



## STRATEGIC ENVIRONMENTAL OUTSOURCING

The scenario is all too familiar to most of you: as an environmental health & safety (EHS) manager in the industrial environment, your responsibilities are overwhelming. They most likely encompass the full suite of environmental media – air, water, and soil; a host of regulated raw chemicals and wastes; one or more treatment systems, each with a permitted discharge point (or more); regular monitoring requirements and reports; programs to ensure the ongoing health and safety of plant employees; and the relentless push to continuously improve while being asked to do more with less. It's often a similar story for the corporate remediation manager – too many sites, differing state requirements, operating unit issues, new technologies to evaluate, appeasing legal and accounting departments, reserve budgeting, environmental issues associated with acquisitions coupled with the exact same more-for-less demands. Most often, today's environmental manager works at a frenzied pace to keep up with the many demands of his or her job, and seeks help from outside resources to address the overload.

As a result, virtually all of us have had some experience -- on either side of the project -- with the business of hiring a consultant to take care of an environmental compliance or management task. This arrangement, which we might call "out-tasking," usually involves basic services, is task-specific, is of fixed duration, and supports technical and lower-level organizational tasks. Commonly out-tasked services are those related to environmental project "events," such as investigations and assessments, permitting, pollution control and remediation, and waste management.

The out-tasking arrangement has certainly worked – at least as a way to off-load some of the overwhelming responsibilities today's EHS managers face. At the same time, however, some industrial environmental managers and even plant managers are turning their attention to "outsourcing." Unlike task-specific assignments, outsourcing involves the transfer to a third party *all or part of a business function* that the company would normally perform internally. As just one example, an EHS manager might have traditionally hired a consultant to handle air permitting, maybe even on a permit-by-permit basis, while today's manager would have the option to outsource the responsibility for a facility's entire air program. Outsourcing also differs from out-tasking in the nature of the contract and specifications required to make it work, the degree of internal time and monitoring required, and the level of risk. Despite these increased complexities, though, outsourcing has the potential to provide far greater payoffs than are likely in the traditional consulting arrangement.

### What is Outsourcing?

Outsourcing enables us to contract out a program or portion of a program that no longer fits – or never has fit -- with our companies' core competencies and strategic programs. It might be an air quality program, as in the above example, or it might involve a wastewater treatment program, information systems, training needs, or larger programmatic functions. In some cases, it might even logically be the entire EHS program. Figure 1 shows how common environmental tasks have traditionally been handled in a typical plant-level program, compared to how they might be addressed under an outsourcing program. For an EHS manager, outsourcing, when coupled with a solid understanding of your firm's core competencies, allows you to concentrate critical resources and true strengths on those areas where you

**TYPICAL FACILITY EHS PROGRAM COMPONENTS BY MEDIA**

		WATER / WASTEWATER	AIR	HAZARDOUS AND SOLID WASTE	HEALTH AND SAFETY	REMEDATION
<b>FACILITY EHS PROGRAM COMPONENTS BY FUNCTION</b>	REGULATORY ANALYSIS					
	PERMITTING					
	SAMPLING					
	LAB ANALYSIS					
	TECHNOLOGY EVALUATION					
	DESIGN					
	CONSTRUCTION					
	O&M					

	EXAMPLES OF OUTSOURCING CANDIDATES		EXAMPLES OF TRADITIONALLY OUT-TASKED PROGRAM COMPONENTS
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Figure 1: Outsourcing involves contracting out *an entire business function* that would normally be handled internally.

can achieve true excellence and real cost-effectiveness based upon in-house skills, experience and personal interests.

### **Is the Environmental Business Ready for Outsourcing?**

Outsourcing has been a valued corporate strategy since the early 1990s, particularly in the areas of accounting, legal functions, information technology and human resources— areas in which most companies do not have a significant strategic need or special talents. In the early years of outsourcing, environmental work was not widely considered a good outsourcing candidate, chiefly due to liability concerns. Today, however, environmental work is a much more evolved business in a number of ways:

- Risks are better understood and managed.
- Technologies have become more complicated and sophisticated, requiring rapidly changing knowledge and making it difficult for in-house staff to stay up to date across a broad spectrum.
- The degree of external expertise has expanded, which has helped make outsourcing less expensive due to improved supply.
- EHS staff have been downsized and today's environmental manager can no longer effectively do everything: air, wastewater, remediation, solid waste management, and a host of vertically integrated functions.
- The environmental department is increasingly becoming a “business as usual” component of the corporation, as companies have begun to expect environmental programs to live by the same corporate business rules as other business functions, including barely adequate budgets.

