

General / SDWIS Site Visit Info

1	Reason for the visit.	DropDown	None
2	Date of the survey	Date	None
3	Status of site visit.	DropDown	None
4	Source evaluation:	DropDown	None
5	Treatment sytem evaluation:	DropDown	None
6	Distribution system evaluation:	DropDown	None
7	Finished water storage evaluation:	DropDown	None
8	Pump and pumping facility evaluation:	DropDown	None
9	Monitoring and requirements evaluation:	DropDown	None
10	System management and operations evaluation:	DropDown	None
11	Operator compliance evaluation:	DropDown	None
12	Security evaluation:	DropDown	None
13	Financial evaluation:	DropDown	None
14	Other element evaluated:	DropDown	None
15	Last name of inspector:	Text	None
16	First name of inspector:	Text	None
17	Inspector organization	DropDown	None
18	Water system notification date? (Date system was notified about a defficiency)	Date	None
19	Next inspection due date:	Date	None

General / Background Info

Name/Location:

1	Name of public water system:	Text	None
2	PWS number:	Text	None

General / Background Info

Classification:

1	SDWIS Activity Status	DropDown	None
2	SDWA classification of system	DropDown	None
3	Number of residential service connections?	Numeric	None
4	Residential population: (Do not change population, make a note and update SDWIS directly yourself)	Numeric	None
5	Number of metered connection?	Numeric	None

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct Response
Numeric None

6 Number of unmetered connections?

General / Background Info

Owner:

1	AC's Last Name:	Text	None
2	AC's First Name:	Text	None
3	AC's Address:	Text	None
4	AC's City:	Text	None
5	AC's State:	Text	None
6	AC's zip:	Text	None

Regulations / General

1	1	What is the operator certification level required for this facility?(ex. VSWS, 1T1D, 2T2D, 2T1D, etc)	Text	None
2	1	Is the system staffed by properly certified operators?	YesNo	Yes
3		Have the operator certification points been re-avaluated?	YesNo	Yes

Regulations / Monitoring

1		Is the PWS out of compliance with any monitoring violations?	YesNo	No
2		Are there any outstanding violations?	YesNo	No

Sources / General

Quantity:

1	3	What is the plant design capacity?	Numeric	None
2		What is the average daily production?	Numeric	None
3		What is the maximum daily production?	Numeric	None
4		What is the unaccounted for water percentage?(if above 10% recommend leak detection program)	Numeric	None
5		Does the system have an operational master meter?	YesNo	None
6		How often is the meter calibrated?	Text	None
7	2	Does the system have interconnections with neighboring systems or a contingency plan for water outages?	YesNo	Yes

Sources / Groundwater

Wells / SW Protection:

1	2	Is the well located in the proximity of any potential sources of pollution within 300'?	YesNo	No
2		Does the system have a wellhead protection plan and is it up to date?	YesNo	Yes

QuestionNumber	Community	Response Type
3	Are zoning restrictions in place that control manufacturing in the wellhead protection area?	
4	Does the system own the wellhead protection area?	
5	If no, does the system plan to purchase this area?	
6	If yes, what is the percentage owned?	

Sanitary Survey Questions --- Large

Correct	Response
	YesNo None
	YesNo None
	YesNo None
	Numeric None

Sources / Groundwater

Wells / Construction:

1	What is the depth of the well in feet?	Numeric	None
2	What is the depth of the casing in feet?	Numeric	None
3	What is the diameter of the well casing?	Numeric	None
4	2 Does the casing terminate at an adequate elevation?	YesNo	Yes
5	2 Is the sanitary seal properly installed and maintained?	YesNo	Yes
6	What is the yield of the Well?	Numeric	None
7	What is the unit of measure for the yield of the well?	DropDown	None
8	Is the well located in a flood plain?	YesNo	None
9	Is the well protected from vandalism?	YesNo	Yes
10	What type of pump is used for this well?	DropDown	None
11	What is the capacity of the raw water pump (GPM)?	Numeric	None
12	What is the HP Rating of the raw water pump?	Numeric	None
13	When was the pump last serviced?	Text	None

Sources / Groundwater

Springs / SW Protection:

1	Has a GWUDI Assessment been done for this source?	YesNoLead	Yes
1.01	If yes, date performed?	Date	None
1.02	Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?	Text	None
1.03	Is the site subject to flooding?	Text	None

Sources / Groundwater

Springs / Construction:

1	2 Is there a screened overflow and drain pipe?	YesNo	Yes
---	--	-------	-----

Sources / Surface Water

Reservoirs, Lakes, Rivers, Streams / General:

1	3 How many intakes are in use?	Numeric	None
---	--------------------------------	---------	------

QuestionNumber	Community	er	Response Type
2	3	Are they at different locations/depths?	
3		How often are the intakes inspected?	
4		What conditions cause fluctuations in water quality?	
5		Are intake locations and 400' no entry zones clearly marked with buoys?	
6		Are water fowl a problem around the intake?	
7		Does the system monitor for Giardia and Cryptosporidium?	

