

2013 EPA Region 8 TRIBAL SANITARY SURVEY FORM For Surface Water & GWUDISW Systems INVENTORY

DATE OF SURVEY _____	RESERVATION _____ SURVEYOR NAMES: _____
PWSID _____	SYSTEM NAME _____
System representatives present at survey: _____ IHS team members present: _____ BOR team members present: _____ Tribal Engineer: _____	EMERGENCY CONTACT Emergency Contact Name: _____ Emergency cell phone: (____) _____ Emergency email address: _____
SYSTEM OWNER OR LEGAL REPRESENTATIVE Addressee _____ Title _____ Street _____ City _____ State _____ Zip _____ Owner Phone (____) _____ Fax (____) _____ Email Address _____ Tribal Chairman (if different than owner): _____	ADMINISTRATIVE CONTACT (to receive correspondence from EPA) Addressee _____ Title _____ Street _____ City _____ State _____ Zip _____ Administrative Contact Phone (____) _____ Fax (____) _____ Email Address _____
OPERATOR OF SYSTEM Name _____ Certified Operator?@ <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not required Treatment Certification Level _____ Distribution Certification Level _____ Treatment Cert. Expir. Date _____ Distribution Cert. Expir. date _____ Treatment Certification # _____ Distribution Certification # _____ Certifying Agency _____ Phone (____) _____ Email Address _____	ALTERNATE OPERATOR Name _____ Certified Operator? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not required Treatment Certification Level _____ Distribution Certification Level _____ Treatment Cert. Expir. Date _____ Distribution Cert. Expir. date _____ Treatment Certification # _____ Distribution Certification # _____ Certifying Agency _____ Phone (____) _____ Email Address _____
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WATER SYSTEM CLASSIFICATION BY EPA for operator certification System Treatment Classification Level _____ System Distribution Classification Level _____	WATER SYSTEM CLASSIFICATION (from PWS Inventory) <input type="checkbox"/> C = Community <input type="checkbox"/> NTNC = Non-Transient Non-Community <input type="checkbox"/> NC = Transient Non-Community
SYSTEM PHYSICAL ADDRESS Street _____ City _____ State _____ Zip _____	PHYSICAL LOCATION Physical Location and Directions _____
CONTACTS IHS TUC OR SANITARIAN _____, _____ Phone: _____	CONTACTS BOR CONTACT _____ Phone: _____

Email: _____	Email: _____
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<p style="text-align: center;">PERIOD OF OPERATION</p> <p><input type="checkbox"/> Year-round</p> <p><input type="checkbox"/> Part of the year</p> <p style="margin-left: 20px;">From _____ to _____</p>	<p style="text-align: center;">SERVICE CONNECTIONS</p> <p>Total Service Connections: Residential (year round residents): _____ Business/Non-Transient (non-residential): _____</p> <p>For Transient NC Systems also indicate: Transient: _____</p> <p>Service Connections Metered? <input type="checkbox"/> Yes <input type="checkbox"/> No _____</p> <p>Number of metered service connections under water system's control: _____</p>
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<p style="text-align: center;">OWNER TYPE</p> <p><input type="checkbox"/> 1 Federal Government (BIA/BIE/BOR)</p> <p><input type="checkbox"/> 2 Federal Government under 638 contract with Tribe</p> <p><input type="checkbox"/> 3 Private Subdivision, Investor, Trust, Cooperative, Water Association, etc.</p> <p><input type="checkbox"/> 4 Mixed Public/Private</p> <p><input type="checkbox"/> 5 Native American Indian Tribe & Reservation _____</p>	<p style="text-align: center;">POPULATION</p> <p>Does the water system serve at least 25 individuals daily at least 60 days out of the year? _____</p> <p>Residential Population _____ Average number of year-round residents utilizing the PWS</p> <p>For Non-Community Systems:</p> <p>Non-Transient Population _____ Number of same persons using PWS Daily for 6 months of the year</p> <p>Transient Population _____ Average number of transient persons served by PWS Daily during peak 60 days of operation</p> <p><input type="checkbox"/> If population varies throughout the year, recommend EPA send new Basic Information Form (BIF) to request specific seasonal counts?</p>
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<p style="text-align: center;">SERVICE CATEGORY (check all that apply)</p> <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"><input type="checkbox"/> AP Airport</td> <td style="width:50%; border: none;"><input type="checkbox"/> PC Picnic Area</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> BA Bathing/Swimming</td> <td style="border: none;"><input type="checkbox"/> RA Rest Area</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> BR Bar</td> <td style="border: none;"><input type="checkbox"/> RC Recreation</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> CG Campground</td> <td style="border: none;"><input type="checkbox"/> RS Residential</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> CH Church</td> <td style="border: none;"><input type="checkbox"/> RT Restaurant</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DC Daycare Center</td> <td style="border: none;"><input type="checkbox"/> RV RV Park</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DR Dude Ranch</td> <td style="border: none;"><input type="checkbox"/> SC School</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> HS Hospital</td> <td style="border: none;"><input type="checkbox"/> SD Subdivision</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> IB Interstate Bottler</td> <td style="border: none;"><input type="checkbox"/> SK Ski Area</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> IF Industrial/Agricultural</td> <td style="border: none;"><input type="checkbox"/> SS Service Station</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> IN Institution</td> <td style="border: none;"><input type="checkbox"/> US Water User's Association</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> LB Local Bottler</td> <td style="border: none;"><input type="checkbox"/> VC Visitor Center</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> LO Lodge</td> <td style="border: none;"><input type="checkbox"/> VM Vending Machine</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> MA Marina</td> <td style="border: none;"><input type="checkbox"/> WH Water Hauler</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> MH Mobile Home Park</td> <td style="border: none;"><input type="checkbox"/> XX Other</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> MO Motel/Hotel _____</td> <td></td> </tr> </table> <p>Service Category Description _____</p>	<input type="checkbox"/> AP Airport	<input type="checkbox"/> PC Picnic Area	<input type="checkbox"/> BA Bathing/Swimming	<input type="checkbox"/> RA Rest Area	<input type="checkbox"/> BR Bar	<input type="checkbox"/> RC Recreation	<input type="checkbox"/> CG Campground	<input type="checkbox"/> RS Residential	<input type="checkbox"/> CH Church	<input type="checkbox"/> RT Restaurant	<input type="checkbox"/> DC Daycare Center	<input type="checkbox"/> RV RV Park	<input type="checkbox"/> DR Dude Ranch	<input type="checkbox"/> SC School	<input type="checkbox"/> HS Hospital	<input type="checkbox"/> SD Subdivision	<input type="checkbox"/> IB Interstate Bottler	<input type="checkbox"/> SK Ski Area	<input type="checkbox"/> IF Industrial/Agricultural	<input type="checkbox"/> SS Service Station	<input type="checkbox"/> IN Institution	<input type="checkbox"/> US Water User's Association	<input type="checkbox"/> LB Local Bottler	<input type="checkbox"/> VC Visitor Center	<input type="checkbox"/> LO Lodge	<input type="checkbox"/> VM Vending Machine	<input type="checkbox"/> MA Marina	<input type="checkbox"/> WH Water Hauler	<input type="checkbox"/> MH Mobile Home Park	<input type="checkbox"/> XX Other	<input type="checkbox"/> MO Motel/Hotel _____		<p style="text-align: center;">PRIMARY SOURCE (SDWIS CODE)</p> <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"><input type="checkbox"/> SW = Surface Water</td> <td style="width:50%; border: none;"><input type="checkbox"/> SWP = Surface Water Purchased</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> GW = Groundwater</td> <td style="border: none;"><input type="checkbox"/> GWP= Groundwater Purchased</td> </tr> <tr> <td colspan="2" style="border: none;"><input type="checkbox"/> GWUDI = Groundwater Under the Direct Influence of Surface Water</td> </tr> </table> <p>If there is more than one source type, indicate: <input type="checkbox"/> Mixed GW/GWP and SW /SWP If mixed, does GW/GWP receive full SW Treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No.</p> <hr/> <p>Is the current water source adequate in quantity? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____</p> <p style="color: red;">Have there been any interruptions in service since the last sanitary survey?@ <input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____</p> <p>Have there been reports of water borne disease (2 or more people)? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____</p> <p>Have there been any changes to the water system since the last sanitary survey? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____</p> <p>Are there any changes that are planned? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____</p>	<input type="checkbox"/> SW = Surface Water	<input type="checkbox"/> SWP = Surface Water Purchased	<input type="checkbox"/> GW = Groundwater	<input type="checkbox"/> GWP= Groundwater Purchased	<input type="checkbox"/> GWUDI = Groundwater Under the Direct Influence of Surface Water	
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SUMMARY (Describe the water system in a paragraph or two)

