# 2016 EPA Region 8 TRIBAL SANITARY SURVEY FORM INVENTORY

DATE OF SURVEY:	RESERVATION:	SURVEYOR NAME(S):
PWS ID:	SYSTEM NAME:	
System representatives (including tit	tles) present at survey:	EMERGENCY CONTACT
IHS team members present:		Emergency Contact Name:
BOR team members present:	_	Emergency cell phone: ()
Tribal engineer present:	-	Emergency email address:
Comments:		Title:
		Street:
		City: State: County: Zip:
SYSTEM OWNER OR LE	GAL REPRESENTATIVE	PRIMARY ADMINISTRATIVE CONTACT
Addressee Name:		(to receive ALL correspondence from EPA)  Addressee:
Title:		Title:
Street:		Street:
City: State: Zip: _		City: State: County: Zip:
Owner Phone: () Fax	: ()	Administrative Contact Phone: () Fax: ()
Email Address:		Email Address:
Tribal Chairman (if different than ow	ner):	
ADDITIONA (if a	L CONTACT	PUBLIC WORKS DIRECTOR, TRIBAL ENGINEER and/or WATER PLANT SUPERINTENDENT
Addressee:	,	
Title:		Addressee:
Street:		Street:
City: State: County	/: Zip:	City: State: County: Zip:
Contact Phone: () Fax: ()		Contact Phone: () Fax: ()
Email Address:		
Comments:		Email Address:
DESIGNATED OPER	RATOR OF SYSTEM	ALTERNATE OPERATOR
Name:		Name:
Certified Operator? @ ☐ Yes ☐ No		Certified Operator? ☐ Yes ☐ No ☐ Not required  Treatment Cert. Level: Distribution Cert. Level:
Treatment Cert. Level:	Distribution Cert. Level:	Treatment Cert. Exp. Date: Distribution Cert. Exp. Date:
Treatment Cert. Exp. Date:	Distribution Cert. Exp. Date:	Cert. Authority: Cert. Authority:
Cert. Authority: Phone: ()	Cert. Authority:	Phone: ()
Email Address:		Email Address:
Contract Operator*?		Comments:
Date contract ends:		
Comments:		
WATER SYSTEM CLA	SSIFICATION BY EPA	WATER SYSTEM CLASSIFICATION
for operator	certification	from PWS Inventory
System Treatment Classification Lev		C = Community
System Distribution Classification Le	evel:	NTNC = Non-Transient Non-Community
Comments:		☐ NC = Transient Non-Community  Comments:
		Connicio.
SYSTEM PHYSI	CAL ADDRESS	PHYSICAL LOCATION
Street:		Physical Location and Directions:
City: State: Zip: _		

CONTACTS	CONTACTS	
IHS TUC or Sanitarian:	BOR Contact:	
Phone:	Phone:	
Email:	Email:	
PERIOD OF OPERATION	SERVICE CONNECTIONS	
☐ Year-round	Total Service Connections (Active and Inactive):	
☐ Part of the year	Service Connections Metered?	
From to	Number of metered service connections:	
If only open part of the year, does the entire distribution system remain pressurized during the entire off period? $\square$ Yes $\square$ No	Comments:	
Is this PWS operating with a lease on Federal land? ☐ Yes ☐ No If yes, Federal land name:		
Comments:		
OWNER TYPE ☐ 1 Federal Government (BIA / BIE / BOR)	POPULATION DIRECTLY SERVED (do not include populations of consecutive PWSs)	
☐ 2 Federal Government under 638 contract with Tribe	Residential Population:	
3 Private: Subdivision, Investor, Trust, Cooperative, Water Association, etc.	(Number of year-round residents utilizing PWS)	
4 Mixed Public/Private	Non-Transient Population:  (Number of the same persons utilizing PWS Daily for	
5 Native American Indian Tribes & Reservations	6 months of the year – i.e. students, employees)  Transient Population:	
Comments:	(Average number of transient persons served by PWS daily during peak 60 days of operation – i.e. customers, visitors)	
	Does the water system serve at least 25 individuals daily at least 60 days of the year (does not need to be consecutive days)? ☐ Yes ☐ No	
	Comments (source(s) of population info):	
SERVICE CATEGORY (check all that apply)	SOURCES (check all that apply)	
☐ AP Airport ☐ PC Picnic Area	☐ SW = Surface Water ☐ SWP = Surface Water Purchased	
☐ BA Bathing/Swimming ☐ RA Rest Area ☐ BR Bar ☐ RC Recreation	☐ GW = Groundwater ☐ GWP= Groundwater Purchased	
☐ BR Bar ☐ RC Recreation ☐ CG Campground ☐ RS Residential ☐ CH Church ☐ RT Restaurant	☐ GWUDI = Ground Water Under the Direct Influence of Surface Water	
☐ DC Daycare Center ☐ RV RV Park	If mixed, does GW receive full SW Treatment? ☐ Yes ☐ No	
☐ DR Dude Ranch ☐ SC School ☐ HS Hospital ☐ SD Subdivision ☐ IB Interstate Bottler ☐ SK Ski Area	Is the current water source adequate in quantity?  ☐ Yes ☐ No Describe:	
☐ IF Industrial/Agricultural ☐ SS Service Station ☐ IN Institution ☐ US Water User's Association	Have there been any interruptions in service since the last survey?  Yes No Describe:	
☐ LB Local Bottler ☐ VC Visitor Center ☐ LO Lodge ☐ VM Vending Machine ☐ MA Marina ☐ WH Water Hauler	Have there been reports of a water borne disease (2 or more people)?  Yes No Describe:	
☐ MH Mobile Home Park ☐ XX Other ☐ MO Motel/Hotel	Have there been any changes to the water system since the last survey?  Yes No Describe:	
Primary Service Category Description:	Are there any changes that are planned?	
Comments:	Yes No Describe:	
SUMMARY (Describe the water	Comments:er system in a paragraph or two)	
The following abbreviations will be used throughout this document: NI = no  @ = potential significant deficiency.	o 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 have 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.

#### **UNCORRECTED SIGNIFICANT DEFICIENCIES FROM PRIOR SANITARY SURVEY**

Numbered significant deficiencies and associated numbered photos if applicable RECOMMENDATIONS

Numbered recommendations and associated numbered photos if applicable

#### **CONSECUTIVE SYSTEMS**

(i.e. does this PWS receive some or all of its finished water from another PWS?)

□ NA

Name of Wholesaler (System Receives Water From)	PWS ID of Wholesaler	Water Source Type	Connection Type	
- ,		☐ GW ☐ SW ☐ Mixed	☐ Permanent	
Comments	Comments	If mixed, does GW receive full SW Treatment? ☐ Yes ☐ No.	Seasonal, # Days/Yr: Emergency Only	
Comments:	Comments:	Type of residual disinfectant in water supplied:	Comments:	
		☐ Chlorine ☐ Chloramines ☐ None		
		Comments:		
		☐ GW ☐ SW ☐ Mixed	☐ Permanent	
Commente	Commente	If mixed, does GW receive full SW Treatment? ☐ Yes ☐ No.	Seasonal, # Days/Yr:  Emergency Only	
Comments:	Comments:	Type of residual disinfectant in water supplied:  Chlorine Chloramines None	Comments:	
		Comments:		
		☐ GW ☐ SW ☐ Mixed	☐ Permanent	
		If mixed, does GW receive full SW Treatment? ☐ Yes ☐ No.	Seasonal, # Days/Yr:  Emergency Only	
Comments:	Comments:	Type of residual disinfectant in water supplied:  Chlorine Chloramines None	Comments:	
		Comments:		
How many master meter connections exist from the wholesale system to the consecutive system?				
Who is responsible for mainte	nance of the master mete	r connection(s) from the wholesale system?		
☐ Wholesaler				
☐ 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 are inspections performed on the master meter connection?				
How often is maintenance	e performed on the master	r meter connection(s)?		
Does standing water exist	t in any meter pits?	∕es □ No		
If so, what is the source o	of the standing water?			
Leaks @				
☐ Groundwater				
Don't know @				
Comments:				
Name of hauler	If PWS Purch	nases Water from a WATER HAULER:		
Name of hauler:  Name of the water system supplying water to the hauler:				
Is there a water tight cap on the (water system's) fill port? @				
How does the operator check		_		
Comments:		, <u>—</u>		

WHOLESALE SYSTEMS
(i.e. does this PWS supply finished water to another PWS?)

