Outline

• TOP’s Beginnings
  • Why Optimize?
  • Comprehensive Performance Evaluations (CPEs)
• TOP’s Expanded Role
  • Training and Technical Assistance
  • Distribution System Evaluations
  • Corrosivity Evaluations
  • Revised Total Coliform Rule
TOP’s Beginnings

- Optimization of Conventional Surface Water Treatment Plants (SWTPs)
- Comprehensive Performance Evaluations (CPEs)
- Performance Based Training (PBT)
Why Optimize?

- Optimized Turbidity Goals Provide Additional Public Health Protection
  - Settled water turbidity < 2 NTU
  - Individual filter effluent turbidity < 0.1 NTU
  - Reduced backwash turbidity spike and spike duration
  - = additional Cryptosporidium removal
Why Optimize?

• Currently 14 Public Water Systems (PWSs) Participate in the TOP Recognition Program
  • 4 SWTPs have met the Optimization Recognition Criteria continuously for 5 years
  • 1 SWTP – 15 years
CPEs

- Thorough review and analysis of a facility’s design capabilities as well as administrative, operational, and maintenance practices
- Determine and correct Performance Limiting Factors
- CPEs expanded from voluntary optimization evaluations to mandatory compliance events
CPEs

• Common Issues
  • Turbidimeter data
  • Lack of or insufficient Standard Operating Procedures (SOPs)
  • Application of water treatment concepts
  • Communication
TOP’s Expanded Role

- Training and Technical Assistance
  - PWS Operators and Administrative Staff
    - Development of Directed Assistance Modules (DAMs)
    - Customized technical assistance visits by TCEQ staff and TOP contractors
TOP’s Expanded Role

- Training and Technical Assistance (cont.)
  - Water Supply Division staff and TCEQ Investigators
  - Development and delivery of Training Modules
  - Assistance during and after PWS investigations
TOP’s Expanded Role

- Distribution System Evaluations
  - Disinfectant Residual Maintenance
    - Chloramine chemistry
    - Nitrification
  - Best practices
  - Corrective actions
TOP’s Expanded Role

- Evaluation of Water Corrosivity Leaving Treatment Plants
  - Field evaluation of corrosion and scaling indices
  - Raising operator awareness of corrosivity issues and corrosion control
TOP’s Expanded Role

• Revised Total Coliform Rule (RTCR)
  • Developing tools and training for Level 1 and Level 2 Assessments
  • Providing onsite assistance for Level 2 Assessments
  • RTCR’s ‘find and fix’ approach requires a comprehensive view of potential sanitary defects
Thanks for Your Time!

• Questions or comments:

David Simons
david.simons@tceq.texas.gov
(512) 239-3154
If you operate a water or wastewater system and would like to arrange for free financial, managerial, or technical assistance, contact our Financial, Managerial and Technical (FMT) program team:

FMT@tceq.texas.gov

https://www.tceq.texas.gov/drinkingwater/fmt

(512) 239-4691