

Achieving Better Environmental, Health, and Safety Outcomes

Should Your Organization Partner with External Experts?

Executive Summary

Delivering effective environmental, health, and safety (EH&S) services and support is a challenge for most companies. While most organizations are committed to obeying the law to provide a safe working operation and be compliant environmentally, successful delivery remains elusive. Numerous factors drive this reality:

- EH&S skill sets are difficult to maintain. This creates organizational inefficiencies.
- While important, EH&S operations are **not high priority organizational capabilities** for most firms.
- EH&S is a **small function of most organizations** and therefore cannot benefit from scale efficiencies.
- EH&S issues are often a distraction to the management team.

Over the long term, the inability to address these challenges will lead to:

- Repeated incidents causing operational failures and shut downs
- Failed inspections and fines
- Uneven performance across operations
- Contractor incidents and poor performance
- Reactive response to issues and consumption of senior management's time and energy
- Marginal level of compliance with compliance projects behind schedule
- Difficulty keeping pace with regulatory changes
- Employee concerns and fears

This discussion highlights the benefits of using a third party to reverse and improve EH&S outcomes. More and more firms are recognizing these consequences and turning to expert third parties to deliver strong EH&S solutions. By doing so, these facilities are exposing commonly held myths of higher costs, perceptions of management abdication, and difficulty in changing historic approaches when using third party partners. This paper explores the root challenges of EH&S operations in detail, and identifies alternative solutions through third party experts in an effort to avoid long term consequences like the situations mentioned above.



Today's Challenges of Delivering EH&S Operational Excellence

While almost all clients who eventually reach out for third party help are committed to EH&S compliance, many acknowledge the fact that their results are sub-optimal. On the surface, this seems contradictory; the regulatory expectations are clearly stated and more often than not, highly prescriptive in how to meet those expectations. However, in reality, significant barriers to success exist and they are interconnected.

Regulatory Climate is Growing in Complexity

The often-heard concern is that the regulatory climate continues to grow in complexity. This is not driven necessarily by political ideology, but rather by higher living standards, the introduction of new materials and elements that present new health and safety challenges, and a better understanding of how the exposure to existing materials have an impact in our lives. As shown in Figure 1, as a proxy for the increasing regulatory oversight, the number of total pages in the Code of Federal Regulations continues to increase regardless of the political party in control.

New regulatory rules and requirements are published continually by the federal, state and local governments. Just maintaining visibility of

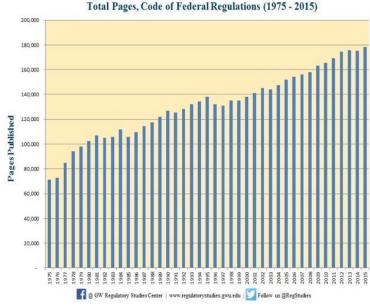


Figure 1: Source: www.regulatorystudies.gwu.edu

those rules and requirements can require full time support, as actively interpreting and taking action on these evolving requirements become more and more arduous for a company.

Skill Sets and Resources are More Difficult to Find and Retain

EH&S skill sets are difficult to maintain for numerous reasons. Aside from maintaining currency in the increasingly complex regulatory structure, what is often not realized is that vastly different skill sets are needed as a firm grows and matures, adds services and products, and/or grows geographically. Whether organically or by acquisition, these additions will create distractions to management through new regulations (state and country), uneven performance and reporting (multiple locations), and new or different operational requirements (products and services).



The specialized knowledge of EH&S creates organizational inefficiencies with silos, overstaffing, and underutilization of resources leading to roles and responsibilities that are static and offer limited advancement and growth for staff. This yields very senior individuals fulfilling junior roles, which in turn creates difficulty in hiring and retaining entry-level personnel (high churn) and creating a higher cost structure.

With many concerned about EH&S as a viable, high growth career, there continues to be a shortage of truly qualified EH&S personnel whom are market ready. Market research indicates that there are approximately three job openings for only every one qualified person that can fill them. In addition, only half of the entry-level demand will be met by new college graduates¹. To compensate, firms often lean on service individuals for whom EH&S represents a second career, further exacerbating the presence of senior, expensive personnel with narrow skills. Based on survey response identification and LinkedIn's review of EH&S professionals, average age and experience skew high. The average age of EH&S professionals is 54 years old². In addition, 56% of EH&S professionals have 10+ years' experience, 24% have 6-10 years, with only 20% at 5 years or less. The apparent age/experience gap is due to an EH&S career being a secondary career choice. On the depletion side, one market review estimates that 10% of EH&S staff are retiring annually³.

Capabilities Are Not Aligned with Core Operations

While important and certainly top of mind to a firm's leadership, EH&S practices are not capabilities that are integral to the core operations of most companies. It is very difficult to fit one-off, small, specialized skills into the focus of most operations, regardless of the industry. Given the small size of EH&S operations compared with core functions of the firm, one cannot benefit from efficiencies and savings of scale. Clients experience these difficulties with other functions such as payroll, IT, legal, certain marketing and HR functions, and corporate security.

If the decision is to reduce costs, most take the form of substituting capital (expert systems) for labor (knowledge and expertise). However these expert systems are only as good as the data provided to them and the ability of the firm to interpret their results.

The lack of capability further manifests itself when the firm attempts to manage multiple site locations. Whatever elements of an EH&S program that may be in place are diluted by geographic distance and acquisition, resulting in a lack of consistency in compliance and outcomes throughout the organization.

-

¹ Safety + Health –"Job Outlook 2015 – Tom Musick, April 26, 2015

² http://www.ishn.com/articles/91983-comforts-of-an-aging-ehs-nation

³ https://www.cdc.gov/niosh/oshworkforce/



The profile of an organization that benefits most from third party engagement has the following characteristics:

- Part time, misplaced, or missing ownership of EH&S responsibilities
- Outdated compliance calendar
- Projects, reports, etc. behind schedule or stalled
- Long vacancies of EH&S positions
- Lack of a current, independent audit to understand the baseline of compliance attainment

Summary

Each one of these issues, regulatory complexity, effective skill sets, and organizational capabilities, represents a significant drag on effective EH&S operations. The complexity level increases the need for a significant skill set that the organization does not have, cannot find, and cannot support.

This ultimately becomes a reactive issue for the management team. Rather than having resources and processes that are proactive, leadership becomes mired in crisis management of one-off events, never able to catch up and get ahead of the issues. With these issues having high visibility with employees and other stakeholders, everything gets managed up for resolution, creating distractions to solving core issues.

The Use of EH&S Partners: What Does Great Look Like?

At first blush, most EH&S partnerships work through the simple idea of specialization and the segmentation and focus on tasks within a specific field or skill set. This comparative advantage leads to enhancements and delivery efficiencies that can become a virtuous cycle; specialization leads to learning that can improve the delivery, costs, and quality of tasks. But as most of us have experienced in the global customer support (e.g. call centers) realm, those benefits plateau quickly.

Expertise and Experience (Yes, There is a Difference) - A strong partner places EH&S operational excellence at the forefront. They invest in their team, delivering world-class resources, services, and experienced personnel who are passionate about their career endeavor of EH&S, not as a second or third career choice. The ideal partner will have a deep bench of expertise and staff to support client sites instantaneously. And this expertise goes beyond EH&S activities. They will also have a strong knowledge and understanding of the client's industry and operations. Lastly, a strong partner will address the root cause of the issues and not simply the symptoms to ensure that process, roles and responsibilities, and performance improvements will stick (see Figure 2).



Root Causes

	Strategic			_	Organizational			Process			Systems/Data	
Issue	Lack of ma	ndate support	ndianal Treat	nent of Lack of org	anizational Poorty Pes	Lack of Experie	e Misatigune	ent of such of such	ndards fices fices fire	nontedge Poorlinite Poorlinite	M. Incomplete Missing	
Repeated incidences	√	✓	✓	✓			✓	✓		✓		
Operational failures and shut downs		✓	✓	✓						✓	✓	
Failed Inspections / Fines	✓			✓	✓	✓		✓	✓		✓	
Uneven performance across operations	✓	✓		✓	✓		✓	✓			✓	
Poor contractor performance		✓	✓			✓				✓		
Reactive response to issues		✓		✓	✓		✓	✓			✓	
Marginal level of compliance	✓			✓	✓	✓	✓	✓	✓			
Compliance projects behind schedule	✓		✓		✓	✓	✓	✓				
Unable to keep pace of regulatory changes		✓		✓		✓	✓	✓	✓			
Employee concerns/fears	✓	✓	✓	✓		✓	✓			✓	✓	

Figure 2

Strong Process and Metrics - An EH&S partner will have the ability to be proactive and identify and resolve issues BEFORE those issues impact client operations, with the goal of driving exceptions to zero. For example, see Figure 3 to view Triumvirate's straightforward model that ensures all elements of an effective and robust EH&S program are firmly rooted and executed.



Set Up / Establish Operating Framework Discrete project oriented engagement

Evaluate, Design, and Implement

- Creation of Policies & Procedures
- Training
- First Time Permitting, Registration, & Licensing
- Strategy and Operational Alignment
- Process Design
- Roles and Responsibilities -Responsible Official (RO) support, Incident Response and Plans, and Occupational Health Program management
- · Reporting and Escalation
- Emergency Response Design
- Employee Training programs
- · Facilities Support Design
- Waste Management and Discharge Design

Discrete project oriented engagement designed as pre packaged delivery, sized to fit the needs of the client

Operate

Staff augmentation, interim EH&S leadership, and full department ownership to align with client needs and expectations

Execute and Deliver

- Audits and Inspections
 - Process
- Equipment readiness & certifications
- ·Raw material inventories
- On going permitting, registration & licensing support
- •On going & new employee training
- Record & data collection, submissions, & maintenance
- · Internal and External reporting
- Operational Support Interpretation, guidance and assistance of EH&S policies and process execution
- Sampling
- · Emergency response

Delivery models of staff augmentation, interim EH&S leadership, and full department ownership to align with client needs and expectations

Improve

Discrete project oriented engagements, identified and driven by ongoing delivery work

Enhance

- •Infrastructure (construction, decommissioning)
- Operational training
- Knowledge builds
- Process improvements
- Scenario planning & preparation

Discrete project oriented engagements, identified and driven by ongoing delivery work

Figure 3

Client Engagement – An effective EH&S partner will have an intimate knowledge of the client's operations through ongoing engagements, not project or periodic touch points. By having that ongoing engagement, the EH&S partner can co-create value with their clients continually. A good partner will connect with their clients daily, or at least weekly, to support other initiatives. Front line professionals should create multiple check-ins with the core client team responsible for EH&S, creating familiarity with the firm and reinforcing their professionalism and expert execution.

A strong EH&S partner will be able to provide flexible solutions. This is especially valuable for clients that are small, are in a state of flux, or have distributed operations. Not all clients need resources on site or even full time; an on demand solution can be effective in a number of scenarios. In addition, the right partner can properly size and fit the required skill sets and resources to the projects and operational needs *in an immediate timeframe*. This removes the mismatch of skill sets that internal resources inherently and mistakenly create.

Lastly, an effective EH&S partner will be able to connect and demonstrate the value of EH&S core and support activities though a reference framework (see Figure 4) that the client's



employees and management can understand. It is easy to get lost in procedures, data collection, and reporting. Good EH&S partners will continually demonstrate the 'why' of their efforts, not simply the 'what.'

Delivery Components

- Policy and procedure development
- Permitting, Registration, & Licensing
- Equipment testing and maintenance
- Safety protocols
- Raw material inventory audits
- Hazard material management and data inventory
- Training general and specific, regulatory and operational
- Management oversight and reporting – internal and compliance
- Emergency Response spills and odors
- Hazardous waste oversight

Value Proposition

- Deliver a safe working environment reduce risk and liability through subject matter expertise (including local knowledge), and best practices
- Independent advisor
- Proactive response to regulatory changes
- Operationalize policy and procedures through a multi-disciplined process and experienced skill set
- · Operational integrity
- 24/7 response
- Cost effective
 - Efficiency less than FTE if needed
 - Effectiveness strong ability to deliver with & within the client organization
 - Fixed budget no surprises
 - Reduce burn rate of start up funds
- Maintain strong communications and visibility internally and externally
- Reduce non-core or non-strategic management responsibilities
- Consistency across multiple sites/divisions/ operating groups
- Tailored or a la carte solutions that are flexible and easily modified -Delivery with any range of current infrastructure (none to robust)
- Correct training at the right time

Figure 4

So, Where is the Debate?

