Water System Information

Name of Water System __________________________________________

PWS ID# __________________________

Contact Name ________________________________________________

Contact Title _________________________________________________

Contact Phone _______________________________________________

Sanitary Survey and Other Related Information

1. When was your last Health Department sanitary survey? 
Who from the water system went with the Health Department inspector during the survey? ______ ______

2. Since the last survey, have you had major changes in any of the following?
   a. Management
   b. Operators
   c. Physical changes in the system
   d. Anything else

3. Do you have a copy of the most recent sanitary survey? ___Yes ___No

4. Were there any deficiencies found? If yes, how have those deficiencies been corrected? (Check all that apply)
   a.) ___All deficiencies were corrected within (circle 1)  
      1 mo. 3 mo. 6 mo. 1 year
   b.) ___The following water system personnel responded to the Health Department sanitary survey letter?______________________________
   c.) ___Some deficiencies have been corrected.
   d.) ___None of the deficiencies have been corrected.

5. If any deficiencies are still not corrected, why not?
_____________________________________________________________________
_____________________________________________________________________

6. Do you have copies of other letters or notices from the Health Department? Who reads and follows up on them? _________________________________

7. Has the system ever been put on public notification for bacteriological violations? 
   ______ Yes ______ No
8. List the dates and type of all violations within the last twelve months?

________________________________________________________________________________

________________________________________________________________________________

9. Does the water system have any special monitoring required by the Health Department, for example, VOCs, raw water sampling, interim monitoring under the Surface Water Treatment Rule (SWTR), etc.? Yes No

**Maps, Drawings and Other Records**

10. Please indicate on the following table all facilities for which you have as-built plans, drawings, or maps. Please indicate by using the words "plans," "drawings," and "maps," or some combination thereof.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Location</th>
<th>Size</th>
<th>Construction Material</th>
<th>Year of Installation</th>
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<tbody>
<tr>
<td>Water Source(s)</td>
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<tr>
<td>Treatment Plant(s)</td>
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<td>Transmission Mains</td>
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<td>Distribution Mains</td>
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<td>Storage Tanks</td>
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<td>Pumping Stations</td>
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<td>Pressure Zones</td>
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</table>

11. Are your as-built plans, drawings, or maps drawn to scale?
   _____ Yes   _____ Some (please list)   _____ No   _____ Not Applicable

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

12. Has your water system established a procedure to periodically update your as-built plans, drawings, or maps as system elements are changed (i.e., replaced, repaired, or expanded)?
   _____ Yes   _____ No   _____ Not Applicable

If yes, please describe (or attach) your system’s procedure.

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

Arkansas Department of Health
If no, please describe (or attach) how you plan to ensure that as-built drawings will be prepared and maintained for all future facilities.

13. Do you have a map that shows the water system’s existing service area?
   ______ Yes    ______ No    ______ Not Applicable

14. **New systems and existing systems that are consolidating with another existing system**: Do you have a map that shows the proposed service area of the new or consolidated system?
   ______ Yes    ______ No    ______ Not Applicable

15. If your water system is expanding its service boundaries, do you have a map that shows the system’s future service area boundaries based on a 10-year growth projection?
   ______ Yes    ______ No    ______ Not Applicable

16. Does the water system keep a consulting engineer on retainer to assist with technical issues and problems?

   ______ Yes    ______ No

**Planning Documents**

17. Have you developed:
   a.) A 10-year growth projection of the water system service area and customer base that is consistent with local land use plans?
      ______ Yes    ______ No    ______ Not Applicable

   b.) A 10-year projection of water demand on your system?
      ______ Yes    ______ No    ______ Not Applicable

18. Have you performed a capacity analysis of your system’s current water source(s) to meet the 10-year projection of water demand?  *(If no, please check “Not Applicable” for Question 19(a-e) and continue with Question 20)*

      ______ Yes    ______ No

19. Does your capacity analysis include:
   a.) Estimates of the amount of water needed to serve the annual and maximum daily demand over the coming 10-year period?
       ______ Yes    ______ No    ______ Not Applicable

   b.) A description and yield analysis for each surface water source that is currently being used or that you propose to use to meet the projected water demand on your system?
       ______ Yes    ______ No    ______ Not Applicable
c.) A description of each groundwater source that is currently being used or that you propose to use to meet the projected water demand on your system that includes:

