**2022 WATER PROJECT APPLICATION ADDITIONAL INFORMATION**

Project Name:

Applicant:

Contact Person:

E-mail:

Phone:

Engineer:

Contact Person:

E-mail:

Phone:

Project Type: 🞏 Source Capacity 🞏Treatment Plant Capacity 🞏Storage Capacity

🞏 Pressure 🞏 Water Loss 🞏 Aging Equipment

🞏 Line Extension 🞏 Quality and Operations

Complete the following information for existing and under-construction facilities which relate to the proposed project using the dates of the most recent audit.

This technical application should be sealed by a professional engineer, licensed in Tennessee.

1. **Provide a brief project description, including scope, purpose & need, and condition of existing facilities. This is required even if PER is included:**
2. **Description of project location:**
   1. Attachment A: Project Map
3. **Detailed project cost including proposed funding sources.** **For water loss projects, laterals up to the property line must be included.:**
4. **Project Schedule:**
5. **Measurement:** Using AWWA Free Water Audit Software results (Use most recent audit):
   1. Non-Revenue Water as percent by cost of operating system (%):
   2. Validity Score:
   3. Do you track water loss on a monthly basis? 🞏Yes 🞏No
   4. How often are master meters hydraulically calibrated?
   5. Attachment B: Monthly water loss data, if available (12 months)
   6. Attachment C: AWWA Free Water Audit Software report
6. **Mapping:**
   1. Is the current water system map up to date? 🞏Yes 🞏No
   2. Date of last revision:
7. **Planning/Repair**: Include selected items in detailed project description above.
   1. Does the utility have a leak detection and repair program including:
      1. Locating and Repairing Leaks using a systemized method: 🞏Yes 🞏No

Explain method:

* + 1. Method to isolate and measure flow in sections of the system through District Metered Areas, bypass meters or a comparable method? 🞏Yes 🞏No
    2. Installing/Utilizing software management: 🞏Yes 🞏No

Name of software:

Explanation of how software is used:

* 1. Does the proposed project include:

1. Locating and Repairing Leaks using a systemized method: 🞏Yes 🞏No
2. Method to isolate and measure flow in sections of the system through District Metered Areas, bypass meters or a comparable method? 🞏Yes 🞏No
3. Installing/Utilizing software management: 🞏Yes 🞏No

Name of software:

Explanation of how software will be used:

1. **Problem being addressed (complete only sections a-f that apply to the proposed project):**
   1. **Source Capacity**

Type and Capacity of Source (GPD): Existing Proposed

* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Subtotal: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Daily Demand (GPD): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Peak Daily Demand (GPD): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Daily Demand/Existing Source Capacity (%):

1. **Water Treatment Plant Capacity**

Existing Proposed

Design Capacity (GPD): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Daily Demand (GPD): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Peak Daily Demand (GPD): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Daily Pumping Time (Hours): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Daily Demand/Design Capacity (%): \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Storage Capacity**

Total Storage Capacity (MG with clearwell):

Total Distribution Storage Capacity (MG without clearwell):

Total Storage Capacity/Average Daily Demand (%):

1. **Pressure**

Number of customers:

Number of customers below 20 psi:

Number of customers below 20 psi/Number of customers (%):

1. **Water Loss**

Water Purchased and/or Produced (MGY):

Total Water Sold (MGY):

Water loss = Water Pumped and/or Produced – Water Sold (MGY):

Water loss/Water pumped (%):

Is the proposed project in an isolated, measured section of the system such as a DMA? 🞏Yes 🞏No If yes, percent water loss in section:

(Based on a minimum of 6 months.)

1. **Aging Equipment**

Age of equipment as of November 1, 2021:

Life expectancy of original equipment, must be longer than 10 years:

(Age of equipment/ Life expectancy)\*100:

Provide information, if available, for the following:

* Maintenance history for existing equipment being proposed for replacement
* Specific current condition of the existing equipment being proposed for replacement
* Estimated useful life remaining in existing equipment (provide any documentation related to when equipment was originally installed, if available)
* Information on any “environmental” conditions that might have caused acceleration of the deterioration of the equipment being replaced
* Documentation available to ensure that the life expectancy of proposed replacement equipment will be longer than 10 years (such as documentation from manufacturer or projected depreciation schedule)

1. **Line Extension**

Line location, size and material:

Customers served:

1. **Quality and Operations**

List the categories that best describe your project. Clearly describe how the proposed project will improve the conditions of the selected items, including if the applicant considers this project urgent, high, medium or low priority according to the following descriptions:

Urgent Priority: Problems that are posing health risks now

High Priority: Problems resulting in possible health risk if not corrected

Medium Priority: Problems not posing a health risk but are improvements to the system

Low Priority: Regular maintenance items or issues not affecting water quality

Please check the categories that best describe your project:

* Frequent and persistent bacteriological contamination of the water supply posing an immediate health threat
* Gross chemical or radiological contamination of the water supply having immediate health impact
* Existing facilities are experiencing operational problems due to deterioration of facilities – such problems have resulted in the degradation of water quality or quantity such that the health and wellbeing of water customers are affected. (Requires detailed and/or appropriate documentation demonstrating and immediate threat.)
* Continuing MCL and/or SMCL violations
* Trihalomethane control techniques
* Addition of filtration to unfiltered surface water sources
* Presence of carcinogens thought to pose a long term health risk of 1 in 100,000 or higher risk
* Existing facilities are experiencing operational problems due to deterioration of facilities – such problems have the potential to result in degradation of water quality or quantity such that the health and wellbeing of water customers may be affected. (Requires detailed documentation of problem.)
* Addition of redundancy
* Addition of standby power
* Upgrading of older facilities not posing a current risk
* Control of taste and odor and/or removal of contaminants thought to pose a lower risk
* Addition of facilities not affecting water quality or quantity
* Regular maintenance items – replacement of equipment
* Other

Technical Application Checklist:

* Technical application using format above, sealed by a professional engineer licensed in Tennessee
* Attachment A: Project Map
* Attachment B: Monthly water loss data, if available (12 months)
* Attachment C: AWWA Free Water Audit Software report