

## **Auditing Your Ergonomics Process: A Key Strategy to Ensure Success and Sustainability**

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### **Introduction**

A key component of an effective and sustainable safety management system is regular audits or reviews to ensure the process of managing safety is on track and effective. This is part of the Checking and Corrective Action element of the management system. This same practice, process audit or review, is a critical part of an effective and efficient ergonomics improvement process, as validated through a recent (Q4 2009) benchmarking study conducted by Humantech.

A comprehensive and objective audit or process review is critical for sustaining and strengthening a site's or company's ergonomics improvement process, engaging management support and leadership, and ensuring accountability of all involved. A common challenge within many organizations is how to conduct the audit, best use the results, and promote improvement.

This session will review the purpose, value, and application of an audit or Ergonomics Process Review in support of an ergonomics improvement process. It focuses on elements of the ergonomics process but is transferable to other elements of EHS management systems. The goal is to share proven and effective auditing and interview methods to allow organizations to successfully and objectively audit/review their own process or program.

### **What Is An Audit?**

Say the word *audit* to most people and their initial reaction is to associate it with an unpleasant experience. Audits are a regular and necessary activity to help sustain and effectively manage businesses. Most people have experienced some form of the "A word," for example, tax audit, financial audit, compliance audit, corporate audit, quality audit, or EHS program audit, to name a few.

An audit is best defined as a systematic appraisal of procedures and operations for the purpose of determining conformity with prescribed criteria. Within the terms of safety management systems, this is also called a *process review*. An audit or review varies from an inspection in several ways; the greatest difference is that an audit requires collection and documentation of competent and sufficient supporting information. In simple terms, an audit

requires a deeper evaluation of programs and program documents to verify findings. This difference is one of the primary reasons an audit or process review can greatly benefit the organization being audited.

Although there are many types of audits, this presentation focuses specifically on EHS management system audit/reviews as applied to one element of the system, the Ergonomics Process Review.

## **Why Audit?**

The need for, and desired outcome of, an Ergonomics Process Review varies with the two primary recipients: site leadership and corporate management. For an individual site or business unit being audited, their desired results usually are to

- Evaluate the status and progress of the site program relative to company standards/expectation
- Identify strengths and areas for improvement
- Receive recommendations and guidance for improvement
- Raise management awareness

At the corporate level of an organization (e.g., Operations, Facilities, Engineering, EHS, etc.), the most common desired outcomes are to

- Evaluate company-wide status of the company ergonomics initiative
- Provide top management a snapshot of issues and vulnerabilities
- Identify good practices to share across the company

Successful EHS/ergonomic audits are an evaluation of the site or business management team, not an evaluation of an individual department (e.g., EHS or Engineering), the process owner, or the ergonomics team. The EHS program and ergonomics process are elements of running a business, and their performance is the result of the team of people leading that business.

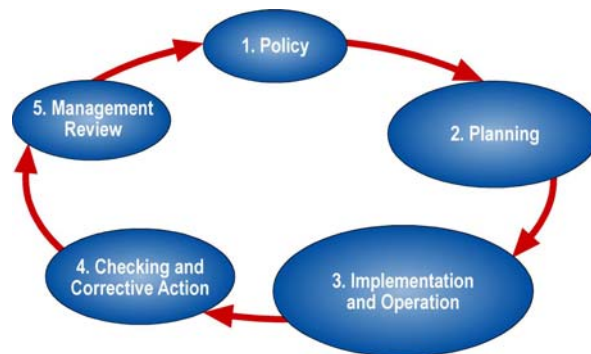
As an element of an EHS management system, the Ergonomics Process Review is an effective tool to evaluate, coach, and assist sites in developing and strengthening their own ergonomics process to ensure its effectiveness and sustainability.

## What to Audit

Any audit/review must be based on established, common, and understood expectations. For an Ergonomics Process Review, these expectations may be in one of several forms: requirements stated in a company ergonomics program standard or policy, company EHS/Engineering audit criteria (which should be based on standards), or they may be aligned with the ergonomics process model.