Sanitary Survey Questions --- Large

Correct	Response
	YesNo Yes
	Text None
	Text None
	YesNo Yes
	YesNo No
	YesNo None

Sources / Surface Water

Reservoirs, Lakes, Rivers, Streams / SW Protection:

1	2	Is the area around the intake(s) free from potential sources of pollution?	YesNo	Yes
2		Is a shoreline buffer zone owned or controlled by the district?	YesNo	None
3		Does the system have an active program for watershed acquisition or control?	YesNo	Yes
4		Are portions of the watershed controlled by land owner agreements or zoning?	YesNo	None
5		Does the system inspect septic systems and leachfields in the watershed?	YesNo	None
6		Are there any agricultural runoffs into the watershed?	YesNo	No
7		Are there any industrial discharges in the watershed?	YesNo	No
8		Are zoning restrictions in place that control manufacturing in the watershed?	YesNo	None

Sources / Surface Water

Reservoirs, Lakes, Rivers, Streams / Construction:

1		What type of raw water pump is used?	DropDown	None
2		What is the capacity of the raw water pump (GPM)?	Numeric	None
3		What is the HP Rating of the raw water pump?	Numeric	None
4		When was the pump last serviced?	Text	None

Sources / Surface Water

Roof Catchments / General:

1		What conditions cause changes to quality of the water?	Text	None
---	--	--	------	------

Sources / Surface Water

Roof Catchments / Construction:

1	2	Is the roof in good condition?	YesNo	Yes
2	2	Is there a diversion box?	YesNo	Yes
3	2	Is the gutter system in good condition?	YesNo	Yes
4	2	Is the collection chamber properly designed and constructed?	YesNo	Yes

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct

Response

5	2	Is the access cover a shoe-box type lid?	YesNo	Yes
6	2	Is the vent screened?	YesNo	Yes
7	2	Does the outlet pick-up several inches above to prevent passage of sediment?	YesNo	Yes
8	2	Is the drain / overflow screened?	YesNo	Yes
9	2	Is the supply intake adequate?	YesNo	Yes

Treatment / General

General:

1	3	Does the system have a schematic of the treatment plant?	YesNo	Yes
2		What is the condition of the interior piping?	DropDown	None
3		Does the equipment, coatings and anything in contact with the potable water meet the NSF-61 certification?	YesNo	None
4		Is there a raw water sample tap (only for ground water sources)?	YesNo	None

Treatment / General

Safety:

1	3	Are all confined space entry procedures done in accordance with OSHA requirements?	YesNo	Yes
2		Are Material Safety Data Sheets available and located near the chemical?	YesNo	None
3		Is proper safety equipment available?	YesNo	Yes
4		Is the eyewash station/shower within safe distance and maintained properly?	YesNo	Yes
5		Is spill containment adequate for all chemicals?	YesNo	Yes

Treatment / General

Chemical Use:

1	2	Do all chemicals meet the NSF-60 certification?	YesNo	Yes
2		Are spare parts available for all chemical feeders?	YesNo	Yes
3		Are hose-bibs provided with backflow prevention devices?	YesNo	None

Treatment / General

Cross-Connections:

1		Are cross-connections present at the water treatment plant?	YesNo	No
2		Are there adequate backflow prevention/antisiphon devices?	YesNo	Yes

Treatment / Activated Alumina

Activated Alumina:

1		chemical name	Text	None
---	--	---------------	------	------

Treatment / Activated Carbon

Granular:

1	3	Is backwashing assisted by an air scour system?	YesNo	Yes
2	3	What is the frequency of GAC regeneration/replacement?	Text	None
3	2	What criteria is used to determine when a filter backwash is required?	DropDown	None
4	2	Is there an SOP for the backwash procedure?	YesNo	Yes

Treatment / Activated Carbon

Powdered:

1	3	What is the empty bed contact time (EBCT)?	Text	None
2	3	What type of filtration media system is being utilized?	DropDown	None
3	3	Are the filters evaluated regularly to determine condition of media?	YesNo	Yes
4	2	What criteria is used to determine when a filter backwash is required?	DropDown	None
5	2	Is there an SOP for the backwash procedure?	YesNo	Yes
6	2	Are provisions made for measuring the quantities of chemicals used?	YesNo	Yes
7	2	Are chemical shipping containers labeled to include chemical name, purity and concentration, supplier name and address?	YesNo	Yes
8	3	Are delivered chemicals assayed?	YesNo	Yes
9	3	Is the PAC applied before the application point of chlorine or any or other oxidant?	YesNo	Yes
10	3	Is a separate room provided for PAC feed installations and equipped with explosion-proof electrical outlets, lights and motors?	YesNo	Yes
11	3	Is the PAC stored in a room separate from any other chemicals?	YesNo	Yes
12	4	Are provisions made for adequate dust control?	YesNo	Yes
13	2	Is PAC being handled as a potentially combustible material and stored in a building or compartment as nearly fireproof as possible?	YesNo	Yes

Treatment / Aeration

General:

1	3	What type of aeration system is used?	DropDown	None
2		What is the purpose of the treatment?	DropDown	None
3		Is post aeration water disinfected?	YesNo	None
4		Are air intakes and outtakes screened?	YesNo	Yes
5		Is the air outlet located a safe distance from the air inlet?	YesNo	Yes
6	3	Is the aerator ventilated properly with vent turned down?	YesNo	Yes
7		How often is the unit serviced?	Text	None

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large
Correct Response

Treatment / Aeration

Cascade:

1 4 Answer all general questions

Text None

Treatment / Aeration

Diffused:

1 4 Answer all general questions

Text None

Treatment / Aeration

Packed Tower:

1 4 Answer all general questions

Text None

Treatment / Aeration

Slat Tray:

1 4 Answer all general questions

Text None

Treatment / Aeration

Spray:

1 4 Answer all general questions

Text None

Treatment / Chlorination

General:

- 1 2 What is the chemical application point?
- 2 What is the pump type?
- 3 Is the chemical feeder paces to flow?
- 4 2 Will the plant shut down on High/Low levels of disinfectant? (please indicate high and low alarm levels in the notes section)
- 5 What is the size of the day tank? (gallons)
- 6 What is the size of the bulk storage tank? (gallons)
- 7 Is the amount on hand adequate?
- 8 3 How is the chemical monitored?
- 9 What is the chlorine analyzer type?
- 10 Where is the analyzer waste disposed of?
- 11 Is there a proper air gap for the analyzer waste stream?

DropDown None
DropDown None
YesNo None
YesNo None
Numeric None
Numeric None
YesNo None
DropDown None
Text None
Text None
YesNo Yes

Treatment / Chlorination

Chloramination:

1 Answer all general questions

Text None

Treatment / Chlorination

Chlorine Dioxide:

1 Answer all general questions.

Text None

Treatment / Chlorination

Gaseous Chlorination:

1 Answer all general questions

Text None

Treatment / Chlorination

Hypochlorination:

1 Answer all general questions

Text None

Treatment / Coagulation

Coagulation:

- 1 2 Is a primary coagulant used at all times the plant is in operation?
- 2 2 What primary coagulant is being used?
- 3 Have other types been tried?

YesNo Yes
DropDown None
YesNo None

Treatment / Filtration

Cartridge:

- 1 3 What is the filter pore size? (1 micron, 5 micron)
- 2 3 What is the typical time between filter replacements?
- 3 What is the filter removing? (iron, sediment)

Text None
Text None
Text None

Treatment / Filtration

Greensand:

- 1 How many filters are in use?
- 2 Date the filter media was last changed or regenerated?
- 3 Is there an oxidizer ahead of the filter?

Numeric None
Text None
YesNo None

Treatment / Filtration

Pressure Sand:

- 1 What is the type of filtration process?

DropDown None

QuestionNumb
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct Response

QuestionNumb	er	Response Type	Correct	Response
2	Who is the filter manufacturer?			Text None
3	How many filters are in use?			Numeric None
4	Depth (Ft)?			Numeric None
5	Width (Ft)?			Numeric None
6	Length (Ft)?			Numeric None
7	Date the filter media was last changed or regenerated?			Text None
8	How are the filter cleaned?			DropDown None
9	Is there a turbidimeter on each filter?			YesNo None
10	Is there a combined effluent turbidimeter?			YesNo None
11	Has a particle counter been used to optimize the filter process?			YesNo None
12	List the types of media in use from the top of the media layer to the bottom? (anthracite, garnet, GAC, sand, gravel, support gravel,			Text None
13	How is media loss measured?			Text None
14	Is media occasionally sent to manufacturer for analysis?			Text None
15	What is the frequency of the filter backwash (hrs)?			Text None
16	What is the volume used for the filter backwash (gals)?			Text None
17	Does the system backwash with clean water?			YesNo None
18	Is backwash recycled?			YesNoLeadi None
18.01	If yes, percentage?			Numeric None
19	Backwash is started by which of the following parameters?			DropDown None
20	Is Filter to waste used?			YesNo None
21	What is the average filtered water turbidity (NTU)?			Numeric None
22	What criteria are used to determine when a filter goes back on-line?			Text None
23	Do turbidity records indicate spiking after start-up?			YesNo None
24	Will the plant shut down on high turbidity?			YesNo None

Treatment / Filtration

Rapid Sand:

1	What is the type of filtration process?			DropDown None
2	Who is the filter manufacturer?			Text None
3	How many filters are in use?			Numeric None
4	Depth (Ft)?			Numeric None
5	Width (Ft)?			Numeric None
6	Length (Ft)?			Numeric None

