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| --- | --- | --- |
| PWS ID#: PWS Name: | | |
| Primary Operator (print name):  Assessment trigger date:  SEASONAL System: YES  NO  Was a Sanitary Survey conducted in 2021 or 2022? YES  NO  Does this water system purchase any water from another system? If yes, please list \_\_\_\_\_\_\_\_\_\_\_  Does this water system sell any water to another system? If yes, please list \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | Phone:  Date Assessment Conducted:  Reason for Assessment (Check one):  Second Level 1 Assessment in 12 months  TC+ and EC+ sample result combination (MCL Violation)  Other: |

|  | **Assessment Elements** | **Y** | N | N/A | **Issue Description**  (Indicate Assessment Element number being described.) | **Corrective Action Taken or Planned to be Taken by PWS and Due Date** |
| --- | --- | --- | --- | --- | --- | --- |
| **1.0** | **Review of the positive sample sites** (Please specify if referring to routine or repeat samples in issue description.) | | | | | |  |  |  |  |
| **1.1** | Did the water system follow their Sample Siting Plan? Were the positive sample(s) taken at location(s) on the plan? What is the date of the Sample Siting Plan in use? **PLEASE INDICATE WHICH SAMPLE LOCATION(S) YOU ARE REFERENCING**. |  |  |  |  |  |
| **1.2** | Was the tap area unsanitary at the time of sampling for the positive result(s)? |  |  |  |  |  |
| **1.3** | Was the positive sample(s) taken from an outside faucet? |  |  |  |  |  |
| **1.4** | Was the positive sample(s) taken from a swivel tap? |  |  |  |  |  |
| **1.5** | Did the tap(s) with the positive result have a point of use treatment device on it?  **If yes**, what type of device (include make and model)?  When was the last time maintenance was performed? |  |  |  |  |  |
| **1.6** | Does the building where the sample(s) was taken have a point of entry treatment device?  **If yes**, what type of device (include make and model)?  When was the last time maintenance was performed? |  |  |  |  |  |
| **1.7** | Has the location of the positive result(s) undergone any plumbing replacements or repairs?  **If yes**, was the distribution system “shocked” after the work was completed? Please list the **date** and the disinfection **method** followed. |  |  |  |  |  |
| **1.8** | Are there any possible cross connections around the positive sample site(s) (including yard hydrants and stock tanks)? |  |  |  |  |  |
| **1.9** | Is the location of the positive result(s) near a storage tank or dead end? |  |  |  |  |  |
| **1.10** | Any other sample site issues not previously mentioned? |  |  |  |  |  |
| **2.0** | **Review of sample protocol** (PLEASE INDICATE WHICH SAMPLE LOCATION(S) YOU ARE REFERENCING.) | | | | | |
| **2.1** | Is the sampler a regular, trained sampler? |  |  |  |  |  |
| **2.2** | Was a laboratory-provided TC sample bottle used? |  |  |  |  |  |
| **2.3** | Was the aerator removed at the positive site(s)? |  |  |  |  |  |
| **2.4** | Was the water tap flushed for at least 5 minutes at the positive site(s)? |  |  |  |  |  |
| **2.5** | Was the tap disinfected or flamed at the positive site(s)? |  |  |  |  |  |
| **2.6** | Did the sample get too warm prior to being placed on ice? |  |  |  |  |  |
| **2.7** | Was there other sampler error? Describe |  |  |  |  |  |
| **2.8** | If it is a seasonal system, were there any problems during the most recent start-up procedure? |  |  |  |  |  |
| **2.9** | Any other sample protocol issues not previously mentioned? |  |  |  |  |  |
| **3.0** | **Review of the distribution system.** |  |  |  |  |  |
| **3.1** | Have any mains been recently replaced or service lines recently added?  **If yes**, was the distribution system “shocked” after the work was completed? Please list the date and the disinfection method followed. |  |  |  |  |  |
| **3.2** | Have fire hydrants or blow offs been recently flushed? |  |  |  |  |  |
| **3.3** | Have valves been recently exercised to direct flow? |  |  |  |  |  |
| **3.4** | Any leaks or main breaks noted?  **If yes**, were they fixed by the time of the Assessment? Was the distribution system “shocked” after the work was completed? Please list the **date** and the disinfection **method** followed. |  |  |  |  |  |
| **3.5** | Are all of the backflow prevention devices under the control of the water system operational?  **If yes**, do they have a maintenance or tracking program in place? Spreadsheet? |  |  |  |  |  |
