

ISO 14001:2015

**Train
the
Trainers**

**Kigali
7-11 Sep
2015**



Day 5



Environmental Management Systems

according to ISO 14001:2015

Improvement

Nonconformities
Corrective Action
Continual Improvement

Performance Evaluation

Monitoring and Measurement
Evaluation of compliance
Internal Audit
Management Review



Planning

Identify key issues (aspects, compliance obligations, emergencies and other issues)
Plan to take action
Set objectives

Support & Operation

Resources and Competence
Awareness and Communication
Documented Information
Operational Control
Emergency Preparedness



4.1 Understanding the organization and its context

The organization shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomes of its environmental management system. Such issues shall include environmental conditions being affected by or capable of affecting the organization.

4.2 Understanding the needs and expectations of interested parties

The organization shall determine:

- a) the interested parties that are relevant to the environmental management system;
- b) the relevant needs and expectations (i.e. requirements) of these interested parties;
- c) which of these needs and expectations become its compliance obligations.





4.3 Determining the scope of the environmental management system

The organization shall determine the boundaries and applicability of the environmental management system to establish its scope.

When determining this scope, the organization shall consider:

- a) the external and internal issues referred to in [4.1](#);
- b) the compliance obligations referred to in [4.2](#);
- c) its organizational unit(s), function(s), and physical boundaries;
- d) its activities, products and services;
- e) its authority and ability to exercise control and influence.

Once the scope is defined, all activities, products and services of the organization within that scope need to be included in the environmental management system.

The scope shall be maintained as documented information and be available to interested parties.

4.4 Environmental management system

To achieve the intended outcomes, including enhancing its environmental performance, the organization shall establish, implement, maintain and continually improve an environmental management system, including the processes needed and their interactions, in accordance with the requirements of this International Standard.

The organization shall consider the knowledge gained in [4.1](#) and [4.2](#) when establishing and maintaining the environmental management system.



SCOPE – One site or dept. or the whole company?





Top management shall demonstrate leadership and commitment with respect to the EMS by:

- a) taking accountability for the effectiveness of the EMS;
- b) ensuring that the environmental policy and environmental objectives are established and are compatible with the strategic direction and the context of the organization;
- c) ensuring the integration of the EMS requirements into the organization's business processes;
- d) ensuring that the resources needed for the EMS are available;
- e) communicating the importance of effective environmental management and of conforming to the EMS requirements;
- f) ensuring that the environmental management system achieves its intended outcomes;
- g) directing and supporting persons to contribute to the effectiveness of the EMS;
- h) promoting continual improvement;
- i) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.



Take accountability for the EMS!

Ensure that:

- Policy is established
- Objectives are established
- EMS is integrated in the business
- EMS resources are available
- The EMS achieves its intended outcomes
- Responsibilities and authority for relevant roles are assigned and communicated

- Communicate the importance of the EMS
- Directing and supporting others
- Promoting continual improvement



5.2 Environmental Policy

Top management shall establish, implement and maintain an environmental policy that, within the defined scope of its environmental management system:

- a) is appropriate to the purpose and context of the organization, including the nature, scale and environmental impacts of its activities, products and services;
- b) provides a framework for setting environmental objectives;
- c) includes a commitment to the protection of the environment, including prevention of pollution and other specific commitment(s) relevant to the context of the organization
- d) includes a commitment to fulfil its compliance obligations;
- e) includes a commitment to continual improvement of the environmental management system to enhance environmental performance.

The environmental policy shall be maintained as documented information; be communicated within the organization and be available to interested parties.





Environmental Policy

This Policy statement is issued by the Board of Directors to describe the environmental impact of its products, equipment and services on the environment.

Environmental Policy Statement:

- To reduce the impact of our operations on the environment and minimize the negative impact of our products, equipment and services on the environment.
- To reduce the impact of our operations on the environment and minimize the negative impact of our products, equipment and services on the environment.
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- To reduce the impact of our operations on the environment and minimize the negative impact of our products, equipment and services on the environment.

