# 2016 EPA Region 8 WY SANITARY SURVEY FORM INVENTORY 

| DATE OF SURVEY: $\quad$ COUNTY: | SURVEYOR NAME: |
| :---: | :---: |
| PWS ID: _ SYSTEM NAME: |  |
| System representatives (including titles) present at survey: $\qquad$ <br> Others present: $\qquad$ <br> Comments: $\qquad$ | EMERGENCY CONTACT <br> Emergency Contact Name: $\qquad$ <br> Emergency cell phone: $\qquad$ <br> Emergency email address: $\qquad$ <br> Title: $\qquad$ <br> Street: $\qquad$ <br> City: $\qquad$ State: $\qquad$ County: $\qquad$ Zip: $\qquad$ |
| SYSTEM OWNER OR MUNICIPAL LEGAL REPRESENTATIVE <br> Addressee Name: $\qquad$ Company: $\qquad$ <br> Title: $\qquad$ <br> Street: $\qquad$ <br> City: $\qquad$ State: $\qquad$ Zip: $\qquad$ <br> Owner Phone: $\qquad$ Fax: ( ) $\qquad$ <br> Email Address: $\qquad$ | PRIMARY ADMINISTRATIVE CONTACT (to receive ALL correspondence from EPA) <br> Addressee: $\qquad$ <br> Title: $\qquad$ <br> Street: $\qquad$ <br> City: $\qquad$ State: $\qquad$ County: $\qquad$ Zip: $\qquad$ <br> Administrative Contact Phone: $\qquad$ Fax: ( ) Email Address: $\qquad$ |
| ADDITIONAL CONTACT (if any) <br> Addressee: $\qquad$ <br> Title: $\qquad$ <br> Street: $\qquad$ <br> City: $\qquad$ State: $\qquad$ County: $\qquad$ Zip: $\qquad$ <br> Contact Phone: $\qquad$ ) Fax: $\qquad$ ( ) <br> Email Address: $\qquad$ <br> Comments: $\qquad$ | PUBLIC WORKS DIRECTOR, CITY ENGINEER and/or WATER PLANT SUPERINTENDENT <br> Addressee: $\qquad$ <br> Title: $\qquad$ <br> Street: $\qquad$ <br> City: $\qquad$ State: $\qquad$ County: $\qquad$ Zip: $\qquad$ <br> Contact Phone: $\qquad$ ) Fax: $\qquad$ <br> Email Address: $\qquad$ |
| DESIGNATED OPERATOR OF SYSTEM <br> Name: $\qquad$ <br> Certified Operator? @ $\square$ Yes $\square$ No $\square$ TNC System (not required) <br> Treatment Cert. Level: $\qquad$ Distribution Cert. Level: $\qquad$ <br> Treatment Cert. Exp. Date: $\qquad$ Distribution Cert. Exp. Date: $\qquad$ <br> Cert. Authority: $\qquad$ Cert. Authority: $\qquad$ <br> Phone: $\qquad$ <br> Email Address: $\qquad$ <br> Contract Operator*? $\square$ Yes $\square$ No <br> Date contract ends: $\qquad$ <br> Comments: $\qquad$ <br> Go to: http://deq.wyoming.gov/wqd/operator-certification/ <br> Click on: Check Facility Records then Click on: Check Operator Records | ALTERNATE OPERATOR <br> Name: $\qquad$ <br> Certified Operator? Yes No Not required <br> Treatment Cert. Level: $\qquad$ Distribution Cert. Level: $\qquad$ <br> Treatment Cert. Exp. Date: $\qquad$ Distribution Cert. Exp. Date: $\qquad$ <br> Cert. Authority: $\qquad$ Cert. Authority: <br> Phone: $\qquad$ <br> Email Address: $\qquad$ <br> Comments: $\qquad$ <br> Go to: http://deq.wyoming.gov/wqd/operator-certification/ <br> Click on: Check Facility Records then Click on: Check Operator Records |
| WATER SYSTEM CLASSIFICATION for operator certification <br> System Treatment Classification Level: $\qquad$ System Distribution Classification Level: $\qquad$ Comments: $\qquad$ <br> Go to: http://deq.wyoming.gov/wqd/operator-certification/ Click on: Check Facility Records | WATER SYSTEM CLASSIFICATION from PWS Inventory C = Community NTNC = Non-Transient Non-Community NC = Transient Non-Community <br> Comments: $\qquad$ |
| SYSTEM PHYSICAL ADDRESS <br> Street: $\qquad$ <br> City: $\qquad$ State: $\qquad$ Zip: $\qquad$ | PHYSICAL LOCATION <br> Physical Location and Directions: $\qquad$ |


| DEQ DISTRICT ENGINEER $\qquad$ District Engineer <br> Phone: 307- $\qquad$ <br> Email: $\qquad$ | COUNTY ANDIOR CHS SANITARIAN $\qquad$ CHS Specialist <br> Phone: 307- $\qquad$ <br> Email: $\qquad$ |
| :---: | :---: |
| PERIOD OF OPERATION Year-round Part of the year: From $\qquad$ to $\qquad$ <br> If only open part of the year, does the entire distribution system remain pressurized during the entire off period? $\square$ Yes $\square$ No <br> Is this PWS operating with a lease on Federal land? $\square$ Yes $\square$ No If yes, Federal land name: $\qquad$ <br> Comments: $\qquad$ | SERVICE CONNECTIONS <br> Total Service Connections (Active and Inactive): $\qquad$ Service Connections Metered? Yes $\square$ No $\qquad$ Number of metered service connections: $\qquad$ Comments: $\qquad$ _ |
| OWNER TYPE 1 Federal Government 2 Private: Subdivision, Investor, Trust, Cooperative, Water Association, etc. 3 State Government 4 Local Government Authority: Commission, District, Municipality, City, etc. 5 Mixed Public/Private 6 Native American Indian Tribes \& Reservations $\qquad$ 7 Other $\qquad$ <br> Comments: $\qquad$ | POPULATION DIRECTLY SERVED <br> (do not include populations of consecutive PWSs) <br> Residential Population: <br> (Number of year-round residents utilizing PWS) <br> Non-Transient Population: <br> (Number of the same persons utilizing PWS Daily for 6 months of the year - i.e. students, employees) <br> Transient Population: (Average number of transient persons served by PWS daily during peak 60 days of operation - i.e. customers, visitors) <br> Does the water system serve at least 25 individuals daily at least 60 days of the year (does not need to be consecutive days)? $\square$ Yes $\square$ No <br> Comments (source(s) of population info): $\qquad$ |
| SERVICE CATEGORY (check all that apply) <br> Primary Service Category Description: $\qquad$ <br> Comments: $\qquad$ | SOURCES (check all that apply) SW = Surface Water SWP = Surface Water Purchased GW = Groundwater GWP= Groundwater Purchased GWUDI = Ground Water Under the Direct Influence of Surface Water If mixed, does GW receive full SW Treatment?  $\square$ No <br> Is the current water source adequate in quantity? Yes No Describe: $\qquad$ <br> Have there been any interruptions in service since the last survey? Yes No <br> Describe: $\qquad$ <br> Have there been reports of a water borne disease (2 or more people)? Yes No Describe: $\qquad$ <br> Have there been any changes to the water system since the last survey? Yes $\square$ No Describe: $\qquad$ <br> Are there any changes that are planned? Yes $\square$ No Describe: $\qquad$ <br> Comments: $\qquad$ |
| SUMMARY (Describe the water system in a paragraph or two) |  |
| The following abbreviations will be used throughout this document: $\mathrm{NI}=$ no information, $\mathrm{NA}=$ not applicable, $\mathrm{NR}=$ not requested, @ = potential significant deficiency. |  |

