ISO 14001 EMS and OHSAS 18001 OH&S Programs – Development, Benefits and Incentives

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This Session

- ISO 14001 EMS and OHSAS 18001
  H&S Programs - Overview and Requirements
- Steps to Develop Your Own Programs
- Benefits and Incentives of Programs
- Challenges and Hurdles
ISO 14001 EMS and OHSAS 18001 H&S Programs – Overview and Requirements
ISO 14001 EMS

**Acronyms**

- ISO = International Organization for Standardization
OHSAS 18001 H&S

- **OHSAS 18001:2007; Occupational health and safety management systems - Requirements**
  - Became Standard in 2007
    - most recent version
  - Aligned with ISO 14001 standard sections.
  - Occupational, Health and Safety Assessment Series
  - Standard for Occupational, Health & Safety Risk.
  - Standard, but not an “International Standard” at this time.

Integrated Management Systems

- IMS or EHSMS = Integrated Management System or Environmental Health & Safety Management System
  - May include both ISO 14001 EMS and OHSAS 18001 H&S Programs, (and sometimes ISO 9000 Quality).
Purpose -
ISO 14001 EMS and OHSAS 18001 H&S

- Written generally so they are applicable to all types and sizes of organizations.
- To assist organizations in the establishment and achievement of sound EHS goals.
- To provide organizations with a practical EHS Management System model that can be integrated with existing management systems.
- Intended to focus on EHS elements that an organization can reasonably be expected to control.
- Not intended to increase or change the legal obligations of organizations.
Continual Improvement

EHS Policy

Planning
- Environmental aspects
- HIRARC (Hazard ID Risk Assessment and Risk Control)
- Legal & other requirements
- Objectives & targets
- EHS management program

Implementation & Operation
- Structure & responsibility
- Training, awareness & competence
- Communication
- EHSMS Documentation
- Document control
- Operational control
- Emergency preparedness and response

Management Review

Checking & Corrective Action
- Monitoring & measurement
- Non-conformance, corrective & preventative action
- Records
- EHSMS audit
Basic Elements -
ISO 14001 EMS and OHSAS 18001 H&S

- General Requirements
- Environmental Policy, OH&S Policy
- Planning
  - Environmental Aspects (EMS)
  - Hazard Identification, Risk Assessment, Controls (H&S)
  - Legal and Other Requirements
  - Objectives (Targets) and Programs
Basic Elements -
ISO 14001 EMS and OHSAS 18001 H&S

- Implementation and Operation
  - Resources, Roles, Responsibility, (Accountability) and Authority
  - Competence, Training and Awareness
  - Communication, (Participation and Consultation)
  - Documentation
  - Control of Documents
  - Operational Control
  - Emergency Preparedness and Response
Basic Elements -
ISO 14001 EMS and OHSAS 18001 H&S

- Checking
  - Performance Measurement and Monitoring
  - Evaluation of Compliance
  - Incident Investigation (H&S)
  - Nonconformity, Corrective and Preventive Action
  - Control of Records
  - Internal Audit
  - Management Review
Common Principles –
Quality Management Systems (ISO 9001 or others)

- Roles/Responsibilities
- Competence Training and Awareness
- Communication
- Documentation
- Document Control
- Monitoring and Measurement
- Nonconformance, Corrective and Preventive Action
- Records
- Internal Audit
- Management Review

Approx. 50% of programs - DUPLICATED.
ISO 14001 EMS Overview

- **EMS**
  - System to implement an organization’s environmental policy and manage its environmental aspects.

- **Environment**
  - Surroundings in which an organization operates (air, water, land, natural resources, flora/fauna, humans and their interrelation…)

- **Environmental Aspect**
  - Element of an organization’s activities or products or services that can interact with the environment.

- **Environmental Impact**
  - Any change to the environment, whether negative or positive, in whole or partially resulting from an organization’s environmental aspects.

- **Significant Environmental Aspect/Impact**
  - A significant environmental aspect has or can have a significant environmental impact (environmental change).
  - Ranked, based on frequency and severity.
## ISO 14001 EMS Overview

<table>
<thead>
<tr>
<th>Activity/Product/Service</th>
<th>Aspect</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AST - Transfer of Material</td>
<td>Spills of hazardous materials during transfer from x into y. Leaks due to failure of tank.</td>
<td>Release to air, contamination of soil and/or stormwater, waste generation from spill cleanup</td>
</tr>
<tr>
<td>General Environmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste Reduction (Positive Aspect)</td>
<td>Corrugated cardboard recycling</td>
<td>Reduce landfill use, less pollution</td>
</tr>
</tbody>
</table>
OHSAS 18001 Overview

- **Hazard**
  - Source or situation with a potential for harm in terms of human injury or ill health, damage to property, damage to the workplace environment, or a combination of these.

- **Risk**
  - Combination of the likelihood and consequences of a specified hazardous event occurring.

- **Risk Assessment**
  - Overall process of estimating the magnitude of risk and deciding whether or not the risk is tolerable.

- **Hazard Identification, Risk Assessment and Risk Control = HIRARC**
  - Ranked based on frequency and severity
  - For those with High Risk, develop targets, objectives and management programs to reduce risk and develop controls.

- **Examples**
  - H&S – Chemical exposure, Pinch Points, Lifting Devices, Confined Space, Electrical
OHSAS 18001 Overview

- Pinch Points
- Lockout/Tagout
- Cut Hazard
- Slips/Trips hazard
Steps to Develop Your Own Programs
Steps

1) Getting Started (Scheduling, organizing)
   - Scope, Baseline Gap Analysis
2) Developing Programs
3) Internal Auditing and Training
4) Obtain Registrations
5) Maintaining Systems and Registrations
1) Getting Started

- **Initial Training/Overview for Management Team**

- **Determine Scope of programs**
  - Which programs going to develop, integrate, obtain Registrations?
  - How to approach certification for company with multiple facilities?
  - What operations are covered (e.g. off-site warehouses)?