□ NA

Name of Consecutive (System Supplies Water To)	PWS ID or State ID of Consecutive (if no PWS ID provide contact and address)	Population	Connection Type
			☐ Permanent ☐ Seasonal, # Days/Yr ☐ Emergency Only ☐ Water is hauled (bulk water fill stations are described in Distribution section)
			<ul> <li>☐ Permanent</li> <li>☐ Seasonal, # Days/Yr</li> <li>☐ Emergency Only</li> <li>☐ Water is hauled (bulk water fill stations are described in Distribution section)</li> </ul>
			☐ Permanent ☐ Seasonal, # Days/Yr ☐ Emergency Only ☐ Water is hauled (bulk water fill stations are described in Distribution section)
Comments:			
How many master meter con	nections exist off the who	olesale system?	
Who is responsible for maintenance of those connection(s)?			
☐ Wholesaler			
☐ Consecutive system			
Comments:			
If the wholesaler is responsible, how often is inspection performed on the master meter connection(s)?			
If the wholesaler is responsible, how often is 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 th	e standing water?		
Leaks @			
☐ Groundwater			
Don't know @			
Comments:			

## **SOURCE DATA**

ACTIVE (PHYSICALLY CONNECTED) WELLS AND WELL PUMPS (if well is GWUDI and fully treated as SW, these will be recommendations)

Well Name:			
Well owner (if different than system owner):			
Facility ID (from PWS inventory, e.g., WL01):			
Well Location: (well house, well pit, pitless adapter, combination, driveway/parking lot, other)			
Does system want this well to be considered inactive? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Adequately protected from vehicle damage? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If well is located in a pit or vault, is the pit or vault completely watertight?	Yes No NA	Yes No NA	Yes No NA
If no, is the pit or vault completed with drainage or a sump pump for permanent or portable use? @ If applicable, indicate type (permanent pump, portable pump, or drainage)	☐ Yes ☐ No ☐ NA Type:	☐ Yes ☐ No ☐ NA Type:	☐ Yes ☐ No ☐ NA Type:
Is the pit located in a building?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Total Well Depth (ft):			
Depth range of shallowest casing perforations (ft):	to	to	to
Actual yield (gpm):			
Well log or Statement of Completion on site? (If yes, please copy or photograph and submit with report)	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Well Construction			
Does SW runoff drain away from the wellhead (including wells in pits or vaults)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does well casing terminate at least 12" above the concrete floor? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the well casing terminate at least 18" above the natural ground surface? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the actual casing height (inches)?			
Any holes or openings observed in the well or its appurtenances? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If yes, describe.			
Does the well have a sanitary seal with tightly bolted cap?  @ (May need operator to open well cap to verify; explain why if unable to verify)	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown
Is a gasket visible?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the well cap move?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Explain			
Is well vented (vent not required)?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the height from the ground level to the screen of the vent (inches)?			
Does the vent terminate at or above the top of the casing or pitless unit? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is vent facing downward? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Vent screened with #24 mesh? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is there a source water sample tap for GWR compliance?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Where is the source water tap located?			
Is there an air release/vacuum relief valve (not required)?	☐ Yes ☐ No ☐ NA	Yes No NA	☐ Yes ☐ No ☐ NA
Discharge Piping Termination			
- In a downward position? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
- At least 8" above the floor? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA

Well Name:			
- Screened with #24 mesh? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments:			
Well Pumps			
Submersible Pump?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Other type of pump?  (if other, describe and indicate location in the comment	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
field below)			
NSF-60 lubricant used?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Operable and in good condition?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Maintenance program in place?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the external pump subject to flooding? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Spare parts available?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Emergency power available?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments			
Are there any sources of pollution near the wells which could possibly impact water quality? @ Yes No Examples: Septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, animal enclosures, cleaning supplies, oil/fuel, etc)			
If yes, indicate impacted well(s) and provide general location and comments (please locate on aerial map and provide photos):			
How far from the well is the source of pollution located?			
Mice or other animals and their droppings in immediate area	Mice or other animals and their droppings in immediate area (well house, vault, pit, etc.) @ \qquad Yes \qquad No \qquad \qquad Yes		
Are there seasonal variations in the quantity of the water?			o
Are there seasonal variations in the quality of the water?		o	
How does the system handle sewage?			Sewage Treatment
		☐ Septic Syste	ems with Pumped Vaults
☐ Septic Systems with Leach Fiel (mark location on aerial if near			
Comments:			

## **SOURCE DATA**

ACTIVE (PHYSICALLY CONNECTED) WELLS AND WELL PUMPS (if well is GWUDI and fully treated as SW, these will be recommendations)

Well Name:			
Well owner (if different than system owner):			
Facility ID (from PWS inventory, e.g., WL01):			
Well Location: (well house, well pit, pitless adapter, combination, driveway/ parking lot, other)			
Does system want this well to be considered inactive? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Adequately protected from vehicle damage? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If well is located in a pit or vault, is the pit or vault completely watertight?	Yes No NA	Yes No NA	Yes No NA
If no, is the pit or vault completed with drainage or a sump pump for permanent or portable use? @ If applicable, indicate type (permanent pump, portable pump, or drainage)	☐ Yes ☐ No ☐ NA Type:	☐ Yes ☐ No ☐ NA Type:	☐ Yes ☐ No ☐ NA Type:
Is the pit located in a building?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Total Well Depth (ft):			
Depth range of shallowest casing perforations (ft):	to	to	to
Actual yield (gpm):			
Well log or Statement of Completion on site? (If yes, please copy or photograph and submit with report)	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Well Construction			
Does SW runoff drain away from the wellhead (including wells in pits or vaults)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does well casing terminate at least 12" above the concrete floor? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the well casing terminate at least 18" above the natural ground surface? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the actual casing height (inches)?			
Any holes or openings observed in the well or its appurtenances? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If yes, describe.			
Does the well have a sanitary seal with tightly bolted cap?  @ (May need operator to open well cap to verify; explain why if unable to verify)	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown	☐ Yes ☐ No ☐ Unknown
Is a gasket visible?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the well cap move?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Explain			
Is well vented (vent not required)?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the height from the ground level to the screen of the vent (inches)?			
Does the vent terminate at or above the top of the casing or pitless unit? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is vent facing downward? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Vent screened with #24 mesh? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is there a source water sample tap for GWR compliance?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Where is the source water tap located?			
Is there an air release/vacuum relief valve (not required)?	Yes No NA	Yes No NA	Yes No NA
Discharge Piping Termination			
- In a downward position? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
- At least 8" above the floor? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA

Well Name:			
- screened with #24 mesh? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments:			
Well Pumps			
Submersible Pump?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Other type of pump?			
(if other, describe and indicate location in the comment field below)	☐ Yes ☐ No ☐ NA	Yes No NA	Yes No NA
NSF-60 lubricant used?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Operable and in good condition?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Maintenance program in place?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the external pump subject to flooding? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Spare parts available?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Emergency power available?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments			
Are there any sources of pollution near the wells which could possibly impact water quality? @ \ Yes \ No Examples: Septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, animal enclosures, cleaning supplies, oil/fuel, etc)			
If yes, indicate impacted well(s) and provide general location and comments (please locate on aerial map and provide photos):			
How far from the well is the source of pollution located?			
Mice or other animals and their droppings in immediate area (well house, vault, pit, etc.) @   Yes   No			_
Are there seasonal variations in the quantity of the water?		☐ Yes ☐ No	o
Are there seasonal variations in the quality of the water?		☐ Yes ☐ No	·
How does the system handle sewage?		☐ Centralized	Sewage Treatment
		☐ Septic Syste	ems with Pumped Vaults
			ems with Leach Fields on on aerial if near well)
Comments:			

#### **SOURCE DATA**

## **SPRINGS AND ASSOCIATED PUMPS**

(if spring is GWUDI and fully treated as SW, these will be recommendations)

Spring name:		Description of the intake to the spring collection box (i.e., how the spring	
Spring owner if different than system owner:		water is collected and conveyed into the box):	
Facility ID (from PWS Inventory, e.g., SPR01):		Actual yield (gpm):	
		Please copy or photograph any available construction diagrams or "asbuilts" and submit with the sanitary survey report.	
		Comments:	
SPRING COLLECTION CHAMBER	Yes No NA	SOURCE PUMPS	
Are the spring collection area and spring		Location of the pump station:	
box fenced to keep animals away? @		How many pumps at the facility?	
Does surface water runoff drain away from the collection area? @		Type of pump(s):	
Is there deep rooted vegetation around the spring collection area and spring box? @		Yes No NA	
Describe:		Are the correct types of lubricants (NSF-60) used?	
Does the spring collection box have the		Are pumps operable and in good condition?	
following features:		Is there a maintenance program in operation?	
Proper shoe box lid? @		Is the pump station subject to flooding? @	
Rubber gasket on the lid? @		Are spare parts available?	
Air vents screened with #24 mesh? @		Is emergency power available?	
Is the hatch locked? @		Comments.	
Overflow screened with #24 mesh screen? @			
Does overflow have a free fall of at least 12 inches? @			
Is the spring collection chamber water tight to prevent inflow of unwanted surface water? @			
Comments:			
For any other hatches/manholes that are part of the (describe the condition of each)	ne spring collection	system or on the line from the spring box to the tank or distribution system:	
Proper shoe box lid? @ ☐ Yes ☐ No	Description and	location:	
Rubber gasket on the lid? @	Description and	location:	
Locked? @ Yes No	Description and	location:	
Are there any sources of pollution near the springs which could possibly impact water quality? @ \ Yes \ No (Examples: Septic systems, chemical storage/mixing facilities, agriculture activities, industrial activities, animal enclosures, cleaning supplies, oil/fuel, etc)			
If yes, indicate impacted spring(s) and provide ge	neral location and c	omments (please locate on aerial map and provide photos):	
How far from the spring is the source of pollution	ocated?		
Mice or other animals and their droppings in immediate area (spring house, etc.) @   Yes  No			
Are there seasonal variations in the quantity of the	e water?	☐ Yes ☐ No	
Are there seasonal variations in the quality of the water?			
How does the system handle sewage?	How does the system handle sewage?		
☐ Septic Systems with Pumped Vaults —			
Comments:	☐ Sep	tic Systems with Leach Fields (mark location on aerial if near spring)	

## SOURCE DATA FOR INTAKE LOCATED IN INFILTRATION GALLERIES AND ASSOCIATED PUMPS $\hfill\Box$ $_{\rm NA}$

INFILTRATION GALLERIES	SOURCE PUMPS		
Infiltration gallery name:	Location of the pump station:		
Infiltration gallery owner if different than system owner:	How many pumps at the facility?		
Facility ID (from PWS Inventory, e.g., IG01):	Type of pump(s):		
Physical description:	Yes No NA		
Depth?	Are the correct types of lubricants (NSF-60) used?		
Actual yield (gpm):	Are pumps operable and in good condition?		
Are there seasonal algal blooms present? ☐ Yes ☐ No	Is there a maintenance program in operation?		
Describe:	Is the pump station subject to flooding?		
Is an algaecide ever used to control algae? ☐ Yes ☐ No	Are spare parts available?		
If yes, describe:	Is emergency power available?		
Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report	Comments:		
Are there any sources of pollution near the infiltration gallery (e.g., ag impact water quality? @ ☐ Yes ☐ No	riculture/industrial activities, cleaning supplies, oil/fuel, etc.) which could		
If yes, indicate impacted infiltration gallery(ies) and provide general lo	cation and comments (please locate on aerial map and provide photos):		
How far from the infiltration gallery is the source of pollution located?			
Are there seasonal variations in the quantity of the water?	☐ Yes ☐ No		
Are there seasonal variations in the quality of the water?	☐ Yes ☐ No		
Comments:			

## SOURCE DATA FOR INTAKE LOCATED IN STREAMS, AND ASSOCIATED PUMPS $\ \square\ _{\mathrm{NA}}$

STREAMS	INTAKE PUMPS	
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? ☐ Yes ☐ No	Type of pump(s):  Yes No NA	
Are there multiple intakes located at different levels?  Yes No Describe:	Are the correct types of lubricants (NSF-60) used?	
Are the intake(s) screened?	Are pumps operable and in good condition?	
☐ Yes ☐ No	Is there a maintenance program in operation?	
Frequency of intake inspection:	Is the pump station subject to flooding?	
Date of last inspection:	Are spare parts available?	
Are there seasonal algal blooms present? ☐ Yes ☐ No	Is emergency power available?	
Describe:	Comments:	
Is an algaecide ever used to control algae? ☐ Yes ☐ No		
If yes, describe:		
Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report		
Are there any sources of pollution near the stream (e.g., agriculture/industrial activities, cleaning supplies, oil/fuel, etc.) which could impact water quality? @  ☐ Yes  ☐ No		
If yes, indicate impacted stream(s) and provide general location and comments (please locate on aerial map and provide photos):		
How far from the stream is the source of pollution located?		
Are there seasonal variations in the quantity of the water?	☐ Yes ☐ No	
Are there seasonal variations in the quality of the water?	☐ Yes ☐ No	
Comments:		

## SOURCE DATA FOR INTAKE LOCATED IN RESERVOIRS, LAKES AND PONDS AND ASSOCIATED PUMPS $\hfill \square$ $_{\rm NA}$

Reservoir or lake name:			
Facility ID (from PWS Inventory, e.g., IN01):			
RESERVOIRS	INTAKE PUMPS		
Is the area around the intake(s) restricted? ☐ Yes ☐ No	Location of the pump station:		
Are there multiple intakes located at different levels? ☐ Yes ☐ No Describe:	How many pumps at the facility?		
Depth of intake(s):	Type of pump(s):		
Distance from shore:	Yes No NA  Are the correct types of lubricants (NSF-60) used?		
Are the intake(s) screened?	, , ,		
Frequency of intake inspection:	Are pumps operable and in good condition?		
Date of last inspection:	Is there a maintenance program in operation?		
Are there seasonal algal blooms present? ☐ Yes ☐ No	Is the pump station subject to flooding?		
Describe:	Are spare parts available?		
Is an algaecide ever used to control algae? ☐ Yes ☐ No	Is emergency power available?		
If yes, describe:	Comments:		
Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report			
Are there any sources of pollution near the reservoir/lake/pond (e.g., agriculture/industrial activities, cleaning supplies, oil/fuel, etc.) which could impact water quality? @			
If yes, indicate impacted reservoir/lake/pond(s) and provide general loca	tion and comments (please locate on aerial map and provide photos):		
Llow for from the reconneit/le/s/pand is the source of palliting land to			
How far from the reservoir/lake/pond is the source of pollution located?			
Are there seasonal variations in the quantity of the water?	∐ Yes ∐ No		
Are there seasonal variations in the quality of the water?	☐ Yes ☐ No		
Comments:			

