



Environmental Health and Safety (EH&S)

Increasing the Strategic Value of EH&S Going Beyond Management by Audit

The Strategic Value of EH&S

Effective Environmental Health and Safety (EH&S) is essential to protect company value and reduce risk. Compliance with EH&S regulations helps companies mitigate risk, avoid fines, reduce fees, and avoid legal action against the business and key employees. It also helps maintain the good name and reputation of the business. From an internal perspective, EH&S provides a moral compass for the business, helping them do the right thing for people and the environment. Perhaps most importantly to executives, EH&S can protect the top line by ensuring the ability to operate across the globe and prevent losing potential revenue by staying off of “the lists.”

EH&S, however, is too frequently viewed as a cost center and relegated to the back end of product and process development. Companies are frequently faced with limited choices when EH&S regulations are considered as afterthoughts. This also puts EH&S personnel at odds with the rest of the business because of the appearance that they are introducing constraints on the business. To increase their strategic value to the business, EH&S leaders must take a more strategic approach to EH&S and move compliance up the product development cycle to get processes right the first time, stay in the good graces of regulators, and reduce the need to perform costly rework and remediation that can be avoided.

Going on the Offensive with EH&S

Too frequently EH&S lives in fire fighting mode. The traditional “find-it, fix-it” mentality of management by audit puts the company at risk. It is error prone in that something has had to be wrong to be found in the audit, so you are

A cost-effective, high quality comprehensive process that enables organizations to efficiently manage environmental, health and safety compliance.



The Source

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already at risk. Secondly, it introduces the need to make changes after processes have been defined (and equipment purchased), and this is always the most expensive place to fix a problem. Instead, EH&S should work further up in the process to get things right the first time. This requires a systematic approach to EH&S.

The time has come for EH&S to move out of crisis mode and move up the value chain. In the same way engineers have introduced design for manufacturability and assembly, companies can design EH&S problems out of processes early on. In order to do this, the company must develop a comprehensive compliance management approach that:

- Maintains a knowledge base of regulations
- Develops a register of applicable regulations by site
- Plans actions to ensure compliance
- Supports compliance during business execution
- Manages change to ensure ongoing compliance
- Provides the means to support efficient audits

Building the Foundation – Knowing the Regulations

The foundation of a successful EH&S system is knowledge of which regulations apply to a business or site. Global companies must comply with countless rules and regulations, many of which are confusing and complex. There are too many requirements to manually keep up with, they come from multiple regulatory bodies, and they change frequently. It is nearly impossible for a company to review and interpret each and every regulation. For example, Applicability Review Tool (ART) from Citation Technologies, is a technology solution that currently addresses over 30,000 regulations across more than 70 countries.

In addition to knowing the regulations, it is important to understand the purpose and actions behind their requirements. These are difficult to interpret through

mass document review or visiting the regulator's website. True understanding requires knowledge of the culture and intent of the legislation. That is why the knowledge in ART is developed by a network of local EH&S experts that help interpret and distill the regulations. Each regulation includes a plain language summary which gives an explanation of the demands placed on the business.

Countries Available in Applicability Review Tool (ART) from Citation Technologies			
Algeria	Egypt	Mexico	South Africa
Angola	Fiji Islands	Mozambique	South Korea
Argentina	Finland	Namibia	Spain
Australia	France	Netherlands	Sweden
Austria	Gabon	New Zealand	Switzerland
Azerbaijan	Georgia	Nigeria	Tanzania
Belgium	Germany	Norway	Thailand
Bolivia	Greece	Oman	Trinidad and Tobago
Botswana	Hungary	Pakistan	Turkey
Brazil	India	Panama	United Arab Emirates
Bulgaria	Indonesia	Peru	United Kingdom
Canada	Ireland	Poland	United States
Chile	Italy	Portugal	Venezuela
China	Japan	Qatar	Vietnam
Colombia	Lebanon	Romania	Yemen
Cyprus	Libya	Russia	Zambia
Czech Republic	Luxembourg	Saudi Arabia	Zimbabwe
Denmark	Malawi	Singapore	
Ecuador	Malaysia	Slovakia	

Figure 1: ART addresses over 30,000 regulations across more than 70 countries

Knowing Which Regulations to Focus On

Understanding the regulations is only beneficial if companies understand which are important to their business. Determining which of the myriad of regulations apply to a site is based on company activities, products, and services along with the location in which business is conducted. In this way, the application of the rules is both personal and local. ART allows companies to determine which regulations apply by asking simple,

straight-forward business questions. Based on the answers to these questions, ART provides a list of applicable and supplemental regulatory requirements. The information is supplied in a consistent, consolidated format, with an understanding of why the requirement must be addressed. In addition to the summarized information, EH&S specialists are provided with links to the actual regulation and other citations for more information.