## 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

## RECOMMENDATIONS

CONSECUTIVE SYSTEMS
(i.e. does this PWS receive some or all of its finished water from another PWS?)
$\square$ NA

| Name of Wholesaler (System Receives Water From) | PWS ID of Wholesaler | Water Source Type | Connection Type |
| :---: | :---: | :---: | :---: |
| Comments: | Comments: | $\square$ GW $\square$ SW $\square$ Mixed | Permanent <br> Seasonal, \# Days/Yr: <br> Emergency Only <br> Comments: $\qquad$ |
|  |  | If mixed, does GW receive full SW Treatment? Yes No. |  |
|  |  | Type of residual disinfectant in water supplied: $\square$ Chlorine Chloramines None |  |
|  |  | Comments: |  |
| Comments: | Comments: | $\square$ GW $\square$ SW $\square$ Mixed | Permanent Seasonal, \# Days/Yr: Emergency Only <br> Comments: $\qquad$ |
|  |  | If mixed, does GW receive full SW Treatment? Yes No. |  |
|  |  | Type of residual disinfectant in water supplied: $\square$ Chlorine Chloramines None |  |
|  |  | Comments: |  |
| Comments: | Comments: | $\square \mathrm{GW} \quad \square \mathrm{SW} \quad \square$ Mixed | Permanent Seasonal, \# Days/Yr: Emergency Only <br> Comments: $\qquad$ |
|  |  | If mixed, does GW receive full SW Treatment? Yes No. |  |
|  |  | Type of residual disinfectant in water supplied: $\square$ Chlorine Chloramines None |  |
|  |  | Comments: |  |
| How many master meter connections exist from the wholesale system to the consecutive system? $\qquad$ <br> Who is responsible for maintenance of the master meter connection(s) from the wholesale system? Wholesaler Consecutive system <br> Comments: $\qquad$ <br> If the consecutive system is responsible: <br> Check the condition of the principal master meter and the pit for leaks or flooding and describe any concerns: <br> How often are inspections performed on the master meter connection? $\qquad$ <br> How often is maintenance performed on the master meter connection(s)? $\qquad$ <br> Does standing water exist in any meter pits? Yes No <br> If so, what is the source of the standing water? Leaks Groundwater Don’t know @ <br> Comments: $\qquad$ |  |  |  |
| Name of the water system supplying water to the hauler: $\qquad$ Is there a water tight cap on the (water system's) fill port? @ $\square$ Yes $\square$ No How does the operator check chlorine residual at the time of delivery? $\qquad$ <br> Comments: $\qquad$ |  |  |  |

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

| Name of Consecutive <br> (System Supplies Water <br> To) | PWS ID or State ID <br> of Consecutive (if <br> no PWS ID provide <br> contact and <br> address) | Population | Connection Type |  |
| :--- | :--- | :--- | :--- | :--- |

# SOURCE DATA <br> ACTIVE (PHYSICALLY CONNECTED) WELLS AND WELL PUMPS <br> (if well is GWUDI and fully treated as SW, these will be recommendations) <br> $\square$ NA 

| 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? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Adequately protected from vehicle damage? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| If well is located in a pit or vault, is the pit or vault completely watertight? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ 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) | $\square \text { Yes } \square \text { No } \square \text { NA }$ | $\begin{aligned} & \square \text { Yes } \square \text { No } \square \text { NA } \\ & \text { Type: } \\ & \hline \end{aligned}$ | $\square \text { Yes } \square \text { No } \square \text { NA }$ |
| Is the pit located in a building? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| WY DEQ and/or WY SEO permit \#: |  |  | - |
| Are there any approved WY DEQ Chapter 12 variances for this well? If yes, describe what type of variance was approved. | $\square \mathrm{Yes} \square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| 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? <br> (If yes, please copy or photograph and submit with report) | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Well Construction |  |  |  |
| Does SW runoff drain away from the wellhead (including wells in pits or vaults)? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does well casing terminate at least 12 " above the concrete floor? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the well casing terminate at least 18 " above the natural ground surface? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| What is the actual casing height (inches)? |  | - | - |
| Any holes or openings observed in the well or its appurtenances? <br> If yes, describe. | $\square$ Yes $\square$ No $\square$ NA $\square$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| 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) <br> Is a gasket visible? <br> Does the well cap move? <br> Explain |  |  |  |
| Is well vented (vent not required)? <br> What is the height from the ground level to the screen of the vent (inches)? | $\square \text { Yes } \square \mathrm{No} \quad \square \mathrm{NA}$ | $\square \text { Yes } \square \text { No } \square \text { NA }$ | $\square \text { Yes } \square \text { No } \square N A$ |
| Does the vent terminate at or above the top of the casing or pitless unit? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square \text { Yes } \square \text { No } \square N A$ |
| Is vent facing downward? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Vent screened with \#24 mesh? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is there a source water sample tap for GWR compliance? <br> Where is the source water tap located? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is there an air release/vacuum relief valve (not required)? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |


| Well Name: |  |  |  |
| :---: | :---: | :---: | :---: |
| Discharge Piping Termination <br> - In a downward position? @ <br> - At least 8 " above the floor? @ <br> - Screened with \#24 mesh? | $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA |
| Comments: |  |  |  |
| Well Pumps |  |  |  |
| Submersible Pump? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Other type of pump? <br> (if other, describe and indicate location in the comment field below) | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| NSF-60 lubricant used? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Operable and in good condition? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Maintenance program in place? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is the external pump subject to flooding? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Spare parts available? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Emergency power available? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Comments |  | - | - |
| Are there any sources of pollution near the wells which could Examples: Septic systems, chemical storage/mixing facilities, oil/fuel, etc) <br> If yes, indicate impacted well(s) and provide general location How far from the well is the source of pollution located? <br> Mice or other animals and their droppings in immediate area <br> Are there seasonal variations in the quantity of the water? <br> Are there seasonal variations in the quality of the water? <br> How does the system handle sewage? <br> Comments: $\qquad$ | possibly impact water qual agriculture activities, indus <br> and comments (please loc <br> well house, vault, pit, etc.) | al activities, animal enclosu <br> on aerial map and provide Yes No Yes  Yes Centralized Septic Syste Septic Syste (mark locatio | es, cleaning supplies, <br> hotos): $\qquad$ $\qquad$ $\qquad$ $\qquad$ <br> Sewage Treatment ms with Pumped Vaults ms with Leach Fields n on aerial if near well) |

# SOURCE DATA <br> ACTIVE (PHYSICALLY CONNECTED) WELLS AND WELL PUMPS <br> (if well is GWUDI and fully treated as SW, these will be recommendations) <br> $\square$ NA 

| 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? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Adequately protected from vehicle damage? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| If well is located in a pit or vault, is the pit or vault completely watertight? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ 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) | $\square$ Yes $\square$ No $\square$ NA <br> Type: | $\square$ Yes $\square$ No $\square$ NA <br> Type: $\qquad$ | $\square$ Yes $\square$ No $\square$ NA <br> Type: $\qquad$ |
| Is the pit located in a building? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| WY DEQ and/or WY SEO permit \#: |  |  |  |
| Are there any approved WY DEQ Chapter 12 variances for this well? If yes, describe what type of variance was approved. | $\square$ Yes $\square$ No | $\square \mathrm{Yes} \mathrm{\quad} \square \mathrm{No}$ | $\begin{gathered} \square \text { Yes } \square \text { No } \\ \hline \end{gathered}$ |
| 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? <br> (If yes, please copy or photograph and submit with report) | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Well Construction |  |  |  |
| Does SW runoff drain away from the wellhead (including wells in pits or vaults)? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does well casing terminate at least 12 " above the concrete floor? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the well casing terminate at least 18 " above the natural ground surface? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| What is the actual casing height (inches)? |  |  |  |
| Any holes or openings observed in the well or its appurtenances? <br> If yes, describe. | $\begin{gathered} \square \text { Yes } \square \text { No } \square \mathrm{NA} \\ \square \end{gathered}$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| 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) <br> Is a gasket visible? <br> Does the well cap move? <br> Explain |  |  |  |
| Is well vented (vent not required)? <br> What is the height from the ground level to the screen of the vent (inches)? | $\square \text { Yes } \square \text { No } \square \text { NA }$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the vent terminate at or above the top of the casing or pitless unit? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is vent facing downward? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
|  |  |  |  |
| Is there a source water sample tap for GWR compliance? <br> Where is the source water tap located? | $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square$ NA |
| Is there an air release/vacuum relief valve (not required)? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |

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## SOURCE DATA <br> SPRINGS AND ASSOCIATED PUMPS

## (if spring is GWUDI and fully treated as SW, these will be recommendations) <br> $\square$ NA



# SOURCE DATA FOR INTAKE LOCATED IN <br> INFILTRATION GALLERIES AND ASSOCIATED PUMPS <br> NA 

## INFILTRATION GALLERIES

Infiltration gallery name: $\qquad$
Infiltration gallery owner if different than system owner: $\qquad$
Facility ID (from PWS Inventory, e.g., IG01): $\qquad$
WY DEQ permit number: $\qquad$
WY SEO permit number: $\qquad$
Physical description: $\qquad$
Depth? $\qquad$
Actual yield (gpm): $\qquad$
Are there seasonal algal blooms present? $\quad \square$ Yes $\square$ No
Describe: $\qquad$
Is an algaecide ever used to control algae? $\quad \square$ Yes $\square$ No
If yes, describe: $\qquad$
Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report

## SOURCE PUMPS

Location of the pump station: $\qquad$
How many pumps at the facility? $\qquad$
Type of pump(s): $\qquad$
Yes No NA
Are the correct types of lubricants (NSF-60) used?
Are pumps operable and in good condition?
Is there a maintenance program in operation?
Is the pump station subject to flooding?
Are spare parts available?
Is emergency power available?
Comments: $\qquad$

Are there any sources of pollution near the infiltration gallery (e.g., agriculture/industrial activities, cleaning supplies, oil/fuel, etc.) which could impact water quality? @YesNo

If yes, indicate impacted infiltration gallery(ies) and provide general location and comments (please locate on aerial map and provide photos):

How far from the infiltration gallery is the source of pollution located? $\qquad$
Are there seasonal variations in the quantity of the water?YesNo

Are there seasonal variations in the quality of the water?YesNo
$\qquad$

Comments: $\qquad$

## SOURCE DATA FOR INTAKE LOCATED IN STREAMS, AND ASSOCIATED PUMPS

## $\square$ NA

## STREAMS

Stream name: $\qquad$
Facility ID (from PWS Inventory, e.g., IN01): $\qquad$
WY DEQ permit number: $\qquad$ -

WY SEO permit number: $\qquad$
Is the area around the intake restricted?
$\square$ YesNo

Are there multiple intakes located at different levels?YesNo Describe: $\qquad$
Are the intake(s) screened? YesNo

Frequency of intake inspection: $\qquad$
Date of last inspection: $\qquad$

Are there seasonal algal blooms present?YesNo Describe: $\qquad$
Is an algaecide ever used to control algae?YesNo If yes, describe: $\qquad$
Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report

## NTAKE PUMPS

Location of the pump station: $\qquad$
How many pumps at the facility? $\qquad$
Type of pump(s): $\qquad$
Yes No NA
Are the correct types of lubricants (NSF-60) used?
Are pumps operable and in good condition?
Is there a maintenance program in operation?
Is the pump station subject to flooding?
Are spare parts available?
Is emergency power available?
Comments: $\qquad$

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
If yes, indicate impacted stream(s) and provide general location and comments (please locate on aerial map and provide photos): $\qquad$
How far from the stream is the source of pollution located? $\qquad$
Are there seasonal variations in the quantity of the water?YesNo
Are there seasonal variations in the quality of the water?YesNo
$\qquad$

Comments: $\qquad$

# SOURCE DATA FOR INTAKE LOCATED IN RESERVOIRS, LAKES AND PONDS AND ASSOCIATED PUMPS 

Reservoir or lake name: $\qquad$
Facility ID (from PWS Inventory, e.g., INO1): $\qquad$
WY DEQ permit number: $\qquad$
WY SEO permit number: $\qquad$

## RESERVOIRS

Is the area around the intake(s) restricted?YesNo
Are there multiple intakes located at different levels?No Describe: $\qquad$
Depth of intake(s): $\qquad$
Distance from shore: $\qquad$
Are the intake(s) screened?YesNo

Frequency of intake inspection: $\qquad$
Date of last inspection: $\qquad$
Are there seasonal algal blooms present? $\quad \square$ Yes $\square$ No
Describe: $\qquad$
$\square$

Is an algaecide ever used to control algae? $\square$ Yes $\square$ No
If yes, describe: $\qquad$

Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report


#### Abstract

INTAKE PUMPS Location of the pump station: $\qquad$ How many pumps at the facility? $\qquad$ Type of pump(s): $\qquad$ Yes No NA Are the correct types of lubricants (NSF-60) used? Are pumps operable and in good condition? Is there a maintenance program in operation? Is the pump station subject to flooding? Are spare parts available? Is emergency power available? Comments: $\qquad$


[^0]How far from the reservoir/lake/pond is the source of pollution located?
Are there seasonal variations in the quantity of the water?
Are there seasonal variations in the quality of the water?YesNoYesNo
$\qquad$

Comments: $\qquad$

## SOURCE DATA EMERGENCY BACKUP SOURCE WATER

## $\square$ NA

Describe any backup source water possibly available during an emergency to the PWS, or indicate none: $\qquad$
Is the backup water source physically disconnected from the water system? $\square$ Yes $\square$ 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 applicable source data section)

Backup source name: $\qquad$
Facility ID (from PWS Inventory, e.g., IN01, WL01, etc.): $\qquad$
WY DEQ permit number: $\qquad$
WY SEO permit number: $\qquad$
Are there seasonal algal blooms present?YesNoNA