| **3.6a** | Was there a total loss of pressure, low pressure (<20 psi) or changes in water pressure? **If yes**, when and what was the situation?  What did the PWS do when pressure was restored? Did they disinfect the distribution system? Do they have a procedure in place to deal with such events? |  |  |  |  |  |
| **3.6b** | Is there at least 20 psi at all points in the system at all times?  If yes, how is it measured?  How often is it measured? |  |  |  |  |  |
| **3.7** | Any areas of the distribution with low disinfectant levels (<0.2 mg/L)? How often is it measured? |  |  |  |  |  |
| **3.8** | Any recent pump station failures or repairs? |  |  |  |  |  |
| **3.9** | Is the air relief valve leaking? |  |  |  |  |  |
| **3.10** | Standing water or debris in valve vault? |  |  |  |  |  |
| **3.11** | Any recent power loss?  **If yes**, what did the PWS do when power was restored? Did they disinfect the distribution system? Do they have a procedure in place to deal with such events? Was pressure lost in the distribution system? |  |  |  |  |  |
| **3.12a** | Any unprotected cross connections in the distribution system (including yard hydrants and stock tanks)? |  |  |  |  |  |
| **3.12b** | Are there any vulnerable distribution pipes or appurtenances (above ground not in heated, lighted structures or not heated or insulated, or not buried below the frost line)? |  |  |  |  |  |
| **3.13** | Any other distribution issue not previously mentioned? |  |  |  |  |  |
| **3.14** | Have there been periods of low water use in the distribution system? If so, what was the duration, and could there be any relationship between stagnant water and the total coliform positive sample results? |  |  |  |  |  |
| **4.0** | **Review of storage tank(s) – if PWS only has hydropneumatic tanks/pressure tanks please check N/A for #4.1 – 4.19 and skip to #4.20 to list information.**  (Note the name and facility ID of each specific storage tank where issues are found.) | | | | | |
| **4.1** | Is there a presence of animals or insects in the storage tank(s)? |  |  |  |  |  |
| **4.2** | Are there breaches or holes of any sort into storage tank(s)? |  |  |  |  |  |
| **4.3** | Is there any presence of animal droppings around openings, vents or overflows of storage tank(s)? |  |  |  |  |  |
| **4.4** | Is there sediment buildup or floating debris in storage tank(s)? Please describe. |  |  |  |  |  |
| **4.5** | Has the storage tank been cleaned in the last 5 years? (**List each storage tank if more than one.**) When was it last cleaned? Was the storage tank(s) drained and walls scoured or was it cleaned with divers by vacuum or some other method? Please describe for each storage tank. |  |  |  | 4.5 (List each storage tank if more than one)  ST0\_\_  ST0\_\_ |  |
| **4.6a** | Is there a #24 mesh screen installed on (each) storage tank vent? (Provide photos) |  |  |  |  |  |
| **4.6b** | Is there a #24 mesh OR a duckbill valve OR a properly sealed flapper valve with screen of any size inside screen installed on (each) storage tank overflow? (Provide photos) |  |  |  |  |  |
| **4.7a** | Is the #24 mesh screen damaged or not properly installed on the storage tank(s) vent(s)? (Provide photos) |  |  |  |  |  |
| **4.7b** | Is the #24 mesh screen damaged or not properly installed on the storage tank(s) overflow(s)? (Provide photos) |  |  |  |  |  |
| **4.8** | Is the overflow pipe directly connected to a tank drain, sanitary sewer or storm drain? |  |  |  |  |  |
| **4.9** | Does the storage tank hatch have a solid, waterproof, shoebox type lid that is properly sealed with a neoprene gasket? (Provide photo of the entire gasketed area for each storage tank.) |  |  |  |  |  |
| **4.10** | Was the storage tank(s) hatch locked or secured? |  |  |  |  |  |
| **4.11** | Has the storage tank(s) been accidently drained? |  |  |  |  |  |
| **4.12** | Have there been high flows through the storage tank(s)? |  |  |  |  |  |
| **4.13** | Was there high-water age in the storage tank(s) (infrequent water use)? |  |  |  |  |  |
| **4.14** | Was the positive sample taken when the storage tank(s) was at the low-level mark? |  |  |  |  |  |
| **4.15** | Was there failure or improper operation on storage tank(s) telemetry/altitude valves/controls? |  |  |  |  |  |
| **4.16** | Any recent repairs on the storage tank(s)? |  |  |  |  |  |
| **4.17** | Was there any power loss to the storage tank(s)? |  |  |  |  |  |
