How a Shared Responsibility Agreement Can Improve Cooling Water Treatment and Address Liability Concerns

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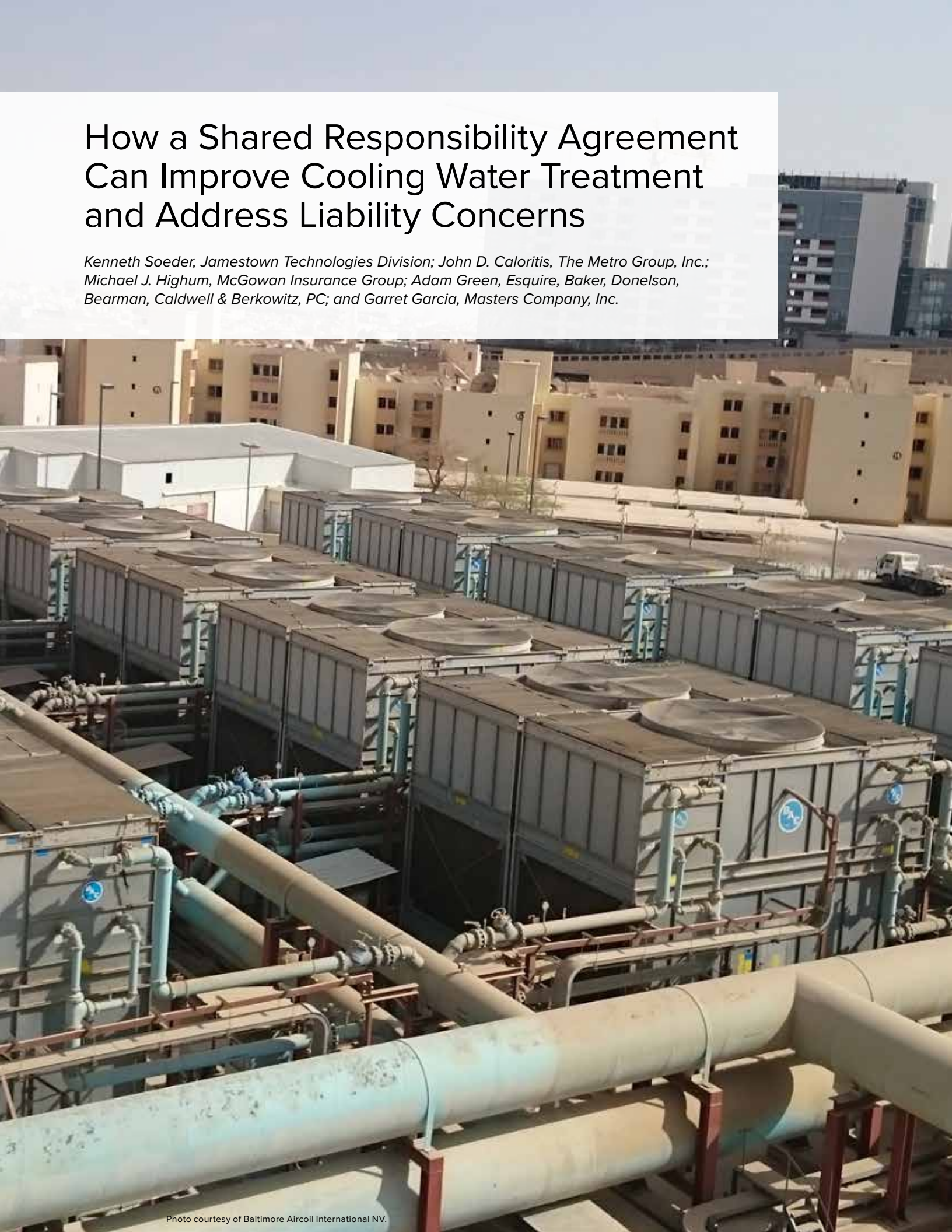

Photo courtesy of Baltimore Aircoil International NV.