The following abbreviations will be used throughout this document:
NI = no information; NA = not applicable; NR = not requested,

SIGNIFICANT DEFICIENCIES

Significant deficiencies include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system, that EPA determines to be causing, or having the potential for causing, the introduction of contamination into the water delivered to consumers. **Please note the instructions for responding to significant deficiencies in the attached cover letter. Failure to provide a response to EPA could result in a violation.**

List deficiency and include reference to numbered photograph in photo log

1)

Uncorrected Significant Deficiencies from Prior Sanitary Survey (list and refer to numbered photograph in photo log)

RECOMMENDATIONS

List recommendation and include reference to numbered photograph in photo log if applicable

1)

CONSECUTIVE SYSTEMS

Is this a consecutive system (Does PWS receive some or all of its finished water from another PWS)? Yes No.(skip this section if No)

Name of Supplier (System Receives Water From)	PWSID of Supplier	Water Source Type	Connection Type
_____	_____	<input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> Mixed If mixed, does GW receive full SW Treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No.	<input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal, # Days/Yr _____ <input type="checkbox"/> Emergency Only
_____	_____	<input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> Mixed If mixed, does GW receive full SW Treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No.	<input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal, # Days/Yr _____ <input type="checkbox"/> Emergency Only
_____	_____	<input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> Mixed If mixed, does GW receive full SW Treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No.	<input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal, # Days/Yr _____ <input type="checkbox"/> Emergency Only

How many master meter connections exist from the wholesale system(s) to the consecutive system? _____

Who is responsible for maintenance of the master meter connection(s) from the wholesale system(s)?

- Wholesaler(s)
- Consecutive system

Comments: _____

If the consecutive system is responsible:

Check the condition of the principal master meter and the pit for leaks or flooding and describe any concerns @ _____

How often is inspection and maintenance performed on the master meter connection(s)? _____

Does standing water exist in any meter pits? Yes No

If so, what is the source of the standing water?

- Leaking master meter connection @
- Groundwater
- Don't know @

Do any Reduced Pressure Backflow Assembly devices exist in pits that have standing water?@ Yes No

If PWS Purchases Water from a WATER HAULER:

Name of hauler: _____

Is there a water tight cap on the (water system's) fill port? @ Yes No.

How does the operator check chlorine residual at the time of delivery? _____

WHOLESALE SYSTEMS

Is this a wholesale system (Does the PWS supply water to another PWS)? Yes No (skip this section if No)

Name of Consecutive (System Supplies Water To)	PWSID of Consecutive	Population	Connection Type
_____	_____	_____	<input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal, # Days/Yr _____ <input type="checkbox"/> Emergency Only
_____	_____	_____	<input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal, # Days/Yr _____ <input type="checkbox"/> Emergency Only
_____	_____	_____	<input type="checkbox"/> Permanent <input type="checkbox"/> Seasonal, # Days/Yr _____ <input type="checkbox"/> Emergency Only

How many master meter connections exist off the wholesale system? _____

Who is responsible for maintenance of those connection(s)?

- Wholesaler
- Consecutive system(s)

Comments: _____

If the wholesaler is responsible, how often is inspection and maintenance performed on the master meter connection(s)? _____

Does standing water exist in any meter pits for which the wholesale system is responsible? Yes No

If so, what is the source of the standing water?

- Leaking master meter connection @
- Groundwater
- Don't know @

Do any Reduced Pressure Backflow Assembly devices exist in pits that have standing water?@ Yes No