Together, these factors are paving the way for new ways of thinking about environmental consulting and fueling initial growth in environmental outsourcing; savvy EHS managers, plant managers and CEO's are beginning to reap the rewards of the outsourcing approach.

### **Why Outsource?**

According to outsourcing experts (see *Additional Reading*), outsourcing provides valuable opportunities to:

1. Maximize the productivity and returns provided by your existing internal resources. This is achieved by focusing all investments on what your business does best and on its long-term goals and strategies.
2. Leverage to the fullest extent possible the innovations and contributions of external suppliers (or consultants). These individuals and firms have already spent years and countless financial resources investing in their *own* core competencies. Now, through an outsourcing arrangement, they can make their specialized professional capabilities available to you through a competitively priced multi-year contract. Almost always, their experience and knowledge would be prohibitively expensive or impossible to provide internally. You have access to these suppliers seven days a week, but you do not have to pay for a full-time staff.
3. Minimize risks, shorten “product” cycle times (e.g. internal initiatives or beneficial environmental projects), reduce investments, and improve responsiveness to internal customers. In a dynamic market, or one marked by rapid technological change, these benefits become invaluable. The multi-year fixed price nature of an outsourcing contract, coupled with the realization of total program responsibility, provides an effective incentive for the provider to think big-picture and apply their own in-house competencies toward developing and putting in place long-term systemic improvements. Providers can often automate high-volume, low-value activities that in-house groups cannot.

4. Improve efficiency and cost-effectiveness by eliminating the need to hire or develop resources that do not reflect your core competencies.

While the traditional practice of hiring a consultant to complete specific tasks serves its purpose well, outsourcing – when carefully evaluated and executed -- tends to deliver benefits that are longer term, more fully integrated with the overall strategies of the firm, and remain focused on achieving business-oriented strategic advantage.

### What Should be Outsourced?

The answer to this question requires attention to several issues, most notably identifying your group's core competencies, where competency means an externally competitive level of skill, experience and interest in a particular field. Surprisingly, this is not always as easy as it might appear. To truly determine the essence of your department's skills and talents, look for the following elements.

- **Skills or knowledge.** What in-house skills or special management systems do you already have? What level of expertise and experience do you maintain in these areas? You might have staff with strong experience in compliance management (air, wastewater, and solid waste management, for example), but very little hands-on experience in site remediation or closure. Or perhaps much of your competency lies in understanding an unusually complex and proprietary manufacturing process, and its impacts on the environment. Or maybe your own background and interest is primarily in the health and safety component of your program, and you are less competent in the environmental component.
- **Ability to stand the test of time** to accommodate changing needs, technologies, or regulatory drivers. By focusing on those skill sets that will serve you well for years to come, such as knowledge of your company's unique chemical and manufacturing processes and relationships with internal customers, or the ability to develop proven pollution prevention or even "green manufacturing" strategies, you will be well-positioned to add long-term value to your company. On the other hand, you probably would not include as core competencies those skills that address only a short-term need, such as the management of an underground tank program.
- **Limited in number.** Limit your identification of core competencies to just two to three skills or areas or expertise. For all but the very largest EHS departments, it is neither feasible nor advisable to maintain advanced knowledge in more than two or three areas. At least one of these competencies should connect directly to your own internal customers.

To facilitate the evaluation of core competencies, consider drawing a simple diagram of your department, including activities you maintain internally, tasks for which you usually hire a consultant, and functions you might be interested in outsourcing. An example of this kind of matrix – in this case showing the relationship between typical corporate remediation program components and the functional expertise required to support those components – is presented in Figure 2. A similar graphical representation of your current program(s) will help reach conclusions about the most appropriate core competencies. For each cell representing an intersection between program component and expertise, attempt to evaluate your group's in-house competency, perhaps on a scale from 1 to 3.