Describe: $\qquad$
Is an algaecide ever used to control algae?YesNoNA

If yes, describe: $\qquad$
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, etc.) which could impact water quality? @Yes
If yes, indicate impacted emergency backup source(s) and provide general location and comments (please locate on aerial map and provide photos): $\qquad$
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.).YesNo

Are there seasonal variations in the quantity of the water?YesNo

Are there seasonal variations in the quality of the water?YesNo
$\qquad$

Comments: $\qquad$

## Name or designation:

$\qquad$
SW $\square$ GW $\square$
Point of origin: $\qquad$
Point of termination: $\qquad$
Approximate Length: $\qquad$
Material: $\qquad$
Are there any service connections off the raw water transmission line? @ $\square$ YesNo $\qquad$ (Check yes only if the water system provides treated water to the rest of the distribution system)

What does each connection serve? $\qquad$
If used for potable water supply, is there a legal agreement or contract in place?YesNo $\qquad$
If used for potable water supply, is the water treated at the connection and how?YesNo $\qquad$
Name or designation: $\qquad$
SW $\square$ GW $\square$
Point of origin: $\qquad$
Point of termination: $\qquad$
Approximate Length? $\qquad$
Material: $\qquad$
Are there any service connections off the raw water transmission line? @YesNo $\qquad$ (Check yes only if the water system provides treated water to the rest of the distribution system)

What does each connection serve? $\qquad$
If used for potable water supply, is there a legal agreement or contract in place?YesNo $\qquad$
If used for potable water supply, is the water treated at the connection and how?$\square$ No $\qquad$

## DISTRIBUTION BOOSTER PUMP STATIONS

| Location of the pump station: |  |
| :--- | :--- |
| How many pumps at the facility? _- |  |
| Type of pumps: |  |
|  |  |
| Are the correct types of lubricants (NSF-60) used? | Yes No NA |
| Is the pump station subject to flooding? @ | $\square \quad \square \quad \square$ |
| Are pumps operable and in good condition? | $\square \quad \square \quad \square$ |
| Is there a maintenance program in operation? | $\square \quad \square \quad \square$ |
| Are spare parts available? | $\square \quad \square \quad \square$ |
| Is emergency power available? | $\square \quad \square \quad \square$ |

## HYDROPNEUMATIC TANKS

NA

## GRAVITY TANKS

$\square$ NA

| 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: |  |  |  |
| 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) <br> Ground level <br> Elevated (pedestal or standpipe) | $\square$ $\square$ $\square$ | $\square$ $\square$ $\square$ | $\square$ $\square$ $\square$ |
| Tank is constructed of: Concrete <br>  Steel <br>  Fiberglass <br>  Other | $\square$ $\square$ $\square$ | $\square$ $\square$ $\square$ | $\square$ $\square$ $\square$ |
| What type of water is stored (GW systems only)? | $\square$ Treated $\square$ Raw | $\square$ Treated $\square$ Raw | $\square$ Treated $\square$ Raw |
| Storage volume (gallons)? |  |  |  |
| Are there any approved WY DEQ Chapter 12 variances for this tank? If yes, describe what type of variance was approved. | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Is the site subject to flooding? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Can the tank be isolated from the system? | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Is the water level indicator accurate? | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Does the tank appear structurally sound? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Does the foundation appear structurally sound? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Are there any unprotected openings in the tank (breaches, leaks, etc)? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Inspection and cleaning history |  |  |  |
| If the tank is more than 10 years old, was it cleaned and inspected within the last 10 years? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ 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? <br> If so, note major concerns and/or recommendations: <br> Carcasses or other debris found in the tank? <br> If yes, was EPA notified immediately? <br> Was the entry point for the carcass or debris eliminated? Describe: | $\square \mathrm{Yes} \square \mathrm{No}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square$ No $\square \mathrm{NA}$ $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square$ NA $\square$ Yes $\square$ No $\square N A$ |  |
| Overflow |  |  |  |
| Does the tank have an overflow separate from the vent? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is the overflow accessible for inspection? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ 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)? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the overflow line terminate no less than 12 inches but no more than 24 inches above the ground surface? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the overflow discharge over an inlet structure, splash plate, or engineered rip-rap? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is the discharge visible? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the overflow have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |


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

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.)

## GRAVITY TANKS

$\square$ NA

| 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: |  |  |  |
| 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) <br> Ground level <br> Elevated (pedestal or standpipe) | $\begin{aligned} & \square \\ & \square \\ & \square \end{aligned}$ | $\begin{aligned} & \square \square \\ & \square \end{aligned}$ | $\stackrel{\square}{\square}$ |
| Tank is constructed of: Concrete <br> Steel <br> Fiberglass <br> Other | $\begin{aligned} & \square \\ & \square \\ & \square \end{aligned}$ |  | $\square$ |
| What type of water is stored (GW systems only)? | $\square$ Treated $\square$ Raw | $\square$ Treated $\square$ Raw | $\square$ Treated $\square$ Raw |
| Storage Volume (gallons)? |  |  |  |
| Are there any approved WY DEQ Chapter 12 variances for this tank? If yes, describe what type of variance was approved. | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Is the site subject to flooding? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Can the tank be isolated from the system? | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Is the water level indicator accurate? | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Does the tank appear structurally sound? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Does the foundation appear structurally sound? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Are there any unprotected openings in the tank (breaches, leaks, etc)? @ | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No | $\square$ Yes $\square$ No |
| Inspection and cleaning history |  |  |  |
| If the tank is more than 10 years old, was it cleaned and inspected within the last 10 years? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| 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? <br> If so, note major concerns and/or recommendations: <br> Carcasses or other debris found in the tank? <br> If yes, was EPA notified immediately? <br> Was the entry point for the carcass or debris eliminated? <br> Describe: | $\square \mathrm{Yes} \square \mathrm{No}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \quad \square \mathrm{No} \quad \square \mathrm{NA}$ |
| Overflow |  |  |  |
| Does the tank have an overflow separate from the vent? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| Is the overflow accessible for inspection? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| 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)? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| Does the overflow line terminate no less than 12 inches but no more than 24 inches above the ground surface? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| Does the overflow discharge over an inlet structure, splash plate, or engineered rip-rap? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| Is the discharge visible? | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |
| Does the overflow have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ | $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ |


| 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: |  |  |  |
| Comments about overflow: |  |  |  |
| Drain Line |  |  |  |
| Combined overflow and drain pipe? (If yes, skip drain questions) | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is the drain accessible for inspection? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square \mathrm{NA}$ |
| Is there \#24 mesh screen on the drain pipe? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does water accumulate in the drain discharge area? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the drain pipe have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? | $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square \mathrm{NA}$ |
| Does the drain pipe terminate between 12 and 24 inches above a drainage area? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Does the drain pipe terminate above an inlet structure, splash plate, or engineered rip-rap? | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Comments about drain: |  | - | - |
| Air Vent |  |  |  |
| Does the tank have a vent separate from the overflow? @ | $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square \mathrm{NA}$ |
| Is the vent accessible for inspection? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square \mathrm{NA}$ |
| For above ground tanks (ground level or elevated/standpipe): <br> Is there \#24 mesh screen? @ $\square$ <br> If not \#24 mesh screen, what size mesh is the screen? <br> Does the tank have a vacuum/pressure relief valve or other mechanism to prevent tank damage? <br> Is the screen on the inside of the vent pipe to discourage vandalism? <br> Downturned vent: Is the vent at least 24 " above the roof? @ <br> For non-downturned vents: Is there a solid cover down to the bottom of the vent screen? @ <br> For non-downturned ventsis the screen at least 8 " above the roof surface? @ | $\square$ Yes $\square \mathrm{No} \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ | $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ | $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square \mathrm{Yes} \square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ |
| Below Ground Tanks (buried or partially buried) <br> Is air vent covered with \#24 mesh screen? <br> Is the screen on the inside of the vent pipe to discourage vandalism? <br> Does the air vent terminate downward@ <br> Is the air vent at least 24 " above the roof or ground surface (whichever is higher)? @ | $\square$ Yes $\square$ No $\square \mathrm{NA}$ $\square$ Yes $\square$ No $\square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ $\square$ Yes $\square \mathrm{No} \quad \square \mathrm{NA}$ | $\begin{aligned} & \square \text { Yes } \square \text { No } \square \mathrm{NA} \\ & \square \text { Yes } \square \mathrm{No} \quad \square \mathrm{NA} \\ & \square \text { Yes } \square \mathrm{No} \quad \square \mathrm{NA} \\ & \square \text { Yes } \square \mathrm{No} \quad \square \mathrm{NA} \end{aligned}$ | $\square$ Yes $\square$ No $\square \mathrm{NA}$ $\square$ Yes $\square$ No $\square \mathrm{NA}$ $\square$ Yes $\square$ No $\square \mathrm{NA}$ $\square$ Yes $\square$ No $\square \mathrm{NA}$ |
| Comments about air vent: | - | - | - |
| Access Hatch |  |  |  |
| Is the hatch accessible for inspection? @ | $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square \mathrm{NA}$ |
| 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)? @ | $\square$ Yes $\square$ No $\square \mathrm{NA}$ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| What is the height of the access hatch above the roof or ground surface? | $\underline{\text { in }}$ | [ in | $\underline{\text { in }}$ |
| Does the hatch have a shoe box lid? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is the lid tight and sealed with a rubber gasket? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Is the hatch locked? @ | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA | $\square$ Yes $\square$ No $\square$ NA |
| Comments about access hatch: | - | - | - |

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

Comments:

## WATER TREATMENT DATA <br> GROUNDWATER and CONSECUTIVE SYSTEMS THAT HAVE AVAILABLE TREATMENT

$\square$ NA

\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{\begin{tabular}{l}
Describe the steps (as many as necessary) of the treatment process in order from the water source \\
Plant Output (gal/day) \\
Design: \(\qquad\) \\
Maximum: \(\qquad\) \\
Any changes to treatment since the last sanitary survey? \\
Yes  \\
Describe: \(\qquad\)
\end{tabular}} \\
\hline \& Step 1 \& Step 2 \& Step 3 \& Step 4 \\
\hline Process \&  \& \(\square\) Chemical
\(\quad\) Type:
\(\quad \square\) NSF 60 Certified?
\(\square\) UV
\(\square\) Filtration
Ion exchange
\(\square\) Softener
\(\square\) Other:
Dosage: \&  \&  \\
\hline Objective: \& Treatment of bacteria, viruses
Turbidity removal
Hardness removal
Taste \& odor removal
Metals removal
Other: \(\qquad\) \& \begin{tabular}{l}
\(\square\) Treatment of bacteria, \\
viruses \\
\(\square\) Turbidity removal \\
\(\square\) Hardness removal \\
\(\square\) Taste \& odor removal \\
\(\square\) Metals removal \\
\(\square\) Other: \\
\hline
\end{tabular} \& Treatment of bacteria, viruses
Turbidity removal
Hardness removal
Taste \& odor removal
Metals removal
Other: \(\qquad\) \& \begin{tabular}{l}
Treatment of bacteria, viruses
Turbidity removal

Hardness removal <br>
Taste \& odor removal
Metals removal
Other: $\qquad$
\end{tabular} <br>

\hline Is this process required by EPA? \& $\square$ Yes $\square$ No \& $\square$ Yes $\square$ No \& $\square$ Yes $\square$ No \& $\square$ Yes $\square$ No <br>
\hline Location of process? \& At Well
At Treatment Plant

Other: $\qquad$ \& | $\square$ At Well |
| :--- |
| $\square$ At Treatment Plant Other: $\qquad$ | \& At Well

At Treatment Plant

Other: $\qquad$ \& $$
\begin{aligned}
& \square \text { At Well } \\
& \square \text { At Treatment Plant } \\
& \square \text { Other: }
\end{aligned}
$$ <br>

\hline Is this process adequate to meet the objective? \& \[
$$
\begin{aligned}
& \square \text { Yes } \square \mathrm{No} \\
& \text { Explain: }
\end{aligned}
$$

\] \& | Yes $\square$ No |
| :--- |
| Explain: $\qquad$ | \& | Yes No |
| :--- |
| Explain: $\qquad$ | \& | Yes $\square$ No |
| :--- |
| Explain: $\qquad$ | <br>


\hline Frequency of use: \& | $\square$ Permanent |
| :--- |
| $\square$ Seasonal |
| $\square$ Emergency |
| $\square$ Other: | \& $\square$ Permanent

$\square$ Seasonal
$\square$ Emergency

$\square$ Other: \& | $\square$ Permanent |
| :--- |
| $\square$ Seasonal |
| $\square$ Emergency |
| $\square$ Other: | \& $\square$ Permanent

$\square$ Seasonal
$\square$ Emergency
$\square$ Other: <br>

\hline Redundant Equipment? \& $$
\begin{gathered}
\square \mathrm{Yes} \square \mathrm{No} \\
\text { Explain: } \\
\hline
\end{gathered}
$$ \& $\square$ Yes $\square$ No

Explain: \& $$
\begin{array}{r}
\square \text { Yes } \square \mathrm{No} \\
\text { Explain: } \\
\hline
\end{array}
$$ \& \[

$$
\begin{gathered}
\square \text { Yes } \square \mathrm{No} \\
\text { Explain: } \\
\hline
\end{gathered}
$$
\] <br>

\hline Backup power? \& $$
\begin{aligned}
& \square \text { Yes } \square \mathrm{No} \\
& \text { Explain: } \\
& \hline
\end{aligned}
$$ \& \[

$$
\begin{aligned}
& \square \mathrm{Yes} \square \mathrm{No} \\
& \text { Explain: } \\
& \hline
\end{aligned}
$$
\] \&  \&  <br>

\hline
\end{tabular}

## Groundwater and Consecutive Systems

## UV Disinfection

Yes NoIs 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: $\qquad$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 are the unit cleaned and the bulbs changed?

