ISO 45001
Occupational Health and Safety Management System

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Georgia Tech
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Partnership for a Sustainable Georgia

Coordinating federal and local technical assistance

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Region IV

United States Environmental Protection Agency

Georgia Tech

Georgia Manufacturing Extension Partnership

A unit of the Enterprise Innovation Institute
The GaMEP: Who We Are

Your Connection to Manufacturing Excellence

State- and federally-sponsored program with offices in 10 locations in Georgia.
Since 1960, our mission has been to help manufacturers *grow* and *stay competitive.*

**Solution-based approach** to help manufacturers **increase top line growth** and **decrease bottom line cost** in:

- Strategic Business Development
- Quality
- Lean / Process Improvement
- Sustainability
- ISO Management Systems
- Energy
Last year, the GaMEP partnered with 1,141 Georgia manufacturers, who achieved the following results:

- $128 million in reduced operating costs
- $286 million in new & retained sales
- 2335 jobs created or retained
Expertise includes helping Georgia manufacturers with:

- ISO 14001 Environmental Management Systems
- Environmental Regulatory Compliance
- Stormwater Pollution Prevention Planning
- Water/Wastewater Treatment

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ISO 45001 Occupational Health and Safety Management System

Learning Objectives

- Comprehend the management system of the Occupational Health and Safety programs.
- Define how the standard can help your plant manage Health and Safety while improving performance.
- Discuss current standard status.
What is an OH&S Management System?

- It is a coordinated and systematic approach to managing health and safety risks.
- OH&S Management Systems (OHSMSs) help organizations to continually improve their safety performance and compliance to health and safety legislation and standards.
- OHSMSs establishes safer working environments that protect people at work by eliminating, or better managing, health and safety hazards.
- POLL
What are the Management System Components?

- System objectives (for OHSMS these may be ethical, economic, legal and organizational)
- **Specification of system elements and their interaction.**
- Determining the connection of the OHSMS to other systems (including the general management system and the regulatory system)
- Requirements for system maintenance.
What Management System are out there?

- The United States Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP)
- The Canadian version, CAN/CSAZ1000-14 Occupational health and safety management.
- The OHSAS 18001 Occupational Health and Safety Management standard
- The forthcoming ISO/DIS 45001 Occupational, health and safety management systems standard.
What is OHSAS 18001?

- The Occupational Health and Safety Assessment Series is an international standard giving requirements related to Health and Safety Management Systems.

- OHSAS 18001 enables an organization to have control over, and knowledge of, all relevant hazards resulting from normal operations and abnormal situations, and improve its performance.
OHSAS 18001 overtime

1999
OHSAS 18001:1999
 specification published

2007
Revised OHSAS 18001:2007
 published

2014-2017
OHSAS 18001 transitions to
ISO 45001
Overview of OHSAS 18001:2007 Requirements

- Management Review
- Measurement and Monitoring
- Evaluation of Compliance
- Incident Investigation, Nonconformity, CA and PA
- Control of Records
- Internal Audit

Plan
- General Requirements
- Policy

Act
- Hazard Identification, Risk Assessment and determining Control
- Legal
- Objectives

Check
- Resources
- Competence
- Communication and Participation
- Documentation
- Control of Documents
- Operational Control
- Emergency Preparedness and Response

Do
- Implementation and Operation
- Internal Audit

General Requirements
- Policy
- Objectives
- Risk Assessment and determining Control
- Legal
- Hazard Identification

Do
- Implementation and Operation
- Internal Audit

Act
- Hazard Identification, Risk Assessment and determining Control
- Legal
- Objectives
Structure

- OHS Policy
- Communication
- Training
- Document and Control
- Resources

1. Hazards Identification-Risks Associated-Determining Controls
2. Legal and Other Requirements
   Evaluation of Compliance
3. OHS Objectives
   Programs
4. Operational Controls
   Measurements and Monitoring
5. Emergencies Preparedness and Response
6. Incident Investigation
   Nonconformities-CA/PA
7. Internal Audit
8. Management Review
   Adequacy, Suitability and Effectiveness
Does it work?

Organizations are continuously making safety and health changes in the workplace. When changes are made, both employers and employees want to make sure they really work. Was the change an improvement?, What were the results?. Next are some of the expected outputs most organizations use:

• Reduce employee Injury and Illness
• Reduce absenteeism
• Reduce workers’ compensation costs and/or rates.
• Increase productivity
• Improve safe work practices
• Increase employee satisfaction
<table>
<thead>
<tr>
<th>Case Study 1:</th>
<th># of Back injuries reported</th>
<th>Workers’ compensation costs ($)</th>
<th>Tasks Activities</th>
<th>Most affected personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventing Back Injuries in Nursing homes</td>
<td>50/year</td>
<td>165,000 year</td>
<td>Transferring residents</td>
<td>Nursing aides and orderlies</td>
</tr>
<tr>
<td>After 2 years of acquiring lifting equipment</td>
<td>25/year</td>
<td>60,000 year</td>
<td>Not at all heavy</td>
<td>Heavily involved in the determining control process</td>
</tr>
</tbody>
</table>
## Case Studies

<table>
<thead>
<tr>
<th>Case Study 2:</th>
<th># Recordable Cases</th>
<th>Workers’ compensation costs ($)</th>
<th>Tasks Activities</th>
<th>Most affected personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing Strains in Meat processing</td>
<td>15.7 Per 100 full time workers per year</td>
<td>NA</td>
<td>Meat Cutting Wrapping Packaging</td>
<td>Hourly personnel</td>
</tr>
<tr>
<td>After 2 years of work station/work methods/job rotation</td>
<td>6.8 Per 100 full time workers per year</td>
<td>NA</td>
<td>Weekly brainstorming sessions</td>
<td></td>
</tr>
</tbody>
</table>
What did you think about the case studies?
Suggested Reading…