<table>
<thead>
<tr>
<th>Groundwater levels?</th>
<th>Yes</th>
<th>No</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawdown patterns?</td>
<td>Yes</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sustained well yield?</td>
<td>Yes</td>
<td>No</td>
<td>Not Applicable</td>
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</table>

"Sustained Well Yield" means the amount of water that a well can reliably be expected to produce on a continuous basis without adversely affecting the level of the groundwater in the aquifer.

d.) A description of the existing source-pumping capacity?
   ______ Yes ______ No ______ Not Applicable

e.) A description of the system's raw and finished water storage capacity?
   ______ Yes ______ No ______ Not Applicable

20. Has a technical engineering evaluation of your water system facilities been conducted with respect to its capacity to reliably meet current drinking water standards and drinking water standards that are proposed and in the process of being adopted?
   ______ Yes Date: _____________ ______ No

(If no, please check "Not Applicable" for Question 21(a-e) and continue to question 22.)

21. Does your technical engineering evaluation:
   a.) Document the system's ability to comply with the Arkansas waterworks standards?
       ______ Yes ______ No ______ Not Applicable

   b.) Assess all treatment facilities’ ability to reliably produce water that meets water quality standards and assess each facility’s capacity to meet maximum system demand?
       ______ Yes ______ No ______ Not Applicable

   c.) Assess the existing system storage for its capacity to provide water to maintain 20 pounds per square inch (psi) throughout the distribution system under daily demand fluctuations, peak daily and peak monthly demands?
       ______ Yes ______ No ______ Not Applicable

   d.) Provide a plan for replacement and improvement of the infrastructure components?
       ______ Yes ______ No

   e.) If yes, is each infrastructure component scheduled for replacement or repair at a point prior to the end of its projected useful life?
       ______ Yes ______ No

22. Does the system have spare parts on hand for routine repairs for components that are not redundant within the system?
    ______ Yes ______ No

23. Does the system have an emergency plan on file with the Health Department?
    ______ Yes ______ No
Water Source(s)

24. What is the classification of your water source?
   a.) Ground
   b.) Surface (Including Springs)
   c.) Ground Water Under the Direct Influence of Surface Water (Also referred to as a Surface Influenced Well or as a GWUDI Well)
   d.) Ground Purchase
   e.) Surface Purchase
   f.) GWUDI Purchase
   g.) Combination of the Above (describe)

25. Does your water system have any emergency connections or sources other than the sources listed above (if yes, please describe)?
   _____ No        _____ Yes
   Describe:

26. Do you routinely evaluate the water system’s source water quality data to identify any increasing concentration in water quality constituents?
   _____ Yes        _____ No        _____ Not Applicable

   If yes, does the evaluation include anything other than what is performed by the Health Department?

27. If you have identified any water quality constituent with an increasing concentration that has the potential of exceeding an MCL, list the likely source, if known, and the constituent below.

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

28. Do you have a map that identifies and locates all potential sources of contamination (e.g., waste disposal sites, landfills, animal feedlots, etc.) within the system’s service area or in adjacent areas that might impact your system’s water source(s)?
   _____ Yes        _____ No        _____ Not Applicable

29. New systems: Has an assessment been conducted of your source water that is consistent with the requirements of Arkansas’ Source Water Assessment Plan (SWAP)?
   _____ Yes        _____ No        _____ Not Applicable

30. Do you have monthly water production records or treatment records that show daily and monthly water production for each source used by your water system?
   _____ Yes        _____ No        _____ Not Applicable

31. Does the system keep records on the number of hours the pumps are run each day?
   _____ Yes        _____ No        _____ Not Applicable
32. What are your systems warning signs of inadequate pumping capacity?

How long does it take for the operator to respond to the warning signs?

33. Has the Health Department directed the water system to find another water source or find better treatment methods for the current water source?

   _____ Yes   _____ No   _____ Not Applicable

34. Does the water have taste and odor problems?

   _____ Yes

Secondary standard violations?

   _____ Yes   _____ No

If yes, please describe, if possible, the source of the problems?

35. If yes to 33 or 34, have any treatment methods been investigated and/or implemented to improve the raw water quality?

   _____ Yes   _____ No

If yes, describe the alternatives being considered.

36. Has your system been through the CPE program or some other optimization program? If some other program, please describe.

   _____ Yes   _____ No   _____ Not Applicable

Describe:

If yes, what were the major limiting factors identified?