This policy has been communicated to all our employees and shall be made available to the public upon request.

ENVIRONMENTAL MANAGEMENT POLICY

The City of Los Angeles is committed to managing resources and minimizing their development and utilization in both an environmental and social perspective manner. The City will strive to improve the quality of life for its citizens and visitors by conserving and protecting the environment and quality of life through the continuous improvement of its environmental performance and the implementation of pollution prevention measures. In a feasible and cost effective manner that is consistent with the City's fiscal resources and goals, as well as be with those of the community and the economy.

To ensure this policy is successfully implemented, the City will develop and maintain an environmental management program that will:

- Identify and evaluate environmental impacts and opportunities, and propose actions to reduce negative impacts and enhance opportunities.
- Develop environmental management programs to reduce negative impacts and enhance opportunities.
- Develop environmental management programs to reduce negative impacts and enhance opportunities.
- Develop environmental management programs to reduce negative impacts and enhance opportunities.
- Develop environmental management programs to reduce negative impacts and enhance opportunities.

Yours sincerely,
Stefan Larsson
Lars-Olof Karlsson

ENVIRONMENTAL POLICY

We are pleased to inform you that our environmental management system has been certified according to ISO 14001:2004. This document describes the environmental policy of the company.

The policy is based on the following principles:

- Minimize the environmental impact of the organization.
- Continuous improvement.
- Developing capacity and performance levels of the organization.
- Ensuring compliance with applicable environmental laws and regulations.
- Promote prevention.
- Reduce the consumption of non-renewable energy sources and promote energy efficiency and renewable energy sources.
- Identifying and addressing significant environmental impacts and responding to the most pressing.

Yours sincerely,
Stefan Larsson
Lars-Olof Karlsson

Systron Donner Inertial ENVIRONMENTAL POLICY

Systron Donner Inertial is a Pollution Prevention Company and seeks to continually improve its environmental performance through commitments stated in the Environmental Policy:

Educate Employees and Communicate to Public
Always Seek to Improve
Reduce Waste
Take Responsible Actions to Prevent Pollution
Honor the Law

Environmental Policy

We, at SPECTRO will work in harmony with the environment. To achieve this aim we make the following commitment that we shall:

- Create, implement & review or review evidence of environmental best practice from time to time.
- Carry out all applicable environmental legislation and regulations.
- Assess the project in accordance with the relevant legislation.
- Appoint review or assessment panels to monitor third party environmental assessments.
- Review and evaluate the environmental impact of our products and services and take steps to reduce the impact where possible.

Environmental Policy

As the world's leading manufacturer of welding consumables and equipment, we shall in all our operations:

- Continuously improve our environmental performance by conserving natural resources and preventing pollution
- Ensure that our facilities and products, at a minimum, comply with applicable governmental requirements and ESAB standards
- Use a lifecycle approach in our efforts to minimise the environmental impact of our products, from the extraction of raw materials to product end of life
- Educate and motivate our employees to contribute to our environmental commitment and to comply with this policy
- Participate in industrial, community and governmental environmental initiatives and openly communicate our environmental performance to our stakeholders