Rather than the virtuous cycle that specialization can create, as this latter discussion demonstrates, most firms find themselves in a vicious cycle of increasing complexity, lack of skill sets, and an organizational design not geared toward EH&S activities, that drives poor performance. So, if the choice were that simple, why are firms still clinging to their existing internal resources?

Cost - "Consultants are Expensive"

The most common concern when partnering is cost. Companies ask, "Are the costs, which seem significantly higher than our internal costs, providing significantly better outcomes, and are they



needed?" However, when examining the true costs of the base case (internal resources), a much different picture emerges.

The cost of a third party to manage EH&S operations can be as much as 70 to 80 percent of the base salaries of direct hires, driven by deeper and broader expertise, flexible delivery, mobility, and accountability. However, consider the following, hidden costs of full time employees, both financially and operationally:

Financial

- An additional 30% (of the base salary) goes toward direct overhead to cover payroll costs of healthcare, employer insurance, short and long term disability and life insurance, 401k matching contribution, and incentive bonuses.
- An additional 15% (of the base salary) for vacations, sick days, and training.
- An additional 5 to 10% (of the base salary) for direct management oversight.
- An additional 20% (of the base salary) for indirect overhead of HR, accounting, and corporate.
- Additional costs, which will vary depending on the compliance level of the firm, representing monies spent on outside project consultants and potential fines that may occur.

These hidden costs rapidly consume any apparent savings an internal resource might offer. Add to that annual increases in salary, additional vacation days, title inflation, and the inability to properly size and fit the skill sets and resource level to the operational need, and the insourcing approach rapidly becomes more expensive over time.

Operational

An effective third party partner produces higher quality operational outcomes with fewer, but better qualified, personnel due to:

- Expertise and skill sets, delivered by a team that is evergreen, instead of a single individual whose expertise is narrow and often calcified.
- A proactive program that incorporates long range planning, visibility, and process designed to eliminate surprise events and start/stop reactive efforts.
- An employee profile that is professional, committed, and enthusiastic when compared to typical in house resources that own a EH&S as a second function and, due to their lack of expertise, are reluctant and unavailable to support improvements. An ideal partner represents a stable workforce that are the enablers of the EH&S level sought, as opposed to a barrier. They represent a terrific alternative to the high churn of junior EH&S personnel a number of firms experience.



• Establishing a transparent, stable, and predictable cost structure contrasted with a hidden and increasing one that demoralizes the efforts of senior management.

In conclusion, a strong third party partner can provide both financial and operational benefits to almost any firm willing to rethink their approach to delivering truly effective EH&S programs.

Inertia - "This is How We've Always Done It"

The example of Automatic Data Processing (ADP) is telling⁴. In 1949, the firm started doing payroll for clients in northern New Jersey. In the early years, every sale actually required two sales: Before anyone would buy the service, they first had to buy the concept. Bookkeepers and business owners found it hard to imagine how payroll could suddenly take up less of



their time. Many were also reluctant to let an outside company have access to their payroll files.

As Henry Taub, the founder of ADP said, "The concept of outsourcing was still foreign to most businesses back then. We had to stick it out, add clients as we could, and hopefully reach a point where our reputation would begin to work for us in the marketplace."

It surprises a number of people that the journey that ADP undertook started over 65 years ago. Today, of course, partnering with experts is an accepted best practice in achieving success.

To paraphrase a famous shoe company; just DON'T do it the same way.

Misconception - "Outsourcing Takes Away Jobs"

Yes, outsourcing is now common today and yes, it is commonly perceived that outsourcing takes away someone's job, career, and their livelihood. However, from Triumvirate's experience, in almost 100% of the staff augmentation assignments the company delivers, the positions were in fact unfilled for a period of months. At the risk of being obvious, world class EH&S support cannot be delivered remotely from a low cost labor pool. The work is local, engaging employees, regulators, and suppliers face to face on a daily basis.