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct

Response

QuestionNum	er	Response Type	Correct	Response
7	Date the filter media was last changed or regenerated?			Text None
8	How are the filter cleaned?			DropDown None
9	Is there a turbidimeter on each filter?			YesNo None
10	Is there a combined effluent turbidimeter?			YesNo None
11	Has a particle counter been used to optimize the filter process?			YesNo None
12	List the types of media in use from the top of the media layer to the bottom? (anthracite, garnet, GAC, sand, gravel, support gravel,			Text None
13	How is media loss measured?			Text None
14	Is media occasionally sent to manufacturer for analysis?			Text None
15	What is the frequency of the filter backwash (hrs)?			Text None
16	What is the volume used for the filter backwash (gals)?			Text None
17	Does the system backwash with clean water?			YesNo None
18	Is backwash recycled?			YesNoLead None
18.01	If yes, percentage?			Numeric None
19	Backwash is started by which of the following parameters?			DropDown None
20	Is Filter to waste used?			YesNo None
21	What is the average filtered water turbidity (NTU)?			Numeric None
22	What criteria are used to determine when a filter goes back on-line?			Text None
23	Do turbidity records indicate spiking after start-up?			YesNo None
24	Will the plant shut down on high turbidity?			YesNo None

Treatment / Filtration

Slow Sand:

1	Who is the filter manufacturer?			Text None
2	How many filters are in use?			Numeric None
3	Depth (Ft)?			Numeric None
4	Width (Ft)?			Numeric None
5	Length (Ft)?			Numeric None
6	Date the filter media was last changed or regenerated?			Text None
7	How are the filter cleaned?			DropDown None
8	Is there a turbidimeter on each filter?			YesNo None
9	Is there a combined effluent turbidimeter?			YesNo None
10	Has a particle counter been used to optimize the filter process?			YesNo None
11	List the types of media in use from the top of the media layer to the bottom? (anthracite, garnet, GAC, sand, gravel, support gravel,			Text None

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct
Response

12	How is media loss measured?	Text	None
13	Is media occasionally sent to manufacturer for analysis?	Text	None
14	What is the frequency of the filter backwash (hrs)?	Text	None
15	What is the volume used for the filter backwash (gals)?	Text	None
16	Does the system backwash with clean water?	YesNo	None
17	Is backwash recycled?	YesNoLeadi	None
17.01	If yes, percentage?	Numeric	None
18	Backwash is started by which of the following parameters?	DropDown	None
19	Is Filter to waste used?	YesNo	None
20	What is the average filtered water turbidity (NTU)?	Numeric	None
21	What criteria are used to determine when a filter goes back on-line?	Text	None
22	Do turbidity records indicate spiking after start-up?	YesNo	None
23	Will the plant shut down on high turbidity?	YesNo	None

Treatment / Filtration

Ultrafiltration:

1	3	What is the treatment objective for this particular membrane?	Text	None
2	3	Is pretreatment being utilized?	YesNo	Yes
3	3	How often is a membrane backwashed?	Text	None
4	3	Is the backwashing procedure fully automatic?	YesNo	Yes
5	3	Is chemical cleaning periodical accomplished?	YesNo	Yes
6	3	Is adequate monitoring being conducted to prevent premature fouling?	YesNo	Yes
7	3	Is the unit properly sealed to prevent leakage?	YesNo	Yes
8	3	What is the percent waste stream?	Numeric	None
9	3	Is adequate monitoring in place to insure membrane integrity?	YesNo	Yes
10	3	How is the waste stream disposed of?	Text	None

Treatment / Flocculation

Flocculation:

1	Number of Floc basins?	Numeric	None
2	Type of mixer?	DropDown	None
3	Current Operating speed (RPM)?	Numeric	None
4	Depth (Ft)?	Numeric	None
5	Width (Ft)?	Numeric	None

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct Response

6	Length (Ft)?	Numeric	None
7	Detention time at max flow rate?	Text	None
8	Are baffle walls used?	YesNo	None
9	Are jar tests or streaming current detectors used to optimize coagulant dosing?	YesNo	None

Treatment / Fluoridation

Fluoridation:

1	2	What is the chemical application point?	DropDown	None
2		What is the pump type?	DropDown	None
3		Is the chemical feeder paces to flow?	YesNo	None
4	2	Will the plant shut down on High/Low levels of chemical? (please indicate high and low alarm levels in the notes section)	YesNo	None
5		What is the size of the day tank? (gallons)	Numeric	None
6		What is the size of the bulk storage tank? (gallons)	Numeric	None
7		Is the amount on hand adequate?	YesNo	None
8		How is the chemical monitored?	DropDown	None
9		What is the analyzer type?	Text	None
10		Where is the analyzer waste disposed of?	Text	None
11		Is there a proper air gap for the analyzer waste stream?	YesNo	Yes

Treatment / Inhibitor Addition

General:

1		Is the chemical feeder paces to flow?	YesNo	None
2	2	What is the chemical application point?	DropDown	None
3		What is the pump type?	DropDown	None
4		What is the size of the bulk storage tank? (gallons)	Numeric	None
5		What is the size of the day tank? (gallons)	Numeric	None
6		Is the amount on hand adequate?	YesNo	None
7	3	How is the chemical monitored?	DropDown	None
8	2	Will the plant shut down on High/Low levels of chemical? (please indicate high and low alarm levels in the notes section)	YesNo	None
10		Is a phosphate used?	YesNoLeadi	None
10.01	2	If yes, what type of phosphae (eg. Ortho, Poly, Hexameta, Bimettallic, Silica)?	Text	None
11	4	Are phosphates fed into the drinking water for corrosion control?	YesNo	None
12		What is the analyzer type?	Text	None
13		Where is the analyzer waste disposed of?	Text	None