Roles, Responsibilities and Authorities

5.3 Organizational roles, responsibilities and authorities

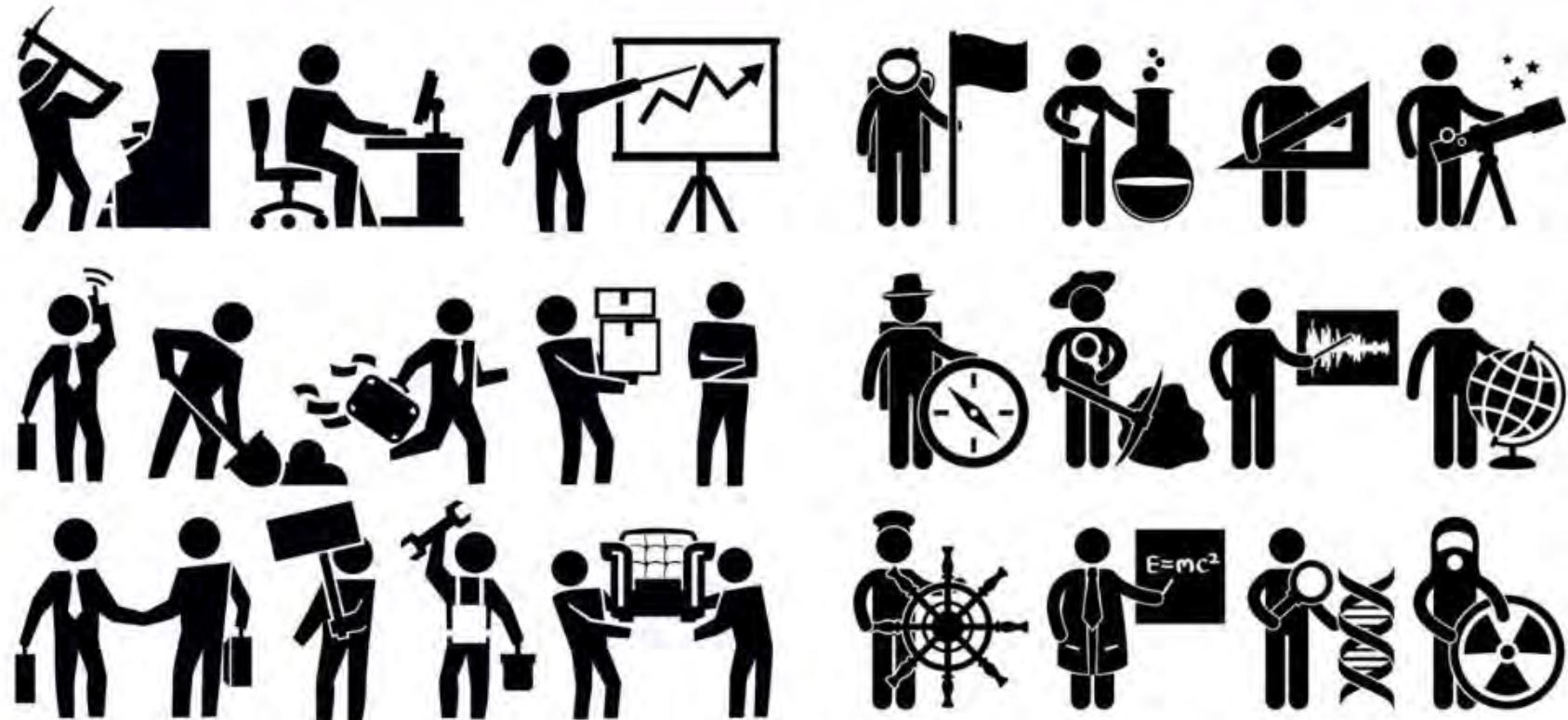
Top management shall ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the organization.

Top management shall assign the responsibility and authority for:

- a) ensuring that the environmental management system conforms to the requirements of this International Standard;
- b) reporting on the performance of the environmental management system, including environmental performance, to top management.



Roles, Responsibilities and Authorities



ESAB AB (publ) Sweden		Signed by	Approved by
Title EHS Roles & Responsibilities	James Wong	Matthew Li	
Document no. and revision ES42-08500-441 P02 Rev 02	Superseded C1	Revision date Rev. 2013-11-01	

Within the EHS the following key functions and responsibilities have been defined:

Function	EHS Management System Responsibility and Authority	Substitution/Delegation
All	All employees are obliged to observe the ESAB EHS policy and are required to report, in a suitable way, deviations within their sphere of duty.	N/A
Managing director	Overall full organizational and any other responsibility including environmental issues and performance. In particular: <ul style="list-style-type: none"> - Define the organization's environmental policy. - Ensure implementation of EHS. - Appoint the Environmental Management Representative (EMR). - Communicate in the name of the company the roles and responsibilities to all employees. - Ensure the availability of resources essential to establishing, implementing, maintaining and improving EHS. 	Managing director appoints his substitute in case of absence.
EMR	To ensure that requirements for the EHS are established, implemented and maintained according to the standard. To report the performance of the EHS to the management for review and as a basis for improving the EHS. In co-operation with the GM, to ensure the resources needed to develop, implement, comply with, revise and maintain the EHS policy as well as other documents and procedures in the EHS. Adjacent operations and contractors a list and for the appropriate distribution of information to contact persons.	If the EMR is absent, the MD substitutes the EMR.
Lean champion	To organize and control all the operations in production, maintenance and supply chain in accordance with EHS.	MD
Engineering	To ensure that equipment maintenance is done on time and in	EMR

6.1 Actions to address risks and opportunities

6.1.1 General

The organization shall establish, implement and maintain the processes needed to meet the requirements in [6.1.1](#) to [6.1.4](#).

When planning for the environmental management system, the organization shall consider:

- the issues referred to in [4.1](#);
- the requirements referred to in [4.2](#);
- the scope of its environmental management system;

and determine the risks and opportunities, related to its:

- environmental aspects (see [6.1.2](#));
- compliance obligations (see [6.1.3](#));
- other issues and requirements, identified in [4.1](#) and [4.2](#);

that need to be addressed to:

- give assurance that the environmental management system can achieve its intended outcomes;
- prevent, or reduce, undesired effects, including the potential for external environmental conditions to affect the organization;
- achieve continual improvement.

Within the scope of the environmental management system, the organization shall determine potential emergency situations, including those that can have an environmental impact.

The organization shall maintain documented information of its:

- risks and opportunities that need to be addressed;
- processes needed in [6.1.1](#) to [6.1.4](#), to the extent necessary to have confidence they are carried out as planned.



Other issues?

- ⌚ Economic constraints
- ⌚ Changing environmental conditions
- ⌚ New technology
- ⌚ Water scarcity
- ⌚ Competition
- ⌚ Language barriers
- ⌚ Etc, etc



6.1.2 Environmental aspects

6.1.2 Environmental aspects

Within the defined scope of the environmental management system, the organization 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 organization shall take into account:

- a) change, including planned or new developments, and new or modified activities, products and services;
- b) abnormal conditions and reasonably foreseeable emergency situations.

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

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

The organization shall maintain documented information of its:

- environmental aspects and associated environmental impacts;
- criteria used to determine its significant environmental aspects;
- significant environmental aspects.

NOTE Significant environmental aspects can result in risks and opportunities associated with either adverse environmental impacts (threats) or beneficial environmental impacts (opportunities).



environmental aspect

element of an *organization's* activities or products or services that interacts or can interact with the *environment*



Examples of additional types of aspects?

Recycling

Use of space

Release of biological matter

Emission of energy (heat, radiation, noise, light)

