

The case for change

When should you change water-treatment suppliers? After a failure? When you are dissatisfied with the quality or price of your incumbent supplier? When you receive an attractively-priced proposal? When your trusted service representative retires? When your competitor buys your refinery?

Answer: Any of these events can be a compelling reason to make change. The real question is: Is your organization prepared to make a change? Changing suppliers might be the absolute right decision. However, if your organization is not ready to make the change, you have created risk—risk of damaging your equipment, lost production, and, perhaps, unsafe conditions that cause injury or death.

Preparing your organization for change. It seems so obvious: If you want to make change, you must understand what things need to change. Too often, organizations violate all of the best management practices and change suppliers based on a flawed assumption, such as: change will solve present problems. Implementing changes without understanding the cause can create additional problems.

The most logical first step is a situation analysis. The classic method, SWOT—Strengths, Weaknesses, Opportunities and Threats—is an excellent framework. The source of data for this analysis is an audit of the plant’s utility water systems that include inspection of the systems and interviews with key stakeholders about the operation of their systems and performance of the incumbent water-treatment supplier. This audit should address these key aspects: system reliability, system operability, data acquisition and management, documentation and procedures, organizational, water and energy efficiency, and costs.

TABLE 1. Excerpt of a SWOT Analysis—US Petrochemical Plant

Strengths	Weaknesses
<p>System reliability and operability—Robust pretreatment infrastructure due to recent upgrades and capital investment</p>	<p>System reliability—Many water-related failures in the cooling water circuits caused over \$1 million of lost opportunity and capital costs.</p> <p>Organizational—Operators lack knowledge about the operating, monitoring and maintenance practices for utility water.</p>
Opportunities	Threats
<p>Organizational—Improve operator competency</p>	<p>System reliability—Failures in the cooling water circuits will continue to compromise operability, safety and profitability until personnel increase their knowledge and ownership of the utility water systems.</p>

The audit is also an opportunity to understand the value (or lack of value) of the incumbent supplier services. One caveat—it is important to understand the supplier’s responsibilities. It is human nature for plant staff to wish that their supplier would take responsibility for as many tasks as possible. When plant personnel abdicate responsibility for managing their utility water systems instead of delegating responsibility, it is a path to certain disaster.

Audit objectives. The primary objective of the audit is to identify risk, especially if the plant has experienced a failure, lost production and/or damage. The audit should drive corrective action to change the circumstances leading to the failure. Often, the audit team will identify opportunities for improvement—possibly reducing the chemical treatment costs. In all cases, the results of an audit will lead to greater understanding and ownership of the utility water systems by plant personnel—a proven path to reduce risk.

Finally, plant personnel should understand the inherent costs and risks of changing water-treatment suppliers. Costs include time, for the audit team members and for the procurement and contract specialists, along with capital costs—new chemical feed control systems and integration of data acquisition and control systems into the plant’s distributed control system.

Audit outcomes. An example SWOT analysis from an audit of a large petrochemical facility is summarized in **TABLE 1**. The audit team created a set of prioritized tasks with estimates of costs and return on investment, identification of the person who “owns” the task, and a negotiated completion date. Once plant personnel have implemented changes to correct the deficiencies and improve the utility water system, the organization can begin the process to change chemical suppliers.

Think before changing. Making decisions based on unsubstantiated assumptions is a dangerous practice—including the decision to change water-treatment suppliers. Instead, use this apparent problem as an opportunity to benchmark your operating costs and competency. Strengthen your staff’s ownership of the utility water systems. If change is the best solution, create a long-term, partnership relationship with the new supplier. **HP**



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