37. Does the system have maps of the aquifer and aquifer recharge areas?

   _____ Yes   _____ No   _____ Not Applicable

38. Does the system know of other water systems using the same aquifer?

   _____ Yes   _____ No   _____ Not Applicable

39. Does the system know the recharge rate of the aquifer and the total water pumped from the aquifer on an annual basis?

   _____ Yes   _____ No   _____ Not Applicable
Wells:

40. Does the system have the well driller’s logs and other construction data for each well?  
    _____ Yes  _____ No  _____ Not Applicable

41. Does the system prepare and keep records of the static, pumping and drawdown levels of its well(s)?  
    _____ Yes  _____ No  _____ Not Applicable

Purchased Sources:

42. Do you have a contract for your purchased water?  _____ Yes  _____ No  
    How long is it for?  _______  Is there a limit to the amount of water you purchase?  
    _____ Yes  _____ No  What happens if you need more?  ____________________________

43. Does the wholesaler meet current drinking water standards?  
    _____ Yes  _____ No  _____ Don’t Know

44. Do both the wholesaler and the purchaser keep a record of master meter readings?  
    _____ Yes  _____ No

45. Are these sets of readings compared?  _____ Yes  _____ No

46. Who retains the records of the readings?  ________________________________

47. Are there any accounts that are past due to the wholesaler?  _____ Yes  _____ No  
    If yes, how much is past due?  ________________________________  
    Have payments consistently been on time during the last 5 years?  
    _____ Yes  _____ No

48. Is there a plan for a backup or emergency source of water (describe)?  
    _____ Yes  _____ No

Description:  
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Arkansas Department of Health
**Treatment**

Describe the system’s treatment process units.

<table>
<thead>
<tr>
<th>Process Unit</th>
<th>Purpose</th>
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<tr>
<td>Example: Chlorinator</td>
<td>Disinfection / Oxidation</td>
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</table>

49. Are the system’s treatment process units in good physical condition?  
   _____ Yes  _____ No

50. Is the plant manned whenever operational?  
    _____ Yes  _____ No
If no, are there any emergency action devices such as alarm systems or automatic dialers in place?  
   _____ Yes  _____ No  If yes, please list.

51. Has the water system ever violated the Total Coliform Rule?  
    _____ Yes  _____ No
If yes, when, and what was the violation?  

52. Has the water system ever exceeded Maximum Contaminant Levels (MCLs) for inorganic, organic, radiochemical, or microbiological contaminants?  
    _____ Yes  _____ No
If yes, when, and what was the violation?
53. Has the water system ever violated the Surface Water Treatment Rule (e.g., turbidity MCL, CT violation, lack of qualified operator, or other treatment technique violation)?
   Yes  No  If yes, when, and what was the violation?

54. Has the water system received water quality complaints within the last year?
   Yes  No  The last 5 years?  Yes  No
   If yes, please describe the nature and frequency of the complaints.

55. Is the chlorine dosing equipment inspected and maintained on a regular basis?
   Yes  No  (Look for evidence of maintenance or inspection) What is regular?

56. Can residual chlorine be detected at taps throughout the distribution system?
   Yes  No
   Do you take regular chlorine samples in different parts of the distribution system?
   Yes  No
   Do you always have a chlorine residual at the far reaches of the distribution system?
   Yes  No

57. Do you have any treatment for iron, manganese, hard water, etc.
   Yes  No
   If yes, please describe.

58. Is the plant flow rate read or calculated and monitored on a regular basis?
   Yes  No  If yes, by what means?

59. Are water quality parameters monitored and used on a regular basis as a means of process control?
   Yes  No
   If yes, please list, and the location of the sample, and parameter being monitored, and the laboratory equipment being used.

<table>
<thead>
<tr>
<th>Sample Location</th>
<th>Parameter</th>
<th>Equipment</th>
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</table>
60. How are chemical feed rates adjusted in response to the process control evaluation?
   ______ Manually      ______ Automatically    ______ Not Applicable

61. Has an evaluation been conducted to document the condition and remaining service life of existing treatment facilities?
   ______ Yes    ______ No

**Distribution, Pumping and Storage**

62. Are all water connections metered?
   ______ Yes    ______ No

63. Are all the meters read on a monthly basis?
   ______ Yes    ______ No

64. Does anyone evaluate the readings for possible leaks on the homeowners’ side of the meter?
   ______ Yes    ______ No    If yes, are the readings evaluated in the field or in the office?