## **SOURCE DATA** EMERGENCY BACKUP SOURCE WATER $\ \square$ NA

Describe any backup source water possibly available during an emergency to the PWS, or indicate none:		
Is the backup water source physically disconnected from the water system? Yes No (if this is a raw water source and is still physically connected to the system, then stop filling out this section and complete the applical data section)	ble source	
Backup source name:		
Facility ID (from PWS Inventory, e.g., IN01, WL01, etc.):		
Are there seasonal algal blooms present?		
Describe:		
Is an algaecide ever used to control algae? ☐ Yes ☐ No ☐ NA		
If yes, describe:		
Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report		
Are there any sources of pollution near the emergency backup source (e.g., agriculture/industrial activities, cleaning supplies, oil/fuel, which could impact water quality? @ \( \Boxed{\text{T}} \text{Yes} \( \Boxed{\text{D}} \text{No} \)	, etc.)	
If yes, indicate impacted emergency backup source(s) and provide general location and comments (please locate on aerial map and photos):	provide	
How far from the emergency backup source is the source of pollution located?		
Mice or other animals and their droppings in immediate area (well house, vault, pit, etc.).		
Are there seasonal variations in the quantity of the water?		
Are there seasonal variations in the quality of the water?		
Comments:		

## RAW WATER TO TREATMENT PLANT TRANSMISSION LINE $\hfill\Box$ $^{\rm NA}$

Name or designation:				
sw □ Gw □				
Point of origin:				
Point of termination:				
Approximate Length:				
Material:				
Are there any service connections off the raw water transm (Check yes only if the water system provides treated water		☐ Yes system)	□ No	
What does each connection serve?				
If used for potable water supply, is there a legal agreem	nent or contract in place?	☐ Yes	☐ No	
If used for potable water supply, is the water treated at	the connection and how?	☐ Yes	□ No	
Name or designation:				
sw □ gw □				
Point of origin:				
Point of termination:				
Approximate Length?				
Material:				
Are there any service connections off the raw water transm (Check yes only if the water system provides treated water		☐ Yes system)	□ No	
What does each connection serve?				
If used for potable water supply, is there a legal agreen	nent or contract in place?	☐ Yes	□ No	
If used for potable water supply, is the water treated at	the connection and how?	☐ Yes	☐ No	
DISTRIBUTION	N BOOSTER PUMF	STATIO	ONS	
Location of the pump station:				
How many pumps at the facility?				
Type of pumps:				
	Yes No NA			
Are the correct types of lubricants (NSF-60) used?				
Is the pump station subject to flooding? @				
Are pumps operable and in good condition?				
Is there a maintenance program in operation?				
Are spare parts available?				
Is emergency power available?				

## HYDROPNEUMATIC TANKS □ NA

Type of Tanks ☐ Captive Air Bladder Tank	
☐ Pressure Tank that uses an air	compressor
Number of tanks:	
Location, Description:	
Dates put into service:	
Is there an operable pressure gauge?	☐ Yes ☐ No
Is there evidence of severe rust? @	☐ Yes ☐ No
Is there evidence of water leaks? @	☐ Yes ☐ No
Is there evidence of air leaks? @	☐ Yes ☐ No
Is there evidence of flooding (if in a vault)? @ \ \ \ \ NA	☐ Yes ☐ No
Is there a pressure relief valve?	☐ Yes ☐ No
Can tank(s) be by-passed for repair?	☐ Yes ☐ No
For any tank that uses an air compressor, is the tank age older than the life expectancy? @ (Manufacturer and model number)	☐ Yes ☐ No
Comments:	

## **GRAVITY TANKS**

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Complete for all tanks at ground water systems and consecutive sy systems. (Includes indoor clearwells and contact tanks or other finite systems).		inished water tanks at surf	ace water / GWUDI
Tank Name:			
Tank ID (from PWS inventory, e.g., ST01):			
Tank owner (if different than system owner):			
Location (indoor or outdoor):			
Date put into service			
Tank Type  Below ground (buried or partially buried)  Ground level  Elevated (pedestal or standpipe)			
Tank is constructed of:  Concrete Steel Fiberglass Other			
What type of water is stored (GW systems only)?	☐ Treated ☐ Raw	☐ Treated ☐ Raw	☐ Treated ☐ Raw
Storage volume (gallons)?			
Is the site subject to flooding? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Can the tank be isolated from the system?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the water level indicator accurate?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Does the tank appear structurally sound? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Does the foundation appear structurally sound? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Are there any unprotected openings in the tank (breaches, leaks, etc)? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Inspection and cleaning history			
If the tank is more than 10 years old, was it cleaned and inspected within the last 10 years? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
When and how was the tank last cleaned and inspected?	<u>——</u>		
Who performed the cleaning and inspection?			
How was the tank disinfected after cleaning? (NA if diver used)			
Surveyor able to view report and confirm date?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If so, note major concerns and/or recommendations:			
Carcasses or other debris found in the tank?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If yes, was EPA notified immediately?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Was the entry point for the carcass or debris eliminated?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Describe:		<del></del>	
<u>Overflow</u>			
Does the tank have an overflow separate from the vent? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the overflow accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Overflow has a #24 mesh screen OR a duckbill valve OR a properly sealed flapper valve with screen inside (EPA recommends a #24 mesh screen)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow line terminate no less than 12 inches but no more than 24 inches above the ground surface? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow discharge over an inlet structure, splash plate, or engineered rip-rap? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the discharge visible?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about overflow:			
Drain Line			

Complete for all tanks at ground water systems and consecutive systems. Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:			
Combined overflow and drain pipe? (If yes, skip drain questions)	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the drain accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is there #24 mesh screen on the drain pipe?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does water accumulate in the drain discharge area?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate between 12 and 24 inches above a drainage area?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate above an inlet structure, splash plate, or engineered rip-rap?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about drain:			
Air Vent			
Does the tank have a vent separate from the overflow? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the vent accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For above ground tanks (ground level or elevated/standpipe):			
Is there #24 mesh screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If not #24 mesh screen, what size mesh is the screen?			
Does the tank have a vacuum/pressure relief valve or other mechanism to prevent tank damage?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Downturned vent: Is the vent at least 24" above the roof? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For non-downturned vents: Is there a solid cover down to the bottom of the vent screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For non-downturned vents: Is the screen at least 8" above the roof surface? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Below Ground Tanks (buried or partially buried)			
Is air vent covered with #24 mesh screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the air vent terminate downward? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the air vent at least 24" above the roof or ground surface (whichever is higher)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about air vent:			
Access Hatch			
Is the hatch accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch raised at least 24" above the roof or ground (whichever is higher) on below ground tanks (buried or partially buried) or 4" above the roof for above ground tanks (ground level or elevated)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the height of the access hatch above the roof or ground surface?	in	in	i <u>n</u>
Does the hatch have a shoe box lid? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the lid tight and sealed with a rubber gasket? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch locked? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about access hatch:			
Comments:			