SOURCE DATA SPRINGS AND PUMPS

Spring name : _____ Facility ID (from PWS Inventory, e.g.: SPR01) : _____	Description of the intake to the spring collection box: _____ Actual yield (gpm): _____ (Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report)
<p>SPRINGS</p> <p>Is the area around the spring collection box fenced to keep animals away?@ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Does surface water runoff drain away from the collection area?@ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Is there deep rooted vegetation around the spring collection box@ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>Does the spring collection box have the following features: @</p> <p style="padding-left: 20px;">Proper shoe box lid? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="padding-left: 20px;">Rubber gasket on the lid? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="padding-left: 20px;">Adequate air vents with #24 mesh corrosion-resistant screen? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="padding-left: 20px;">Is the hatch locked? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="padding-left: 20px;">Screened (#24 mesh) overflow ? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="padding-left: 20px;">Overflow with a free fall of at least 12 inches? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Is the water supply intake at least 6 " above the floor of the spring collection chamber? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="padding-left: 20px;">Is the intake screened? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Is the spring collection chamber water tight to prevent inflow of unwanted surface water ? @ <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>PUMPS Yes No</p> <p>Location of the pump station:: _____</p> <p>How many pumps at the facility?: _____</p> <p>Are the correct types of lubricants (NSF-60) used? <input type="checkbox"/> <input type="checkbox"/></p> <p>Are pumps operable and in good condition? <input type="checkbox"/> <input type="checkbox"/></p> <p>Is there a maintenance program in operation? <input type="checkbox"/> <input type="checkbox"/></p> <p>Is the pump station subject to flooding? @ <input type="checkbox"/> <input type="checkbox"/></p> <p>Are spare parts available? <input type="checkbox"/> <input type="checkbox"/></p> <p>Is emergency power available? <input type="checkbox"/> <input type="checkbox"/></p> <p>Comments: _____</p>
<p>For any other hatches/manholes from the spring box to the tank or distribution system: (describe the condition of each)@: _____</p> <p>Proper shoe box lid: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Rubber gasket on the lid: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Secured access entry: <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>Are there any sources of pollution in the vicinity near the well which could impact water quality? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Includes: septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, unsanitary conditions in immediate area (rodent droppings, etc)@, potential chemical contamination sources in immediate area (cleaning supplies, oil/fuel, etc.)@</p> <p>If yes, provide general location and comments: _____</p> <p>Are there seasonal variations in the quantity of the water? <input type="checkbox"/> Yes <input type="checkbox"/> No _____</p> <p>Are there seasonal variations in the quality of the water? <input type="checkbox"/> Yes <input type="checkbox"/> No _____</p>	

SOURCE DATA INFILTRATION GALLERIES AND SOURCE PUMPS

INFILTRATION GALLERIES	PUMPS		Yes	No
Infiltration gallery name: _____	Location of the pump station:: _____			
Facility ID (from PWS Inventory, e.g.: IG01) : _____	How many pumps at the facility?: _____			
Physical description: _____	Are the correct types of lubricants (NSF-60) used? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Depth? _____	Are pumps operable and in good condition? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Actual yield (gpm): _____	Is there a maintenance program in operation? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
(Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report)	Is the pump station subject to flooding? @ <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	Are spare parts available? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	Is emergency power available? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	Comments: _____			
<p>Are there any sources of pollution in the vicinity near the well which could impact water quality? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Includes: septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, unsanitary conditions in immediate area (rodent droppings, etc.)@, potential chemical contamination sources in immediate area (cleaning supplies, oil/fuel, etc.)@</p> <p>If yes, provide general location and comments: _____</p> <p>Are there seasonal variations in the quantity of the water? <input type="checkbox"/> Yes <input type="checkbox"/> No _____</p> <p>Are there seasonal variations in the quality of the water? <input type="checkbox"/> Yes <input type="checkbox"/> No _____</p>				

SOURCE DATA STREAMS AND SOURCE PUMPS

STREAMS	PUMPS		Yes	No
Stream name: _____	Location of the pump station:: _____			
Facility ID (from PWS Inventory, e.g.: IN01) : _____	How many pumps at the facility?: _____			
Is the area around the intake restricted? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are the correct types of lubricants (NSF-60) used? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Are there multiple intakes located at different levels? <input type="checkbox"/> Yes <input type="checkbox"/> No Describe: _____	Are pumps operable and in good condition? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Are the intakes screened? <input type="checkbox"/> Yes <input type="checkbox"/> No	Is there a maintenance program in operation? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Frequency of intake inspection: _____	Is the pump station subject to flooding? @ <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Date of last inspection: _____ (Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report)	Are spare parts available? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	Is emergency power available? <input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
	Comments: _____			
<p>Are there any sources of pollution in the vicinity near the well which could impact water quality? <input type="checkbox"/> Yes <input type="checkbox"/> No Includes: septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, unsanitary conditions in immediate area (rodent droppings, etc.)@, potential chemical contamination sources in immediate area (cleaning supplies, oil/fuel, etc.)@</p> <p>If yes, provide general location and comments: _____</p>				
Are there seasonal variations in the quantity of the water?	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____		
Are there seasonal variations in the quality of the water?	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____		

SOURCE DATA BACKUP WATER SOURCES

Backup source name: _____ Facility ID (from PWS Inventory, e.g.: IN01, WL01, etc.): _____ (Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report)	
Describe any backup water sources possibly available to the PWS: _____ Is the backup water source physically disconnected from the water system? <input type="checkbox"/> Yes <input type="checkbox"/> No _____ Does the system have a contingency plan for water outages? <input type="checkbox"/> Yes <input type="checkbox"/> No _____	
Are there any sources of pollution in the vicinity near the source which could impact water quality? <input type="checkbox"/> Yes <input type="checkbox"/> No Includes: septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, unsanitary conditions in immediate area (rodent droppings, etc.)@, potential chemical contamination sources in immediate area (cleaning supplies, oil/fuel, etc.)@ If yes, provide general location and comments: _____ Are there seasonal variations in the quantity of the water? <input type="checkbox"/> Yes <input type="checkbox"/> No _____ Are there seasonal variations in the quality of the water? <input type="checkbox"/> Yes <input type="checkbox"/> No _____	

RAW WATER TO TREATMENT PLANT TRANSMISSION LINE

Name or designation: _____

SW GW

Point of origin: _____

Point of termination: _____

Material: _____

Are there any service connections to the raw water transmission line? Yes No _____

What does each connection serve? _____

Name or designation: _____

SW GW

Point of origin: _____

Point of termination: _____

Material: _____

Are there any service connections to the raw water transmission line? Yes No _____

