

**GEORGIA WATER & POLLUTION CONTROL
ASSOCIATION**

**WATER DISTRIBUTION SYSTEM
OF THE YEAR AWARD**

EVALUATORS GUIDE

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INTRODUCTION

The purpose of this evaluation is to determine the best operated water distribution system in the State of Georgia for the current year within each established category. In order to make a fair assessment, standards have been established so multiple evaluators may provide fair and equal assessments for all nominated utility systems.

I. RESOURCES

Employee/Certification Employee Ratio- A satisfactory rating will be given if each work crew has a certified operator in the position that is considered the on-site supervisor. An organization chart along with certification records should be available for review.

Maintenance/Repair Material On-Hand- Pipe, fittings, sleeves, valves, hydrant parts, valve boxes, etc. should be available for reasonable response. Small utilities may not have all repair material on hand; however outside sources should be defined and readily available to supply material on demand.

Maintenance/Repair Equipment Available- Necessary equipment should be available to maintain and repair the system. Small utilities may have independent contractors that provide this service. Procedures for the procurement of these services should allow a quick response for a satisfactory rating. Check orders or the system used to direct work for back logs and response times.

Equipment Condition- All essential equipment should be in good working order. Maintenance records of the equipment would be a plus.

System Maps- Maps should be up-to-date, complete, neat, and easily accessible.

II. FACILITIES MANAGEMENT AND OPERATION

Valve operation and Maintenance Program- Records should be available for review that would indicate an ongoing valve exercise and maintenance (repair, locate and raise, etc.) program exists. Some utilities may contract this work with outside firms. A satisfactory rating would indicate that at least 20 percent of the valves should be exercised each year.

Hydrant Testing/Maintenance Program- Some utilities perform this task within their organization while others rely on the fire department or other agencies. Records and/or a field inspection should provide evidence of a satisfactory hydrant maintenance program. Records of repairs should be available for inspection.

Water Quality Monitoring Program- Each utility must have a program to receive a satisfactory rating. Small utilities will use other agencies (EPD) or outside laboratories to perform the testing. Records should be available for review. Also, procedures to correct any substandard condition should be in place and available for review.

Water Quality Problems- Records of problems (i.e. color, taste, odor, etc.) along with corrective procedures must be available for inspection. Recurring problems should have corrective plans in place for long term solutions (i.e. line replacement, systematic flushing, etc.)

Flushing Program- A flushing program must be in place in order to meet the satisfactory requirements. Procedures and records must be available for review. In some cases, the utility is not responsible for this activity. Other departments, such as the fire department, may provide this service.

Corrosion Control Testing Program- This program is beneficial; however, it is not essential to the operation of the distribution system. A well developed program with maps, maps, records, and some type of corrective plan will be scored as excellent (2 points). There will be no penalty for utilities not having a program in place.

Residual Chlorine Testing Program- In some cases, this program may be coupled with a water quality monitoring program or with a program that would address water quality problems. If the utility has a separate residual testing program, bonus points (2) with an excellent rating may be given. No program at all, either a specific program or one coupled with another program, would result in an unsatisfactory rating.

Water Loss Abatement Program- In order to receive a satisfactory rating records must be available for review. Plant production and financial records indicating water loss would be acceptable. A complete, independent abatement program may receive an excellent rating.

Pressure/Flow Testing Program- Records and maps with historical data should be available for review. Some utilities perform this service with their own staff, others use outside sources, (i.e. fire department, engineering firms, etc.). Current and historical data should be available at the utility to receive a satisfactory rating. GIS overlay and/or some form of modeling capability would warrant an excellent rating in this category

Overall Rating by Fire Department- A report from the fire department indicating the adequacy of the system including storage, flow, pressure, reliability and availability should be available at the time of evaluation. The rating will determine the score in this category.

Backflow Prevention Program- A program must be in place for a satisfactory rating. Records and procedures must be available for review.

Long Range Plan- A copy of the plan should be available for review. Innovative plans along with aggressive schedules to maximize the system performance and efficiency may rate excellent in this category.

New Construction Inspection- The utility must provide construction inspection, either in-house or through contract, in order to receive a satisfactory rating. Check the inspector's work load and the inspection procedures in order to determine the adequacy of the program.

Pumping Facilities- All equipment should be in good working order. The station should be relatively clean and give an appearance of being well maintained. Maintenance records should be available for review.

Storage Facilities- Same as pumping facilities.

Chemical Feed Equipment- Same as pumping facilities.

III. SAFETY

Written Safety Program- Must be available for review.

Written Policy to Employees- A copy must be available for review.

Scheduled Safety Meetings- Records of meetings must be available for review.

Training Program- Topics, attendee lists, dates and other related records must be available for review.

Safety Officer- At least one person with authority must be named as the overall safety officer.

Safety Incentive Program- This is to be used as a bonus (excellent rating, 2 points). There will be no penalty if the system does not have this program.

Overall Attitude- A feeling of "safety is our first concern" should be demonstrated to receive a satisfactory rating.

Program Features- Each category within this section is essential; however, defensive driving and CPR may be considered as bonus points (2 each), if proper documentation is available for review. The other programs require documentation to be qualified for a satisfactory rating. On-site supervisors must be certified as completing both the competent person and the confined space entry training. An evaluation of the organization chart along with certification records should provide proper documentation. A site visit will be required to evaluate DOT traffic control standards. Handbooks issued by the DOT should be available at the site.

Safety Equipment- Personal protective equipment will vary with each utility. All equipment should be in good condition and available for use when required. A site visit may be required to determine the rating in this category. Shoring will also be a variable item. Check to see the availability and the condition. Traffic control devices should be on-hand or available through rental companies. Check procedures for availability under emergency conditions. Gas monitors along with calibration records must be available for inspection. Small utilities may use other agencies to provide this service. Ventilation equipment should be available either by the utility or through rental companies. Check the equipment for maintenance records or the procedure required to rent under emergency conditions. First aid kits should be well stocked and available on all job sites. Fire extinguishers should be in each vehicle and fully charged.

IV. EMERGENCY RESPONSE

Emergency Response Plan- All utilities must have an up to date, written plan available for review. Records of employee training should also be available for review.

Available Spare Parts- Spare Parts to repair both the piping and pump station(s) must be available. In small utilities, repair service may be performed by private contractors. Review the procedure and agreement. Also, check the availability of material that may be required to determine the adequacy of the response time.

Available Repair Equipment- Required equipment will vary with the complexity of the system. Each utility should either have the necessary equipment on hand, in good working condition, or agreements with other sources to provide the service. Review the agreement(s) to determine the responsiveness under emergency conditions.

Adequate Employee Training- Employees should be well informed and well trained to respond under emergency conditions. Check training records, the availability of the Emergency Response Plan to the employees and the employees' familiarity of the plan.

Electronic/Computerized Monitoring System (SCADA)- these systems are not required; however, if the utility is currently using this type of system monitoring, a well maintained system must be evident for a satisfactory rating. If the utility is not using a SCADA system, procedures for system monitoring along with quick response procedures must be available for review.

V. TECHNICAL TRAINING PROGRAM

This section will vary with each utility. Adequate training records in the areas of operator certification, specialized O&M training and management/supervisor training must be available for review.