

## **Requirements for Technical Audit**

An on-site Tech Audit is most effective if certain documents are directly available to the audit team. These include:

- o Throughput information for each demineralizer train for the past year.
- Operator logs from the water plant for the past year.
- o Resin installation, such as purchase orders or maintenance records, which identify volumes of resin, exact commercial products, and dates of loading into vessels
- o The resin analysis file, with analyses back as far as the files goes.
- o Maintenance file on the vessels and dilution skids.
- o Original Equipment Manufacturer (OEM) reference books on the system.
- O Current regeneration practices (steps, times, concentrations, etc.) either hard copy or access to the control system

While on-site, additional information will be requested, including:

- o Monthly figures for acid and caustic consumption
- o Monthly figures for DI water production
- Cost of acid and caustic

The audit team will compile the above data to determine the efficiency of the demineralizer operation, as well as identify potential problems and bottlenecks. The team will also talk with operators, supervisors, and management to determine their perspectives on the water plant, goals for improvements, as well as identifying barriers to improved performance.