QuestionNumb
Community

er
Response Type

Sanitary Survey Questions --- Large
Correct Response

Treatment / Inhibitor Addition

Bimetallic Phosphate:

1 Must answer all general questions for this category

None None

Treatment / Inhibitor Addition

Hexametaphosphate:

1 Must answer all general questions for this category

None None

Treatment / Inhibitor Addition

Orthophosphate:

1 Must answer all general questions for this category

None None

Treatment / Inhibitor Addition

Polyphosphate:

1 Must answer all general questions for this category

None None

Treatment / Inhibitor Addition

Silica:

1 Must answer all general questions for this category

None None

Treatment / Ion Exchange

General:

- 1 4 What is the ion exchange removing?
- 2 Who is the manufacturer?
- 3 Is regular maintenance/servicing completed on the treatment unit (recommend annually)?

DropDown None
Text None
YesNo None

Treatment / Ion Exchange

Ion Exchange:

- 1 3 Is the Brine tank covered and corrosion resistant?
- 2 What is the Resin Type?
- 3 2 Where is the filter backwash waste sent?
- 4 Is there a proper air gap on the backwash line?

YesNo Yes
Text None
Text None
YesNo Yes

Treatment / Lime - Soda Ash Addition

Lime - Soda Ash Addition:

- 1 2 What is the chemical application point?
- 2 What is the pump type?

DropDown None
DropDown None

QuestionNumb
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct Response

3	Is the chemical feeder paces to flow?	Text	None
4	What is the size of the day tank? (gallons)	Numeric	None
5	What is the size of the bulk storage tank? (gallons)	Numeric	None
6	Is the amount on hand adequate?	YesNo	None
7	3 How is the chemical monitored?	DropDown	None
8	What is the analyzer type?	Text	None
9	Where is the analyzer waste disposed of?	Text	None

Treatment / Ozonation

Ozonation:

1	Type of Ozone system:	DropDown	None
2	How many units(generators) are installed?	Numeric	None
3	What is the design flow rate per unit?	Text	None
4	What is the ozone dosage (mg/l)?	Numeric	None
5	Is the ozone venting system appropriate?	Text	None
6	Are the continuous ozone analyzers monitoring ozone levels in the ozone contact basin?	YesNo	None
7	Is the ambient air in the ozone generation/contact basin room being monitored?	YesNo	None
8	Are there high and low alarms for ozone levels in the contact basins and ambient air quality?	Text	None
9	What are the alarm levels set at?	Text	None
10	Will the plant shut down automatically at high or low ozone levels	YesNo	None
11	Is the ozone destruction system working properly?	YesNo	None

Treatment / PH Adjustment

General:

1	2 What is the chemical application point?	DropDown	None
2	What is the pump type?	DropDown	None
3	Is the chemical feeder paces to flow?	Text	None
4	2 Will the plant shut down on High/Low levels of chemical? (please indicate high and low alarm levels in the notes section)	YesNo	None
5	What is the size of the day tank? (gallons)	Numeric	None
6	What is the size of the bulk storage tank? (gallons)	Numeric	None
7	Is the amount on hand adequate?	YesNo	None
8	3 How is the chemical monitored?	DropDown	None
9	What is the chlorine analyzer type?	Text	None
10	Where is the analyzer waste disposed of?	Text	None

Treatment / PH Adjustment

PH Adjustment:

1	Must answer all general questions for this category.	Text	None
---	--	------	------

Treatment / PH Adjustment

Post Adjustment:

1	Must answer all general questions for this category.	Text	None
---	--	------	------

Treatment / PH Adjustment

Pre Adjustment:

1	Must answer all general questions for this category.	Text	None
---	--	------	------

Treatment / Rapid Mix

Rapid Mix:

1	Type of mixer?	DropDown	None
---	----------------	----------	------

Treatment / Reverse Osmosis

Reverse Osmosis:

1	3	What is the treatment objective for this particular membrane?	Text	None
2	3	Is pretreatment being utilized?	YesNo	Yes
3	3	Is the system serviced annually and is a maintenance log kept?	YesNo	Yes
4	3	Where is the waste stream disposed of?	Text	None
5		Is there a proper air gap?	Text	None

Treatment / Sedimentation

Sedimentation:

1	3	Number of sedimentation units?	Numeric	Yes
2	3	Length (Ft)?	Numeric	Yes
3		Depth (ft)?	Numeric	None
4	3	Width (Ft)?	Numeric	Yes
5	3	What is the post-sedimentation turbidity?(NTU)	Numeric	Yes
6	4	Volume of each basin (Gal)?	Numeric	Yes
7	3	Are chemicals added in a manner to insure satisfactory mixing of the chemicals with the water?	YesNo	Yes
8	4	Describe Basin Characteristics?	Text	None

Treatment / Sequestration

General:

- | | | | | |
|---|---|---|-------|------|
| 1 | 4 | Does the raw water have Fe levels greater than 0.3 mg/l? | YesNo | None |
| 2 | | Does the raw water have Mn levels greater than 0.05 mg/l? | YesNo | None |
| 3 | 3 | Are there raw and finished water sample taps? | YesNo | Yes |

Treatment / Sequestration

Sequestration:

- | | | | | |
|---|---|---|-------|-----|
| 1 | 3 | Are stock phosphate solutions kept covered and disinfected by carrying approximately 10 milligrams per liter free chlorine residual? (Phosphate solutions having a pH of 2.0 or less may be exempted from this requirement by the reviewing author) | YesNo | Yes |
| 2 | 3 | Where phosphate sequestration is practiced, is appropriate phosphate testing equipment provided? | YesNo | Yes |
| 3 | 3 | Where phosphate treatment is used, are satisfactory chlorine residuals maintained in the distribution system? | YesNo | Yes |

Treatment / Sludge Treatment

Sludge Treatment:

- | | | | | |
|------|---|---|------------|------|
| 1 | | Does the plant use holding tanks for sludge handling? | YesNoLeadi | None |
| 1.01 | 4 | Are they sized properly? | YesNo | Yes |
| 2 | | Does the plant use lagoons for sludge treatment? | YesNoLeadi | None |
| 2.01 | 4 | Are they sized properly? | YesNo | None |
| 2.02 | | Is an acceptable means of final sludge disposal provided? | YesNo | Yes |
| 3 | | Does the plant use drying beds for sludge treatment? | YesNoLeadi | None |
| 3.01 | 3 | Are they sized properly? | YesNo | Yes |

Treatment / Ultraviolet Radiation

Ultraviolet Radiation:

- | | | | | |
|---|--|--|-------|------|
| 1 | | What type of UV system is installed? | Text | None |
| 2 | | Is there a back-up/redundant unit? | YesNo | None |
| 3 | | Will the raw water pumps shut down if UV bulbs are not at full strength? | Text | None |
| 4 | | What occurs with the UV system if there is a power failure? Describe process and is this adequate. | Text | None |
| 5 | | Does the system have replacement bulbs? | YesNo | None |

Pump Stations / General

- | | | | | |
|---|--|--|----------|------|
| 1 | | What is the name & location of this pumping station? | Text | None |
| 2 | | What is the purpose of this pumping station? | DropDown | None |

QuestionNum	er	Sanitary Survey Questions	---	Large
Community	Response Type	Correct	Response	
3	What is the actual pumping capacity of this station? (GPD or MGD)		Numeric	None
4	2 Is the actual capacity of the pumping facility adequate to meet the demand?		YesNo	Yes
5	3 Is all of the pumping equipment operable and in good condition?		YesNo	Yes
6	3 If a critical pump fails to operate, are operators notified of this by an telephone dialer or similar automatic system?		YesNo	Yes
7	2 If no, is there a local alarm system and do area residents know to call the system in the event that it activates?		YesNo	Yes

Pump Stations / Design

1	What type of pump(s) are at this pumping station?		DropDown	None
2	How many pumping units are provided?		Numeric	None
3	2 Are there redundant pumping facilities?		YesNo	Yes
4	3 Is an air release valve located between the source and check valve? (Recommended for Vertical Turbine Pumps)		YesNoLeadi	Yes
5	2 Do the controls include an adequate failure alarm system?		YesNo	Yes
6.01	2 If yes, and the SCADA system is out of service, can personnel operate the system manually?		YesNo	Yes

Pump Stations / Operation

1	3 Is the building orderly and clean?		YesNo	Yes
2	4 Is there any leaking water from the piping or appurtenances?		YesNo	No
3	2 Are toxic chemicals, hazardous or flammable materials or lubricants stored inside the pumping station?		YesNo	No
4	3 Are adequate operational records maintained for pumping facilities?		YesNo	Yes
5	3 Are valves exercised regularly?		YesNo	Yes

Distribution / Design

1	List the communities served by the water system?		Text	None
2	Does the system have a leak detection program?		YesNo	Yes
3	Are there any low pressure points in the distribution?		YesNo	No
4	Are there any limited service agreements?		YesNo	None
5	How many limited service agreements?		Text	None
6	Are plans of the distribution system available and current?		YesNo	Yes
7	Please indicate in the next 7 questions the amount of pipe the system has in there distribution?		None	None
8	Plastic?		Text	None
9	Cast Iron?		Text	None
10	Ductile Iron?		Text	None

QuestionNum
Community

er
Response Type

Sanitary Survey Questions ---
Correct Response

Large

11	Concrete?	Text	None
12	Galvanized Steel?	Text	None
13	Asbestos?	Text	No
14	Other?	Text	None
15	How often is the system flushed?	DropDown	None
16	Are valves regularly exercised?	YesNo	Yes
17	Has a hydraulic model been performed on the system?	YesNo	None
18	Are all dead end water mains equipped with a means to flush the line?	YesNo	None
19	Does the system maintain adequate equipment and repair components.	YesNo	None

