

Appendix C

TRAINING GUIDELINES

PURPOSE

To provide training guidelines to help the training provider understand the department's needs. The instructor can then tailor the presentation to meet departmental needs in the most effective and efficient manner. The Wastewater Group staff will videotape sessions for future use.

GENERAL OVERVIEW

All new or remodeled equipment and processes shall have a general overview of the operation presented to Maintenance and Operations personnel. This shall include:

1. Description of the overall operation.
2. List and describe all conditions necessary to allow normal operation to commence, including interlocks.
3. Describe all set point controls required for normal operation and how they affect the operation.
 - a) Pressure control
 - b) Level control
 - c) Flow control
 - d) pH, D.O., Conductivity, CL₂ residual, etc.
4. Describe all alarm and status conditions and their indication.
5. Describe what type power is required (electrical, hydraulic, air) and the source of said power.
6. Describe how to isolate the equipment and any associated dangers/warnings or hazards.

SPECIFIC EQUIPMENT TRAINING

Detailed training shall be provided to a small select group of three to four E & I Technicians (Specialist) on all new or remodeled equipment. This training shall include:

1. Detailed description of each component and its operation in relation to the overall operation of the equipment.
2. Detailed, in depth, troubleshooting procedures for all known failure conditions, including developing actual test point readings on the actual equipment. Test point readings such as:
 - a) Voltage
 - b) Amperage
 - c) Resistance
 - d) Oscilloscope pictures
 - e) Harmonics
 - f) Any other parameters useful in troubleshooting.

3. Provide a detailed description of all alarm and status conditions, how they are sensed, where they are physically sensed from and the meaning of any code(s) used in place of plain language.
4. Involve the specialists in the complete equipment start-up, check out and explain settings, alignments and setup procedures.
5. Provide copies of all written training material to each student (include all material covered in the training).
6. Provide recommended Preventative Maintenance requirements to the Electrical Planner and Instrument Planner.
7. Provide information on special tools and any hard-to-obtain parts.
8. Provide training for specific instrument maintenance techniques, calibration, programming configuration, etc.