



WATER RESOURCE
CENTER

Water Loss Management Training

September 5, October 10, and November 7

Course Description:

Nationwide, an estimated **six billion gallons per day** of water is taken from water resources and never reaches the customer; this is enough water to supply the drinking water needs of the ten largest cities in the United States. Many community drinking water systems in PA deliver water to customers through aging distribution systems; withdrawing, treating, and supplying water for which they **may not be fully receiving revenue**. To help water utilities in western PA address this growing issue, SPC and PADEP are partnering to present a **three-part instructional training series** on water loss management for water operators, water managers, water authority personnel, engineers, and water system board members.

Session 1: Water Loss Auditing*

Thursday, September 5, 2019, 8:30 am – 3:30pm

5.5 Water Contact Hours

Hands-on Training in Water Loss Auditing using AWWA Free Water Audit Software (DEP ID# 7307)

- Learn about the basic components of non-revenue water, including leakage.
- Receive training on the use of the AWWA software (Excel Spreadsheet application) to help you identify the nature and extent of water loss.
- Learn the value of the water audit for developing a cost-effective water loss control program.

* **For Session 1, attendees should bring a laptop computer with the AWWA Free Water Audit Software downloaded** (If you do not have a laptop, you will be able to share). The Software can be downloaded from: <https://www.awwa.org/Resources-Tools/Resources/Water-Loss-Control>.

Session 2: Metering and Billing

Thursday, October 10, 2019, 8:30 am – 3:30pm

5.5 Water Contact Hours

Controlling Water Utility Apparent Losses in Customer Metering and Billing Operations (DEP ID# 7328)

- Learn the importance of metering and billing operations for your water loss control program.
- Learn ways to estimate apparent losses and recover lost revenue through accurate metering and billing.

Session 3: Leakage Management

Thursday, November 7, 2019, 8:30 am – 3:30pm

5.5 Water Contact Hours

Fundamentals of Leakage and Pressure Management for Water Utilities (DEP ID# 7374)

- Learn tools you can use to analyze system leakage.
- Learn the importance of system pressure in leakage reduction.
- Learn how to systematically reduce water loss through leakage reduction and pressure management.

Additional Information:

Instructor: George Kunkel, P.E., DEP Public Services Institute Instructor

Mr. Kunkel is Principal of Kunkel Water Efficiency Consulting where he provides consulting and training on water loss management. Mr. Kunkel has 38 years of water industry experience and was formerly the water loss control program manager for the City of Philadelphia Water Department. He currently chairs the sub-committee that publishes the AWWA M36 guidance manual *Water Audits and Loss Control Programs* and is a co-author of the AWWA Free Water Audit Software.

Instructor: Mary Roland, DEP Public Services Institute Instructor

Mary has over 33 years of utility experience in water and wastewater systems of all sizes with Pennsylvania American Water Company in the Water Quality and Environmental Compliance Department. Mary is a water auditor trained in the AWWA M36 methodology, she has been a member of the American Water Works Association for over 25 years, and she holds certificates for drinking water operation (A, E 1-14) and waste water operation (A,E 1-4). Mary has been a member for over 10 years for each of the boards of the Small Water Systems Technical Assistance Center Advisory Board and the State Board for Certification of Water and Wastewater Systems Operators.

Location (for all sessions):

Cranberry Township Public Safety Training Center
1000 Maintenance Building Drive,
Cranberry Township, PA 16066

Directions: To access the Public Safety Building: when you turn off of 19, follow the road to the right, past the Public Works building, past the salt shed, to the training center on the left.

Fee: No charge for training sessions
Lunch will be provided
Free parking available

To register:

<http://events.constantcontact.com/register/event?llr=87m9a6xab&oeidk=a07eg7ttrpmc14ca044>

Please note: These are stand-alone workshops, so you may attend one, two, or all three. However, if you have not conducted a water audit at your utility, we highly recommended attending the Water Loss Auditing session first.

PLEASE REGISTER EARLY! SPOTS WILL BE FILLED FIRST-COME, FIRST-SERVED