## **GRAVITY TANKS**

-	-	
Г	٦	NA

Complete for all tanks at ground water systems and consecutive sy systems. (Includes indoor clearwells and contact tanks or other fini		nished water tanks at surfa	ace water / GWUDI
Tank Name:			
Tank ID (from PWS inventory, e.g., ST01):			
Tank owner (if different than system owner):			
Location (indoor or outdoor):			
Date put into service			
Tank Type Below ground (buried or partially buried) Ground level Elevated (pedestal or standpipe)			
Tank is constructed of:  Concrete Steel Fiberglass Other			
What type of water is stored (GW systems only)?	☐ Treated ☐ Raw	☐ Treated ☐ Raw	☐ Treated ☐ Raw
Storage Volume (gallons)?			
Is the site subject to flooding? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Can the tank be isolated from the system?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the water level indicator accurate?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Does the tank appear structurally sound? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Does the foundation appear structurally sound? @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Are there any unprotected openings in the tank (breaches, leaks, etc)?   @	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Inspection and cleaning history			
If the tank is more than 10 years old, was it cleaned and inspected within the last 10 years? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
When and how was the tank last cleaned and inspected?			
Who performed the cleaning and inspection?			
How was the tank disinfected after cleaning? (NA if diver used)			
Surveyor able to view report and confirm date?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If so, note major concerns and/or recommendations:			
Carcasses or other debris found in the tank?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If yes, was EPA notified immediately?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Was the entry point for the carcass or debris eliminated?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Describe:			
<u>Overflow</u>			
Does the tank have an overflow separate from the vent? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the overflow accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Overflow has a #24 mesh screen OR a duckbill valve OR a properly sealed flapper valve with screen inside (EPA recommends a #24 mesh screen)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow line terminate no less than 12 inches but no more than 24 inches above the ground surface? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow discharge over an inlet structure, splash plate, or engineered rip-rap? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the discharge visible?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about overflow:			

Complete for all tanks at ground water systems and consecutive systems Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:			
<u>Drain Line</u>			
Combined overflow and drain pipe? (If yes, skip drain questions)	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the drain accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is there #24 mesh screen on the drain pipe?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does water accumulate in the drain discharge area?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate between 12 and 24 inches above a drainage area?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate above an inlet structure, splash plate, or engineered rip-rap?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about drain:			
Air Vent			
Does the tank have a vent separate from the overflow? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the vent accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For above ground tanks (ground level or elevated/standpipe):			
Is there #24 mesh screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If not #24 mesh screen, what size mesh is the screen?			
Does the tank have a vacuum/pressure relief valve or other mechanism to prevent tank damage?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Downturned vent: Is the vent at least 24" above the roof? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For non-downturned vents: Is there a solid cover down to the bottom of the vent screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For non-downturned ventsis the screen at least 8" above the roof surface? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Below Ground Tanks (buried or partially buried)			
Is air vent covered with #24 mesh screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the air vent terminate downward@	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the air vent at least 24" above the roof or ground surface (whichever is higher)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about air vent:			
Access Hatch			
Is the hatch accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch raised at least 24" above the roof or ground (whichever is higher) on below ground tanks (buried or partially buried) or 4" above the roof for above ground tanks (ground level or elevated)? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the height of the access hatch above the roof or ground surface?	in	in	in
Does the hatch have a shoe box lid? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the lid tight and sealed with a rubber gasket? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch locked? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about access hatch:			
Comments:			

# WATER TREATMENT DATA GROUNDWATER and CONSECUTIVE SYSTEMS THAT HAVE AVAILABLE TREATMENT $\hfill \square$ $_{\rm NA}$

Describe the steps (as many as necessary) of the treatment process in order from the water source to distribution:				
Plant Output (gal/	day)			
Design: Maximum:				
	- tment since the last sanitary su	ırvev?	☐ Yes ☐ No	
Describe:	anone carea are race carmary of			
	_ 			
	Step 1	Step 2	Step 3	Step 4
	☐ Chemical Type: ☐ NSF 60 Certified?			
Process	☐ UV ☐ Filtration ☐ lon exchange ☐ Softener ☐ Other: ☐ Dosage:	☐ UV ☐ Filtration ☐ lon exchange ☐ Softener ☐ Other: ☐ Dosage:	☐ UV ☐ Filtration ☐ lon exchange ☐ Softener ☐ Other: ☐ Dosage:	☐ UV ☐ Filtration ☐ lon exchange ☐ Softener ☐ Other: ☐ Dosage:
Objective:	☐ Treatment of bacteria, viruses ☐ Turbidity removal ☐ Hardness removal ☐ Taste & odor removal ☐ Metals removal ☐ Other:	☐ Treatment of bacteria, viruses ☐ Turbidity removal ☐ Hardness removal ☐ Taste & odor removal ☐ Metals removal ☐ Other:	☐ Treatment of bacteria, viruses ☐ Turbidity removal ☐ Hardness removal ☐ Taste & odor removal ☐ Metals removal ☐ Other:	☐ Treatment of bacteria, viruses ☐ Turbidity removal ☐ Hardness removal ☐ Taste & odor removal ☐ Metals removal ☐ Other:
Is this process required by EPA?	☐ Yes ☐ No			
Location of process?	☐ At Well ☐ At Treatment Plant ☐ Other:	☐ At Well ☐ At Treatment Plant ☐ Other:	☐ At Well ☐ At Treatment Plant ☐ Other:	☐ At Well ☐ At Treatment Plant ☐ Other:
Is this process adequate to meet the objective?	☐ Yes ☐ No Explain:			
Frequency of use:	Permanent Seasonal Emergency Other:			
Redundant Equipment?	☐ Yes ☐ No			
Backup power?	☐ Yes ☐ No			
	Explain:	Explain:	Explain:	Explain:

## Groundwater and Consecutive Systems UV Disinfection

Yes	No	
		Is there a flow meter 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:
		Is there an intensity sensor and alarm (visible/audible) to indicate low intensity?
		Is there a UV lamp status alarm (visible/audible) to indicate lamps off?
		Is there a UV lamp age counter/alarm?
		Is there an automatic shut-off fail-safe solenoid valve so that water does not flow through the unit without adequate treatment?
		Are there spare bulbs on hand?
How	often a	are the unit cleaned and the bulbs changed?
	P	oint of use Treatment
For P	WSs v	vith required Point of Use (POU) treatment, ask the operator –
Yes	No N	A
		Is the system adhering to the O&M Plan approved by EPA and conducting maintenance per the manufacturer's recommendations?
		(i.e. Is the operator replacing POU filters in accordance with the maintenance plan or manufacturer recommendations).
		Is the system following its EPA-approved POU sampling plan?
If No,	explai	n any difficulties:
Comr	ments:	

# WATER TREATMENT DATA SURFACE WATER / GWUDISW SYSTEMS $\square$ NA

#### **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.			
In this section, the ¥ symbol indicates a potential violation to be determined by the EPA R	ule Manager		
Plant Location and Information  Plant / Office Location and Directions:  Date plant put online:  Modifications since the last survey? (if yes, describe):  Describe water sources treated by this plant:  Is treatment impacted by algae (describe)?	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. flowmeters, 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. Please describe:  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-Sed Basin:  ☐ Yes ☐ No  Describe Type and indicate volume:  Chemicals added: ☐ Yes ☐ No (If yes, input chemical information in table below)									
<u>Ra</u>	apid Mix:	☐ Yes ☐ No  Describe Type:  Chemicals added: ☐ Yes ☐ No (If yes, input chemical information in table below)							
Flocculation:		☐ Yes ☐ No  Describe Type:  Chemicals added: ☐ Yes ☐ No (If yes, input chemical information in table below)							
Sedimentation:		☐ Yes ☐ No  Describe Type:  Chemicals added: ☐ Yes ☐ No (If yes, input chemical information in table below)							
Other:		☐ Yes ☐ No  Describe:  Chemicals added: ☐ Yes ☐ No (If yes, input chemical information in table below)							
<u>Cł</u>	nemical Information	n (ask system to provid	le information from chemic	al supplier / manufacturer):					
	Manufacturer	Product Name	Location Chemical Added	Max Dose Used (past 12 months):	NSF 60 Certified?	NSF 60 Max Allowable Dose			
					☐ Yes ☐ No				
		_			☐ Yes ☐ No				
					☐ Yes ☐ No				
					☐ Yes ☐ No				
					☐ Yes ☐ No				
	NSF 60 certification and max. allowable dose info. can be found at: <a href="http://info.nsf.org/Certified/PwsChemicals/">http://info.nsf.org/Certified/PwsChemicals/</a> Does the system use a chemical containing epichlorohydrin or polyacrylamide that is dosed in excess of the NSF 60 Max Allowable Dose? ¥  Yes \sum No								