Introduction

During the past 20 years, the adage "be careful what you wish for" has found application in the cooling water marketplace among both facility managers and water treatment service companies alike, often with unintended and sometimes troublesome consequences. These past years have been marked by periods of tremendous political and economic upheaval, such as the dotcom bust, the 9/11 terrorist attacks, ongoing Middle East conflicts, the Great Recession, the COVID-19 pandemic, and the controversial 2020 elections. All through these difficult times, facilities have reacted to these momentous economic downturns by seeking to lower their overall operating expenses, often by eliminating key management and maintenance staff positions responsible for cooling water treatment oversight.

Throughout this time, there was also increased customer concern regarding the handling of hazardous water treatment chemicals by their employees at their facilities. In addition, industry consultants exerted strong pressure on water treatment vendors to take on more day-to-day responsibilities at their accounts. Reacting to these changes, water treatment service companies recognized these shifting attitudes as an opportunity to better please their customers and to secure their positions at accounts by offering facilities full-service, fixed-price annual contracts with turn-key operations.

An ominous die had been cast. The proliferation of these contracts quickly started impacting and changing the basic customer/vendor service relationships that had historically characterized our industry. Complex and critical cooling water treatment services, which were once based on a close collaboration between facility and vendor staffs, are now often completely controlled by the water treatment service companies, with little to no oversight by building personnel. In this process, a tremendous amount of responsibility, risk, and liability was passed to the water treatment service companies, usually with little to no awareness on their own part.

Based on these changing circumstances, the objective of this article is to introduce a new concept to the supplier/vendor relationship—one with roots in our not-too-distant past—the idea of a Shared Responsibility Agreement (SRA). The primary goal of the agreement will be to re-engage, re-energize, and reinvest our customers back into the maintenance, testing, and oversight of their own cooling water treatment programs, all done in conjunction with their water treatment service company. The second goal of the agreement will be to clearly document specific service tasks and responsibilities to be conducted by both facility management and the water treatment service company staffs. It is expected that this documentation will eventually lead to better lines of communication between the facility and vendor staffs, improve overall system performance, lower risk, and lessen instances of troublesome litigation, and will create a new standard of best practices for efficiency and safety in the industry. Figure 1 is a typical example of cooling towers that could be operated under an SRA as discussed in this article.

Figure 1: Example of a cooling tower that could be a part of a facility-service provider agreement. *Photo courtesy of Baltimore Aircoil International NV.*

Cooling Water Treatment Program Considerations

In all open recirculating cooling water systems, whether associated with manufacturing, commercial buildings, or institutional accounts, even the most technically advanced water treatment programs will not compensate for poor product application or inconsistent system control. Without proper oversight, complex cooling water treatment programs can quickly become susceptible to a wide range of operating problems, including increased corrosion rates, scaling and deposition issues, and increased microbiological activity. Over time, these problems can contribute to shortened equipment service life, increased electric and water consumption rates, poor product quality, and even possible health concerns, such as Legionnaires' disease. In worst-case scenarios, these problems can lead to costly and time-consuming litigation. These types of problems can be most apparent in small to mid-sized accounts, where the water treatment service company may only conduct service visits on a biweekly, monthly, or even quarterly basis, and program oversight by facility management staff is typically modest or even nonexistent.

However, proper system control and excellent results still can be achieved if the water treatment service and facility management staffs work together to fully identify, understand, and document their individual responsibilities for program supervision, testing, and reporting. Effective control of water treatment programs in any facility requires both the product and technical expertise of the water treatment management staff and the day-to-day oversight of the facility management staff. The vendor has the background and knowledge to select an appropriate water treatment program; supply the necessary corrosion and scale inhibitors, dispersants, and microbiocides; set up the required system monitoring, control, and testing equipment; and periodically visit the site to review program compliance. Likewise, the customer's staff is present at the building daily and is in the best position to ensure that the water treatment program is operating as designed. In practice, a collaborative effort using the knowledge, expertise, and time commitment of both parties working together is ultimately required if the treatment program is to be successful.

Company Risk and Liability Management Considerations

For several years now, a great deal of energy and conversation has been devoted to SRA, and rightfully so. The business framework in which we all operate has become increasingly more litigious. Law firms stand ready and willing to jump on even the most minor of perceived transgressions, and take harmful positions aimed squarely at water treatment service providers. As an understanding of the intricacies of commercial and industrial water treatment programs have steadily increased within the legal community, so has the expectation that, eventually, things will go wrong.

In addition to legal forces, the complexities of our own organizations and related business challenges have also had important deleterious effects. An evolving workforce, ongoing employee training needs, heightened customer expectations, and consistent demands for business growth have all conspired to continually pull the limited resources of water treatment professionals in different directions. Too often, certain sacrifices need to be made to address customer concerns or compete for new relationships. Business owners and managers must balance the obvious need for business growth with effectively managing the various risks faced daily by their organizations.

In many ways, today's water treatment professionals find themselves in the risk management business. Owners are constantly forced to create new opportunities and assess the risks and liability challenges of their companies, all while charting a beneficial path forward for their business, employees, and customers. This can become an overwhelming burden and can quickly paralyze a business and its leadership. However, for those who effectively implement risk management processes into their business strategies, the results can be extremely positive and can help to reimage water treatment service providers into high-performing and technically proficient organizations.

Insurance companies have seen this process in action many times. Vendors have found that establishing protocols for themselves and their employees helps in establishing a framework to better forecast and manage both internal and external issues. They have proactively used the resources at their disposal (e.g., consultants, advisors,

industry associations) to create a roadmap for addressing all areas of risk a business may face. Furthermore, this new and focused approach often helps to refresh the corporate culture and restate and emphasize the values of the owner that helped create the business.

The same can be said of the SRA initiative outlined in this article. This agreement should be viewed as a fundamental component of any risk management plan within a competent water treatment business. Experience demonstrates that several water treatment service companies have already attempted to create such an approach. But only an industrywide effort, with guidance and input from all levels of our professions, can serve to address the great number of issues and situations that lie ahead. Of course, not everything can be solved in this way, but the ability to point to and cite accepted standards and concepts, adopted by and for water treatment professionals, will certainly place this industry in a much better position.

In the development and implementation of the SRA approach, there are several specific areas of our companies that can benefit. The first of these, and perhaps the most important, is the internal structure of each water treatment organization. This is certainly an area that has seen great variance from company to company over the years. Not that everyone does not have good intentions, but too often the combined challenges of employee training, establishing company procedures, and the historical ability (or luck) to have averted problems in the past, leads to a feeling that revisions and updates of current company practices can come later. Unfortunately, this could not be further from the truth.

The practice of risk management is ongoing and must begin at the top. The creation, training, and enforcement of company standards and procedures as they relate to the servicing of customer accounts are significant aspects to leading and managing employees to achieve success. SRAs can help to establish these fundamentals. The documentation and discipline of service standards allows employees to better address daily challenges and helps them to better understand their respective responsibilities and limitations within the organization. In addition, with an SRA in place, communication with customers becomes a more effective process, and one that employees are better prepared to handle.

Recent insurance claim scenarios have highlighted this with both positive and negative consequences. These experiences demonstrate that employees who are well trained and guided by established procedures and protocols deal with problems better, document events and procedures more thoroughly, and involve customers in constructive and meaningful solutions more frequently than employees lacking this structure. The reduced financial impact and enhanced customer support gained from these experiences speaks volumes in support of SRA.

Another area of business risk management addressed with the use of SRAs focuses on the limited resources, care, and attention to detail by customers themselves. Perhaps the main goal of every water treatment organization is to please the customer—from both a technical and business perspective—and to maintain those professional relationships at all costs. This is understandable, as water treatment vendors combine a special and unique technical background with a drive and necessity to sell. Few other industries combine such a mix of technical and sales initiatives within their employees, but the competing forces leading to the need for this diverse skillset can and sometimes does place these water treatment vendors in the crosshairs of conflict, risk, and litigation.

Recently, the outcome of this conflict has been for customers and their consultants to push more duties upon the water treatment service provider, and to generally expect more from that relationship. In many cases, these expectations can be impractical or nearly impossible to meet. Yet, from the position of the customer, leaning on the knowledge and advice of the water treatment service company has become commonplace. However, a company structure that is established, well documented, and mutually agreed upon can directly mitigate these risks. Both parties should know, understand, and document the types of services and products available and establish a clear procedure under which these items can be changed or enhanced.