The result is a regulatory register that allows companies to proactively manage regulations based on a solid understanding of which regulations apply to their unique circumstances. With this information, companies know where to focus their limited EH&S resources. This enables them to make good business decisions focused on what they need to comply with, and which regulations are not applicable that would distract attention and add additional, unnecessary expense. Companies are frequently just as surprised by both the regulations that are not important as those that are. For example, companies may face regulatory demands from non-core parts of their business including cafeteria

operations, laboratories or power generation. ART also allows companies to augment these regulations with supplemental requirements such as corporate standards or requirements so that all needs are managed in a central location and with a common process.

Building a Management System to Ensure Compliance

The regulatory register sets the foundation for mitigating risk and improving environmental health and safety performance. The next step is to define how to address the requirements. ART helps companies identify what compliance actions must be taken in order to comply. These actions may include obtaining permits, training, fees, data gathering, reporting, or other stipulations. Compliance actions, called “Detailed Requirements” in ART, are tied to the individual applicable requirements in the requirements register. The result is a compliance matrix that ties requirements with how they need to be addressed, including tasks, controls, responsibilities, and frequency. The matrix also documents what evidence of compliance must be recorded.

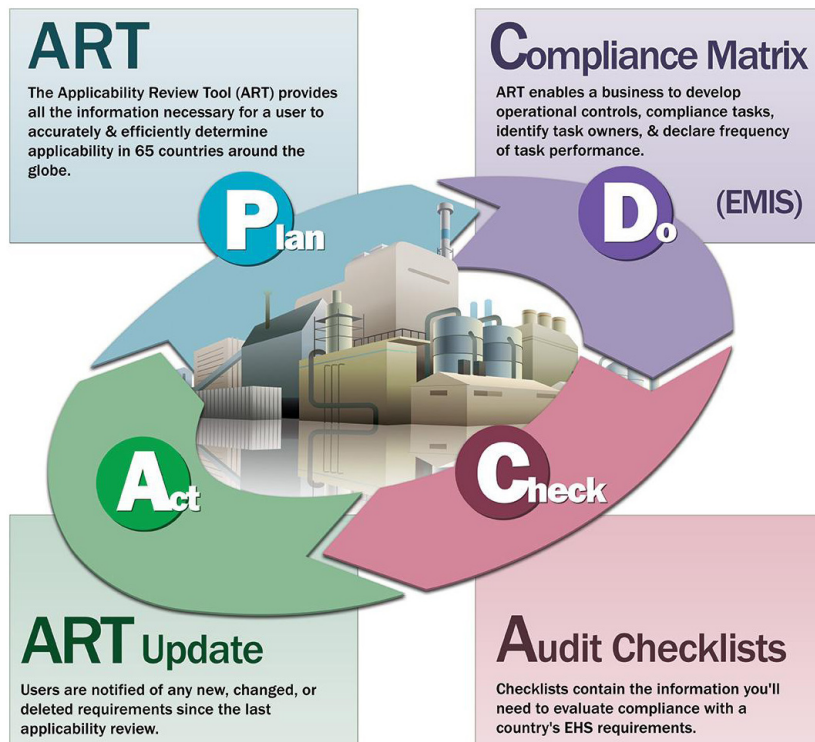


Figure 2: Citation Technologies' Plan-Do-Check-Act cycle can bring an organization closer to the goal of EH&S compliance

The compliance matrix is the basis of a management and control system that ensures compliance and safety at optimal cost. This information can also be used to develop compliance checklists to manage daily operations. The matrix can be integrated with execution tools to manage adherence and automate compliance at the point where issues can occur. Perhaps more importantly, the requirements can be incorporated into upstream design and development processes and systems to ensure they are addressed early on, preventing late, expensive process changes or (in the worst case) product line shutdowns.

Managing Change

Change is inevitable. Regulations change, processes change, and products change. Regulations evolve rapidly, for example, to place increased focus on air quality and global warming. Another example of change is when countries bring local regulations up to EU standards. In addition, individual regulatory bodies focus on local issues of importance such as hazardous substance handling in Bavaria Germany and greenhouse gas emissions in Brazil. This, according to the ART database, results in 17% of regulations (on average) changing annually in a meaningful way.