Traditionally, many companies have established internal EHS standards that meet or exceed regulations. Within these standards, many organizations develop specific expectations for ergonomics or an “Ergonomics Program.” Organizations with strong internal EHS audit programs develop their own audit criteria based on the standards to ensure consistency of auditors and evaluations. These internal references (standards and audit criteria) should be used if they exist and are current. It is Humantech's experience that prescriptive company ergonomics program standards drive well-meaning people to establish programs to meet the audit criteria, not to result in improved ergonomics. The word of warning here is to make sure your audit criteria reflect the *results* expected of the sites, not just the *activities*.

With the increasing adoption of EHS management systems by companies, the Ergonomics Process Review approach is increasing in use and effectiveness. ISO 14001, OHSAS 18001, and ANSI Z-10 are examples of environmental and safety management systems. Based on the model and elements of continuous improvement, they provide a framework from which to evaluate a whole integrated EHS program, or focus just on the process for managing ergonomic improvements.



**Exhibit 1. The EHS management system model provides a framework from which to evaluate an ergonomic improvement process.**

Applying the management system review approach to evaluating a site ergonomics process provides several advantages. First, it allows comparison with existing requirements of a company ergonomics program standard (as part of Policy). In addition, it allows evaluation and validation of the site's program to meet the local improvement goal and metrics established by site leadership or their own operations (as part of Planning). This allows the auditors to evaluate the site process based on the criteria (goals, measures, and plans) established by that site. This

intimacy of locally established expectations improves engagement, ownership, sponsorship, and accountability of site management.



**Exhibit 2. Applying the management system approach to evaluating a site ergonomics process provides several advantages.**

An alignment of the ergonomics process with the safety management system (ANSI/AIHA Z-10) has been recommended by the American Industrial Hygiene Association’s Ergonomics Committee (AIHA).

Whether you choose the company ergonomics program standard or the ergonomics process model as the basis of the audit criteria, the expectations must be clearly communicated to, and understood by, the key owners at each site.

## Whom to Audit

There are two "Who's" in an audit: the *auditors* and the *auditees*.

The individuals representing the site ergonomics process (the auditees) should be selected from those people responsible for each aspect of the site process. Typically, this includes the Management Team Sponsor, Ergonomics Process Lead/Manager, key Engineers, some members of the Ergonomics/Safety Team, Training, Medical, Facilities, and key line managers and supervisors. Each auditee provides insight and experience on a unique aspect of the ergonomics process. Collectively, they provide a comprehensive and integrated illustration of the current process for managing ergonomic improvements.

Auditors typically comprise a team of individuals. At a minimum, auditors must have a complete understanding of the audit criteria and expectations, be familiar and experienced with managing an ergonomics process (at both the strategic and the tactical levels), have proven and effective listening skills and interviewing skills, have demonstrated objective judgment, and be able to communicate effectively with people at all levels of an organization.

Auditors may be internal (to the company or site) or external. The ultimate in internal auditing is a self-audit. In a recent benchmarking study we learned that almost half of the participating companies depended on individual sites to complete self-audits of their own programs. Those same companies indicated that the value and validity of these self-audits were questionable. One person described the self audits as a “pencil whipping” exercise. All participants stated the need for an “outside” auditor to conduct a validation audit.

Internal auditors are people within an organization. They may be peers from other sites or representatives from a corporate organization. The people are key to an audit team, bringing intimate knowledge and familiarity of company expectations and best practices applied at other sites, and they provide comparison among different areas within the organization. An increasingly common practice (with 25% of benchmarked companies) is to engage an auditor who is external to the company. External auditors were valued because they “provide an outside set of eyes and perspective.”

## How to Audit

Numerous books and references on auditing methods and techniques are available. Ultimately, most organizations develop their own sequence or process and format for conducting audits. Most sequences include three steps: preparation, on-site visit, and follow-up or report writing.



**Exhibit 3. The audit process typically involves preparation, an on-site visit, and a written report of the findings and recommendations.**

Prior to the on-site audit, the site should be provided with the audit criteria, a recommended agenda including the roles of individuals who should be interviewed, and a request for program information the audit team can review prior to the audit. Prework by the audit team to review program documents and to understand the site business and organizational structure all help

orient them to better optimize their time on site. It reduces the learning curve about the site operations, enabling the auditors to “hit the ground running.”