#### **Filtration Processes**

#### General

Indicate all types of filtration used:				
☐ Conventional ☐ Bags / Cartridges	☐ Slow Sand			
☐ Direct ☐ Membranes	☐ Diatomaceous Earth			
Which is the final filtration barrier?:				
Type and model # of combined filter effluent (CFE) turbidimeter:				
Location of CFE turbidimeter:				
Frequency of all turbidimeter calibration(s):				
Date(s) of last turbidimeter calibration(s) for all turbidimeters:				
Method used for all calibrations (primary formazin standard or other)?				
Yes No				
□ □ Does the location of the CFE turbidimeter comply with EPA	A policy SWTR #5? @			
☐ Are turbidimeters calibrated at least once every quarter? €				
☐ ☐ Does the system use a primary standard to perform the ca	libration? @			
☐ ☐ Are CFE turbidity records available for the last 5 years? ¥				
☐ ☐ Can CFE turbidities be recorded up to 5 NTU? @ How high	h can they be recorded:			
Can turbidities associated with off-periods (backwash, FTV     @	V) be identified so they are not counted for compliance? (if applicable)			
Finished water CFE turbidity (NTU): PWS measurement: Surv	reyor measurement:			
Conventional and Direct Filtration				
Filter Information	Backwash Information			
# of filters:	What determines when backwash occurs?			
Type of filters:	Backwash rate (gpm/ft²):			
open to atmosphere enclosed (pressure)	What is used for a backwash?			
Manufacturer name & model (if applicable):	☐ Air scour ☐ finished water ☐ raw water @			
Depth of each media (in):	Yes No			
Sand: Anthracite: Garnet:	☐ ☐ System starts up with clean filters (if not running 24/7)			
Total at least 24"? @ Yes \( \) No \( \)	☐ ☐ System performs filter to waste (FTW) before putting			
Has operator observed loss of media?	filters back on line.			
Has the operator inspected the media for mudball formation?				
Average length of filter run (hours):				
Maximum filter loading rate (gpm/ft²):				
Is the filtration rate less than 2 gpm/sf (mono-media), 4 gpm/sf (dual media) or 6 gpm/sf (deep bed)? @				
Yes No				

#### Conventional and Direct IFE and CFE additional information (only if final barrier)

IFE Questions								
How	How are IFE records maintained? ☐ SCADA ☐ strip chart ☐ circular chart							
Yes	Yes No							
		Does each filter have an individual effluent (IFE) turbidimeter? ¥ Types and model #s:						
		Are there alarms on each filter? Alarm set point (NTU):						
		Are IFE turbidities measured continuously, and recorded at least every 15 Minutes? ¥						
		Is IFE turbidity recorder (SCADA or charts) calibrated to record turbidities ≥ 2 NTU? @						
		Are IFE records kept for the last 3 years (as applicable)? ¥						
		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 ≥ 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	Quest	<u>ions</u>						
How	are Cl	FE records maintained?  SCADA strip chart circular chart						
Yes	No							
		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:						
Log r	emova	al credited for this type of filtration barrier for: <i>Giardia</i> : Viruses: Cryptosporidium:						
Conv	Conventional and Direct (only if filter backwash, thickener supernatant, or sludge dewatering liquid is recycled)							
Desc	Describe where recycle enters treatment process:							
Yes	No							
		Is recycle location before the TOC monitoring point?						
	Are records of recycle practices kept in an acceptable format for each year that includes all of the required elements (e.g., avg and max times/flows of backwashes; recycle treatment/equalization [chemical addition; hydraulic loading rates])? ¥							

#### Membranes

Number of membrane skids: Configuration: 🗌 parallel 🗎 series							
Membrane type: ☐ microfiltration ☐ ultrafiltration ☐ nanofiltration ☐ RO							
Manufacturer: Model #: Absolute pore size:							
Each 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) performed at least daily (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 every15 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 a 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 parallel filter trains: Each train capacity (gpm):							
Pre Filter (if applicable)							
Pre Filter (if applicable)							
Pre Filter (if applicable)  Housing: Manufacturer: Model:							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:							
Pre Filter (if applicable)  Housing: Manufacturer: Model: # per housing: # per ho							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:   Final Filter  Housing: Manufacturer: Model:  Model: # per housing:   Final Filter							
Pre Filter (if applicable)  Housing: Manufacturer: Model: # per housing: # per ho							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:   Final Filter  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:   Manufacturer's recommended maximum flow rate (gpm):							
Pre Filter (if applicable)  Housing: Manufacturer: Model: # per housing:  Bag / Cartridge Filter: Manufacturer: Model: # per housing: # per housing:  Final Filter  Housing: Manufacturer: Model: # per housing:   Bag / Cartridge Filter: Manufacturer: Model: # per housing:   Manufacturer's recommended maximum flow rate (gpm):  Pore size rating (microns - indicate absolute or nominal):							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Final Filter  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Manufacturer's recommended maximum flow rate (gpm):  Pore size rating (microns - indicate absolute or nominal):  Replacement frequency of all filters:							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Final Filter  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model:  Manufacturer's recommended maximum flow rate (gpm):  Pore size rating (microns - indicate absolute or nominal):  Replacement frequency of all filters:  Yes No  Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (1 NTU 95% of each month,							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Final Filter  Housing: Manufacturer: Model: # per housing:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Manufacturer's recommended maximum flow rate (gpm):  Pore size rating (microns - indicate absolute or nominal):  Replacement frequency of all filters:  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) ¥							
Pre Filter (if applicable)  Housing: Manufacturer: Model:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Final Filter  Housing: Manufacturer: Model: # per housing:  Bag / Cartridge Filter: Manufacturer: Model: # per housing:  Manufacturer's recommended maximum flow rate (gpm):  Pore size rating (microns - indicate absolute or nominal):  Replacement frequency of all filters:  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? @							
Housing: Manufacturer: Model:							

#### Diatomaceous Earth Filters

Number of filters: Pressure 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) ¥  ☐ Yes ☐ No							
Describe precoat and body feed systems:							
Maximum filter loading rate (gpm/ft²):							
Is the filtration rate less than 1.5 gpm/sf? @ ☐ Yes ☐ No							
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)?							
Is the filtration rate less than 0.1 gpm/sf? @ ☐ Yes ☐ No							
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) ¥							
☐ ☐ Is turbidity of raw water to filters always <10 NTU? @							
☐ ☐ Is water depth over sand at least 3 feet during operation? @							
☐ ☐ Can plant meet design capacity with one unit out of service?							
☐ ☐ Do they ripen after scraping (filter to waste) and how long?							
☐ 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: Giardia: Viruses: Cryptosporidium:							