Distribution / Cross-Connections

1	2	Does the system have a cross-connection control program (pop. >1000)?	YesNo	None
2		Is it up to date?	YesNo	None
3	2	Does the water system have a program to control the use of fire hydrants?	YesNo	None
4		Are the backflow prevention devices installed and tested in compliance with the cross-connection program?	YesNo	None
5		Are dual check assemblies installed in all new residential services?	YesNo	None

Distribution / Disinfection

1	2	Does the system submit monthly operating reports?	YesNo	Yes
2		Is there total coliform sampling site plan up to date and available for review?	YesNo	None

Storage / Gravity

Design:

1	3	How many days of storage does the system have?	Numeric	None
2	2	Is the elevation of the tank sufficient to maintain distribution pressure throughout the system?	YesNo	Yes
3	2	Is the storage structure secure from unauthorized access?	YesNo	Yes
4	2	Does the storage reservoir have a watertight roof or cover and is it sloped so that water will drain?	YesNo	Yes
5	3	What is the tanks usable capacity (volume)? ALWAYS change this question to read "0" then proceed to next question to add correct tank	Numeric	None
6	3	What is the storage tanks usable capacity (volume)? (Add correct volume here under Measures table)	Numeric	None
7	3	What is the volume measured unit? ALWAYS change this question to read "blank" then proceed to next question to add correct measured unit.	DropDown	None
8		What is the effective volume measured unit? (Add correct measured unit (gallons) here under Measures table)	DropDown	None
9	3	What is the tank material?	DropDown	None
10		Can the tank be isolated from the system?	YesNo	None

Storage / Gravity

Components:

1	2	Does the tank appear to be structurally sound?	YesNo	Yes
2		Are overflow pipes:	Header	None
2.01	3	Terminated 12 to 24 inches above the ground?	YesNo	Yes
2.02	3	Screened or fitted with a flapper gate?	YesNo	Yes
3		Are air vents:	Header	None
3.01		Turned downward or covered from rain?	YesNo	Yes
3.02	2	Screened?	YesNo	Yes
4	2	Are outside access hatches locked?	YesNo	Yes

Storage / Gravity

Operation:

1	2	Does the storage tank have adequate turnover?	YesNo	Yes
2	2	Are instruments and controls adequate and operational?	YesNo	Yes
3		When was the tank constructed?	Numeric	None
4		When was the tank last inspected?	Text	None

Storage / Clear-Wells

Design:

1	3	Is the clear-well constructed with baffles?	YesNo	Yes
2	2	Does the storage reservoir have a watertight roof or cover and is it sloped so that water will drain?	YesNo	Yes
3	2	Is the storage structure secure from unauthorized access?	YesNo	Yes
4	3	What is the tanks usable capacity (volume)? ALWAYS change this question to read "0" then proceed to next question to add correct tank	Numeric	None
5	3	What is the storage tanks usable capacity (volume)? (Add correct volume here under Measures table)	Numeric	None
6	3	What is the volume measured unit? ALWAYS change this question to read "blank" then proceed to next question to add correct measured unit.	DropDown	None
7	3	What is the effective volume measured unit? (Add correct measured unit (gallons) here under Measures table)	DropDown	None
8	3	What is the construction material?	DropDown	None

Storage / Clear-Wells

Components:

1	2	Does the tank appear to be structurally sound?	YesNo	Yes
2		Are overflow pipes:	Header	None
2.01	3	Terminated 12 to 24 inches above the ground?	YesNo	Yes

QuestionNum
Community

er
Response Type

Sanitary Survey Questions --- Large

Correct

Response

- 2.02 3 Screened or fitted with a flapper gate?
- 3 Are air vents:
- 3.01 2 Turned downward or covered from rain?
- 3.02 2 Screened?
- 4 2 Are outside access hatches locked?

- YesNo Yes
- Header None
- YesNo Yes
- YesNo Yes
- YesNo Yes

Storage / Clear-Wells

Operation:

- 1 2 Are instruments and controls adequate and operational?
- 2 When was the tank last inspected?
- 3 What is the tank construction date?

- YesNo Yes
- Text None
- Text None

Storage / Hydropneumatic

Design:

- 1 Is the tank located above ground and completely housed?
- 2 What is the tanks usable capacity (volume)? ALWAYS change this question to read "0" then proceed to next question to add correct tank
- 3 3 What is the storage tanks usable capacity (volume)? (Add correct volume here under Measures table)
- 4 3 What is the volume measured unit? ALWAYS change this question to read "blank" then proceed to next question to add correct measured unit.
- 5 3 What is the effective volume measured unit? (Add correct measured unit (gallons) here under Measures table)
- 6 3 What is the construction material?

- YesNo Yes
- Numeric None
- Numeric None
- DropDown None
- DropDown None
- DropDown None

Storage / Hydropneumatic

Components:

- 1 3 Are the interior and exterior surfaces in good condition?
- 2 Is leakage evident at time of inspection?
- 3 Are tank supports adequate and structurally sound?

