

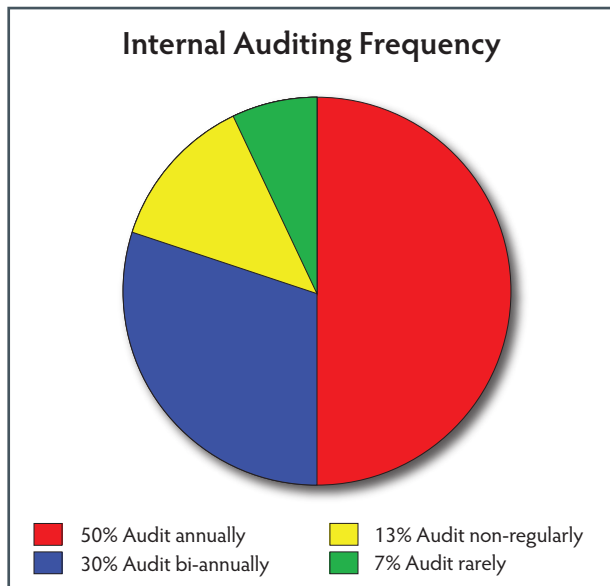
> Benchmarking Study Results

EH&S Auditing Benchmarking Study

Trinity Consultants recently conducted a survey to gain insight into EH&S auditing practices among industrial companies. EH&S professionals were invited to participate and no incentive was provided other than the opportunity to receive this summary report of the results. The representative sampling resulted in more than 100 responses from a cross-section of industries, including building products, automotive, oil & gas, chemicals, forest products, aerospace, pipelines, agriculture, electricity, and general manufacturing. A summary of responses to each of the survey questions is provided below, along with associated best practices for effective auditing programs.

Internal EH&S Audits

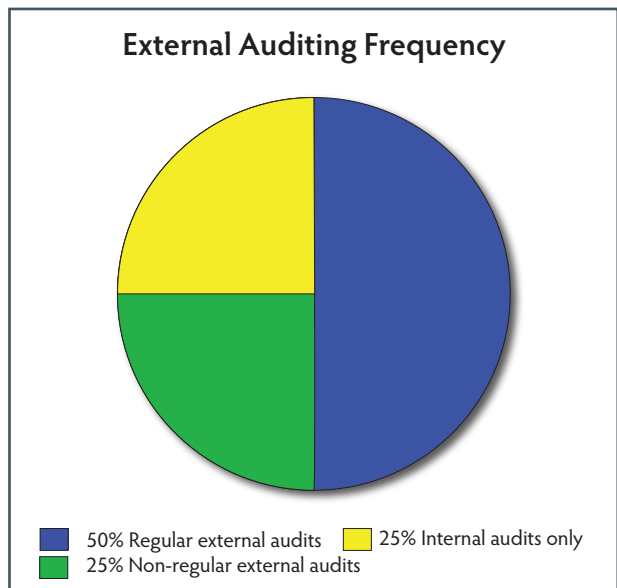
Survey Result: Over 80% of responding companies conduct internal EH&S audits regularly and over 50% conduct internal EH&S audits annually. Less than 7% of companies rarely or never conduct internal EH&S audits.



Best Practice: Internal audits are widely used to assess compliance in between external audits. Proper internal auditing frequency depends on several factors. These include the nature of the processes, the volume and hazardous nature of the materials used, the risk and severity of potential system failures, and the training and experience of the personnel involved.

External EH&S Audits

Survey Result: Three quarters of responding companies use some external (third party) resources in their auditing programs. Half of responding companies conduct external (third party) EH&S audits on a regular basis.



Best Practice: External auditors can bring a non-biased view to the auditing process. They can often shed light on issues that internal auditors might miss because they are too involved with the site activities or lack knowledge of regulatory requirements. Because external auditors are constantly auditing various sites, their experience is not only current and in-depth but broadly based. They are likely to be more comprehensive and thorough in their investigation without the interruptions that daily events can bring. They bring “fresh eyes” to the audit that can be invaluable in identifying problematic issues.

Auditing Frequency

Survey Result: One third of responding companies audit every facility annually. More than half audit a sampling of their facilities annually.

Best Practice: An auditing program should consider the number of facilities, similarity of operations at each facility, and the environmental risks associated with the operations. If each of the company's facilities has very similar operations, it is easier to apply corrective actions across all sites. When operations vary greatly between facilities, it is more challenging to identify common issues. Companies with more diverse operations may need to audit more sites in a given time frame. Companies with similar operations at each facility may be able to audit a sampling of the sites and apply the results company wide.

Environmental risk should also be considered. Sites that have had historical problems or that would cause greater harm if operations were improper may need to be audited more frequently. Sites with lower emissions, less dangerous materials, and lower volumes may be audited less frequently. Also sites in populated or environmentally sensitive areas may warrant more frequent audits.

A third consideration is regulatory intensity for the industry. Certain industries (e.g., chemical industry, refineries, etc.) are more heavily regulated and experience frequent rule changes. Companies in these industries should consider auditing more often to ensure compliance with frequently changing regulations.