What does each connection serve? _____

DISTRIBUTION BOOSTER PUMP STATIONS

Number and location of booster pump station(s): _____

How many pumps are at each facility?: _____

Are the pump stations subject to flooding?@: Yes No _____

Are the correct types of lubricants (NSF-60) used? Yes No _____

Are pumps operable and in good condition? Yes No _____

Is there a maintenance program in operation? Yes No _____

Are spare parts available? Yes No _____

Is emergency power available? Yes No _____

HYDROPNEUMATIC TANKS

COMPLETE ONE SECTION FOR EACH HYDROPNEUMATIC TANK

CAPTIVE AIR (BLADDER) TANK(S)	PRESSURE TANK(S) (THAT USE AN AIR COMPRESSOR)
Tank name: _____ Tank ID _____ Location, Description _____ Date put into service: _____ Volume: _____ Is there an operable pressure gauge? <input type="checkbox"/> Yes <input type="checkbox"/> No Does low pressure level provide adequate pressure (> 20 psi)? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Pressure: Cut-In _____ psi Cut-Out _____ psi Is the exterior surface of the tank in good physical condition? <input type="checkbox"/> Yes <input type="checkbox"/> No Can tank(s) be by-passed for repair? <input type="checkbox"/> Yes <input type="checkbox"/> No Comments: _____	Tank name: _____ Tank ID _____ Location, Description _____ Date put into service: _____ Volume: _____ Is there an operable pressure gauge? <input type="checkbox"/> Yes <input type="checkbox"/> No Does low pressure level provide adequate pressure (> 20 psi)? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Pressure: Cut-In _____ psi Cut-Out _____ psi Is there evidence of severe rust? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Is there evidence of water leaks? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Is there evidence of air leaks? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Is there evidence of flooding (if in a vault)? @ <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No Is there a pressure relief valve? <input type="checkbox"/> Yes <input type="checkbox"/> No Can tank(s) be by-passed for repair? <input type="checkbox"/> Yes <input type="checkbox"/> No Comments: _____
CAPTIVE AIR (BLADDER) TANK(S)	PRESSURE TANK(S) (THAT USE AN AIR COMPRESSOR)
Tank name: _____ Tank ID _____ Location, Description _____ Date put into service: _____ Volume: _____ Is there an operable pressure gauge? <input type="checkbox"/> Yes <input type="checkbox"/> No Does low pressure level provide adequate pressure (> 20 psi)? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Pressure: Cut-In _____ psi Cut-Out _____ psi Is the exterior surface of the tank in good physical condition? <input type="checkbox"/> Yes <input type="checkbox"/> No Can tank(s) be by-passed for repair? <input type="checkbox"/> Yes <input type="checkbox"/> No Comments: _____	Tank name: _____ Tank ID _____ Location, Description _____ Date put into service: _____ Volume: _____ Is there an operable pressure gauge? <input type="checkbox"/> Yes <input type="checkbox"/> No Does low pressure level provide adequate pressure (> 20 psi)? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Pressure: Cut-In _____ psi Cut-Out _____ psi Is there evidence of severe rust? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Is there evidence of water leaks? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Is there evidence of air leaks? @ <input type="checkbox"/> Yes <input type="checkbox"/> No Is there evidence of flooding (if in a vault)? @ <input type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No Is there a pressure relief valve? <input type="checkbox"/> Yes <input type="checkbox"/> No Can tank(s) be by-passed for repair? <input type="checkbox"/> Yes <input type="checkbox"/> No Comments: _____

GRAVITY TANKS

COMPLETE ONE SECTION FOR EACH STORAGE FACILITY

Tank name: _____

Tank ID (from PWS Inventory, e.g.: ST01) _____

Location, Description _____

Elevation of tank: Below ground
 Ground Level
 Elevated

Date put into service: _____

Tank is constructed of: Concrete
 Steel
 Fiberglass
 Other: _____

What type of water is stored? Raw Treated

Storage Volume (gallons)? _____

Total number of days of supply (Summer)? _____

Total number of days of supply (Winter)? _____

Is the storage capacity adequate to meet current needs? Yes No

Is the storage capacity adequate to meet future needs? Yes No

Is the site subject to flooding?@ Yes No

Can the tank be isolated from the system? Yes No

Is the water level indicator accurate? Yes No

Is the tank structurally sound and properly maintained?@ Yes No

Are there any breaches or openings other than a properly designed vent, overflow, drain or hatch?@ _____ Yes No

Do the inlet and outlet lines have check valves? Yes No

When and how was the tank last cleaned and inspected? @ _____

How is the tank disinfected after cleaning? _____

Air vent

Is the vent accessible for inspection? @ Yes No

Is air vent covered with #24 mesh corrosion-resistant screen?@ Yes No

Is the screen on the inside of the vent pipe to discourage vandalism? Yes No

For elevated tanks, does the tank have a vacuum/pressure relief valve or other mechanism to prevent tank damage? NA Yes No

For above ground tanks (ground level or elevated), does the vent terminate in an inverted U construction at least 3 pipe diameters above the tank OR have a cover to prevent rain from entering, with the vent screen at least 8 inches above the tank roof ?@. _____ NA Yes No

If no, describe: _____

For below-ground (buried or partially buried) tanks, does the air vent terminate in an inverted U (downward) at least 24 inches above the roof or ground surface(whichever is higher)? @ NA Yes No

If no, describe: _____

Comments: _____

Overflow Pipe

Overflow pipe is (select one)@: Downturned
 Horizontal with flapper valve
 Other (describe and provide photo): _____
 Unable to inspect @

Does the overflow line have a #24 mesh corrosion-resistant screen OR a duckbill valve OR a properly sealed flapper valve with a screen of any size inside?@ Yes No

Does the overflow line terminate over a splash plate? Yes No

Does the overflow line terminate no less than 12 inches but no more than 24 inches above the splash plate?@ (see exception for overflow that daylight at ground level) Yes No

Is the overflow line connected directly to a storm sewer?@ Yes No

Is the overflow line connected directly or indirectly to a sanitary sewer?@ Yes No

If yes, is the overflow line 3 or more pipe diameters above the entrance to the storm or sanitary sewer?@ Yes No

Drain and clean-out pipe

Drain pipe is (select one)@: Downturned
 Horizontal
 Other (describe and provide photo): _____
 Unable to inspect @

Does the drain pipe terminate at least 12 " over a splash plate? Yes No

Is there #24 mesh screen on the drain pipe? Yes No

When the tank drains, is water channeled away so it does not accumulate near the drain area? Yes No

Is the drain pipe connected directly to a storm sewer?@ Yes No

Is the drain pipe connected directly or indirectly to a sanitary sewer?@ Yes No

Is the drain pipe 3 or more pipe diameters above the entrance to the storm or sanitary sewer?@ Yes No

Access hatch

Is the hatch accessible for inspection? @ Yes No

For below-ground (buried or partially buried) tanks, is the hatch raised at least 24 inches above the roof or ground (whichever is higher)?@ NA Yes No

For above ground (ground level or elevated) tanks, is the hatch raised at least 4 inches above the roof?@ NA Yes No

Does the hatch have a shoe box lid?@ Yes No

Is there a rubber gasket between the lid and the lip of the hatch?@ Yes No

Is the site subject to flooding?@ Yes No

Is the lid tight and sealed?@ Yes No

Is the hatch locked?@ Yes No

Comments: _____

**WATER TREATMENT DATA
SURFACE WATER / GWUDISW SYSTEMS**

General Information

For each treatment plant indicated on the overall PWS schematic, update the separate treatment plant schematic. Show all treatment processes, recycle streams, turbidimeter locations, raw water and finished water sampling points, and disinfectant residual sampling points.