## Point of use Treatment

For PWSs with required Point of Use (POU) treatment, ask the operator -

Yes No NAIs 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, explain any difficulties:
Comments: $\qquad$

# WATER TREATMENT DATA SURFACE WATER I 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 Rule Manager

## Plant Location and Information

Plant / Office Location and Directions: $\qquad$
Date plant put online: $\qquad$
Modifications since the last survey? (if yes, describe): $\qquad$
Describe water sources treated by this plant: $\qquad$
Is treatment impacted by algae (describe)? $\qquad$

Provide a brief description of the plant's treatment processes: $\qquad$
Indicate all points in the treatment process where flow is determined and describe how (i.e. flowmeters, flow restrictors, valves, etc): $\qquad$

Please indicate all of the treatment plant waste disposal methods the plant currently employs:
$\square$ Discharge to surface, sewer, or equivalent. Please describe: $\qquad$
$\square$ On-site disposal. Please describe: $\qquad$Land applicationDischarge to lagoon/drying bed, with no recovery/recycling - e.g., downstream outfallBackwash recovery/recycling: discharge to basin or lagoon and then to sourceBackwash recovery/recycling: discharge to basin or lagoon and then to plant intakeOther. Please describe: $\qquad$No wastes generated

| Pre-Sed Basin: | $\square$ Yes $\square$ No |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Describe Type and indicate volume: $\qquad$ <br> Chemicals added: $\square$ Yes $\square$ No (If yes, input chemical information in table below) |  |  |  |  |
|  |  |  |  |  |  |
| Rapid Mix: | $\square$ Yes $\square$ No |  |  |  |  |
|  | Describe Type: ___ |  |  |  |  |
|  | Chemicals added: $\square$ Yes $\square$ No (If yes, input chemical information in table below) |  |  |  |  |
| Flocculation: | $\square$ Yes $\square$ No |  |  |  |  |
|  | Describe Type: |  |  |  |  |
|  | Chemicals added: $\square$ Yes $\square$ No (If yes, input chemical information in table below) |  |  |  |  |
| Sedimentation: | $\square$ Yes $\square$ No |  |  |  |  |
|  | Describe Type: |  |  |  |  |
|  | Chemicals added: $\square$ Yes $\square$ No (If yes, input chemical information in table below) |  |  |  |  |
| Other: | $\square$ Yes $\square$ No |  |  |  |  |
|  | Describe: |  |  |  |  |
|  | Chemicals added: $\square$ Yes $\square$ No (If yes, input chemical information in table below) |  |  |  |  |
| Chemical Information (ask system to provide information from chemical supplier / manufacturer): |  |  |  |  |  |
| Manufacturer | Product Name | Location Chemical Added | Max Dose Used (past 12 months): | NSF 60 Certified? | NSF 60 Max Allowable Dose |
| - | - | - | - | $\square \mathrm{Yes} \square$ No | - |
| - | - | - | - | $\square$ Yes $\square$ No | - |
| - | - | - | - | $\square$ Yes $\square$ No | - |
| - | - | - | - | $\square \mathrm{Yes} \square$ No | - |
| - | - | - | - | $\square$ Yes $\square$ No | - |
| NSF 60 certification and max. allowable dose info. can be found at: http://info.nsf.org/Certified/PwsChemicals/ |  |  |  |  |  |
| Does the system use a chemical containing epichlorohydrin or polyacrylamide that is dosed in excess of the NSF 60 Max Allowable Dose?$\square$ Yes $\square$ No |  |  |  |  |  |

## Filtration Processes

General

Indicate all types of filtration used:
$\square$ Direct
Bags / CartridgesMembranes
Slow Sand
$\square$ Diatomaceous Earth

Which is the final filtration barrier?: $\qquad$

Type and model \# of combined filter effluent (CFE) turbidimeter: $\qquad$
Location of CFE turbidimeter: $\qquad$
Frequency of all turbidimeter calibration(s): $\qquad$
Date(s) of last turbidimeter calibration(s) for all turbidimeters: $\qquad$
Method used for all calibrations (primary formazin standard or other)? $\qquad$
Yes No
$\square \quad \square$ Does the location of the CFE turbidimeter comply with EPA policy SWTR \#5? @Are turbidimeters calibrated at least once every quarter? @Does the system use a primary standard to perform the calibration? @Are CFE turbidity records available for the last 5 years? $¥$Can CFE turbidities be recorded up to 5 NTU? @ How high can they be recorded: $\qquad$Can turbidities associated with off-periods (backwash, FTW) be identified so they are not counted for compliance? (if applicable) @
Finished water CFE turbidity (NTU): PWS measurement: $\qquad$ Surveyor measurement: $\qquad$

## Conventional and Direct Filtration

## Filter Information

\# of filters: $\qquad$
Type of filters:open to atmosphereenclosed (pressure)

Manufacturer name \& model (if applicable): $\qquad$
Depth of each media (in):
Sand: $\qquad$ Anthracite: $\qquad$ Garnet: $\qquad$
Total at least 24"? @ Yes $\square$ No $\square$
Has operator observed loss of media? $\qquad$
Has the operator inspected the media for mudball formation? $\qquad$
Average length of filter run (hours): $\qquad$
Maximum filter loading rate ( $\mathrm{gpm} / \mathrm{ft}^{2}$ ): $\qquad$
Is the filtration rate less than $2 \mathrm{gpm} / \mathrm{sf}$ (mono-media), $4 \mathrm{gpm} / \mathrm{sf}$ (dual media) or $6 \mathrm{gpm} / \mathrm{sf}$ (deep bed)? @YesNo

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

## IFE Questions

How are IFE records maintained? $\square$ SCADA $\square$ strip chart $\square$ circular chart
Yes No
$\square \quad \square$ Does each filter have an individual effluent (IFE) turbidimeter? $¥$ Types and model \#s: $\qquad$
$\square \quad \square \quad$ Are there alarms on each filter? Alarm set point (NTU): $\qquad$
$\square \square$ Are IFE turbidities measured continuously, and recorded at least every 15 Minutes? $¥$Is IFE turbidity recorder (SCADA or charts) calibrated to record turbidities $\geq 2$ 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. $\qquad$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. $\qquad$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? $\square$ SCADA $\square$ strip chart $\square$ 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: $\qquad$

Log removal credited for this type of filtration barrier for: Giardia: $\qquad$ Viruses: Cryptosporidium: $\qquad$

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

Describe where recycle enters treatment process: $\qquad$
Yes No
$\square \quad \square$ 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



## Bags / Cartridges

Number of parallel filter trains: $\qquad$ Each train capacity (gpm): $\qquad$
Pre Filter (if applicable)


## 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: $\qquad$
Yes No
$\square \quad \square \quad$ Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (1 NTU 95\% of each month, 5 NTU max) $¥$
$\square \quad \square \quad$ Are there working pressure gauges before and after filters? @
$\square \quad \square$ Does the PWS keep daily records of monitoring the pressure drop across the filters, and know when to change out filters? @
$\square \quad \square$ Has the final filter or pre/final filter combination been demonstrated to remove at least $99.9 \%$ of Cryptosporidium or equivalent size particles or have a 1 or 2 micron absolute pore size rating? (leave blank if unknown) @
$\square \quad \square \quad$ Does the flow rate through the final filter exceed the manufacturer's maximum recommended flow rate? @

Log removal credited for this type of filtration barrier for: Giardia: $\qquad$ Viruses: $\qquad$ Cryptosporidium: $\qquad$