The on-site visit typically starts with a tour to familiarize the audit team with the layout of the site, an opening conference to introduce all involved and provide an overview of the audit process and purpose, and general discussions about the site ergonomics process. The auditing activities include three methods of investigation and verification:

- Interviews with key people involved with the ergonomics process
- Observation of the workplace to see workstation challenges and improvements
- Review of documentation and records to verify ergonomics process elements

After completing all scheduled interviews, the auditors typically review their initial findings with the key site contact. In addition to being a courtesy, this is a means for confirming the general findings.

Following the on-site visit, the auditors compile their findings into a written report of record. This report of record serves two purposes: to document the findings (strengths, opportunities for improvement, and recommendations) and to communicate the recommendations to the site. Many companies with EHS audit programs include scoring and/or share the report of record with the CEO, President, and other top leaders. This is an effective method for ensuring accountability of plant and business unit leaders. After all, the EHS/ergonomics process is ultimately their responsibility.

On a personal level, experienced auditors learn and develop their own style and techniques for auditing. The two most critical skills are *interviewing* and *listening*. Each individual interview involves four steps:

1. Planning: Know who you are interviewing and the information you want to explore.
2. Opening: Introduce yourself, establish rapport, and address any questions.
3. Conducting: Gather the specific information, confirm findings, and give feedback. This is where interviewing and listening skills are most important.
4. Closing: End on a positive note.

Most of the meeting time should be spent on step 3, conducting the interview. This meeting may be with one person (e.g., Management Sponsor) or several people (e.g., ergonomics team members). This is the step in which the strong interviewing and good, active listening skills are used to probe and learn about specific elements of the site ergonomics process.

- Interviewing: The key is to ask open questions.
- Listening: The key is to not talk. Just listen

## **When to Audit**

Since Ergonomics Process Reviews are a systematic evaluation of an improvement process or management system, they should not be conducted until the site has history and results of their own process. Typically, an initial Ergonomics Process Review should be conducted 6 months after launching the site process. This initial review can be used as an introduction to the review process, and to provide an initial reference point and coaching for the site.

Ongoing process reviews should be conducted at a regular, established interval. For successful and mature ergonomics processes (i.e., they “meet” all criteria), an interval of 1½ to 2 years is appropriate. For new or challenged site processes (i.e., they received “does not meet” rating on several criteria), an interval of once per year is appropriate.

## **Using the Results**

Within the safety management system model, the results of a review conducted as part of the Checking and Corrective Action step is followed by the Management Review step. Following this approach, the results of the Ergonomics Process Review should be discussed and understood by site leadership and used to revise and refine plans to improve the effectiveness and efficiency of the improvement process. An effective audit report will provide them with a clear explanation of process gaps, opportunities, and recommendations of strategies and tactical steps to address the gaps. Remember, the primary purpose of the Ergonomics Process Review is to help sites improve.

In addition, the program strengths and examples can be used to recognize and reinforce the results achieved by individuals and teams involved in supporting the ergonomics process. This is a great opportunity to market the findings of auditors in order to promote and make the site process visible to others. Newsletters, "all-hands" meetings, and bulletin board postings are simple but effective ways to recognize the accomplishments of the site process and the contributions of individuals.

Many progressive companies include the results of EHS program audits as selection criteria for internal leadership awards (for example, The President’s Quality Award, Leadership Award, etc.).

## **Conclusions**

A wise person once said “What gets measured gets done.” An even wiser manager added “What gets measured and tracked gets done quickly.” Checking, or tracking, is a key element and critical step of any ongoing improvement process or management system. It ensures progress to a goal, ownership and accountability of people, and it helps to sustain the ongoing effectiveness of the process. When managed as an improvement process, workplace ergonomics can add value to an organization's bottom line. However, activities must be tracked and monitored, and the results must be communicated. An Ergonomics Process Review has been proven to be an effective means to achieve this. Although focused on evaluating the process of managing ergonomic

improvements, EHS auditing systems and methods can be expanded to encompass occupational ergonomics.

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