Plant Location and Information

Plant Name/SDWIS ID _____
 Office Location and Directions: _____
 Date plant put online: _____
 Modifications since the last survey? (if yes, describe): _____
 Describe water sources treated by this plant: _____

Plant Output (gal / day)

Design: _____
 Summer Average: _____
 Winter Average: _____
 Maximum: _____

Provide a brief description of the plant's treatment processes: _____

Indicate all points in the treatment process where flow is determined and describe how (i.e. flow meters, flow restrictors, valves, etc): _____

Please indicate all of the treatment plant waste disposal methods the plant currently employs:

- Discharge to surface, sewer, or equivalent. Please describe: _____
- On-site disposal _____
- Land application
- Discharge to lagoon/drying bed, with no recovery/recycling – e.g. downstream outfall
- Backwash recovery/recycling: discharge to basin or lagoon and then to source
- Backwash recovery/recycling: discharge to basin or lagoon and then to plant intake
- Other. Please describe: _____
- No wastes generated

Pre-Filtration Processes

Pre-filtration Processes

Pre-Sed Basin:
 Describe Type and indicate size: _____
 Chemicals added and dose: _____

Rapid Mix:
 Describe Type: _____
 Chemicals added and dose: _____

Flocculation:
 Describe Type: _____
 Chemicals added and dose: _____

Sedimentation:
 Describe Type: _____
 Chemicals added and dose: _____

Other:
 Describe: _____

Filtration Processes
<p>Indicate all types of filtration used:</p> <p> <input type="checkbox"/> Conventional <input type="checkbox"/> Bags / Cartridges <input type="checkbox"/> Slow Sand <input type="checkbox"/> Direct <input type="checkbox"/> Membranes <input type="checkbox"/> Diatomaceous Earth </p> <p>Which is the final filtration barrier?: _____</p>
<p>Type and model# of combined filter effluent (CFE) turbidimeter: _____</p> <p>Location of CFE turbidimeter (see EPA policy SWTR #5) @: _____</p> <p>Frequency of all turbidimeter calibration(s) ¥: _____</p> <p>Method used for all calibrations (primary formazin standard or other?) ¥: _____</p> <p>Date(s) of last turbidimeter calibration(s) for all turbidimeters ¥: _____</p> <p>Are CFE turbidity records available for the last 5 years? ¥ _____</p> <p>Finished water CFE turbidity (NTU): PWS measurement: _____ Surveyor measurement: _____</p>

Conventional and Direct Filtration										
<p><u>Filter Information</u></p> <p># of filters: _____</p> <p><u>Type of filters:</u></p> <p><input type="checkbox"/> open to atmosphere <input type="checkbox"/> enclosed (pressure)</p> <p>Manufacturer name & model (if applicable): _____</p> <p><u>Depth of each media (in):</u></p> <p>Sand _____ Anthracite _____ Garnet _____ Total at least 24" @ Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Has operator observed loss of media? _____</p> <p>Has the operator inspected the media for mudball formation? _____</p> <p>Average length of filter run (hours): _____</p> <p>Maximum filter loading rate (gpm/ft²) (should be no greater than 2 for mono-media, 4 for dual media, and 6 for deep bed): @ _____</p>	<p><u>Backwash Information</u></p> <p>What determines when backwash occurs? _____</p> <p>Backwash rate (gpm/ft²) _____</p> <p><u>What is used for a backwash?</u></p> <p><input type="checkbox"/> Air scour <input type="checkbox"/> finished water <input type="checkbox"/> raw water @</p> <table style="width: 100%;"> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>System starts up with clean filters (if not running 24/7)</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>System performs filter to waste (FTW) before putting filters back on line.</td> </tr> </table>	Yes	No		<input type="checkbox"/>	<input type="checkbox"/>	System starts up with clean filters (if not running 24/7)	<input type="checkbox"/>	<input type="checkbox"/>	System performs filter to waste (FTW) before putting filters back on line.
Yes	No									
<input type="checkbox"/>	<input type="checkbox"/>	System starts up with clean filters (if not running 24/7)								
<input type="checkbox"/>	<input type="checkbox"/>	System performs filter to waste (FTW) before putting filters back on line.								

Conventional and Direct IFE and CFE additional information (only if final barrier)		
<u>IFE Questions</u>		
How are IFE records maintained? <input type="checkbox"/> SCADA <input type="checkbox"/> strip chart <input type="checkbox"/> circular chart		
Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Does each filter have an individual effluent (IFE) turbidimeter ¥? Types and model #s _____
<input type="checkbox"/>	<input type="checkbox"/>	Are there alarms on each filter? Alarm set point (NTU): _____
<input type="checkbox"/>	<input type="checkbox"/>	Are IFE turbidities measured continuously, and recorded at least every 15 Minutes ¥?
<input type="checkbox"/>	<input type="checkbox"/>	Is IFE turbidity recorder (SCADA or charts) calibrated to record turbidities ≥ 2 NTU @?
<input type="checkbox"/>	<input type="checkbox"/>	Are IFE records kept for the last 3 years (as applicable) ¥?

- Can turbidities associated with off-periods (backwash, FTW) be identified so they are not counted for compliance? @
- Did any single filter IFE exceed 1.0 NTU in 2 consecutive 15 minute readings during the last 12 months? If yes, Indicate dates of all occurrences and copy those records. _____
- a. If so, did they report to EPA and do a filter profile, if required? ¥
- b. If this occurred 3 months in a row, did they conduct a filter self-assessment?
- Did any single filter IFE exceed 2.0 NTU in 2 consecutive 15 minute readings in the last 12 months? Indicate dates of all occurrences and copy those records. _____
- a. If this occurred 2 months in a row for the same filter, did they report to EPA and have a CPE performed? ¥
- For systems serving $\geq 10,000$, did the IFE of any filter exceed 0.5 NTU in 2 consecutive 15 minute readings after being online 4 hours (following backwash or other reason offline) in the last 12 months? Indicate dates of all occurrences and copy those records.
- a. If so, did they report to EPA and do a filter profile, if required? ¥

CFE Questions

How are CFE records maintained? SCADA strip chart circular chart

Yes No

- Are CFE turbidity records available for the last 5 years?
- Based on these records, has the system consistently met the CFE turbidity requirements for this type of filtration during the last 12 months¥? (0.3 NTU 95% of each month, 1 NTU max) If no, indicate date of all occurrences and copy those records: _____
- Can CFE turbidities be recorded up to 5 NTU@?
- Can turbidities associated with off-periods (backwash, FTW) be identified so they are not counted for compliance? @

Log removal credited for this type of filtration barrier for: *Giardia*: _____ *Viruses*: _____ *Cryptosporidium*: _____