Of course, the overall goal would be to work together with the customer to have them provide a higher level of service and become more involved with the overall management of their own water treatment system. This work would need to be done in a systematic, well-established, and

documented process designed to alleviate problems down the road. In a similar way, sophisticated customers also have a desire to do business with professionals that best understand their business, including the risks associated with safety and downtime. Water treatment service companies that embrace the goals and needs of their customers create the basis for a long-term business relationship built on trust and confidence.

Using the SRA outlined here as part of your business portfolio can result in two distinct advantages. The first is for increased sales opportunities. The level of services outlined in the agreement creates a natural path forward to assist in upselling and cross selling the customer. If done in a respectful and prudent manner, with an understanding of the required needs, the communication with the customer and mutual creation of the agreement can increase the revenue potential and longevity of the relationship.

A second clear advantage is the expectation of the customer regarding the capabilities of the water treatment organization with which they do business. Customers increasingly desire a service provider that demonstrates strong knowledge of and expertise in their business. In addition, they seek a vendor that can effectively and succinctly communicate that knowledge while demonstrating how it can directly benefit the customer. The use of an SRA in these cases can help to achieve all potential goals for both parties. By introducing the agreement into a business relationship, the water treater can effectively address safety, resources, and scope concerns while substantially increasing its reputation and goodwill with the customer.

As we have become acutely aware, risk management has become an essential part of every business operation. Risk management is of considerable importance to today's water treatment service provider. As owners and managers are faced with competing demands on their own time, energy, and financial resources, they must administer their efforts in a productive manner. Managing these risks needs to become a top priority within the organization, but in a manner that does not impede the company's business growth opportunities.

While there are several tools and resources available to achieve these goals, the introduction of an SRA can be a fundamental first step forward. Not only can these agreements have positive results in managing legal risk, but there can also be beneficial impacts on training, costs control, documentation, and overall customer relationships. With little to no downside, deploying the SRA initiative within your water treatment company becomes an obvious first step to a successful overall business program.

Managing Liability Considerations

Many water treatment vendors uniquely possess a high degree of technical competence in not only water chemistry but related disciplines. This level of proficiency is often exploited by opportunistic claimants who will allege that the water treatment service company is a complete program expert who should somehow save the system from any engineering, operational, or design failures. As a result, water treatment vendors have become the subject of a growing body of claims and litigation. The litigation trends suggest that the threshold for opportunistic claimants to institute legal recourse is diminishing.

In many instances, a system-related issue of any kind occurring during a water treatment service company's term of service is often enough to result in the treater being implicated regardless of culpability. Regardless of the substantive merits, the legal risks, alleged damages, and expenses can be significant and are frequently disproportionate to the revenue earned in connection with treatment of the system. Even if the water treatment service company is ultimately exonerated, the legal costs involved in defending itself will invariably overwhelm its profit margin.

Much of the expense and risk associated with defending these lawsuits derives from the inherently complex and technical nature of water treatment. The value of these disputes is ultimately decided by those who sit in judgment upon the water treatment service company, namely judges and juries. While generally sophisticated, most judges and jurors have no experience or reference of familiarity with the technical principles of chemistry, engineering, metallurgy, or microbiology, or how they apply these concepts to a cooling water system. Advocates are charged with finding ways to simply explain their positions and to overcome the general tendency of the listener to reject that which is not fully understood.

To further complicate matters, experts are frequently retained to educate the finders of facts about the respective roles and responsibilities of the parties in a water treatment setting and the standards of care to which they must abide. Unfortunately, retained experts frequently will seek to find and highlight any possible imperfection in a water treatment service company's regimen, no matter how inconsequential to the subject issue. The conflation of flaws, which are mere imperfections that did not cause the failure, can serve to inflame an already perilous litigation for those wrongfully implicated. Given the adversarial nature of litigation, experts for competing sides typically offer divergent opinions on these issues as well as the appropriate standard of care. The net result is that an already bewildered finder of fact is now challenged with technically complex and competing information about the water treatment service company's role, responsibility, and performance standard.