Next, spend time evaluating the outsourcing potential associated with each of these EHS program elements by reviewing your firm's history and culture as well as your own department's level of in-house expertise in the targeted program element (Figure 3 provides a model for this evaluation). An unacceptable level of OSHA violations or particularly dangerous processes might indicate that health & safety is an area of high risk for your company, and one in which you do not maintain in-house expertise.

**CORPORATE REMEDIATION GROUP PROGRAM COMPONENTS BY SITE**

**CORPORATE REMEDIATION GROUP PROGRAM  
COMPONENTS BY FUNCTION**

	SITE 1 PROJECT MANAGER	SITE 2 PROJECT MANAGER	SITE 3 PROJECT MANAGER	SITE 4 PROJECT MANAGER	SITE 5 PROJECT MANAGER
FIELD INVESTIGATION					
RISK ASSESSMENT					
ECOLOGICAL ASSESSMENT					
DESIGN					
CONSTRUCTION					
OPERATION, MAINTENANCE AND MONITORING					

 **CANDIDATES FOR OUTSOURCING**

Figure 2: The identification of core competencies begins with a diagram of the EHS program, in this case showing the relationship between program assignments and functional expertise.

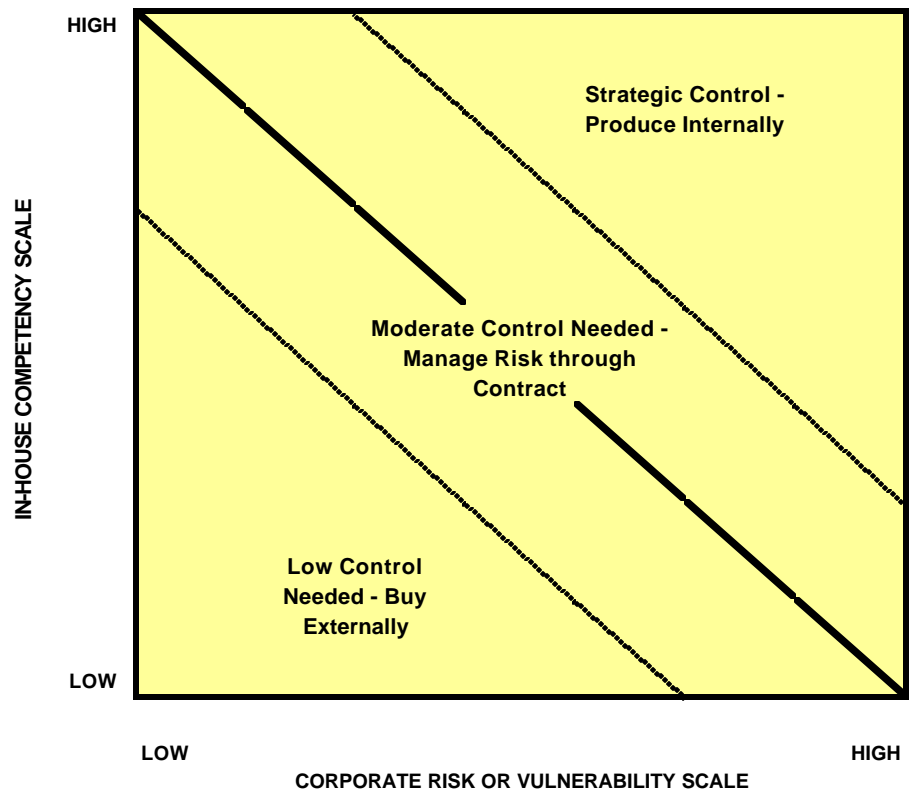


Figure 3: The decision to outsource a program or component of a program is ideally based on an evaluation of and balance between corporate risk or vulnerability and in-house competency.

Using this information, determine whether it is more appropriate to outsource the health & safety function using a carefully executed contract (to manage the risks involved), or to hire a health & safety expert to handle this function in-house. Other functions, such as your wastewater compliance or groundwater monitoring program, might be of relatively low risk in your specific situation; if your analysis finds that you do not maintain this capacity or competency in-house, the decision to outsource this function would be fairly straightforward.