Conventional and Direct (only if filter backwash, thickener supernatant, or sludge dewatering liquid is recycled)

Describe where recycle enters treatment process: (observe during survey; is recycle before or after raw water TOC monitoring point?) ¥ _____

Yes No

- Are records kept of recycle practices (e.g., avg and max times/flows of backwashes; recycle treatment/equalization [chemical addition; hydraulic loading rates])? ¥
- Records available for the last calendar year in acceptable format? ¥

Membranes

Number of membrane skids: _____ Configuration: parallel series

Filter type and manufacturer/model # (include absolute pore size): _____

Each Filter/skid capacity (gpm): _____

Yes No

- Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (0.3 NTU 95% of each month, 1 NTU max) ¥
- Are direct integrity tests (DIT) done (specify pressure or vacuum applied)?¥ If yes, how often? ¥ _____
- For continuous indirect integrity testing, does each unit/skid have its own online turbidimeter? ¥

a. Is filtrate turbidity monitored continuously and recorded at least once every 15 minutes? ¥
 b. Is it set with a trigger level of 0.15 NTU for > 15 minutes (a DIT should be initiated when filtrate turbidity exceeds this level)? ¥
 Do operators know how to check and repair membranes when DIT fails? @

How/when are membranes cleaned? _____

Are spare membrane cassettes available? Yes No

Is there adequate storage of cleaning chemicals in case of emergency weather? _____

Log removal credited for this type of filtration barrier for: *Giardia*: _____ Viruses: _____ Cryptosporidium: _____

Bags / Cartridges

Number of filter skids: _____ Configuration: parallel series

Filter type and manufacturer/model # (include absolute pore size, describe both the housing and the bag / cartridge element): _____

Each Filter/skid capacity (gpm): _____

Replacement frequency: _____

Yes No

Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (1 NTU 95% of each month, 5 NTU max) ¥

Are there working pressure gauges before and after filters? @

Does the PWS keep daily records of monitoring the pressure drop across the filters, and know when to change out filters? @

Log removal credited for this type of filtration barrier for: *Giardia*: _____ Viruses: _____ Cryptosporidium: _____

Diatomaceous Earth Filters

Number of filters: _____ Pressure System Vacuum System

Filter manufacturer/model # (if applicable): _____

Each filter capacity (gpm): _____

Describe pre-coat and body feed systems: _____

Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (1 NTU 95% of each month, 5 NTU max) ¥ _____

Describe precoat and body feed systems: _____

Maximum filter loading rate (gpm/ft²) (should be no more than 1.5) @: _____

Maximum head loss allowed @: _____

What determines when backwash occurs? @ time turbidity automatic head loss

Log removal credited for this type of filtration barrier for: *Giardia*: _____ Viruses: _____ Cryptosporidium: _____

Slow Sand Filtration

Number of filters: _____ Each Filter capacity (gpm): _____

What is rate of filtration (gpm/ft)? (should be 0.1 or less) @ _____

Yes No

Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (1 NTU 95% of each month, 5 NTU max) ¥

<input type="checkbox"/>	<input type="checkbox"/>	Is turbidity of raw water to filters always <10 NTU? @
<input type="checkbox"/>	<input type="checkbox"/>	Is water depth over sand at least 3 feet during operation? @
<input type="checkbox"/>	<input type="checkbox"/>	Can plant meet design capacity with one unit out of service?
<input type="checkbox"/>	<input type="checkbox"/>	Do they ripen after scraping (filter to waste) and how long?
<input type="checkbox"/>	<input type="checkbox"/>	Is head loss across filters monitored and used for process control? @ If yes, how is the head loss monitored? _____
How often is each unit scraped? _____		
Log removal credited for this type of filtration barrier for: <i>Giardia</i> : _____ Viruses: _____ Cryptosporidium: _____		

Disinfection Processes
Describe all inactivation processes, both pre-filtration and post-filtration : _____

UV Disinfection
Point of application: _____
UV manufacturer/model #: _____
Validated maximum flow (gpm): ¥ _____ Validated UV dosage (mJ/cm ²): ¥ _____
Yes No
<input type="checkbox"/> <input type="checkbox"/> Does PWS keep records of UV reports sent monthly to EPA? ¥
<input type="checkbox"/> <input type="checkbox"/> Does public water system's Emergency Response Plan address breakage of UV lamps? (Mercury hazard: OSHA guidelines 1910 Subparts H, I, Z, Response to breakage, Cleanup and disposal)

UV Disinfection – less than 40 gpm
Yes No
<input type="checkbox"/> <input type="checkbox"/> Is there a flowmeter to monitor/alarm or a flow restrictor valve so the max flow rate is not exceeded? @ Describe how the system ensures the flow does not exceed max flow rate: _____
<input type="checkbox"/> <input type="checkbox"/> Is there an intensity sensor and alarm (visible/audible) to indicate low intensity? @
<input type="checkbox"/> <input type="checkbox"/> Is there a UV lamp status alarm (visible/audible) to indicate lamps off?@
<input type="checkbox"/> <input type="checkbox"/> Is there a UV lamp age counter/alarm?@
<input type="checkbox"/> <input type="checkbox"/> Is there an automatic shut-off fail-safe solenoid valve so that water does not flow through the unit without adequate treatment ?@
<input type="checkbox"/> <input type="checkbox"/> Are there spare bulbs on hand?
How often is the unit cleaned and the bulbs changed? _____

UV Disinfection – greater than 40 gpm
How is unit monitored? <input type="checkbox"/> Intensity Setpoint Method <input type="checkbox"/> Calculated Dose Method
How often are the UV intensity sensors calibrated (recommend monthly)? @ _____
How often is the UV transmittance analyzer calibrated (Calculated Dose Method) (recommend weekly)? @ _____
Yes No
<input type="checkbox"/> <input type="checkbox"/> Is there a calibrated flowmeter and at least once/4 hours recording of flow rate so max flow rate is not exceeded? @
<input type="checkbox"/> <input type="checkbox"/> Are daily operational records kept of flow rates/production, run time, lamp status, UV intensity, UVT and UV dosage? ¥ (These should be monitored and recorded at least once/4 hours.)

