

**WATER TREATMENT CONTINUED**

SOURCE ID

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SURVEY DATE†

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PWSID†

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**CHEMICAL ADDITION**

This section must be filled out if any chemicals other than disinfectants are added to the water system.

Chemical(s)	Dosage	Purpose

yes no n/a unk

43. Are chemicals stored properly?
- \*44. Are chemical feeders and pumps in good condition, and properly maintained?
- \*45. Are chemical feed systems designed so that they cannot overfeed?
- \*46. Is there an auto shut-off safety switch to prevent chemical feed when water pumps are off?
- \*47. Are instrumentation and controls adequate for the process being utilized and in proper working order?
48. Are accurate records being maintained (check records)?
49. Are adequate safety devices available and precautions observed?
50. Is the system monitoring for chemicals being used?
51. Is the operator trained to use and conduct monitoring of chemicals used?

TRAINING:	DATE:

**PRETREATMENT (if applicable)**

52. Mixing (Circle one)    Static     Inline     Mixing Chamber
53. Is coagulation practiced whenever water is treated?
54. Is flocculation used?
55. Is pH adjustment used?
56. Is sedimentation used?

**CORROSION CONTROL (if applicable)**

57. Is there corrosion monitoring?
58. If water is corrosive, does utility have an approved corrosion control program?
59. Has a Langelier Index or similar corrosion potential indicator been determined?
60. Does system comply with lead solder ban?
61. Are corrosion control chemicals being used?

**OTHER TREATMENT (Circle all that apply)**

Fe/Mn <input type="checkbox"/>	Softening <input type="checkbox"/>	Ion Exchange <input type="checkbox"/>	Fluoridation <input type="checkbox"/>	R.O. <input type="checkbox"/>
Other:				

COMMENTS:

**FILTRATION/ABSORPTION (if applicable)**

Type of treatment(s) used (Circle all that apply)

Conventional     Direct     Pressure Sand     Slow Sand

Diatomaceous Earth     Cartridge/Bag     Absorption (s.f.g.)

Other (list): \_\_\_\_\_ (See field guide for treatment descriptions)

Number of Filters	Number of Stages (Cartridge)	Size of Filters
(Cartridge) Brand		(Cartridge) Model
Replacement Interval		
Purpose of Filter (Circle all that apply)		
Odor/Taste <input type="checkbox"/> Giardia <input type="checkbox"/> TTHM's <input type="checkbox"/> Other (list) _____		
Turbidity <input type="checkbox"/> Fe/Mn <input type="checkbox"/> VOC's <input type="checkbox"/> Color <input type="checkbox"/>		
Type of Filter Media (Circle one)		
Sand <input type="checkbox"/> Mixed Media <input type="checkbox"/> GAC <input type="checkbox"/> Green Sand <input type="checkbox"/> Other (list) _____		
Filtration Rate (GPS)	Backwash Interval	
62. What determines when backwashing will take place?		
63. Is backwash automatic or manual?		

64. How often is the interior of the pressure filter inspected?

yes no n/a unk

- \*65. Is filtration equipment maintained and in operable condition?
66. Can backwash wastewater be observed during backwash?
67. Is backwash flow measured?
68. Is backwash rate sufficient?
69. Can backwash rate of flow be adjusted?
70. Are there backup filters for use during repair and cleaning?
71. Does filtering media meet standards approved in plan review?
72. Is there equal flow through all filters?
73. Is there surface wash?
74. Can surface wash arm rotation be verified?
75. Is treated water used for backwashing?
76. Are jar tests conducted at facility?
77. Is there filtered water to waste piping?
78. Is there air assisted backwash capability?
79. Is flow to the filter(s) controlled with a device such as a rate of flow controller?
80. Is pressure drop monitored across the filter?
81. Is cartridge/bag filter replacement safe and sanitary?
82. Are chemicals used in filtration?
83. Are epichlorohydrin and/or acrylamide used?
84. If so, does the system annually certify that they are using them in the correct dosage?

COMMENTS:

# FIELD GUIDE FOR SANITARY SURVEY

## FILTRATION TREATMENT DESCRIPTIONS

**APPROVED TECHNOLOGIES** (these filtration treatment types meet the SWTR requirements)

**CONVENTIONAL** - water passes through the following processes: coagulation, flocculation, sedimentation, filtration (rapid sand or multi-media).

**DIRECT** - water passes through the following processes: coagulation, flocculation, filtration (rapid sand, in-line or multi-media).

**SLOW SAND** - passage of water through a bed of sand at slow (less than .4m/hr) velocity.

**DIATOMACEOUS EARTH** - passage of water through a precoat cake of diatomaceous earth filter media, with additional filter media (body feed) added to maintain permeability of cake.

**ALTERNATIVE TECHNOLOGIES** (these filtration treatment types must be approved by DEC for the individual pws in order to meet the SWTR requirements)

**PRESSURE SAND** - passage of pressurized water through a multimedia filter, in which the entire filter apparatus is enclosed by a steel shell.

**CARTRIDGE** - water passes through cleanable ceramic or disposable polypropylene or paper cartridges.

**HIGH RATE FILTRATION** - rates greater than rapid sand filtration, or greater than 6 gpm/ft<sup>2</sup>

**ABSORPTION** - purpose of media is to absorb rather than to filter.