>3</sup> by tests along the proposed route at intervals not exceeding 250 feet as determined by a properly qualified person or a satisfactory

history of service life or prior test along the proposed route which can be certified to be correct and shown to be reliable information by the owner or an officer of the utility, steel of the following lesser wall thicknesses may be used for pipe coated in accordance with paragraph d (1) (a) or (b), above, and lined in accordance with paragraph d (2) (a) ~~or~~ (c), above, as follows:

(a) Coal tar lined pipes;

1. 4-inch O.D. to and including 6 5/8-inch O.D. - 14-gauge.
2. 7-inch O.D. to and including 10 3/4-inch O.D. - 12-gauge.

(b) Cement-mortar lined pipes, minimum lining 3/4-inch;

1. 4-inch O.D. to and including 8 5/8-inch O.D. - 14-gauge.
2. 9-inch O.D. to and including 12 3/4-inch O.D. - 12-gauge.

Now Therefore, good cause appearing,

IT IS ORDERED that Paragraph III 5 d of General Order No. 103 adopted by Decision No. 53204 (55 Cal. P.U.C. 56), is hereby amended to read as follows:

"d. Minimum Requirements for Steel Pipeline. The requirements as set forth in paragraphs a, b, and c, above, are intended to be general in nature in order to permit full discretion in the selection of proper materials and equipment by the qualified person. However, in distribution and transmission

systems the following minimum requirements shall be met in the design of steel pipelines.

- (1) Outside Coating. Any of the following, except that those portions laid above ground may be protected on the outside after cleaning by painting only:
  - (a) Coal tar enamel wrapped as specified by American Water Works Association Specification No. C203.
  - (b) Asphalt with asbestos felt or fiberglass wrapping in accordance with the specifications shown in Appendix B.
  - (c) Reinforced concrete in accordance with American Water Works Association Specification No. C205.
- (2) Inside Lining. Any of the following:
  - (a) Coal tar enamel in accordance with American Water Works Association Specification No. C203.
  - (b) Asphalt as specified in the specifications shown in Appendix B.
  - (c) Cement lining in accordance with American Water Works Association Specification No. C205 or Federal Specification WWP 406, where applicable.
- (3) Pipes Under 4-inches Outside Diameter. Pipes under 4-inches in outside diameter may be dipped in asphalt after cleaning without wrapping, provided they have a minimum wall thickness of 12-gauge. If wrapped outside in accordance with the specifications outlined in paragraph d(1), above, the minimum gauge shall be 14-gauge.
- (4) Pipes 4-inches Outside Diameter and Larger. The wall thickness of pipes 4-inches in outside diameter and

larger shall meet the following minimum gauge requirements:

- (a) 4-inch O.D. to and including 6 5/8-inch O.D. pipe - 12-gauge.
- (b) 7-inch O.D. to and including 10 3/4-inch O.D. pipe - 10-gauge.
- (c) Pipes over 10 3/4-inches in outside diameter shall be of 10-gauge minimum steel thickness.

All such pipes shall meet the standard specifications of the American Water Works Association Specification No. C202 and be of adequate design for the existing conditions.

- (5) Exception when Used for Reinforcing. Where steel pipe is used as reinforcing for cement coated and lined pipe, steel of lesser wall thickness may be used provided the design is such that the strength of the reinforced concrete is equal to the American Water Works Association Specification No. C202 or Federal Specifications SS-P-381 for a steel pipe of the same diameter.
- (6) Exception for Non-corrosive Soils. Where maximum operating pressures will not exceed 200 p.s.i.g. and where soil resistivities are not less than 2,500 ohms/cm<sup>3</sup> by tests along the proposed route at intervals not exceeding 250 feet as determined by a properly qualified person or a satisfactory history of service life or prior test along the proposed route which can be certified to be correct and shown to be reliable information by the owner or an officer of

the utility, steel of the following lesser wall thicknesses may be used for pipes coated in accordance with paragraph d (1) (a) or (b), above, and lined in accordance with paragraph d (2) (a) ~~for~~ (c), above, as follows:

- (a) Coal tar lined pipes;
  - 1. 4-inch O.D. to and including 6 5/8-inch O.D. - 14-gauge.
  - 2. 7-inch O.D. to and including 10 3/4-inch O.D. - 12-gauge.
- (b) Cement-mortar lined pipes, minimum lining 1/2-inch;
  - 1. 4-inch O.D. to and including 8 5/8-inch O.D. - 14-gauge.
  - 2. 9-inch O.D. to and including 12 3/4-inch O.D. - 12-gauge."

Amended Paragraph III 5 d of General Order No. 103 shall become effective on the date hereof.

The effective date of this order shall be the date hereof.

Dated at Los Angeles, California, this 17th day of May, 1960.

[Signature]  
President

[Signature]

[Signature]

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Commissioners