UV Disinfection – Inactivation Calculations

Log inactivation credited based upon validated dosage (use table below): *Giardia*: _____ *Cryptosporidium*: _____

Table 1. UV Dose Requirements in Millijoules per Square Centimeter (mJ/cm²)

Target Pathogen	Log Inactivation							
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
<i>Cryptosporidium</i>	1.6	2.5	3.9	5.8	8.5	12	15	22
<i>Giardia</i>	1.5	2.1	3.0	5.2	7.7	11	15	22
Viruses	**	**	**	**	**	**	**	**

Source: 40 CFR 141.720(d)

** UV not credited with virus inactivation by EPA R8 for SW/GU systems

Chemical Disinfection – Chlorine and Chloramines

Type: _____ Dosage: _____ (lb / day or ppm)

Point of application: _____

Where does the PWS measure disinfectant residual for compliance with the SWTR requirement of ≥ 0.2 mg/L at the POE? _____

Is this before the 1st user of the water? ¥ _____

How is residual measured? continuous grab Equipment / manufacturer model# _____

Free chlorine residual at POE (mg/L): PWS measurement @: _____ Surveyor measurement @: _____

Yes No

- Is residual detectable at taps at the end of the distribution system? @
- Is there redundant disinfection equipment?
- Is there emergency power for the disinfection equipment?
- If measuring residual continuously, is the PWS conducting weekly verifications with a grab sample measurement? @

Ozone

Number of Ozone generators: _____ Percent ozone being generated (%): _____

Where is the ozone applied? _____ Where is residual measured?: _____

Ozone residual (%): _____ Ozone residual (mg/L): _____

Describe the purpose of the ozone addition: _____

Are all applicable residual monitors operational?: _____

Are excess ozone destructors operational? _____

Is there a preventive maintenance program for the generators? _____

Is a SCBA or supplied-air respirator available for the operators when working with ozone? _____

Are operators exposed to ozone levels above 0.1 mg/L? _____

Does the system monitor bromate concentration at point of entry? ¥ _____

Chlorine Dioxide

Number of Chlorine Dioxide generators: _____

Where is the Chlorine Dioxide applied? _____ Where is Chlorine Dioxide residual measured?: _____

Chlorine Dioxide residual (mg/L): _____

Describe the purpose of the Chlorine Dioxide addition: _____

Are all applicable residual monitors operational?: _____

Is there a preventive maintenance program for the generators? _____

Are operators exposed to Chlorine Dioxide levels above 0.1 ppm? _____

Does the system monitor chlorine dioxide daily at point of entry? ¥ _____

Does the system monitor chlorite at point of entry daily and monthly in the distribution system? ¥ _____

Chemical Disinfection – Inactivation Calculations

If the PWS performs ongoing daily or weekly CT calculations, use their actual data to document inactivation in the section below. Otherwise, do a conservative calculation for each inactivation segment.

Identify location of 1st user: _____

<p><u>Summer Calculations</u></p> <p>Lowest disinfectant residual and where measured: _____</p> <p>Water temperature (lowest): _____</p> <p>Water pH (highest): _____</p> <p>Maximum flow through segment: _____</p> <p>Describe each segment and list appropriate baffling factor: _____</p>	<p>List the volume of each segment using minimum operating heights of tanks: _____</p> <p>Total logs <i>Giardia</i> inactivation from all chemical disinfection segments: _____</p> <p>Total logs virus inactivation from all chemical disinfection segments: _____</p>
<p><u>Winter Calculations</u></p> <p>Lowest disinfectant residual and where measured: _____</p> <p>Water temperature (lowest): _____</p> <p>Water pH (highest): _____</p> <p>Maximum flow through segment: _____</p> <p>Describe each segment and list appropriate baffling factor: _____</p>	<p>List the volume of each segment using minimum operating height of tanks: _____</p> <p>Total logs <i>Giardia</i> inactivation from all chemical disinfection segments: _____</p> <p>Total logs virus inactivation from all chemical disinfection segments: _____</p>

Chemical Disinfection – Disinfection Profiling (if system is exempt, skip section)

<p>Yes No</p>	<p><input type="checkbox"/> <input type="checkbox"/> Did profiling start on or before 7/1/03 (for systems serving <10,000 but >500); or 1/1/04 (smaller systems)? ¥ If not, indicate when profiling started: _____</p> <p><input type="checkbox"/> <input type="checkbox"/> Did the PWS make a significant change (new disinfectant; new location; etc.) to disinfection practices after 7/1/03 or 1/1/04? If yes, describe the change, date made, and if EPA was consulted: ¥ _____</p> <p><input type="checkbox"/> <input type="checkbox"/> Does the profile include weekly log inactivation calculations?</p> <p>Lowest monthly average log inactivation observed from the profile (month/value): <i>Giardia</i> _____ Viruses _____</p>
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Overall Inactivation / Removal Calculations

Viruses / Giardia

<p>Viruses</p> <p>_____ Logs Removal (filtration)</p> <p>_____ Logs chemical inactivation</p> <p>_____ Logs UV inactivation</p> <p>_____ <u>Logs other removal or inactivation</u></p> <p>_____ Total logs inactivation / removal</p> <p>≥ 4 logs ? ¥ <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Giardia</p> <p>_____ Logs Removal (filtration)</p> <p>_____ Logs chemical inactivation</p> <p>_____ Logs UV inactivation</p> <p>_____ <u>Logs other removal or inactivation</u></p> <p>_____ Total logs inactivation / removal</p> <p>≥ 3 logs ? ¥ <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<i>Cryptosporidium</i>	
<p>Committed to install max treatment <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If no, what is the system's bin #? <input type="checkbox"/> Bin #1 <input type="checkbox"/> Bin #2 <input type="checkbox"/> Bin #3 <input type="checkbox"/> Bin #4</p> <p>System Classification: <input type="checkbox"/> Filtered <input type="checkbox"/> Unfiltered</p> <p>*If system committed to install max treatment, is in Bin #s 2, 3, or 4, or is unfiltered, then the section below must be completed</p>	
<p>Total logs <i>Cryptosporidium</i> inactivation / removal required based on max treatment, bin # or classification: _____</p> <p>Date treatment required by: _____ Toolbox Components Utilized: _____</p> <p>_____ Logs Removal (filtration)</p> <p>_____ Logs chemical inactivation</p> <p>_____ Logs UV inactivation</p> <p>_____ <u>Logs other Toolbox Components</u></p> <p>_____ Total logs inactivation / removal</p> <p>≥ required logs ? ¥ <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	

DISTRIBUTION DATA

Please provide a brief description of the distribution system, including source to use (no treatment) piping: _____

What are the location and estimated linear feet of asbestos pipe in the distribution system? _____

Have lines broken due to freezing? Yes No _____

Have lines broken due to traffic load? Yes No _____

Are lines properly disinfected after repairs are made?@ Yes No _____

Are there more than five pressure zones within the distribution system? Yes No _____

Is there at least 35 psi pressure in the distribution system at peak normal flow? Yes No _____

Is there at least 20 psi at all points in the system at all times? @ Yes No _____

Location, length, number, and flushing frequency for dead ends in the system: _____

Are distribution system ("as-built") drawings maintained; e.g. revised to show replacement or repair? Yes No _____

CROSS CONNECTION CONTROL

Does each severe hazard connection have the appropriate reduced pressure backflow assembly installed at the meter/service connection and approved air gap (twice the size of the supply pipe diameter but always greater than one inch)? If no, describe each severe hazard connection and its location. @

Yes No NA _____

Severe hazard connections include radioactive materials processors, nuclear reactors, sewage treatment plants/pump stations.