65. Does the water system have a properly working master meter?
   ______ Yes    ______ No

66. Is the unaccounted for water calculated each month?
   ______ Yes    ______ No

67. What is the % of unaccounted for water? _________%

68. Is an operating pressure of at least 20 psi maintained under all normal service conditions (including times of fire flow if your system is used for fire protection) in your system’s distribution system?
   ______ Yes    ______ No

69. If no to 68, do you have a map that identifies the areas in your distribution system that do not maintain an operating pressure of at least 20 psi?
   ______ Yes    ______ No

70. Is an operating pressure of at least 5 psi maintained in all transmission lines under all normal service conditions (including times of fire flow if your system is used for fire protection) in your system’s transmission lines?
   ______ Yes    ______ No

71. If no to 70, do you have a map that identifies those transmission lines that do not maintain an operating pressure of at least 5 psi?
   ______ Yes    ______ No

72. Has the water system issued a boiled water notice in the last year? ______ Yes ______ No. If yes, what was the cause(s) of the boil water notice(s)?

73. Has a pressure survey been conducted on the distribution system?
   ______ Yes    ______ No

74. Has a hydraulic computer analysis been conducted on the transmission and distribution system?
   ______ Yes    ______ No
75. Does the water system have a cross-connection control program that meets the requirements of the Rules and Regulations Pertaining to Public Water Systems?
   _____ Yes _____ No
   If yes, please provide a brief description.

   If no, describe any plans to meet the requirements, along with any proposed time lines.

76. Are the system’s pumping stations in good physical condition?
   _____ Yes _____ No

77. Are the system’s pumping stations able to accomplish their tasks, such as filling tanks?
   _____ Yes _____ No _____ Not Applicable
   If no, please describe.

78. Are the system’s pumping stations equipped with auxiliary power?
   _____ Yes _____ Some _____ No _____ Not Applicable
   If “some,” please list the pump stations and indicate which ones have auxiliary power.

79. Is the following information collected on the system’s pumping stations:
   a.) Pump run time _____ Yes _____ No _____ Not Applicable
   b.) Pump electrical power usage _____ Yes _____ No _____ Not Applicable
   c.) Pump starts per day _____ Yes _____ No _____ Not Applicable

80. Are the water storage tanks inspected for corrosion or pitting at least every 3 years?
   _____ Yes _____ No If No, how often?

81. Does the inspector see any corrosion or pitting in the tanks? _____ Yes _____ No

82. Is the tank capacity enough to meet current and projected demand (24 hours of storage at average day demand)? _____ Yes _____ No

83. Has an evaluation been conducted to document the condition and remaining service life of existing distribution, pumping and storage facilities? _____ Yes _____ No
Technical Knowledge

List the name, license grade and license number for each individual who operates your system.

<table>
<thead>
<tr>
<th>Name</th>
<th>Grade and Type</th>
<th>License Number</th>
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84. Is an operator(s) accessible at all times?   ____ Yes  ____ No

85. Does the water system use remote monitoring devices (e.g., Cl₂ levels, tank levels, turbidity levels, etc.), and are the devices in working order?   ____ Yes (Please list)  ____ No

<table>
<thead>
<tr>
<th>Device</th>
<th>Working Order? (Y/N)</th>
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86. Is the operator(s) aware of the EPA proposals for new standards that could affect the water system?   ____ Yes  ____ No

87. Have bacteriological, lead/copper, fluoride, or other water samples taken by the water system, been rejected by the Health Department’s laboratories?   ____ Yes  ____ No

If yes, why?__________________________________________________________

88. Does the operator maintain an operations and maintenance manual or document on what needs to be done if he is not there?   ____ Yes  ____ No
89. Does the operator(s) have a back-up? _____ Yes _____ No Is the back-up properly licensed? _____ Yes _____ No

90. Does your system have a continuing education plan for:
   System manager(s)? _____ Yes _____ No _____ Not Applicable
   System operator(s)? _____ Yes _____ No _____ Not Applicable
   Other system employees? _____ Yes _____ No _____ Not Applicable
   Governing board members? _____ Yes _____ No _____ Not Applicable

91. Does the manager of your water system have experience with or training in:
   Utility management? _____ Yes _____ No _____ Not Applicable
   Drinking water regulations? _____ Yes _____ No _____ Not Applicable
   Resource management (i.e., personnel, budget, facilities)? _____ Yes _____ No _____ Not Applicable

Summary

Please provide any other relevant comments.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Arkansas Department of Health