

SECTION 15107 - DIAPHRAGM VALVES

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing diaphragm valves.

1.2 RELATED SECTIONS

- A. The WORK of the following Section applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.

- 1. Section 15100 Valves, General

PART 2 -- PRODUCTS

2.1 EQUIPMENT REQUIREMENTS

- A. **General:** Except as otherwise indicated, diaphragm valves shall be of the weir type, designed for throttling service and operation in any position. Valves manufactured of polyvinyl chloride (PVC) shall have a pressure rating of 150 psi at 73 degrees F and 15 psi at 140 degrees F. Valves manufactured of chlorinated polyvinyl chloride (CPVC) shall have a pressure rating of 150 psi at 73 degrees F and 40 psi at 210 degrees F. Valves shall be designed for bubble-tight shut-off.

2.2 CONSTRUCTION

- A. **Body:** Except as otherwise indicated, valve bodies shall be fabricated of PVC or CPVC, conforming to ASTM D 1784, and recommended by the manufacturer for the service indicated, with threaded ends or flanged ends conforming to ANSI B16.5 (150 psi). [The valves shall include position indicators.] [Diaphragm valves on outlets and drain nozzles of storage tanks shall have cast iron or ductile iron bodies with plastic linings recommended by the manufacturer for the indicated chemicals.]
- B. **Diaphragm:** Diaphragms of valves shall be fabricated of chlorosulfonated polyethylene such as Hypalon (or equal), except that the diaphragms for valves in chlorine solutions and chlorine gas lines shall be Teflon.
- C. **Operator:** Except as otherwise indicated, valves shall be handwheel-operated. Handwheels shall be made of plastic or material with plastic coating. Where pneumatic or electric operators are indicated they shall be provided by the valve manufacturer, and shall include limit switches, positioners, and accessories.

2.3 MANUFACTURERS

- A. Valves shall be manufactured by one of the following (or equal):

ASAHI/AMERICA
Hills-McCanna Company
ITT Engineered Valves
NIBCO, Inc. (Chemtrol)

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. Diaphragm valves shall be installed in chlorine solution and chemical feed lines, between the storage tanks and points of application, and where indicated.
- B. Valves shall be installed in accordance with Section 15100.

**** END OF SECTION ****