Does each high hazard connection have the appropriate reduced pressure backflow assembly installed? If no, describe each high hazard connection and its location. @

Yes No NA _____

High hazard connections include: hospitals, medical/dental facilities, laboratories, mortuaries, large taxidermies, chemical suppliers/processing facilities, petroleum plants, food processing facilities, wastewater treatment plants, water fill points/loading stations, piers and docks, car washes, dry cleaners, and any service connection with an unapproved auxiliary supply.

Does the PWS have any frost-free hydrants that drain into the soil?@

Yes No NA _____

Do **trailers or mobile homes connected directly to the PWS** via a yard hydrant have a double check valve assembly at each connection?

Yes No NA _____

At Community PWS, do the following low hazard connections have the appropriate double check valve assembly installed at the meter or service connection?

Yes No NA _____

Low hazard connections include: Mobile home parks, farms and dairies, ranches, shopping centers

For Non-community Systems, do the following connections have the indicated type of backflow prevention assembly?

Stock tanks – approved air gap or atmospheric vacuum breaker at the tank? @

Yes No NA _____

Does the water supplier have a record keeping program and management procedures to ensure:

a. the installation and certification by test or inspection of all backflow preventers (BFPs) at new service connections

Yes No NA _____

b. the annual passing test certification by a certified tester of all high-hazard BFPs at service connections

Yes No NA _____

SAFETY

Personnel Safety

- Are all personnel trained in proper handling of all utilized chemicals and materials? Yes No _____
- Are adequate masks, protective clothing, and safety equipments provided? Yes No _____
- Does the operator understand relevant Occupational Safety and Health Administration (OSHA) regulations (e.g., confined space, hazard communication, trenching/shoring, lock out/tag out)? Yes No _____

Chlorine Gas Safety NA

- Are chlorine room doors posted on the outside with warnings? Yes No _____
- Do the doors open outward? Yes No _____
- Do they open to the exterior of the building? Yes No _____
- Are chlorine room doors equipped with crash bars and viewports? Yes No _____
- Is there a leak detector in the chlorine room with an audible alarm? Yes No _____
- Are chlorine feed and storage areas isolated from other facilities? Yes No _____
- Are chlorine areas adequately ventilated? Yes No _____
- Are all chlorine cylinders adequately restrained? Yes No _____
- Are self-contained breathing apparatus available for use in chlorine emergencies? Yes No _____
- Where are they stored? _____
- Are they in good working condition? _____
- Are water system personnel adequately trained in the use and maintenance of the self-contained breathing apparatus? Yes No _____
- Are chlorine leak kits available and are all personnel trained in their proper use? Yes No _____

Chemical Safety

- Are oxidizers, corrosives, and flammables stored in separate areas and in closed, marked containers? Yes No _____
- Are flammables stored in appropriate containers and cabinets away from combustion sources? Yes No _____
- Is there adequate ventilation in the areas where solvents, aerosols, and chemical feeders are in use? Yes No _____
- Are bulk storage areas physically isolated from treatment areas to prevent spills from entering treated or untreated water? Yes No _____
- Is the fire department familiar with the facilities and their contents? Yes No _____

MANAGEMENT DATA

- Are there rules governing new hookups to protect the integrity of this water system? Yes No _____
- Does the PWS have arrangements in place to assure prompt supply and repair service? Yes No _____
- Does system have a current operations and maintenance manual which describes all procedures, equipment, sampling schedules, and inspection data? Yes No _____
- Is there a schedule for routine preventative maintenance for all facilities and equipment? Yes No _____
- Does the system (treatment plant, finished water storage) have security measures in place (fencing; locks; lighting; alarms; etc.)? Yes No _____
- Does the system have an emergency response plan (ERP) that includes: @** Yes No _____
- **Emergency contact phone numbers?** Yes No _____
 - **Procedures to respond to a pressure loss/water outage/?** Yes No _____
 - **Procedures to respond to a water contamination incident?** Yes No _____
- Is the ERP accessible to the operator on-site? Yes No _____

MONITORING AND RECORDS

Does the operator know how to collect samples for total Coliform analysis? (Review operator sampling procedure at time of survey to confirm)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Does the operator know what to do in the event of a total Coliform "unsafe" result? (Contact the Total Coliform Rule Manager when there is a positive Coliform result)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Are extra bottles available in case of need for repeat TCR sampling?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Does the system have a TCR sampling plan on file and available for the surveyor's review?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Is it up to date?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
If subject to the Ground Water Rule (GWR), does the operator know:			
If they receive notice of a positive/unsafe sample under the Total Coliform Rule, they need to sample all their ground water sources?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
They will need to submit both-			
- Repeat samples under the TCR (utilizing their regular lab form), and	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
- Source water samples utilizing the Ground Water Rule Sample Collection Form located on the Drinking Water Online website (http://www2.epa.gov/region8-waterops) under the Reporting Forms link	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Where to sample if they are required to sample all of their ground water sources?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Are extra bottles available in case of need for GWR source sampling?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Are test kits, reagents, and instruments, as appropriate, available for monitoring?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
<u>For systems that disinfect:</u>			
If the PWS chlorinates, is test equipment available for measuring chlorine residual?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Describe equipment: _____			
Are reagents up to date?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Does the operator know how to properly measure chlorine residual?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
<u>For community and NTNC systems:</u>			
Is there a DBPR Monitoring Plan on-site available for the surveyor's review?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
- Is it up-to-date reflecting the current distribution system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
- What types of MRDLs are measured (free, total, combined, or chlorine dioxide)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Does the system have a Lead & Copper sample siting plan on file and available for the surveyor's review?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Is it up to date?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Does the operator know the location of each entry point to the distribution system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Does the operator know how to properly label samples taken from the entry points?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Has the PWS completed the monitoring that is specified in the EPA-provided monitoring schedule so far for this calendar year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Are copies of all monitoring results filed and readily accessible?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____
Is the operator familiar with the Drinking Water Online (http://www2.epa.gov/region8-waterops) and Drinking Water Watch (https://sdwisr8.epa.gov/Region8DWW/JSP/loginForm.jsp) websites created for their benefit?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	_____