#### **Disinfection Processes**

#### General

Descr	Describe all inactivation processes, both pre-filtration and post-filtration:										
UV Di	UV Disinfection										
Point	Point of application: UV manufacturer/model #:										
Valida	Validated maximum flow (gpm): Validated UV dosage (mJ/cm²):										
Log in	activ	ation credited based upon valida	ited dosage	(use table	below): G	iardia:	Crypto	osporidium	n:		
		Table 1. UV	Dose Requi	rements i	n Millijoul	es per Sq	uare Cent	timeter (m	nJ/cm²)		_
		Target				Log Ina	ctivation				
		Pathogen	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	1
		Cryptosporidium	1.6	2.5	3.9	5.8	8.5	12	15	22	<u> </u>
		Giardia	1.5	2.1	3.0	5.2	7.7	11	15	22	<u> </u>
		Viruses	**	**	**	**	**	**	**	**	<del>-</del>
		Source: 40 CFR 141.720(d	d)	1	1	1		1	1	1	1
		** UV not credited with viru	s inactivation	by EPA F	R8 for SW/	GU systen	ns				
Yes	No										
		Does PWS keep records of U\	/ reports sen	t monthly	to EPA? ¥						
		Does public water system's Er 1910 Subparts H, I, Z, Respor					e of UV lar	nps? (Me	rcury haza	rd: OSHA	. guidelines
UV Di	sinfe	ction – less than 40 gpm									
		oden rece dian re gpiii									
Yes	No										
		Is there a flow meter to monitor ensures the flow does not exc				o the max	flow rate is	s not exce	eded? @	Describe	how the system
		Is there an intensity sensor and	d alarm (visib	le/audible	) to indicat	e low inter	nsity? @				
		Is there a UV lamp status alarr	n (visible/aud	lible) to ind	dicate lam	os off? @					
		Is there a UV lamp age counter	r/alarm? @								
		Is there an automatic shut-off for	ail-safe soler	oid valve	so that wa	ter does n	ot flow thro	ough the u	nit without	adequate	treatment? @
		Does this UV unit have an NSF Disinfection Guidance Manual				ıs it been v	/alidated a	ccording to	o the requi	rements o	f the 2006 UV
	☐ ☐ Are there spare bulbs on hand?										
How o	How often is the unit cleaned and the bulbs changed?										

#### UV Disinfection - greater than 40 gpm

How is unit monitored? ☐ Intensity Setpoint Method ☐ Calculated Dose Method							
Yes No							
☐ ☐ Is the calibration of the UV intensity sensors checked at least monthly using a reference sensor? @ How frequently are calibration checks performed?							
Is the calibration of the UV transmittance analyzer checked at least weekly with a benchtop analyzer (Calculated Dose Method only)? @ How frequently are calibration checks performed?							
☐ Is there a calibrated flowmeter to ensure max flow rate is not exceeded? @							
Are daily operational records kept of flow rates/production, run time, lamp status, UV intensity, UVT and UV dosage? ¥ (These should be monitored continuously and recorded at least once/4 hours. Small systems (less than 500 population) are allowed to record one time each day.)							
□ □ Does the operator know how to identify an off-specification event and report it to the EPA? @							
☐ ☐ Does the system alarm when an off-specification event occurs? @							
☐ ☐ Are there spare bulbs on hand?							
Chemical Disinfection							
Chlorine and Chloramines							
Type: Dosage: (lb / day or mg/L) NSF 60 Certified? ☐ Yes ☐ No							
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 1 <sup>st</sup> user of the water? ¥ ☐ Yes ☐ No							
How is residual measured?   continuous   grab Equipment / manufacturer model #:							
What type of measurement is taken? ☐ free ☐ total							
Chlorine residual at POE (mg/L): PWS measurement: Surveyor measurement:							
Are the two measurements within 0.1 mg/L or 15% of one another (whichever is larger)? @ ☐ Yes ☐ No							
Yes No							
☐ ☐ 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? ¥ ☐ Yes ☐ No							

#### **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? Yes No					
<ul> <li>Does the system monitor chlorine dioxide daily at point of e</li> <li>Does the system monitor chlorite at point of entry daily and</li> </ul>	*				
Chemical Disinfection – Inactivation Calculations					
If the PWS performs ongoing daily or weekly CT calculations, use their a a conservative calculation for each inactivation segment.  Identify location of 1st user:	actual data to document inactivation in the section below. Otherwise, do				
Summer Calculations Lowest* disinfectant residual and where measured (mg/L): Water temperature (lowest*): Water pH (highest*): Maximum* flow through segment:					
Winter Calculations Lowest* disinfectant residual and where measured (mg/L):  Water temperature (lowest*):  Water pH (highest*):  Maximum* flow through segment:  gpm  Describe each segment and list appropriate baffling factor:					
* Use data from system's ongoing CT calculations if available. Values should correlate to the system's lowest calculated inactivation levels during the specified season in the previous year.					
Chemical Disinfection – Disinfection Profiling (if system is exempt, skip section)					
year of daily log inactivation calculations (>10,000 pop)? @	new location; etc.) to disinfection practices after 7/1/03 or 1/1/04?  made: ¥				

#### **Overall Inactivation / Removal Calculations**

#### Viruses / Giardia

Viruses	Giardia			
Logs Removal (filtration)	Logs Removal (filtration)			
Logs chemical inactivation (lowest value from Summer / Winter calculations)	Logs chemical inactivation (lowest value from Summer / Winter calculations)			
Logs UV inactivation	Logs UV inactivation			
Logs other removal or inactivation	Logs other removal or inactivation			
Total logs inactivation / removal	Total logs inactivation / removal			
≥ 4 logs? @	≥ 3 logs? @			
Cryptosporidium				
Committed to install maximum treatment?				
Total logs Cryptosporidium inactivation / removal required based on ma	x treatment, bin # or classification:			
Date treatment required by: Toolbox Components Utilized:	<u> </u>			
Logs Removal (filtration)				
Logs chemical inactivation				
Logs UV inactivation				
Logs other Toolbox Components				
Total logs inactivation / removal				
≥ required logs? ¥ ☐ Yes ☐ No				

## WATER TREATMENT DATA (FOR ALL SYSTEMS)

# CORROSION CONTROL

Does this PWS add chemicals for Corrosion Control?					
Chemical added: NSF 60 Certified? Dosage at Treatment Plant Added Continuously or Seasonally					
Yes 🗆 No			☐ Continuously ☐ Seasonally		
Yes			☐ Continuously ☐ Seasonally		
	☐ Yes ☐ No		☐ Continuously ☐ Seasonally		
	☐ Yes ☐ No		☐ Continuously ☐ Seasonally		
Do you monitor Corrosion Control chemical residuals, pH or anything else in the distribution system to evaluate the process?   No Comments:					

#### **DISTRIBUTION DATA**

Please provide a brief description of the distribution system, including source to use piping:					
What are the location and estimated linear feet of asbestos pipe in the distribution system?					
Have lines broken due to freezing?					
Are lines properly disinfected after repairs are made? @					
Is there at least 35 psi pressure in the distribution system at peak normal flow?   Yes  No  No					
Is there at least 20 psi at all points in the system at all times? @ Yes No					
Total number of days of storage (Summer)?  Total number of days of storage (Winter)?  Yes No NA  Is the storage capacity adequate to meet current needs?  Is the storage capacity adequate to meet future needs?  Comments:					
Are there any bulk water supply/fill stations attached to this system?   Yes No No No (note to surveyor: if yes, check each facility, note its condition and provide photos)					
Station name (if applicable)  Location  Appropriate Air Gap or RPZ?					
Air Gap RPZ Neither @	@				
Air Gap RPZ Neither @	@				
Air Gap RPZ Neither @	@				
Comments:					
Are there any air relief valves in vaults/pits located in the distribution system?  Note to surveyor: If yes, inspect one representative ARV, note its condition and provide photos  Are they regularly inspected and maintained?  Do any have leaks and/or standing water that covers the discharge point? @ 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?)					
For systems that add a chemical disinfectant or receive disinfected water from a wholesaler:  NA   Yes No  Is test equipment available for measuring the chlorine residual in the distribution system? Describe equipment:  Are reagents up to date?  Does the operator know how to properly measure chlorine residual?  Measured chlorine residual distribution system location:  Indicate residual value measured at this distribution system location: By Surveyor: (mg/L) By PWS: (mg/L)  Indicate if free or total chlorine was measured:					
It is recommended that a minimum residual of 0.5 mg/L total chlorine or 0.2 mg/L free chlorine be maintained.					