| **4.18** | Was the storage tank(s) vandalized or subject to tampering? |  |  |  |  |  |
| **4.19** | Any other storage tank(s) issues not previously mentioned above? |  |  |  |  |  |
| **4.20** | Does system only have a hydropneumatic or a pressure tank?  Does the tank have a bladder?  Is the tank age older than the life expectancy? **Please list the make, model and age of the tank.**  Is there evidence of severe rust?  Is there evidence of water leaks?  Is there evidence of air leaks? |  |  |  |  |  |
| **5.0** | **Review of treatment process (if applicable) – INCLUDE ANY INFORMATION ABOUT CHEMICAL AND/OR PHYSICAL TREATMENT PROCESSES** | | | | | |
| **5.1a** | Does the system have any type of treatment?  If yes, please list any filters, chemical treatment, softeners, etc. List the make and model of any treatment units.  Was the treatment put in place by choice or is it required by EPA?  Does the PWS follow the manufacturer’s recommended maintenance schedule?  Is the chemical NSF-60 certified? |  |  |  |  |  |
| **5.1b** | Has any part of the treatment system been bypassed within 2 months before the sampling event?  **If yes**, provide details on when, which processes and for how long? |  |  |  |  |  |
| **5.1c** | Have individual treatment processes been interrupted by power outages or other causes within 2 months before the sampling event?  **If yes**, provide details on when, which processes and for how long? |  |  |  |  |  |
| **5.2** | Have there been any new treatment processes added or new equipment installed since the last sanitary survey?  **If yes**, what was added and when? List the make and model of any treatment units. |  |  |  |  |  |
| **5.3** | Have there been any recent repairs of major unit processes or treatment equipment?  **If yes**, when? Please explain. |  |  |  |  |  |
| **5.4** | Have there been any changes in the operational procedures used for treating the water such as, changes in chemical dosages or changes in coagulant chemicals used?  **If yes**, provide details of the change and when it occurred. |  |  |  |  |  |
| **5.5** | Has a coagulant been added at all times the plant has been filtering water? |  |  |  |  |  |
| **5.6** | Have there been changes in raw water quality? |  |  |  |  |  |
| **5.7** | Was the finished water turbidity increasing at the time of the positive sample(s)? |  |  |  |  |  |
| **5.8** | Have filter clogging algae caused more frequent backwashing? |  |  |  |  |  |
| **5.9a** | Has a disinfectant been added at all times?  **If yes**, how often is the residual measured and by what mechanism?  **If no**, please explain when disinfectant is added, how much, how often and by what mechanism. |  |  |  |  |  |
| **5.9b** | Is disinfection only added to the distribution system once a month?  **If yes**, why? |  |  |  |  |  |
| **5.10** | Has there been any vandalism or tampering at the plant? |  |  |  |  |  |
| **5.11** | Any other treatment plant issues not previously mentioned above? |  |  |  |  |  |
| **6.0** | **Sources – Well(s) –** (Note the specific facility if any issues are found) | | | | | |
| **6.1** | Is the sanitary seal intact for each well? (Please list each well and include a photo). |  |  |  | 6.1 (List each well if more than one.)  WL0\_\_  WL0\_\_ |  |
| **6.2** | Is the well cap or electrical conduit defective, loose, or damaged or not watertight for each well? Please specify. |  |  |  |  |  |
| **6.2a** | If an artesian well, is there evidence of current or past leakage from artesian well surface completions? |  |  |  |  |  |
| **6.3a** | Is there a vent in the well cap of each well? (Vent not required.) |  |  |  |  |  |
| **6.3b** | Does the vent have a #24 mesh screen on each well? |  |  |  |  |  |
| **6.4** | Is the vent screen damaged or not installed properly on each well? |  |  |  |  |  |
| **6.5** | Question has been removed. |  |  |  |  |  |
| **6.6** | How is each well used? (Check applicable box) |  |  | Primary  Backup  Emergency | | |
| **6.7** | Are there any unprotected cross connections at the wellhead(s)? Are there any unprotected openings in the pump or pump assembly for each well? |  |  |  |  |  |
| **6.8** | Is any pitless adapter damaged? If yes, please include photo. |  |  |  |  |  |
| **6.9** | Is there a missing or damaged grout seal on any well? |  |  |  |  |  |
