# SECTION 11260 - CHEMICAL FEEDING EQUIPMENT, GENERAL

# City of San Diego, CWP Guidelines

#### PART 1 -- GENERAL

## 1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing general requirements for chemical feeding equipment comprising tanks, motors, drives, mixers, feeders, meters, conveyors, controls and panels, piping, valves, accessories and providing spare parts and tools.
- B. The WORK also requires that one manufacturer accept responsibility for furnishing all equipment of a similar type as indicated but without altering or modifying the CONTRACTOR'S responsibilities under the Contract Documents.
- C. The WORK additionally requires that the one manufacturer who accepts the indicated responsibilities shall manufacture the principal elements and components of the chemical feeding equipment.
- D. The WORK also includes coordination of design, assembly, testing and installation.
- E. The WORK of this Section applies to the WORK of the following Sections:
  - 1. Section 11261 Metering Pump
  - 2. Section 11262 Polymer Feeding Systems
  - 3. Section 11263 Rotary Volumetric Liquid Feeders
  - 4. Section 11267 Polymer Mix-Feed Pumps
  - 5. Section 11281 Chlorination Equipment
  - 6. Section 11282 Dechlorination Equipment
  - 7. Section 11283 Hypochlorite Systems

## 1.2 RELATED SECTIONS

- A. The WORK of the following Sections 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 11000 Equipment General Provisions
  - 2. Section 11266 Chemical Feeder Control Stations
  - 3. Section 13207 Welded Steel Tanks
  - 4. Section 13209 Fiberglass Reinforced Plastic Tanks

## 1.3 SHOP DRAWINGS AND SAMPLES

A. In addition to the requirements of Section 11000, the following shall be submitted in compliance with Section 01300:

- 1. Shop drawings showing fabrication, assembly, and foundation of chemical feeding equipment.
- 2. Installation drawings showing equipment configuration, isometric piping and special details.
- 3. Schematics, diagrams and panel layouts.
- 4. Calibration graphs based on field testing for chemical feed units which do not include rate set device in pounds per hour for dry feeders and gallons per hour for liquid feeders.

## 1.4 OWNER'S MANUAL

- A. In addition to the requirements of Section 11000, the following shall be submitted in compliance with Section 01300:
  - 1. Certification by CONTRACTOR and manufacturer that products comply with the indicated requirements.

## 1.5 SERVICES OF MANUFACTURER

A. Services of manufacturer shall be provided in accordance with Section 11000 when listed in specific chemical feeding equipment sections.

## PART 2 -- PRODUCTS

#### 2.1 GENERAL

A. Components of chemical feeding equipment shall comply with Section 11000.

# 2.2 MATERIALS

A. **Corrosion Resistance:** Materials of all components of the chemical feeding equipment shall be suitable for the indicated service requirements including corrosion resistance to the chemicals at the indicated temperature range and shall conform to the recommendations of the manufacturer of the equipment.

# 2.3 APPURTENANCES

- A. **Solenoid Valves:** Equipment shall include solenoid valves as part of the chemical feeding unit. The solenoid valve electrical rating shall be compatible with the equipment voltage and valves shall be furnished complete with conduit and wiring from the control panel to the solenoids. Valve material shall comply with Section 15115.
- B. **Pressure Gages:** Chemical transfer and metering pumps, and other equipment, where indicated, shall include pressure gages with diaphragm seals complying with Section 15034.
- C. **Equipment Supports:** Equipment supports shall comply with Section 11000. Chemical feeding equipment and piping shall be supported on and bolted to concrete equipment pads. Fabricated

metal supports exposed to chemical spills shall be of type 316 stainless steel or enameled steel. Anchor bolts, nuts, and washers of such supports shall be of type 316 stainless steel, using an antiseize compound..

- D. **Safety:** The WORK includes providing code-required safety signs and safety products for use by the OWNER.
- E. **Local Control Panels**: The NEMA rating of local control panels shall comply with the area designations of Section 16050, unless indicated otherwise.
- 2.4 NAMEPLATES, TOOLS AND SPARE PARTS
  - A. **Nameplates**: Nameplates shall comply with Section 11000 and shall indicate capacity, motor horsepower, and electrical characteristics.
  - B. **Spare Parts**: Spares parts shall comply with manufacturer's recommendations and shall include seals, packings, gaskets, nuts, bolts, washers, rings, diaphragms, bearings and belts.

# **PART 3 -- EXECUTION**

# 3.1 INSTALLATION

A. Installation shall comply with the manufacturer's installation instructions, Section 11000, this Section, and the requirements of the individual chemical feeding equipment sections.

\*\* END OF SECTION \*\*