

## Chemical Feed Pump

### General System Information:

Public Water Supply Name:

Public Water Supply Identification #: MT00

Ground Water System

Ground Water Purchase

Surface Water System

Surface Water Purchaser

Date:

Instructor:

Operation and Maintenance (O&M) Manual on-site and up-to-date: Yes No

### Chemical:

Name of Chemical:

Type of Chemical:

NSF approved: Yes No

Chemical Objective: (ie disinfection, coagulation, corrosion, sequestering, taste and odor)

4-log-disinfection required: Yes No

Minimum Chemical residual required mg/L

Material Safety Data Sheet (MSDS, or SDS) on site? Yes No

Chemical Concentration when purchased

Age of Chemical days

Chemical storage room temp ° F

Exposure to UV Light: Yes No

Chemical Storage adequate: Yes No

Comments:

### Pump Information:

Peristaltic Displacement Other(describe)

Make Model

Maximum Pump Output

GPD Maximum Pump Output Pressure PSI

System pressure at injection point PSI

Redundancy:

Multiple chemical pumps in parallel Spare Pump on-site No redundancy

What triggers operation of the Chemical pump?

How is dosing achieved?

Continuous set feed Flow Paced Other

How is dosing verified?

SCADA Manually Other

Pump Status verified by SCADA: Yes No

Chemical Pump SCADA alarm configured: Yes No

Maintenance tasks and frequency outlined in O&M manual: Yes No

Spare parts on-site: Yes No

Chemical Compatible Components: Yes No

Comments:

**Peristaltic Chemical Pump:**

Peristaltic pump hose size #:	Spare pump hose(s) on-site? Yes	No
Frequency of hose replacement	months	Last date of head rebuild:
Spare parts on-site? Yes	No	
Chemical pump setting:	Age of peristaltic pump:	
Chemical compatible components: Yes	No	
Comments:		

**Displacement Chemical Pump:**

Pump Control Panel (fill in set values that apply)

Stroke Length	Stroke Speed	Last date of chemical pump rebuild:		
Spare rebuild kit on-site: Yes	No	Age of displacement pump:		
Chemical Compatible components: Yes	No	Air bubbles in suction and/or injection lines? Yes	No	
Does the pump head have an air release mechanism? Yes				No
Is diaphragm leak indicator in use? Yes				No
Is weep hole leaking? Yes	No	Fluid from leak indicator hole is: Water		Oil

Comments:

**Dose Tank:**

Dose Tank Storage capacity	gallons	Days of chemical storage in dose tank	days (target 7-10)
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How is chemical fed?

Neat(without chemical reduction)	Solutions water reduction Rat
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Ratio of Chemical to water in dose tank (typical dilution ratio ranges for 3:1 to 10:1)

Chemical diluted with: Untreated water	Finished water	Deionized water	Other
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Desired dose tank concentration: mg/L

Does the dose tank have an adequately sized containment basin? Yes

No

Does the dose tank sit in the containment basin or on a platform above the containment basin? In

Above

Does the dose tank have a bottom drain for fresh batching of chemical and maintenance? Yes

No

Are dose tank cleaning and maintenance schedules outline in O&M manual? Yes

No

Chemical pump at, or below, the bottom of the dose tank. Flooded suction (positive suction head)

Chemical pump higher than product level (negative suction)

Distance from chemical pump to end of suction hose inches

Sealed dose tank with proper venting that terminates outside the building Yes

No

Suction screen with weighted suction line suspended above the bottom of dose tank Yes

No

Comments:

Accessories:

Suction hose size and type	1/4"	3/8"	Other		
Injection hose size and type	1/4"	3/8"	Other		
Couplers size	1/4"	3/8"	Other		
Check valves size	1/4"	3/8"	Other		
Injector size:	1/4"	3/8"	Other		
Suction tube length	inches	Suction tube age	Injection tube length	inches	Injection tube age
Replacement suction and injection tubing on-site?	Yes	No	Mid-suction/injection tube fittings in use?	Yes	No
Injector type:					
Duckbill	Ceramic Ball and Spring	Other			

Injector Cleaning Frequency:

Does system have adequate back flow protection on the chemical injection line?	Yes	No			
Pulse Dampener Used?	Yes	No	Chemical compatible valves and fittings?	Yes	No
Spare injector(s) on-site?	Yes	No	Spare check valves on-site?	Yes	No
Anti-siphon valves:	Yes	No			

Comments:

Miscellaneous:

Describe the water systems chemical batching process:

Does the system have the capability to pull a raw water sample prior to the treatment system?	Yes	No
Is the injector located prior to pressure tanks/captive air tanks?	Yes	No
Are all chemical pump components cleaned and dried out between uses, if not operating full-time?	Yes	No

Technical Assistance Provider Summary: