



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, Tennessee 37921

February 1, 2023

RE: Area Wide Optimization Program

Dear Water System:

The Division of Water Resources is excited to introduce the Area Wide Optimization Program (AWOP). Division staff has been participating in regular optimization workshops and national conferences for the last several years. Through this participation, the Division has seen the benefits of implementing an optimization program. In 2019, Tennessee decided to adopt the National Optimization Leadership Team's goals as it benefits both water systems and the Division by increasing protection of public health through improving water quality and improving compliance with Federal drinking water regulations. Over the last few years, COVID delayed planned training to introduce the program in a group setting across the State. Since these group meetings could not be held, the Division would like to provide some information about the program in the hopes that water systems will see the benefit of participating in the program and adopting the program goals.

AWOP is a non-regulatory, voluntary program that was created by the EPA's Technical Support Branch to initially assist water systems with compliance on turbidity limits and is founded on the Composite Correction Program developed in the 1990's. American Water Works Association's Partnership for Safe Water also grew out of the EPA Technical Support Branch's work on optimization of water treatment plants. AWOP started out to enhance microbial treatment of drinking water by looking at optimizing turbidity and disinfection processes, but it has also grown to cover optimization of treatment for disinfection by-products and some distribution processes as well. Membrane filtration and corrosion control optimization are two fields that are currently being studied to see if optimization benefits can be provided in these areas as well. Today, over 30 states have some level of participation in AWOP.

Although most of the AWOP goals are focused on surface water systems, part of the focus of AWOP is for water systems to view their systems as a research facility in attempting to improve drinking water quality. This includes conducting tests, gathering data, and reviewing the data before making treatment changes. Optimization tools are provided to assist water systems in obtaining and recording data. Most, if not all, optimization goals require little to no capital expenditures to implement the program. Systems that adopt the optimization goals gain better

knowledge on how their plants and systems operate and operators increase their confidence in making treatment decisions that are based on sound scientific data. The Division also plans to provide training gained from the AWOP workshops in the form of Performance Based Training, Special Studies, and targeted technical assistance.


A copy of the optimization goals adopted by the Division is included with this letter. A copy of the goals along with optimization tools (spreadsheets) and field office contacts can be found on the Tennessee AWOP website at:

<https://www.tn.gov/environment/program-areas/wr-water-resources/tn-plant-optimization-programs/tn-area-wide-optimization-program--awop-.html>

For those systems that would like to make a more significant commitment to AWOP, the Division has implemented an annual recognition program. Using the tools located on the TN AWOP website, systems can choose which categories they would like to participate in. Data is collected and entered in the corresponding spreadsheet for one year. At the end of the year a copy of the completed spreadsheet is provided to Division staff who will review it and determine if the goals were met over the entire year. If the goals were met, the water system receives a certificate documenting that the water system met optimization standards for that year and category.

The Division would request that water systems consider adopting the established goals to help improve water quality and improve overall compliance with the drinking water regulations. If you have any questions about AWOP, please feel free to contact your local regional field office or Erich Webber in the Knoxville Field Office at (865) 364-9502 or at Erich.Webber@tn.gov.

Sincerely,


Jennifer Dodd (Feb 6, 2023 10:01 CST)

Jennifer Dodd
Director