SECTION

CHEMICAL FEED SYSTEM

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Chemical Feed System

1.2 SUBMITTALS

A. Submittals shall include:
   1. Product Data: Full product description including all accessories and control settings.
   2. Drawings: Submit general arrangement drawing; including dimensions, weights and ratings, wiring diagrams, and all other shop related drawings.
   3. Include materials of construction of major pressure vessel parts and fittings.
   4. Controls Cutsheet: Submit complete set of cutsheets for trims and controls.
   5. Warranty: Submit standard form equipment warranty.

B. Closeout Submittals:
   1. Operation and Maintenance Data: Submit manufacturer's descriptive literature, maintenance and repair information.

1.3 QUALITY ASSURANCE

A. The packaged chemical feed system must receive factory tests to check the construction and operation of the unit.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Cover all openings, leave drain valves in open position,

PART 2 – PRODUCTS

2.1 CHEMICAL FEED SYSTEM

A. General
   1. Provide a completely preassembled packaged chemical feed system consisting of the following:
      a. Chemical metering pump
      b. Chemical mix/storage tank
      c. (Optional) Agitator
      d. Accessories (as required)

B. Chemical Meter Pump
   1. Capacity shall be adjustable 10-100 percent through its rated capacity by a manual micrometer adjustment screw while the pump is running or stopped.
   2. Pump stroking frequency 1-125 strokes/minute (15, 17, 30 GPD), 1-145 strokes/min. (45 GPD)
   3. Various output capacity ranges shall be available by merely changing the pump head assembly.
   4. Pump shall include:
      a. Dual output adjustment
      b. Thermal overload protection
      c. Circuit voltage protection
      d. Priming / Degassing valve
      e. Guided double ball checks
      f. LED indicating lights
      g. NEMA 4X style enclosure
      h. 2-year warranty

C. Chemical Storage Tank
   1. The storage tank shall be polyethylene construction with a steel support stand and have a removable or hinged lid.
      a. Chemical storage tank shall be made of UV stabilized linear polyethylene with an average wall thickness of 1/6 inch.
   2. The tank shall include a drain connection and a separate pump supply connection. The pump supply connection will draw from 2” off the bottom to prevent sludge from entering the pump.
   3. The tank support stand shall be constructed of steel and have an agitator bracket and sufficient room to mount the chemical feed pump beneath the tank.
   4. The suction of the chemical feed pump(s) shall be pre-plumbed to the storage tank through a strainer and shut-off valve.
   5. The tank capacity is to be determined by the chemical supplier or design engineer.

D. Agitator
   1. The agitator shall be mounted above the storage tank and have a stainless-steel shaft extending to within 6” of the bottom of the storage tank with a stainless-steel propeller welded to the end.
   2. The propeller speed shall be 1,725 RPM. In order to mix liquids, dissolve powders, and maintain chemicals in suspension.

END OF SECTION