Number of filters: $\qquad$ $\square$ Pressure SystemVacuum System
Filter manufacturer/model \# (if applicable): $\qquad$
Each filter capacity (gpm): $\qquad$
Describe pre-coat and body feed systems: $\qquad$
Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? ( 1 NTU $95 \%$ of each month, 5 NTU max) $¥$$\square$ YesNo
Describe precoat and body feed systems: $\qquad$
Maximum filter loading rate ( $\mathrm{gpm} / \mathrm{ft}^{2}$ ): $\qquad$
Is the filtration rate less than $1.5 \mathrm{gpm} / \mathrm{sf}$ ? @YesNo

Maximum head loss allowed: $\qquad$
What determines when backwash occurs? $\square$ time $\quad \square$ turbidity $\square$ automatic $\square$ head loss

Log removal credited for this type of filtration barrier for: Giardia: $\qquad$ Viruses: $\qquad$ Cryptosporidium: $\qquad$

## Slow Sand Filtration

Number of filters: $\qquad$ Each Filter capacity (gpm): $\qquad$
What is rate of filtration (gpm/ft)? $\qquad$
Is the filtration rate less than $0.1 \mathrm{gpm} / \mathrm{sf}$ ? @ $\square$ Yes $\square$ No
Yes No
$\square \square$ 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? $\qquad$
How often is each unit scraped? $\qquad$
Log removal credited for this type of filtration barrier for: Giardia: $\qquad$ Viruses: $\qquad$ Cryptosporidium: $\qquad$

## Disinfection Processes

## General

Describe all inactivation processes, both pre-filtration and post-filtration: $\qquad$

UV Disinfection

Point of application: $\qquad$ UV manufacturer/model \#: $\qquad$
Validated maximum flow (gpm): $\qquad$ Validated UV dosage ( $\mathrm{mJ} / \mathrm{cm}^{2}$ ): $\qquad$
Log inactivation credited based upon validated dosage (use table below): Giardia: $\qquad$ Cryptosporidium: $\qquad$
Table 1. UV Dose Requirements in Millijoules per Square Centimeter ( $\mathrm{mJ} / \mathrm{cm}^{2}$ )

| Target <br> Pathogen | Log Inactivation |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{0 . 5}$ | $\mathbf{1 . 0}$ | $\mathbf{1 . 5}$ | $\mathbf{2 . 0}$ | $\mathbf{2 . 5}$ | $\mathbf{3 . 0}$ | $\mathbf{3 . 5}$ | $\mathbf{4 . 0}$ |  |
| Cryptosporidium | 1.6 | 2.5 | 3.9 | 5.8 | 8.5 | 12 | 15 | 22 |  |
| Giardia | 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
Yes No
Does PWS keep records of UV reports sent monthly to EPA? ¥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 $\mathbf{4 0}$ gpm

Yes No
$\square \quad \square \quad$ 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: $\qquad$
$\square \quad \square \quad$ Is there an intensity sensor and alarm (visible/audible) to indicate low intensity? @
$\square \quad \square \quad$ Is there a UV lamp status alarm (visible/audible) to indicate lamps off? @
$\square \quad \square \quad$ 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? @Does this UV unit have an NSF Standard 55A Certification or has it been validated according to the requirements of the 2006 UV Disinfection Guidance Manual? $¥$ (leave blank if unknown)
$\square \quad \square \quad$ Are there spare bulbs on hand?
How often is the unit cleaned and the bulbs changed? $\qquad$

```
How is unit monitored? }\square\mathrm{ Intensity Setpoint Method }\square\mathrm{ Calculated Dose Method
Yes No
\square \square Is the calibration of the UV intensity sensors checked at least monthly using a reference sensor? @ How frequently are calibration checks performed?
``` \(\qquad\)
```

$\square \quad \square \quad$ 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?

``` \(\qquad\)
```

$\square \quad \square$ Is there a calibrated flowmeter to ensure max flow rate is not exceeded? @
$\square \square$ 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.)
$\square \quad \square$ Does the operator know how to identify an off-specification event and report it to the EPA? @
$\square \quad \square \quad$ Does the system alarm when an off-specification event occurs? @
$\square \quad \square \quad$ Are there spare bulbs on hand?

```

\section*{Chemical Disinfection}

\section*{Chlorine and Chloramines}

Type: \(\qquad\) Dosage: \(\qquad\) (lb / day or mg/L) NSF 60 Certified? \(\square\) Yes \(\square\) No
Point of application: \(\qquad\)
Where does the PWS measure disinfectant residual for compliance with the SWTR requirement of \(\geq 0.2 \mathrm{mg} / \mathrm{L}\) at the POE? \(\qquad\)
Is this before the \(1^{\text {st }}\) user of the water? \(¥ \square\) Yes \(\square\) No
How is residual measured? \(\square\) continuous \(\square\) grab Equipment/manufacturer model \#: \(\qquad\)
What type of measurement is taken? \(\square\) free \(\square\) total (systems that use chloramination must measure total)
Chlorine residual at POE ( \(\mathrm{mg} / \mathrm{L}\) ): PWS measurement: \(\qquad\) Surveyor measurement: \(\qquad\)
Are the two measurements within \(0.1 \mathrm{mg} / \mathrm{L}\) or \(15 \%\) of one another (whichever is larger)? @ \(\square\) Yes \(\square\) No
Yes No
\(\square \quad \square \quad\) Is there redundant disinfection equipment?
\(\square \quad \square \quad\) Is there emergency power for the disinfection equipment?
\(\square \quad \square\) If measuring residual continuously, is the PWS conducting weekly verifications with a grab sample measurement? @

\section*{Ozone}

Number of Ozone generators: \(\qquad\) Percent ozone being generated (\%): \(\qquad\)
Where is the ozone applied? ___ Where is residual measured? ___
Ozone residual (\%): \(\qquad\) Ozone residual (mg/L): \(\qquad\)
Describe the purpose of the ozone addition: \(\qquad\)
Are all applicable residual monitors operational? \(\qquad\)
Are excess ozone destructors operational? \(\qquad\)
Is there a preventive maintenance program for the generators? \(\qquad\)
Is a SCBA or supplied-air respirator available for the operators when working with ozone? \(\qquad\)
Are operators exposed to ozone levels above \(0.1 \mathrm{mg} / \mathrm{L}\) ? \(\qquad\)
Does the system monitor bromate concentration at point of entry? \(¥\)YesNo

Number of Chlorine Dioxide generators: \(\qquad\)
Where is the Chlorine Dioxide applied? \(\qquad\) Where is Chlorine Dioxide residual measured? \(\qquad\)
Chlorine Dioxide residual ( \(\mathrm{mg} / \mathrm{L}\) ): \(\qquad\)
Describe the purpose of the Chlorine Dioxide addition: \(\qquad\)
Are all applicable residual monitors operational? \(\qquad\) -

Is there a preventive maintenance program for the generators? \(\qquad\)
Are operators exposed to Chlorine Dioxide levels above 0.1 ppm? \(\qquad\)
Yes NoDoes 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? \(¥\)

