Self-Assessment Report Approach- Prioritize and Focus

The Distribution System Optimization program Self-Assessment report approach differs from the Treatment Plant Optimization program. The treatment plant program report requires an extensive narrative discussion of all Status questions, proposed Actions, and Improvement Plans to address all identified Performance Limiting Factors. This approach has great merit. It requires involvement of all parties and a written explanation of plant programs and systems gained from this comprehensive approach.

However, there are considerable differences in overall footprint and complexity of a distribution system in comparison to a water filtration plant. Most importantly, the Partnership recognizes that the time needed to implement distribution system improvement plans, and fully realize the impacts of those actions, is significantly greater than when making in-plant process control modifications. Taking this into consideration, the Partnership has elected to modify the self-assessment report approach for the Distribution System Optimization program. Due to the scope of distribution system topics, there are many distribution system status questions. To ensure efficient size and focus of the report, a tabular assessment is used to identify and prioritize the list of performance limiting factors.

This approach then requires a narrative discussion of only the highest priority performance limiting factors and the improvement plans for these items. The intent of this modified approach is to focus efforts, thereby enabling adequate time to document improvement on the highest ranking performance limiting factors for a specific distribution system. Tools are provided to sort the performance limiting factors, but discretion is allowed for system operators to modify these results to match their priority needs and preferences, with an explanation of why high priority factors were considered as such. It is extremely important that the foundation for this approach is the active involvement of a collaborative team comprised of representatives from all areas of utility operations that impact distribution system performance and management.

The Partnership for Safe Water expects that the self-assessment report for the Distribution System Optimization program will summarize the results to identify areas for improvement. Performance data for disinfectant residual, pressure, and main break frequency will be used to assess the effect of improvement efforts. Optimizing several of the more than twenty identified performance improvement factors should provide an overall combined effect that will most likely be needed to reach the desired results.

Distribution systems that are fully optimized and meet all of the Partnership for Safe Water goals will be rare. However, distribution systems striving to reach these optimization goals will provide benefits to their customers in terms of high quality drinking water and improved system reliability.

Partnership for Safe Water
Steering Committee