| **6.10** | Has there been any recent work performed on the pump for any well?  **If yes**, which well and was the well “shocked” after the work was completed? Please list the **date** and the disinfection **method** followed. |  |  |  |  |  |
| **6.11** | Is the wellhead for each well secured to prevent unauthorized access? |  |  |  |  |  |
| **6.12** | Have there been any sewer spills, source water spills or other disturbances near any of the well(s)? |  |  |  |  |  |
| **6.13** | Is the well pit (for any well) in standing water or evidence of flooding? |  |  |  |  |  |
| **6.14** | Any other well issues not previously mentioned above? |  |  |  |  |  |
| **6.14a** | Is the GWR source sample tap located after the well or spring and before the storage tank or hydropneumatic tank or any treatment? Does the GWR source sample tap accurately characterize the source water? |  |  |  |  |  |
|  | **Sources - Spring(s) / Infiltration Galleries / GW Collection Structures –** (Note the specific facility if any issues are found) | | | | | |
| **6.15** | Is there evidence of flooding or infiltration of surface water runoff around the spring, infiltration gallery, or collection structure? |  |  |  |  |  |
| **6.16** | Is the collection structure improperly constructed or poorly maintained? |  |  |  |  |  |
| **6.17** | Are there dead animals near the spring, infiltration gallery, or collection?? |  |  |  |  |  |
| **6.17a** | If the spring, infiltration gallery, or GW collection structure is considered groundwater, is the **GWR source sample tap** located before the storage tank or hydropneumatic tank or any treatment? Does the GWR source sample tap accurately characterize the source water? **(TAKE PHOTO)** |  |  |  |  |  |
| **6.18** | Any other issues about springs, infiltration gallery, or collection not previously mentioned above? |  |  |  |  |  |
|  | **Sources - purchased water** | | | | | |
| **6.19a** | Was the wholesaler/supplier notified of the situation leading to the Level 2 Assessment? |  |  |  |  |  |
| **6.19b** | Were there water quality issues with supplier at the time of the positive result(s)? |  |  |  |  |  |
| **6.19c** | Is there a backflow prevention device at the consecutive connection to the wholesaler?  If yes, is it working properly or tested annually? |  |  |  |  |  |
| **6.20a** | Was there a low disinfectant residual from supplier at the time of the TC+ (typically ≤0.2 mg/L)?  If so, is that the normal operating situation? Please explain. |  |  |  |  |  |
| **6.20b** | Does the consecutive system measure the chlorine residual when they collect the total coliform sample? |  |  |  |  |  |
| **6.21** | Any other purchased water issues not previously mentioned above? |  |  |  |  |  |
| **Applicable to all sources** | | | | | | |
| **6.22** | Has an unapproved source been used? If yes, explain. |  |  |  |  |  |
| **6.23** | Has there been a change in water source?  **If yes**, has EPA been notified of the change with a Change Form? |  |  |  |  |  |
| **6.24** | Has there been recent rapid snowmelt, heavy rainfall or flooding?  **If yes**, when?  Was the water discolored after the event?  Did the water level in the well or GW collection structure change? If so, how? Please describe. |  |  |  |  |  |
| **6.25** | Any evidence of animals near the source? |  |  |  |  |  |
| **6.26** | Have there been algae blooms? |  |  |  |  |  |
| **6.27** | Is the **source water sample for groundwater systems *E. coli* positive**? This may indicate that the positive sample(s) is originating from the source and may be a continuous source of contamination. |  |  |  |  |  |
| **6.28** | Any other source issues not previously mentioned above? |  |  |  |  |  |
| **7.0** | **Significant Deficiencies** | | | | | |
| **7.1** | Are there any unaddressed significant deficiencies? This may indicate that the problem is known and is in the process of being remedied. Include approved corrective action date(s) and status of each corrective action. |  |  |  |  |  |

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| **Additional Assessor Comments:** |
| **These signatures certify that the people below were present at the Level 2 Assessment:**  **Name of Assessor Completing Field Work (PRINTED):**  **Signature:**  **Date:**  **Water System Representative Present at Assessment (PRINTED):**  **Signature: Date: Water System Representative Refused to Sign** |
| **TO BE COMPLETED BY EPA ONLY:**  **Name of Assessor Completing Field Work: Date:**  **Assessment Form Compiled and Finalized by: Date:** |