The purpose, scope, and limits of a water treatment vendor's function are frequently the central dispute in litigation. There is a common disconnect between facility owners and water treatment service companies regarding the scope of a chemical water treater's responsibilities and the practical limitations inherent in the job. Premise owners and building engineers often errantly assume that anything involving the internals of the water handling system is the responsibility of the water treatment service company. Furthermore, and in certain instances, owners are unconcerned with the requisite procedures needed to preserve their equipment and project the tenor that "they don't want the labor pains, they just want the baby." Consequently, when there is an issue with the cooling water system, the water treater vendor is alleged to have failed in its duties regardless of the realities of the situation. The effect of this position is to regard the chemical water treatment vendor as an insurance policy for all ills that may befall the system and the sole guarantor of its welfare.

SRAs present an opportunity to potentially avoid litigation, mitigate these risks, and save the client relationship from being disrupted. Almost invariably, the disputes that unfortunately arise between water treatment vendors and facility owners are contractual in nature. Nonetheless, and for the reasons stated elsewhere in this publication, the parties often fail to define their respective responsibilities accurately or fully in their contracts.

A detailed division of responsibility should provide a clear understanding regarding the scope and limits of the water treatment service company's capabilities and job duties and the limits of its responsibilities. Within the document, water treatment vendors should clearly state their scope of work, including the specific equipment they are treating and their purpose in doing so. For instance, if the program is a traditional water treatment regimen intended to promote system efficiency, that purpose should be clearly stated to the exclusion of other goals, such as health-based considerations more appropriately addressed through an ASHRAE 188-2018 Water Management Plan or other pathogen-based monitoring program, such as *Legionella* testing.

Similarly, the SRA will serve to educate the facility owner about its role and responsibilities in maintaining its capital assets. This set of clearly divided roles and responsibilities is intended to eliminate later disputes. Should a dispute arise, the parties can then look to the agreement to resolve any discrepancy. If additional services or purposes are to be incorporated, the agreement should be formally amended.

The execution of an SRA will hopefully serve to eliminate the uncertainty, risk, expense, and liability of having to litigate the issue of responsibility. The existence of clearly defined roles will hopefully serve to dissuade litigation and spare the water treatment service company from the risk of having to rebut expert testimony about the nature of the water treatment vendor's role, responsibilities, or performance standard before finders of fact who are wholly unfamiliar with the subject matter.

In this instance, "an ounce of prevention is worth a pound of cure."

SRA Program Outline

The SRA presented here is essentially a signed document developed between the facility management and water treatment staffs that outlines the tasks and responsibilities that are to be performed on a routine basis by each party. It recognizes that the water treatment service company cannot be at the facility every day, so certain tasks must be performed by the facility management

staff to ensure the consistent and successful operation of the cooling water treatment program. The objective of the agreement is to document specific tests and tasks that should be conducted by both the facility management and water treatment vendor staffs to ensure the successful operation of the cooling water treatment program.

The agreement begins by outlining specific testing and maintenance tasks in a guideline designed to ensure greater program participation and oversight on a routine basis by facility management staff. It must be stressed here that we are presenting guidelines that are to be used by the individual facilities and water treatment vendor staffs working collaboratively to develop a program specific to the customer's individual cooling water treatment program and building staffing requirements. Not all the test procedures or tasks outlined in the guideline need to be incorporated into the final agreement. You may even wish to include some new test procedures or tasks of your own that are not even listed in the current guideline. Areas of concern in the guideline include basic, standard, and advanced water testing procedures, supplemental/specialized testing (such as corrosion coupon or ATP studies), cooling tower and chemical feed station inspections, and open equipment inspections and documentation. Please note that many of the routine tests outlined in the agreement (highlighted in red), such as conductivity, pH, temperature, and oxidation reduction potential (ORP) measurements, can now be conducted and documented using modern digital system controllers with data logging, cloud reporting, and remote accessing capabilities.

