

Feasibility Study Instructions For Public Water Systems

Systems that submit Feasibility Studies

Sometimes TCEQ requires a public water system (PWS) to do a Feasibility Study. A Feasibility Study is usually required for a system that does not meet a primary or secondary chemical standard (30 TAC 290.101-122). A Feasibility Study is used to determine the feasibility and cost of supplying water that meets the drinking water quality standards to their customers.

Primary Violators: The report should be done by a licensed engineer

If a public water system is submitting the Feasibility Study to meet the Technical Requirements of a Compliance Agreement resulting from a primary chemical violation, the study must be performed by a licensed engineer. The system should provide their engineer with a copy of these instructions to ensure that he or she evaluates all of the options that TCEQ requires.

Secondary Violators: The Feasibility Study can be done by the system

If a public water system is submitting the Feasibility Study because of a secondary chemical violation, the system does not need to have the study performed by a licensed engineer. However, the system may wish to hire an engineer with expertise in drinking water treatment expertise to evaluate treatment options.

Options that must be considered in a Feasibility Study:

The options a public water system must consider as part of a Feasibility Study are:

- ! Connecting to, consolidating with, or purchasing some water from a nearby system that has water meeting the standards;
- ! Treating enough of the water to meet the standard;
- ! Drilling a new well or putting in a new surface water intake in a location that would have water meeting the standards; or
- ! Blending existing source water, or blending with a new source.

Data that can be used to develop a Feasibility Study:

In order to figure out which of these options could be feasible, the water system will have to present information on those options. Specifically, some of the information you will need to gather will be:

- ! A complete chemical analysis of all applicable regulatory contaminants for all public drinking water sources currently used by the system;
- ! The feasibility of purchasing potable or raw water from one or more neighboring public drinking water systems with water of an acceptable quality;
- ! The feasibility of developing another raw water source(s) for sole use or for blending with the system's unacceptable source(s);
- ! The feasibility of consolidating with one or more public drinking water systems with an acceptable quality and quantity of water;
- ! The development of a regional source(s) of water and water treatment plant capable of providing an acceptable quality and quantity of water;
- ! The development of any new raw water source(s) for sole use or for blending to provide an acceptable water quality;
- ! All acceptable treatment alternatives and any combination of treatment and blending to produce an acceptable water quality (it must include any cost for waste disposal and permitting);
- ! A complete chemical analysis of all applicable regulatory contaminants for each source investigated and

the required blending ratios to produce an acceptable quality of water (it should include historical chemical analysis results, if available);

- ! A summary and a cost comparison table showing the customers' current base charge and cost per 1,000 gallons of water that does not meet the Drinking Water Standards and the customers' base charge and cost per 1,000 gallons for each investigated compliance option; and,
- ! The cost to each customer of meeting the Drinking Water Standards.

The next step after doing a Feasibility Study:

A Feasibility Study is just the first step for a system to take as they examine ways that they can provide good water to their customers. After examining all of the options, the system will need to develop a plan, including obtaining funding, of how they can ensure that they are in compliance with all TCEQ rules and regulations.