- **Roles, Responsibilities, and Authority Clearly Defined, Documented and Communicated**
  - Ensure full Top Management support (from beginning to end)
  - Identify EHS Management Representative
  - Identify ISO 14001/OHSAS 18001 Program Team
1) Getting Started

- **Baseline Gap Analysis**
  - Internal Assessment of current programs, procedures, systems in relation to ISO 14001 and OHSAS 18001.
  - Include Recommendations to address findings.
  - Help to identify gaps in programs and level of effort and resources needed to get system ready for registration.
  - Includes:
    - ISO/OHSAS Element; Rating; Nonconformity
    - Recommended Corrective Action (CA) or Opportunity for Improvement (OFI)
2) Developing Programs

- Address Findings from Gap Analysis.
- Perform Aspect/Impact Analysis, Hazard Risk Identification and Control Analysis for all operations.
  - Include off-site and Positive aspects (P2).
  - Train key implementers in Hazard Identification, Risk Assessment, Risk Control (HIRARC), and Aspects Identification.
2) Developing Programs

- **EHSMS Documentation**
  - Model set of documents/Tiered approach
  - (Policy, Procedures, Work Instructions).
  - Document Control
  - Records Management

- **New Programs on Sig. Aspects**
  - Operational Control, Monitoring/Measuring
2) Developing Programs

● Program EMS/H&S Awareness Training for all employees, contractors…
  – Can include give-aways (make it fun!!)
  – Include policy, sig. Aspects/Impacts and high H&S risks, roles/resp.

● Detailed Training
  – Require more detailed training for personnel who’s work affects sig. Aspects/impacts and high H&S risks.
3) Internal Auditing and Training

• Identify Internal Auditing Team
• Team receives Internal Auditing Training by Lead Auditor (4-8 hrs)
• Perform Internal Audits
  – Work to address Corrective/Preventive Actions identified.
4) Obtain Registrations

- Identify and interview Registrar companies and registrars
  - Auditor Determines Conformance With Standards

- Certification Phases
  - Preassessment (optional)
  - Stage I
  - Stage II

- Receive Registrations
5) Maintain Registration

**Internal**
- Continue all programs, internal audits
- Document management
- If any changes or programs implemented that affect aspects/impacts and/or hazards/risks, update documentation.

**With Registrar**
- Yearly Surveillance Audits (6 or 12 mo)
- Three Year Full System Reassessment
Benefits and Incentives of Programs
Benefits –
ISO 14001 and OHSAS 18001 Programs

- Program requires all is documented, covered and coordinated for the future.
- Help solidify/strengthen existing Environmental and/or Health & Safety Policy.
- A way for organizations to do the right thing without the need for additional government regulations, involvement, intrusion.
Benefits –
ISO 14001 and OHSAS 18001 Programs

- Environmental management excellence
- Reduction in environmental compliance violations
- Increased complexity of the regulatory requirements.
- Reduction in health & safety hazards, risks = less injuries
Benefits & Incentives
ISO 14001 and OHSAS 18001 Programs

- USEPA Consent Orders
  - Many mandating EMS

- State EPA/DNR Incentive Programs
  - Less stringent with inspection frequency, and penalties
  - Many States with programs (see attachment)
  - Example: WDNR Green Tier Program
WI Green Tier Program

● Website:
  - http://dnr.wi.gov/topic/GreenTier/

● Information Provided
  - Application process guidance
    ● Tier I - EMS that meets WDNR criteria
    ● Tier II - EMS that is ISO 14001 Registered
  - EMS System Requirements
  - List of auditors and advisors
  - List of companies in the program
Green Tier
Advantage: Business
Advantage: Environment

Apply

to become a Green Tier participant.

See

Green Tier participants, applicants and charters.

Green Tier invites you to become part of the ideal state for growing a green bottom line. Together, we provide credible, creative ways to enable your business to be a powerful, sustainable force for environmental good and enhance your productivity, cut your costs and strengthen the health of your culture and community. Dynamic, forward thinking businesses and charter associations are benefiting from all the ideas, ideals and advantages of being a Green Tier participant.
Benefits – ISO 14001 and OHSAS 18001 Programs

● Presidential Directive
  – Governmental agencies to develop EMS.
    • Specific Sectors (DoD)
    • General Sectors (both public & private)

● OSHA VPP
  – Similar sections to OHSAS (employee part., hazard analysis…)
Benefits –
ISO 14001 and OHSAS 18001 Programs

● **Sustainability/Green Movement**
  - Corporate Sustainability Report (CSR)
  - Many actions taken w/in EMS coincide with GHG reduction, energy reduction, natural resource use reduction…
  - Customer expectations, perceived brand value, stakeholder/employee pressure
  - Responsible corporate reputation
  - Sales Opportunities
Challenges and Hurdles
Challenges and Hurdles

- Engaging Top Management and Team support throughout
  - Keeping the program going after Certification
  - Program should not be sole responsibility of EHS Manager or Corporate EHS.

- Set realistic timelines and appropriate resources
  - Depending on size of company/facility, realistic to set 6-12 month goals from beginning to end.
Challenges and Hurdles

- Developing a useful system that works within current systems, personnel and operational structure.
- Much easier to implement system if Quality system is in place.
  - Already have auditors identified/trained who can be used for these programs

A proven way to reduce costs, strengthen compliance, and improve operations.
Other ISO Standards

- ISO 31000 – Risk Management
- ISO 26000 – Social Responsibility
- ISO 50001 – Energy Management
Questions

Please feel free to contact me at any time with questions or to request example documents.

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