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# PURPOSE

This standard is one of five Environmental and Occupational Safety and Health management system (ESH MS) standards that constitute the ESH Management System for TI’s manufacturing sites.

# SCOPE

The provisions of this standard apply to all TI employees, suppliers, vendors, and visitors at TI manufacturing sites worldwide.

# reference documents

## TI SP&P 04-04-01 Environmental, Safety, Health

## TI SP&P 04-07-01 Records Retention

## ISO14001 International Standard on Environmental Management System

## ISO 45001 International Standard on Occupational Health and Safety Management System

## TI ESH Standard 20.10 ESH Roles & Responsibilities

# Definitions

[TI ESH Standards Glossary of Definitions](https://sps01.itg.ti.com/sites/wwf/esh/standards/Knowledge_Bank/Forms/AllItems.aspx)

[ISO 14001:2015 (Terms)](https://sps01.itg.ti.com/sites/wwf/esh/standards/Knowledge_Bank/Forms/AllItems.aspx)

[ISO 45001:2018 (Terms)](https://sps01.itg.ti.com/sites/wwf/esh/standards/Knowledge_Bank/Forms/AllItems.aspx)

# RequirementS

## General Actions to Address Risks and Opportunities

### When planning for the ESH MS, sites shall establish, implement and maintain a documented process for the assessment of Risks and Opportunities related to:

#### Environmental aspects and impacts; significant environmental aspects can result in risks and opportunities associated with either adverse environmental impacts (threats) or beneficial environmental impacts (opportunities).

#### Occupational safety and health hazards taking into account effectiveness of controls;

#### Opportunities to enhance OH&S performance, while taking into account planned changes to the site, its policies, its processes or activities and:

##### Opportunities to adapt work site and work environment to workers;

##### Opportunities to eliminate hazards and reduce OH&S risks;

#### Compliance obligations;

#### Other issues and requirements such as:

##### External and internal context issues;

##### Expectations and needs of interested parties;

##### Scope of the ESH MS;

##### Continual improvement considerations.

### Sites shall assess and document the ESH MS risks and opportunities and determine which need to be addressed to:

#### Give assurance that the ESH MS can achieve its intended outcomes;

#### Prevent or reduce undesired effects, including the potential for external conditions to affect the site;

#### Achieve continual improvement.

## Environmental Aspects and Impacts

### Within the defined scope of the ESH MS, the site shall determine the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts considering a life-cycle perspective.

### When determining environmental aspects, the site shall take into account:

#### Change including planned or new developments, and new or modified activities, products and services;

#### Abnormal conditions and reasonably foreseeable emergency situations.

### The site shall determine those aspects that have or can have a significant environmental impact, i.e., significant environmental aspects, by using established criteria.

#### The site shall communicate its significant environmental aspects among the various levels and functions of the site, as appropriate.

#### The site shall maintain documented information of the:

* Environmental aspects and associated impacts;
* Criteria used to determine its significant environmental aspects;
* Significant environmental aspects.

## Occupational Safety and Health Hazards and Risks

### Sites shall establish, implement and maintain a proactive process for the ongoing hazard identification, risk assessment, and determination of necessary controls. The procedure shall provide for the identification, prioritization and documentation of hazards, risks, and the application of controls as appropriate. The procedure(s) for hazard identification and risk assessment shall take into account, for example:

#### How work is organized, various social factors, leadership, etc.;

#### Routine and non-routine activities and situations including hazards arising from:

* Infrastructure, equipment, materials, substances and the physical conditions of the workplace;
* Product and services design, research, development, testing, production, assembly, construction, service delivery, maintenance and disposal;
* Human factors;
* How the work is performed;

#### Past relevant incidents, internal or external to the site, including emergencies, and their causes;

#### Potential emergency situations;

#### People, including consideration of:

* Those with access to the workplace and their activities, including workers, contractors, visitors and other persons;
* Those in the vicinity of the workplace who can be affected by the activities for the site;
* Workers at a location not under the direct control of the site.

#### Other issues, including consideration of:

* The design of work areas, processes, installations, machinery/equipment, operating procedures and work site, including their adaptation to the needs and capabilities of the workers involved;
* Situations occurring in the vicinity of the workplace caused by work-related activities under the control of the sites;
* Situations not controlled by the site and occurring in the vicinity of the of the workplace that can cause injury and ill health to persons in the workplace;

#### Actual or proposed changes in the site, operations, processes, activities and the ESH MS

#### Changes in knowledge of, and information about, hazards.

### Sites may supplement the hazard and risk assessment process by utilizing and documenting additional processes such as PPE Hazard Assessments, Work Permits and Job Hazard Analysis (JHA), and the Chemical Review Process.

### For Management of Change, the site shall identify the hazards and risks associated with changes in the site, the management system, or its activities, prior to the introduction of such changes.

## Compliance Obligations (Legal)

### The site shall:

* + Determine and have access to compliance obligations (also known as legal requirements and other requirements to which the site subscribes) that are applicable to its environmental aspects, OS&H hazards, risks and ESH MS, respectively;
  + Ensure that these compliance obligations are understood as to how they apply and are taken into account in establishing and implementing, maintaining and continually improving its ESH MS;
  + Communicate relevant information on compliance obligations to persons working under the control of the site and to other relevant interested parties;
  + Maintain documented information on compliance obligations and keep the information up-to-date. Documentation will include a “legal register” and a “compliance calendar”.

### Tools used to identify applicable legal and other requirements include, but are not limited to:

* + Subscription services (i.e. BBNA) and other resources to identify upcoming changes to national, regional, and other regulatory requirements; and
  + Fan-Out System to receive notification of changes to TI ESH Standards.

### Other requirements include but are not limited to TI ESH Standards and ESH commitments to industry associations.

## Planning

### The site shall plan:

#### Actions to address:

#### Significant environmental aspects/impacts and related risks and opportunities;

#### OS&H hazards and risks, and related risks and opportunities;

#### Other ESH risks and opportunities;

#### Compliance obligations and;

#### Prepare for and respond to emergency situations.

#### How to integrate and implement the actions into its ESH MS or other business processes; and

#### How to evaluate the effectiveness of these actions.

### When planning these actions, the site shall consider its technological options and its financial, operational and business requirements.

### The site shall take into account the hierarchy of controls and outputs from the ESH MS when planning to take actions.

## ESH Objectives

### The site shall establish ESH objectives at relevant functions and levels taking into account the site’s significant environmental aspects, highest safety/health hazards, applicable compliance obligations, input from employees, and considering the assessment of ESH risks and opportunities.

### The objectives shall be:

* + Consistent with the ESH policy;
  + Measurable (if practicable);
  + Monitored to ensure progress is made toward completion;
  + Communicated;
  + Updated as appropriate;
  + Documented (with designation of responsibility, means, and time-frame).

##### 

## Planning Actions to Achieve ESH Objectives

### When planning how to achieve its ESH objectives, the site shall determine:

* + What will be done;
  + What resources will be required;
  + Who will be responsible;
  + When it will be completed;
  + How results will be evaluated including indicators for monitoring progress toward achievement of goals.

### The site shall:

#### Consider how actions to achieve its objectives can be integrated into the site’s business processes.

#### Maintain and retain documented information on the ESH objectives and plans to achieve them.

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# STANDARD Approval

This standard has been approved by Zane Broadhead, TI Vice President.

# Revision history

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rev#** | **Date** | **Nature of Revision** | **Author/Editor** | **Approver** |
| A | 8/22/2017 | New Standard | Gilmore/Moore | ELC |
| B | 4/17/2019 | Addition of ISO 45001 requirements and considerations | Gilmore/Moore | ELC |
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