

SECTION 15166 - DIAPHRAGM GAS METERS

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing diaphragm type gas meters for measuring [digester gas] [natural gas] flow at low pressure, equipped with totalizers.

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 15150 Meters, General

PART 2 -- PRODUCTS

2.1 GENERAL

- A. **Basic Design:** The meters shall be of the diaphragm displacement type designed with moving parts enclosed in an aluminum housing. The meters shall be suitable for measuring and totalizing the flow of gas in cubic feet units at an accuracy of plus or minus 1 percent from 10 to 100 percent of capacity.

- B. **Schedule:** Meters shall comply with the following:

<u>I.D. No.</u>	<u>Service</u>	<u>Pipe Capacity (CFH)</u>	<u>Inlet Size (in.)</u>	<u>Flow Pressure ([])</u>	<u>Range ([])</u>
[]	[]	[]	[]	[]	[]
[]	[]	[]	[]	[]	[]

2.2 BASIC MATERIALS

- A. **Meter Body:** Moving parts of the diaphragm displacement type meter shall be housed in a flanged die-cast aluminum alloy body. Valves, linkages, and the diaphragm assembly shall be mounted on a common plate for easy removal. Bearings shall be of the low-friction type and the design shall include a bolted access cover to permit adjustment. The totalizer assembly shall be mounted outside of the meter body, and shall be protected by a hinged cover. Both inlet and outlet connections shall be threaded. The meters shall be designed for outdoor installation and for [minimum pressure loss].

2.3 MANUFACTURERS

- A. Diaphragm gas meters shall be manufactured by one of the following (or equal).

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. Diaphragm gas meters shall be installed in accordance with the manufacturer's installation instructions and Section 15150.
- B. Meters connected to high pressure gas mains shall be protected by shut-off valves, strainers, and pressure regulators.
- C. Unions shall be provided at inlet and outlets.

**** END OF SECTION ****