Once the testing and task responsibilities have been properly allocated between the facility management and the water treatment service company field staffs, the agreement can then be reviewed for correctness and completeness by upper management staffs. The agreement must be signed by customer and vendor representatives that have legal standing and authority to sign on behalf of their respective companies. After the agreement has been properly authorized, it becomes the responsibility of both parties to ensure that the tests and task responsibilities outlined in the agreement are followed and adhered to in a proper and professional manner by all involved. Also, the SRA is designed to be a "living document" that should be reviewed and modified by both parties on a periodic basis. With a properly prepared and executed SRA, both parties should now have a document that clearly outlines specific testing and task responsibilities, enhances documentation, improves program performance, promotes better lines of communication, minimizes risk, and reduces the possibility of legal action. Once completed, the SRA can then be used as a stand-alone document, or more commonly as an addendum page in a new proposal or contract renewal.

Program Control Activities and Guidelines

This section will provide an overview of the key water treatment program components, which include necessary preventative maintenance activities. This list allows for assignment of the relevant tasks as well as recommended frequency and protocol. These are considered the relevant program control parameters that need to be monitored and reacted to routinely, many of which must be conducted daily or multiple times per week depending on complexity.

Table A provides an overview of an SRA agreement. A more detailed version of these guidelines can be found in the Appendix of this paper.

Table A: SRA Recommended Program Guidelines

• Outlines specific tasks and responsibilities for both the customer and vendor staffs
• Development of a written and signed document
• Each document is site-specific
• Testing and task responsibilities can be added or removed as needed

Water Treatment Testing Parameters and Assigned Responsibilities

In this section, we provide an overview of different aspects an SRA pact would cover between the service company and the client facility.

A. Basic Testing (accomplished by system automation or facility staff)
   - Conductivity
   - pH
   - ORP
   - Bulk water temperature
   - Halogen reserve (chlorine or bromine)

B. Standard Responsibilities
   - Inhibitor residual (PTSA dye, molybdate, phosphate, phosphonate, others)
   - Total bacteria (dip slides)
   - Tower visual inspection
   - Chemical feed and system control station inspections
   - Read and record water usage for makeup and bleed-off

C. Advanced Testing Responsibilities
   - Hardness
   - Alkalinity
   - Chloride
   - Iron
   - Copper

D. Supplemental/Specialized Testing
   - Azole concentration
   - Polymer concentration
   - Total bacteria via HPC (lab)
   - SRB
   - ATP
   - Biofilm deposits
   - Corrosion coupons
   - Metal and pipe failure evaluations

E. Cooling Tower Inspections
   - Wetted surfaces
   - Basin cleanliness
   - Drift eliminators cleanliness

F. Chemical Feed and System Control Equipment Inspections
   - Product inventory levels
   - Chemical pumps clean and operational
   - Chemical storage containers clean, labeled, and intact
   - System controller clean and operational
   - Cooling water bleed is operational (and strainer is free of debris)

G. Open Equipment Inspections
   - Inspect, photograph, and document the condition of any open refrigeration equipment, including HEX (tubes/tube sheets or plates/sections)

Including these activities in the overall cooling water treatment guidelines will ensure that the water treatment service company is in position to maximize support for the customer's program and facility. It will allow both parties to remain accountable to producing consistent results and lead to longer equipment life, improved heat transfer rates, lower utility expenses, and reduced challenges from unpredictable events or unforeseen circumstances.

The authors are keenly aware that market pressures and competition play a major role in the awarding of a cooling water treatment service contract. In many situations, price, rather than technical competence, becomes the determining factor in the selection of a water treatment vendor. However, it is our belief that a well-crafted and executed SRA, based on input from both the facility management and water treatment service company's staffs, can help to secure and retain business by instilling in our customers greater confidence and trust in the water treater's technical services and professionalism.

Observations and Conclusions

During the past two decades, there have been a profound series of economic, political, and business events that have had a disruptive impact upon the cooperative service relationship that historically existed between cooling water treatment customers and vendors. As a result of these changes, a significant portion of the water treatment tasks and responsibilities and oversight that was once the domain of facility management staffs has now been shifted to the water treatment service companies. With this shift in responsibilities came an increase in exposure levels and liability for the water treatment vendor.