Types of Auditing Programs

Survey Result:

Compliance Audits - More than 60% of responding companies conduct environmental regulatory compliance audits; over 50% conduct health & safety regulatory compliance audits; and approximately 40% conduct combined environmental and health & safety regulatory compliance audits.

Systems Audits - In addition to compliance audits, approximately 40% of responding companies conduct environmental management systems audits and 20% conduct health & safety management systems audits.

Best Practice: For many facilities it can be efficient and effective to perform environmental and health & safety audits at the same time. The benefit of integrating these audits is that the facility operations are less frequently interrupted. For more complex facilities, separate, more focused audits may be preferable. The choice can depend on the organization's culture and available resources. While integrated audits can be more efficient and proportionally less costly overall, they do require a more concentrated commitment of time and resources to do them well.

Who does the Internal Audits?

Survey Result: About half of the sites doing internal audits use a combination of plant and corporate staff to conduct audits. The other half use exclusively plant level staff or exclusively corporate staff to conduct audits.

Best Practice: When plant level staff is utilized, it is an effective technique to use auditors from similar facilities to avoid any conflicts of interest. It may be beneficial to have corporate staff participate as they will provide a higher level review of the requirements while plant level staff will be more focused on the day to day requirements.

Compliance Auditing Tools

Survey Result: Approximately 50% of all responding companies have developed standardized corporate checklists for conducting audits. Less than 25% of responding companies utilized external software in conducting compliance audits.

Best Practice: One advantage of external software is that it typically provides links to the latest rules and regulations, although it can be challenging to use and auditors should be trained to use it effectively. Prepared checklists are often successful alternatives to software, especially for new or inexperienced auditors that may not have up-to-date knowledge of regulations. However, checklists may not produce the in depth interaction needed to drive results as there can be a tendency to focus on the specific wording of the checklist questions, sometimes overlooking the real world situation that the questions are trying to address.

Auditor Training

Survey Result: Approximately one half of responding companies use internal resources to provide internal auditor training. Approximately one third use external trainers to provide internal auditor training. Less than 15% of responding companies train their auditors at an off-site location. Approximately 40% of companies have no formal training program for their internal auditors.

Best Practice: This is one area where relying fully on internal resources may be ineffective. Internal training of auditors can be efficient but may be limited due to personnel knowledge that is incomplete or outdated. External training can add to the quality of training; however, for ultimate effectiveness, it must also include practical application. Like most skills, auditing is best learned when practiced routinely and often.

Audit Findings Resolution

Survey Result: Four out of five companies have a formal corrective and preventive action system to resolve audit findings.

Best Practice: The value of an audit is to not only identify areas that need improvement, but to implement necessary changes to improve processes. Existing problems can be repaired and future problems can be prevented by taking actions on root causes of audit findings.

Audit Protection

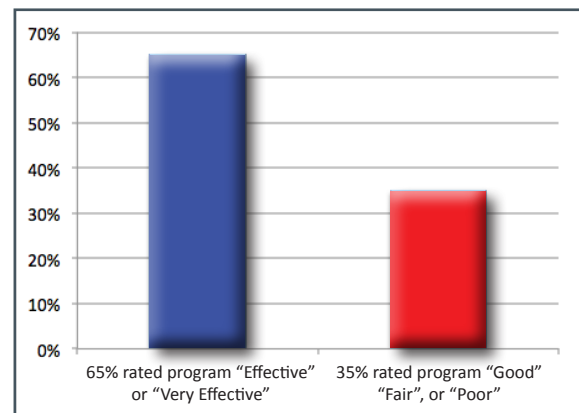
Survey Result: More than half of responding companies conduct regulatory compliance audits under Attorney-Client Privilege, with the majority of those using internal versus external legal counsel.

Best Practice: EPA and many state agencies have audit privilege programs available. In addition, audits can be performed under Attorney-Client Privilege conditions to limit discovery. Prior to performing an audit, each company should consider available audit privilege programs and discuss privilege with their attorney to see if they may be of value. For example, EPA's audit privilege program is EPA policy but is not a requirement. EPA

has discretion whether to apply the policy and different EPA regions may apply it in varying ways. EPA and state programs often have strict requirements regarding how audit results must be handled in order to claim the privilege. However, potential regulatory fines associated with regulated discrepancies can often be reduced or eliminated entirely if audit findings are handled properly. Performing audits under Attorney-Client Privilege can provide substantial protection from discovery by EPA and state agencies and offer the ability to find and correct problems proactively.

Audit Program Effectiveness

Survey Result: 65% of companies that responded to the survey rated their audit program as "Effective" or "Very Effective"; 35% rated their programs "Good," "Fair," or "Poor."



Best Practice: A strong auditing program reduces risk for the company and promotes a culture of continuous improvement.

Trinity's auditing team is available to advise on auditing practices and to assist with external audits. For questions or more information, contact your local Trinity office at (800) 229-6655 or trinityconsultants.com.