When you feel comfortable with your identification of core competencies and areas of corporate risk or vulnerability, turn your attention to the potential costs of outsourcing by comparing the costs of keeping functions in-house, including transaction costs, to those inherent in outsourcing. During this part of the evaluation, it is important to consider the full cost of hiring and retaining in-house resources, including not only the obvious expenses such as wages and benefits, but ongoing training and development needs as well.

Also consider the potential strength of the supplier market for the functions you might outsource. The availability of sufficient – and competent – suppliers will influence pricing, quality, and responsiveness. Likewise, determine the degree of outsourcing control you seek or are likely to find. If you are considering outsourcing a function you determine to be high-risk, such as waste management, but that is available only through firms you deem to be of average competency, consider managing the supplier carefully through the contract. By including specific and stringent performance measures, for instance, you can ensure sufficient control to get the quality and results you need.

Finally, though each is eminently manageable, be sure to understand the potential risks inherent in outsourcing. Among them are the:

- **Loss of critical skills and risk of developing the wrong skills.** Be mindful of the need to maintain and develop core competencies that will sustain your department over the long term, such as knowledge of pollution prevention or specific manufacturing processes. At the same time, be careful not to over-commit valuable internal resources to tasks of short-term criticality, such as risk management planning.
- **Loss of cross-functional skills.** For most of us, the most valuable training is of the on-the-job variety. Opportunities to “rub shoulders,” share technology, and collaborate with others build and strengthen skills across job functions and technical disciplines. One effective way to maintain cross-functional skills is to remain in close contact with your suppliers, integrating them effectively into your organization.
- **Loss of control over a supplier or access to infrastructure.** Even though outsourcing removes the burden of day-to-day management for certain functions, it requires careful coordination with the supplier(s), particularly as the arrangement is initially crafted, but also at regular intervals thereafter. In the case of outsourced technology-based functions, contract negotiations might include some modest training for your staff in the use of a database or other IT system, or other means to remain aware of infrastructure developments.
- **Difficulties in pricing and measuring value.** It is often impossible to specify outcomes in advance and costs are difficult to estimate. This coupled with later problems in measuring a supplier’s real contribution may lead you to distrust your ability to strike a win:win deal with these experts. This is why it is critical to include all in-sourcing transaction costs – including non-innovation, delays, management time expenditures, program investments such as regulatory update services and training, and even recruiting and career counseling expenditures – in your analysis.

- **Poor or inadequate communication of environmental policies and business objectives.** Your supplier will often be in a position to represent you and your firm to the outside world. Make sure that your company's image is presented correctly and consistently, and that business objectives and strategies are communicated according to your wishes. The contract is the ideal place to outline these stipulations, which must then be followed up with clear and regular communication with the supplier to make sure he or she understands the right external message.

As with any approach, outsourcing carries with it some inherent – but manageable – risks and costs. You will want to carefully evaluate your department's core competencies, your corporate vulnerability, and overall cost-benefit ratio before embarking on an outsourcing program. But insourcing poses significant risks and costs as well, particularly where regulatory compliance and the company's bottom line are at stake. According to Quinn (1999), "upon serious investigation, most companies will find that 60 percent to 90 percent of their in-house activities are services that are neither being performed at [best-in-class] levels nor contributing significantly to competitive edge – and are not very risky to carefully outsource." With its proven rewards -- maximized internal productivity, enhanced innovation, better customer responsiveness, and improved efficiency and cost-effectiveness -- can you really afford *not* to outsource?

### **Additional Reading**

Quinn, James Brian and Frederick G. Hilmer. Summer 1994. "Strategic Outsourcing." *Sloan Management Review*.

Quinn, James Brian. Summer 1999. "Strategic Outsourcing: Leveraging Knowledge Capabilities." *Sloan Management Review*.

Forst, Leland I. May/June 1999. "Outsourcing: You Get What You Ask For." *Journal of Business Strategy*.

Quinn, James Brian, P. Anderson and S. Finkelstein. March-April 1996. "Managing Professional Intellect: Getting the Best from the Best." *Harvard Business Review*.

Greco, J. July-August 1997. "World Class Outsourcing Strategies." *Journal of Business Strategy*.

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