## **CROSS CONNECTION CONTROL**

Yes	No	NA	
			<b>Does each severe hazard connection</b> 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)? Describe each severe hazard connection and its location. @
			Note: Severe hazard connections include radioactive materials processors, nuclear reactors, and sewage treatment plants/pump stations.
			<b>Does each high hazard connection</b> in the <u>treatment plant</u> or <u>distribution system</u> have the appropriate air gap or reduced pressure backflow assembly installed? Describe each high hazard connection and its location. @
			Note: High hazard connections include hospitals, medical/dental facilities, laboratories, mortuaries, large taxidermies, chemical suppliers/processing facilities, petroleum plants, food processing facilities, wastewater treatment plants, piers and docks, car washes, dry cleaners, direct connections to raw or non-potable water, and any service connection with an unapproved auxiliary supply.
			Do <b>trailers or mobile homes connected directly to the PWS</b> via a yard hydrant have a residential dual check valve at each connection?
			Are any <b>frost-free hydrants</b> that drain into the soil directly connected to this PWS?
			Are there any leaking system components in the water system observed by the surveyor that are not previously noted? @
			Explain where and what was leaking:
			At Community PWS, do all low hazard connections have the appropriate dual check valve assemblies installed at the meter or service connection?
			Note: Low hazard connections include mobile home parks, farms/dairies, ranches, and shopping centers.
			For Non-community Systems, do the following connections have the indicated type of backflow prevention assemblies?
			- Stock tanks – approved air gap or atmospheric vacuum breaker at the tank? @
			- Threaded yard hydrants – pressure vacuum breaker, atmospheric vacuum breaker or double check valve assembly? ———
			Does the water supplier have a record keeping program and management procedures to ensure:
			- The installation and certification by test or inspection (as applicable) of all backflow preventers (BFPs) at new service connections
			- The annual certification by a certified tester of all high-hazard BFPs at service connections

## **SAFETY**

Personnel Safety								
Yes	No	NA						
			Are all personnel trained in proper handling of all utilized chemicals and materials?					
			Are adequate masks, protective clothing, and safety equipment provided?					
			Does the operator understand relevant Occupational Safety and Health Administration (OSHA) regulations (e.g., confined space, hazard communication, trenching/shoring, lock out/tag out)?					
Chlorine Gas Safety NA								
			Are there chlorine warnings posted on the outside of chlorine room doors?					
			- Do the doors open outward?					
			- Do they open to the exterior of the building?					
			- Are chlorine room doors equipped with crash bars?					
			- Are chlorine room doors equipped with viewports?					
			Is there a leak detector in the chlorine room with an audible alarm?					
			Are chlorine feed and storage areas isolated from other facilities?					
			Are chlorine areas adequately ventilated?					
			Are all chlorine cylinders adequately restrained?					
			Are self-contained breathing apparatus (SCBA) available for use in chlorine emergencies?					
			- Are they in good working condition?					
			- Are water system personnel adequately trained in the use and maintenance of the SCBA?					
╢			- Where are the SCBA stored?					
			Are chlorine leak kits available and are all personnel trained in their proper use?					
Chemical Safety NA								
Yes	No	NA						
			Are oxidizers, corrosives, and flammables stored in separate areas and in closed, marked containers?					
			Are flammables stored in appropriate containers and cabinets away from combustion sources?					
			Is there adequate ventilation in the areas where solvents, aerosols, and chemical feeders are in use?					
			Are bulk storage areas physically isolated from treatment areas to prevent spills from entering treated or untreated water?					
			Is the fire department familiar with the facilities and their contents?					

## **MANAGEMENT DATA**

Yes	No	NA					
			Are there rules governing new hookups to protect the integrity of this water system?				
			Is the treatment plant being properly operated to prevent inadequately treated water from being sent to the distribution system? @				
			Does the system have arrangements in place to assure prompt supply and repair service?				
			Does the system have a current operations and maintenance manual which describes all procedures, equipment, sampling schedules and inspection data?				
			Is there a schedule for routine preventative maintenance for all facilities and equipment?				
			Does the system (treatment plant, finished water storage) have security measures in place (fencing, locks, lighting, alarms, etc.)?				
			Does the system have an emergency response plan (ERP) – system does not need to show the surveyor the ERPthat includes: @				
			- Emergency contact phone numbers?				
			- Procedures to respond to a pressure loss/water outage?				
			- Procedures to respond to a water contamination incident?				
			Is the ERP accessible to the operator on-site?				
			Is the system part of a state's WARN network?				
			Have you evaluated possible impacts to your system from extreme weather events?				
			If yes, what was the outcome?				
			Are you interested in training on extreme weather events?				
			Have you evaluated your facilities to see if they are in the 100 and 500 year flood plains?				
			If yes, what was the outcome?				
What	What percentage of the utility's power comes from your own renewable energy sources?						
% wii	% wind: % solar: % hydro:						

## **MONITORING AND RECORDS**

Revi	Revised Total Coliform Rule (RTCR) monitoring (all systems)							
Yes	No							
			Does the operator know how to collect samples for total coliform analysis? (Review operator sampling procedure at time of survey to confirm)					
			Does the operator know what to do in the event of a total coliform "unsafe" result? (Consult the "RTCR/E-coli Positives" link on the Drinking Water Online site: <a href="http://www2.epa.gov/region8-waterops">http://www2.epa.gov/region8-waterops</a>					
			Are extra bottles available in case of need for repeat coliform sampling?					
			Does the system have an RTCR sampling plan on file and available for the surveyor's review?					
			Ask the operator - Is the system following their RTCR sampling plan? If No, explain any difficulties					
If su	If subject to the Ground Water Rule (GWR), does the operator know:  NA □							
Yes	No	NA						
			Within 24 hours of being notified of a <i>routine coliform</i> positive sample result, they must collect one triggered source water sample for <i>every</i> routine coliform positive sample at each active ground water source (e.g., three routine coliform positive samples requires the operator to collect three source water samples from <i>each</i> ground water source)?					
			They will need to submit both:					
			- Repeat samples under the RTCR (utilizing their regular lab form)?					
			- Source water samples utilizing the Ground Water Rule Sample Collection Form located on the Drinking Water Online site ( <a href="http://www2.epa.gov/region8-waterops">http://www2.epa.gov/region8-waterops</a> )?					
			Where to sample if they are required to sample all of their active ground water sources?					
			Are extra bottles available in case of the need for GWR source sampling?					
For 0	For Community and NTNC systems (including consecutives):							
Yes	No	NA						
			Is there a Disinfection Byproducts Rule Monitoring Plan on-site available for the surveyor's review?					
			- Is it up-to-date reflecting the current distribution system?					
			- What types of maximum residual disinfectant levels (MRDLs) are measured (free, total or combined chlorine)?					
			Does the system have a Lead & Copper sample siting plan on file and available for the surveyor's review?					
			- Is it up to date?					
For A	For All Systems:							
Yes	No	NA						
			Does the operator know the location of each entry point to the distribution system?					
			Does the operator know how to properly label samples taken from the entry points?					
			Has the PWS completed the monitoring that is specified in the EPA-provided monitoring schedule so far for this calendar year?					
			Are copies of all monitoring results filed and readily accessible?					
			Is the operator familiar with the Drinking Water Online ( <a href="http://www2.epa.gov/region8-waterops">http://www2.epa.gov/region8-waterops</a> ) and Drinking Water Watch ( <a href="https://sdwisr8.epa.gov/Region8DWW/JSP/loginForm.jsp">https://sdwisr8.epa.gov/Region8DWW/JSP/loginForm.jsp</a> ) websites created for their benefit?					