\section*{Chemical Disinfection - Inactivation Calculations}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
If the PWS performs ongoing daily or weekly CT calculations, a conservative calculation for each inactivation segment. \\
Identify location of \(1^{\text {st }}\) user: \(\qquad\)
\end{tabular} & data to document inactivation in the section below. Otherwise, do \\
\hline \begin{tabular}{l}
Summer Calculations \\
Lowest* disinfectant residual and where measured (mg/L): \(\qquad\) \\
Water temperature (lowest*): \(\qquad\) \\
Water pH (highest*): \(\qquad\) \\
Maximum* flow through segment: \(\qquad\) gpm \\
Describe each segment and list appropriate baffling factor: \(\qquad\)
\end{tabular} & \begin{tabular}{l}
List the volume of each segment using minimum* operating heights of tanks: \(\qquad\) \\
Total logs Giardia inactivation from all chemical disinfection segments: \(\qquad\) \\
Total logs virus inactivation from all chemical disinfection segments:
\(\qquad\)
\end{tabular} \\
\hline \begin{tabular}{l}
Winter Calculations \\
Lowest* disinfectant residual and where measured (mg/L): \(\qquad\) \\
Water temperature (lowest*): \(\qquad\) \\
Water pH (highest*): \(\qquad\) \\
Maximum* flow through segment: \(\qquad\) gpm \\
Describe each segment and list appropriate baffling factor: \(\qquad\)
\end{tabular} & \begin{tabular}{l}
List the volume of each segment using minimum* operating height of tanks: \(\qquad\) \\
Total logs Giardia inactivation from all chemical disinfection segments: \(\qquad\) \\
Total logs virus inactivation from all chemical disinfection segments:
\(\qquad\)
\end{tabular} \\
\hline \multicolumn{2}{|l|}{* 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.} \\
\hline
\end{tabular}

\section*{Chemical Disinfection - Disinfection Profiling (if system is exempt, skip section)}

\section*{Yes No}Does the system have a disinfection profile on site that contains a year of weekly log inactivation calculations (<10,000 pop.) or a year of daily log inactivation calculations (>10,000 pop)? @
\(\square \quad \square \quad\) 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, was EPA consulted? Describe the change and date made: \(¥\) \(\qquad\)
When was the profile conducted? \(\qquad\) to \(\qquad\)
Lowest monthly average log inactivation observed from the profile (month/value): Giardia: \(\qquad\) Viruses: \(\qquad\)

\section*{Overall Inactivation / Removal Calculations}

Viruses / Giardia
\begin{tabular}{|c|c|}
\hline Viruses & Giardia \\
\hline _ Logs Removal (filtration) & _ Logs Removal (filtration) \\
\hline Logs chemical inactivation (lowest value from Summer / Winter calculations) & Logs chemical inactivation (lowest value from Summer / Winter calculations) \\
\hline Logs UV inactivation & _ Logs UV inactivation \\
\hline _ Logs other removal or inactivation & _ Logs other removal or inactivation \\
\hline __ Total logs inactivation / removal & - Total logs inactivation / removal \\
\hline \(\geq 4\) logs? @ \(\square\) Yes \(\square\) No & \(\geq 3\) logs? @ \(\square\) Yes \(\square\) No \\
\hline
\end{tabular}

\section*{Cryptosporidium}

Committed to install maximum treatment? \(\square\) Yes \(\square\) No
If no, what is the system's bin \#? \(\square \operatorname{Bin} \# 1 \quad \square \operatorname{Bin} \# 2 \quad \square \operatorname{Bin} \# 3 \quad \square \operatorname{Bin} \# 4\)
System Classification:FilteredUnfiltered
*If system completed sampling and was classified as a Bin \#1 system, the section below does not need to be completed. For all other systems, please complete the section below.

Total logs Cryptosporidium inactivation / removal required based on max treatment, bin \# or classification: \(\qquad\)
Date treatment required by: \(\qquad\) Toolbox Components Utilized: \(\qquad\)
\(\qquad\) Logs Removal (filtration)
\(\qquad\) Logs chemical inactivation
___ Logs UV inactivation
___ Logs other Toolbox Components
__ Total logs inactivation / removal
\(\geq\) required logs? \(¥ \square\) Yes \(\square\) No

\section*{WATER TREATMENT DATA (FOR ALL SYSTEMS) CORROSION CONTROL \(\square\) NA}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Does this PWS add chemicals for Corrosion Control? \(\square\) Yes \(\square\) No \(\square\) NA Comments: \(\qquad\)} \\
\hline Chemical added: & NSF 60 Certified? & Dosage at Treatment Plant & Added Continuously or Seasonally \\
\hline & \(\square\) Yes \(\square\) No & & \(\square\) Continuously \(\square\) Seasonally \\
\hline & \(\square \mathrm{Yes} \square \mathrm{No}\) & & \(\square\) Continuously \(\square\) Seasonally \\
\hline & \(\square\) Yes \(\square\) No & & \(\square\) Continuously \(\square\) Seasonally \\
\hline & \(\square\) Yes \(\square\) No & & \(\square\) Continuously \(\square\) Seasonally \\
\hline \multicolumn{4}{|l|}{Do you monitor Corrosion Control chemical residuals, pH or anything else in the distribution system to evaluate the process? \(\square\) Yes \(\square\) No Comments: \(\qquad\)} \\
\hline
\end{tabular}

\section*{DISTRIBUTION DATA}


\section*{CROSS CONNECTION CONTROL}
\begin{tabular}{|c|c|c|c|}
\hline Yes & No & NA & \\
\hline \(\square\) & & & \begin{tabular}{l}
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)? Describe each severe hazard connection and its location. @ \(\qquad\) \\
Note: Severe hazard connections include radioactive materials processors, nuclear reactors, and sewage treatment plants/pump stations.
\end{tabular} \\
\hline \(\square\) & & & \begin{tabular}{l}
Does each high hazard connection in the treatment plant or distribution system have the appropriate air gap or reduced pressure backflow assembly installed? Describe each high hazard connection and its location. @ \(\qquad\) \\
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, and docks, car washes, dry cleaners, direct connections to raw or non-potable water, and any service connection with an unapproved auxiliary supply.
\end{tabular} \\
\hline - & & \(\square\) & Do trailers or mobile homes connected directly to the PWS via a yard hydrant have a residential dual check valve at each connection? \(\qquad\) \\
\hline & & \(\square\) & Are any frost-free hydrants that drain into the soil directly connected to this PWS? \\
\hline & & & \begin{tabular}{l}
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: \(\qquad\)
\end{tabular} \\
\hline & & & \begin{tabular}{l}
At Community PWS, do all low hazard connections have the appropriate dual check valve assemblies installed at the meter or service connection? \(\qquad\) \\
Note: Low hazard connections include mobile home parks, farms/dairies, ranches, and shopping centers.
\end{tabular} \\
\hline & & \(\square\) & \begin{tabular}{l}
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? @ \(\qquad\) \\
- Threaded yard hydrants - pressure vacuum breaker, atmospheric vacuum breaker or double check valve assembly?
\(\qquad\)
\end{tabular} \\
\hline & &  & \begin{tabular}{l}
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 \(\qquad\) \\
- The annual certification by a certified tester of all high-hazard BFPs at service connections. \(\qquad\)
\end{tabular} \\
\hline
\end{tabular}

\section*{SAFETY}


\section*{MANAGEMENT DATA}


\section*{MONITORING AND RECORDS}
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[^0]:    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? @Yes No
    If yes, indicate impacted reservoir/lake/pond(s) and provide general location and comments (please locate on aerial map and provide photos):