The management system is only as good as the accuracy and currency of the applicability register and the compliance matrix. Companies must be able to quickly analyze changes and determine which are applicable and which are not. Sometimes a change has no impact, such as correcting spelling errors. Other times, the changes don't apply based on geography or types of operation. As with the initial requirements register, companies need to understand potential impacts based on their company and where they operate and be able to act on only those that apply.

ART leverages the same network of local EH&S experts to evaluate changes and determine their impact. The information is provided in a net change fashion, highlighting what has been added, changed,

or repealed, so appropriate actions can be taken. The changed requirement can be reviewed because it is tied back to the regulatory register and compliance matrix. In this way, companies can keep EH&S activities current on a continuous basis.

Streamlining Audits

Regulatory compliance must be reliable, supportable and stand up to regulatory audits. With an up-to-date applicability register and compliance matrix, companies can provide regulators with lists of regulations and how they apply by site, along with tailored rationale statements that help explain the applicability decisions that are taken. This demonstrates to auditors that the company has a process and is in control and ahead of requirements. This helps to ensure audits are passed. Focusing only on what applies helps make audits efficient and mitigates lengthy (and costly) audit processes. ART has been shown to reduce the cost of audits by 50% or more.

Summing it all Up – Enabling Compliance

Organizations need a high-quality, comprehensive process that enables them to efficiently manage environmental, health and safety. Effective compliance is best enabled with a tool that allows company personnel to transform reams of confusing and complex EH&S regulatory data into a user-friendly format and put expert-driven regulatory analysis into action.

The following chart details some of the most compelling features that organizations can embrace to enable their compliance strategy and foster high-quality, informed applicability decision making. Company’s should evaluate their own processes and systems, and ask whether they are able to do the following:

Applicability Review	
Subject Matter Experts (SME) and facility stakeholders designations	✓
Single site or multiple site evaluation	✓
Activities, products, and services representation	✓
Company policies, standards, or other supplementary requirements incorporation	✓
Easy to understand conditions based applicability questions	✓
Prepared regulatory summaries	✓
Guide Notes with official definitions	✓
Links to full-text laws, regulations and supplemental requirements	✓
Ability to enter Rationale Statements	✓
Applicability Register	
Applicable Requirements Register	✓
Positive and negative applicability determinations including who made the decision on what applies and the reason	✓
Registries of legal & other requirements to satisfy ISO-style EH&S management systems	✓
Compliance Matrix	
High Level Compliance Requirements Matrix	✓
3 rd Party EMIS integration capability	✓
Management of Change	
ART Update - Notification of new, changed or repealed laws and regulations	✓
High level MoC Compliance Requirements Matrix	✓
Expertise and Value-Added Services	
Personnel like certified facilitators are available to assist in implementing compliance assurance systems	✓

Figure 3: Capabilities of a best-in-class regulatory applicability review tool

Conclusion

EH&S has an opportunity to provide greater value to the business and become more strategic by preventing rework and getting compliance right the first time. Effective EH&S requires a strong foundation of regulatory requirement knowledge. ART provides a systematic, efficient way to understand which regulations must be addressed based on straight-forward business questions. ART provides exceptional value by leveraging a network of experts so each company doesn't have to identify and interpret regulations, and helps keep the information current as regulations change. As a result, ART helps companies develop compliance assurance programs based on a compliance matrix that ties regulations to the appropriate actions, and sets companies up for efficient audits with positive outcomes.

Effective EH&S keeps companies out of regulatory trouble, saving them from fines, fees, and prosecution. It also helps protect top-line revenue by protection company reputation and access to markets. IHS has the tools and expertise, including Citation Technologies' ART, to help companies reduce risk and protect top line revenue at optimal cost.

About IHS Inc.

IHS (NYSE: IHS) is a leading source of information and insight in pivotal areas that shape today's business landscape: energy, economics, geopolitical risk, sustainability and supply chain management. Businesses and governments around the globe rely on the comprehensive content, expert independent analysis and flexible delivery methods of IHS to make high-impact decisions and develop strategies with speed and confidence. IHS has been in business since 1959 and became a publicly traded company on the New York Stock Exchange in 2005. Headquartered in Englewood, Colorado, USA, IHS employs more than 4,200 people in more than 30 countries around the world.

About Citation Technologies Inc.

Citation Technologies Inc. is a world leader in environmental, health and safety (EH&S) compliance management solutions driving operational excellence, business sustainability and improved decision making for executives. For nearly 20 years, Citation has helped the EH&S industry comply with the ever-changing regulatory landscape. About Citation Technologies Today, Citation's products go beyond compliance -- they help manage risk, and they do it for many industries around the world.

IHS White Paper

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