- YesNo Yes
- YesNo No
- YesNo Yes

Storage / Underground

Design:

- 1 3 How many days of storage does the system have?
- 2 2 Is the elevation of the tank sufficient to maintain distribution pressure throughout the system?
- 3 2 Is the storage structure secure from unauthorized access?
- 4 2 Does the storage reservoir have a watertight roof or cover and is it sloped so that water will drain?
- 5 3 What is the tanks usable capacity (volume)? ALWAYS change this question to read "0" then proceed to next question to add correct tank
- 6 3 What is the storage tanks usable capacity (volume)? (Add correct volume here under Measures table)

- Numeric None
- YesNo Yes
- YesNo Yes
- YesNo Yes
- Numeric None
- Numeric None

QuestionNum	er	Sanitary Survey Questions	---	Large
Community	Response Type	Correct	Response	
7	3	What is the volume measured unit? ALWAYS change this question to read "blank" then proceed to next question to add correct measured unit.	DropDown	None
8	3	What is the effective volume measured unit? (Add correct measured unit (gallons) here under Measures table)	DropDown	None
9	3	What is the tank material?	DropDown	None
10		Can the tank be isolated from the system?	YesNo	None

Storage / Underground

Components:

1	2	Does the tank appear to be structurally sound?	YesNo	Yes
2		Are overflow pipes:	Header	None
2.01	3	Terminated 12 to 24 inches above the ground?	YesNo	Yes
2.02	3	Screened or fitted with a flapper gate?	YesNo	Yes
3		Are air vents:	Header	None
3.01		Turned downward or covered from rain?	YesNo	Yes
3.02	2	Screened?	YesNo	Yes
4	2	Are outside access hatches locked?	YesNo	Yes

Storage / Underground

Operations:

1	2	Does the storage tank have adequate turnover?	YesNo	Yes
2	2	Are instruments and controls adequate and operational?	YesNo	Yes
3		When was the tank constructed?	Numeric	None
4		When was the tank last inspected?	Text	None

Management / General

1		Does the system have a plan for ongoing training of personnel?	YesNo	None
2		Does the system have an emergency response plan and is it up to date?	YesNo	Yes
3		Are copies of the emergency response plan available to all critical personnel?	YesNo	Yes
4		Is implementation of the emergency response plan practiced on a regular basis to ensure that it is workable?	YesNo	None
5		Have you shared critical elements of the plan with local fire and police departments?	YesNo	Yes
6		Do alarms notify an emergency phone or autodialer?	YesNo	None
7		Can the treatment plant be stopped or started through a SCADA system?	YesNo	None
8		Is this for the entire plant or for parts?	Text	None
9		If the SCADA system is down, can personnel operate the system manually?	YesNo	None
10		Does the system have an emergency generator at needed locations?	YesNo	None

QuestionNumber	er	Sanitary Survey Questions	---	Large
Community	Response Type	Correct	Response	
11	Is it regularly exercised under load?		YesNo	Yes
12	What is the Maximum day design flow of this plant? (If answer is unknown recommend system to provide info within 120 days of inspection)		Text	None
13	What percentage of the maximum day design flow will the emergency generator provide?		Text	None
14	How long can the system provide safe water with the emergency generator while providing the average day demand? (answer should be a number in days)		Text	None
15	What type of management structure exists and how many?		Text	None
16	Is there enough staff to effectively maintain the water system?		YesNo	None
17	Number and distribution of Staff?		Text	None
18	Does the system have and maintain their Operations Manual or Policy (Written SOP's standard operating procedures)?		YesNo	None

Management / Financial

General:

1	Does the system have a comprehensive facilities plan (master plan)?		YesNo	None
2	Are recommendations built into the rate structure?		YesNo	None
3	Does the water system budget provide funding for depreciation of existing plant in service and/or for the funding of reserves for system?		YesNo	None
4	Does the PWS provide and use an annual budget?		YesNo	None

Security / Management

Internal and External Communications:

1	1	Do local law enforcement officials know the system and its physical layout?	YesNo	Yes
2	1	Do they know who to contact at the water system in the event that they see suspicious activity?	YesNo	Yes

Security / Management

Employees:

1	1	Are employees adequately trained in security policies and procedures?	YesNo	Yes
2	1	When terminating employment, does the system require employees to turn in photo IDs, keys, access codes, and other security-related items?	YesNo	Yes

Security / Management

Physical Security:

1	1	Are facilities fenced, including wellhouses and pump pits, and are gates locked where appropriate?	YesNo	Yes
2	2	Are facilities patrolled periodically to check for breaches and maintenance needs?	YesNo	Yes
3	1	Are doors, windows, and other points of entry such as tank and roof hatches and vents kept closed and locked?	YesNo	Yes
4	1	Are warning signs (tampering, unauthorized access, etc.) posted on all critical components of the water system (e.g., well houses and storage)?	YesNo	Yes

Security / Treatment

Delivery of Chemicals:

1	1	Are deliveries of chemicals and other supplies made in the presence of water system personnel?	YesNo	Yes
2	2	Does the system verify that suppliers take precautions to ensure that their products are not contaminated?	YesNo	Yes
3	2	Are there chain of custody procedures for delivery of chemicals?	YesNo	Yes
4	2	Does the system keep a log or journal of deliveries?	YesNo	Yes