In the case of ADP, a fact often not recognized was that most ambitious finance professionals avoided payroll responsibilities as it was repetitious, without a strong connection to the firm's core operations (not a competitive differentiator), and it had no gradient scale of achievement (payroll was either right or wrong; extraordinary efforts did not register or mean a greater contribution to the firm's success).

_

⁴ https://www.adp.com/who-we-are/history.aspx



Negative Connotation - "Use of a Third Party Sends the Wrong Message"

Often heard is that management is reluctant to use third parties to manage environmental and safety operations due to the criticism (vocal or implied) of certain employees or stakeholders (community, regulators etc.). Specifically, that it implies a reprioritization or lowering of the importance of EH&S or that the firm leadership is abdicating its responsibilities is these areas.

The rational argument, and the one that will win over skeptics, is that attempting to manage EH&S is usually not a core capability of most firms, and that giving the responsibility to a set of experts will almost guarantee better outcomes, with the following provisos:

- Firm management does not surrender the accountability of the operational outcomes of EH&S delivery, but in fact sets the expectations and follows up to ensure those expectations are met and/or exceeded.
- The third party partner has the true authority to intervene, make corrections, and has 'teeth' in influencing outcomes. Having the responsibility without the authority simply pushes the decisions back up the management ladder with a return of sub-optimal performance.

Conclusions

Regardless of well-defined requirements, procedures, and targets, most firms still struggle with delivering good EH&S compliance programs. The dragging factors of increasing regulatory complexity, hard to maintain skill sets, and operational mis-alignment continue without abatement. A strong EH&S partner can reposition and drive better operational and financial outcomes for a client's program. That partner, however, must have a deep understanding of the client operations and expectations, something that can be achieved with day-to-day engagement, not periodic or project type interfaces. The commonly perceived barriers for using an EH&S partner are not founded on facts but rather past perspectives that are no longer valid.

Triumvirate has the privilege of serving clients in a variety of industries, and in a multitude of different capacities, which allows us to make a daily commitment and positive impact to our client's EH&S programs. This continuity, we believe, is a significant enabler of the success and results our clients' experience. To thank you for taking the time to read this white paper, we would like to offer a phone call with one of our EH&S advisors to discuss your issues and talk through potential solutions. Please <u>click here</u> to request a complimentary consultation and a member of our team will be in touch to schedule a call.



About the Author

Jim Holland is the Managing Director of Triumvirate Environmental's Professional Services division. He has been both a Senior Line Manager and Executive Consultant with over 20 years' experience in engineering and operations in the oil and gas, chemical, mining, and nuclear propulsion industries.

In the early part of his career, Jim worked for General Dynamics in engineering design, construction, and overhaul of shipboard nuclear power plants (submarines). As District Manager for FMC's Wellhead Systems Texas Gulf Coast operations, Jim managed a staff of 15 in the sales, assembly, testing, delivery, and installation of Wellhead Systems for oil and gas exploration and production for inland and off shore operations. He also served in the US Coast Guard as a rescue swimmer, lifeboat pilot, and boarding officer in New England and as a welding engineer for the US Navy.

Other notable accomplishments:

- Based on his experience in the US Navy Nuclear program, Jim was retained by British Petroleum in a process safety engineering function to correct operational failures and to evaluate the safety culture in US refinery operations, which had caused a significant loss of life and operational capacity at the Texas City refinery explosion in 2005.
- Jim co-led the Site Safety Acceleration Program for a leading mining company, managing multiple consulting/client teams in North America, Australia, Africa, and Europe to identify and execute safety initiatives that address leadership, culture, and behaviors in the employee and contractor workforce. The CEO Safety Award was presented to one of the early sites, driving demand for the program globally.
- Jim was retained by a \$12 billion home products manufacturer to design and implement a strategic risk management initiative to align field operations with corporate legal and risk management operations.

Jim holds a Bachelor of Science of Mechanical Engineering from Pennsylvania State University, a Masters in Engineering Science from Rensselaer Polytechnic Institute, and a Masters in Business Administration from the University of Chicago School of Business.