1. National Institute for Occupational Safety and Health, NIOSH


3. Center for Disease Control and Prevention, Workplace Safety and Health.
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- Expertise includes helping Georgia manufacturers with:
  - ISO Management Systems
    - ISO 9001
    - ISO 14001
    - ISO 50001
  - Implementation, internal audits, training
  - Product design (stagegate, etc.)
STATUS OF ISO PC 283
ISO 45001
Work Done: Toronto, Denmark & Lithuania, Vienna

- Dispositioned Comments for:
  - Clauses 4, 5, 6, 8
  - Partial Clauses 7, 9, 10
  - Introduction and Scope, 7.2 (competence), 10.1 d); 10.2.2, Annex
  - In Part: Terms and definitions; 7.0, 7.4.1; Note 2 to 7.5.3; Information and communication (remove ‘information’?); 10.1 (root cause)
Observations: DIS Meetings to Date (3)

- US interpretations of the standard differ from other countries.
  - Engagement of workers – what is the appropriate level
  - Definition of Workers
  - Eliminate hazards
  - Importance of the Annex in clarifying the intent of requirements
- Reduce Redundancy (5.4 aggregated – 23 times)
- Prescriptive vs MSS intent (Continues as a significant issue)
- SME friendly (remains a challenge);
- OH&S Risk vs Risk (Risks and Opportunities def. and use in Clause 6)
5.1 – Culture – US Issue -not defined or auditable

Meeting Outcome: No definition; US Comment not accepted; auditable?; WG1 straw poll- OH&S culture.

5.1 Leadership and commitment

- Top management shall demonstrate leadership and commitment with respect to (US comment- “a culture that supports”) the OH&S management system by:
  - j) developing, leading and promoting an occupational health and safety culture in the organization that supports the intended outcomes of the OH&S management system;
  - k) protecting workers from reprisals when reporting incidents, hazards, risks and opportunities;

10.2 Continual improvement

- b) promote a culture that supports an OH&S management system. (US wording for 5.1) c) promote a positive occupational health and safety culture;
5.4 – Consultation and Participation of workers and consultation

- The organization shall establish, implement and maintain process(es) for consultation and participation (including consultation) of workers at all applicable levels and functions, and where they exist, workers’ representatives in the development, planning, implementation, performance evaluation and actions for improvement of the OH&S management system by workers at all applicable levels and functions and where they exist, workers’ representatives.

  **US SUSTAINED OPPOSITION**

- e) give additional emphasis to emphasize the consultation inclusion of non-managerial workers, in consultation related to the following:
  2) establishing the **OH&S** policy (see 5.2); (Significant issue – workers include non-employees)
1 Scope
5.2 policy
5.3 assignment of roles and responsibilities at all levels
6.1.1 processes and actions needed to determine and address its hazards and opportunities to the extent necessary to have confidence…
6.1.2.2 methodologies and criteria for risk assessment
6.1.3 information on legal requirements and other requirements, okay
6.2.2 information on objectives and plans to achieve them
7.2 information on evidence of competence
7.4.1 information as evidence of communications, as appropriate
7.5.1 C as requested by legal requirements
8.1.1 information to the extent necessary to have confidence that the process is carried out
8.6 information on processes and on plans for responding to potential emergency situations
9.1.1 information as evidence of the monitoring, measurement, analysis and evaluation results. Records of maintenance, calibration or verification of measurement of equipment shall be retained.
9.1.2 retain documented information of the compliance evaluation results
9.2.2 information has evidence of the implementation of the audit program and the audit results
9.3 information as evidence of the results of management reviews
10.1 information has evidence of: the nature of incidents for nonconformities and any subsequent actions taken, the results of any corrective action, including the effectiveness of the actions taken. The organization shall communicate this documented information to relevant workers, where they exist, workers representatives, and relevant interested parties.
10.2.2 information as evidence of the results of continual improvement
3.3 Worker (definition)
Note 3 to entry: The work or work-related activities performed under the control of the organization may be performed by workers employed by the organization, or other persons, including workers from external providers, contractors, individuals, and situations where the organization has some degree of control over the work or work-related activities performed by workers such as agency workers. (contradicts the definition)
DIS 2 New Requirements

- **3.4 participation**
  involvement of workers (3.3) in decision-making processes in the OH&S management system (3.11)

- **5.4 d) participation of non-managerial workers in the following:**

  3) actions to eliminate hazards and reduce OH&S control hazards and risks (see 6.1.4); (HOC)
  5) determining the information that needs to be communicated and how this should shall be done 723 (see 7.4);
DIS 2 New Requirements

- Addition of Top Management responsibility to protect workers from reprisals
- Policy commitment to eliminate hazards and reduce OH&S risks. Elimination of hazards is first choice but only one means for reducing risk. (requirement replaces HOC)
DIS 2 New Requirements

- Requirement for Top management (shall) to support the establishment and effective functioning of workers safety delegates, workers’ safety and health committees, and joint safety and health committees. (5.1 & 5.3)

- Emphasis on workers determining what needs to be communicated and how it’s done

- Workers assigning roles, responsibilities (5.3) in light of the broad definition of workers

- MOC requirements include working conditions and workforce (directive-‘how to”)
Thank you for attending today’s webinar:

Occupational Health and Safety

Questions?

Visit the GaMEP online discussion forum at

www.gamep.org/forums

Or contact Sandra Enciso

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Next webinar: April 21 Finding Energy savings within your plant