Unfortunately, this increase in risk and liability is often neither fully recognized nor appreciated by the water treatment service company. Insurance companies frequently talk to their customers about the need to prepare and plan immediately for the eventual claim or lawsuit that they know will one day happen. With these increased levels of risk and liability, it is imperative that water treatment service companies now take steps to re-engage, re-energize, and reinvest their customers into the maintenance and operation of their own cooling water treatment programs.

For many water treatment service companies, this re-engagement could easily take the form of an SRA.

Disclaimer: This publication references broad litigation concepts. Not all cases are the same. The context of each case must be assessed for variables including the laws of the forum state, the allegations as framed, available evidence and other unique considerations including the evolving state of Legionella science and authority. This document is not a substitute for competent counsel and should not be construed as legal advice.

Acknowledgements

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APPENDIX

The SRA and associated guidelines are illustrated fully in this Appendix. While the authors recognize each program will be tailored to the individual needs of the customer's facility, the primary components are intended to serve as a template for water treatment service company to work from. We recommend that all tasks be carefully considered and that responsibility for each item shown be covered by one or both parties. It is also logical that one agreement may be necessary for each cooling water system located at the facility, depending on any unique operating characteristics and conditions inherent to the systems.

Suggested Testing and Tasks Guidelines Under a Shared Responsibility Agreement

Date: _____

1. Facility Management and Water Treatment Service Company - Operating Document:

(One guideline per operating system is recommended)

Facility Name: _____

Facility Street Address: _____

Facility City, State and Zip Code: _____

Facility Manager Name: _____

Facility Manager Title: _____

Facility Manager Phone: _____

Facility Manager Email: _____

2. Open Cooling Water System Operating Parameters:

System Parameter:	System Result:
System Name or Designation:	
Service Visit Frequency:	Weekly, bi-monthly, monthly or quarterly
System Application:	Commercial, institutional, health care, data centers, power generation, or manufacturing accounts
System Size (tonnage):	Expressed in operating tons
Operation Period:	Year-Round or seasonal
Daily Operation:	Continuous or intermittent
System Notes:	

3. Water Treatment Testing Parameters and Assigned Responsibilities:

Basic Testing: (red highlighted tests can be accomplished by an automated system controller or facility staff)			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Conductivity (cycles):			
pH:			
ORP (oxidizing microbiocide concentration):			
Recirculating Water Temperature:			
Halogen residual test (chlorine, bromine or chlorine dioxide):			

Standard Tests:			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Corrosion Inhibitor Residual:			
Dip Slides:			
Cooling Tower Visual Inspection:			
Chemical Feed Station Visual Inspection:			
Makeup and Blowdown Meter Readings (if available):			

Advanced Testing:			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Total Hardness:			
Total Alkalinity:			
Chlorides:			
Total Iron:			
Total Copper:			

Supplemental/Specialized Testing:			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Azole Concentration:			
Polymer Concentration:			
Heterotrophic Plate Counts (laboratory procedure):			
Sulfate-Reducing Bacteria:			
ATP Studies:			
Biofilm Analysis:			
Corrosion Coupon Testing (for mild steel, copper, and other selected metals):			
Metal and pipe failure analyses:			

Cooling Tower Inspections:			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Wetted tower surfaces are free of organic material, biofilms, algae, scale, sediment, and deposits:			
Tower basins are free of organic material, biofilm, algae, sediment, and deposits:			
Drift eliminators are free of organic material, biofilms, algae, scale, sediment, and deposits:			

Chemical Storage and Feed Station Inspections:			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Check all chemical inventory levels:			
Chemical feed pumps are clean and operational:			
Chemical storage containers are clean and intact:			
Cooling tower system controller is clean and operational:			
Cooling tower bleed system is operational:			

Open HVAC Equipment Inspections:			
Parameter:	**Facility Responsibility:** *(with testing frequency)*	**WTSC Responsibility:** *(with testing frequency)*	**Notes:**
Inspect, photograph, and document the condition of any open refrigeration equipment:			

4. Acknowledgement by Responsible Company Parties:

Agreed to by Client:

Company: _____

Signature: _____

Name: _____

Title: _____

Date: _____

Agreed to by Water Treatment Vendor:

Company: _____

Signature: _____

Name: _____

Title: _____

Date: _____