Generation of by-products



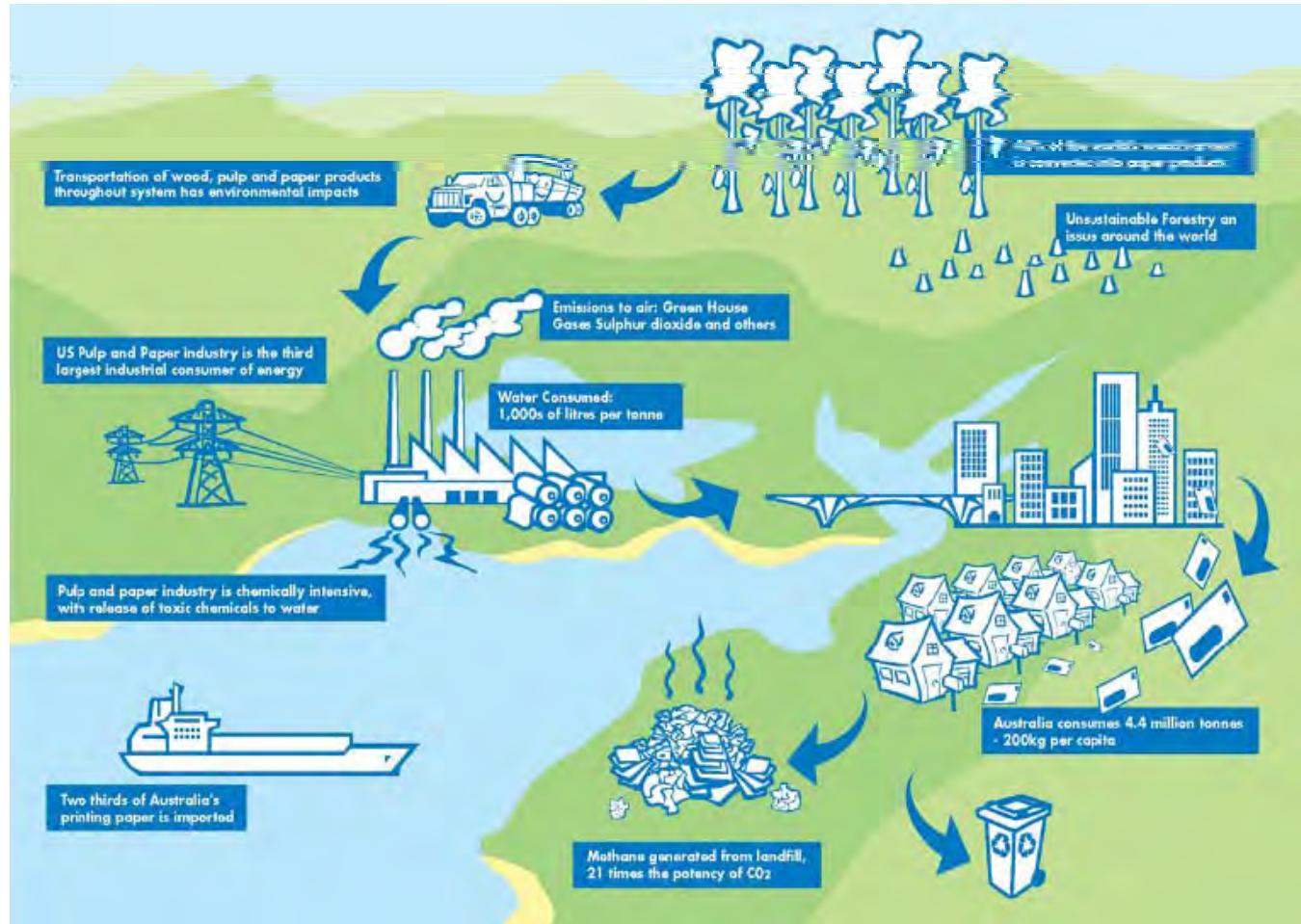
6.1.2 Environmental aspects



Electronics - upstreams and downstreams



6.1.2 Environmental aspects

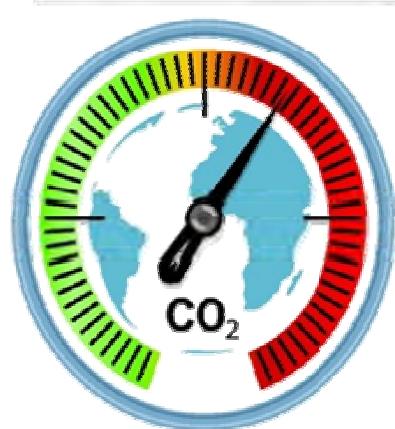


from use of
papers

ISO 14001:2015 ENVIRONMENTAL IMPACT FROM ASPECTS

environmental impact

change to the *environment*, whether adverse or beneficial, wholly or partially resulting from an *organization's environmental aspects*



compliance obligations (legal requirements and other requirements - admitted term)
legal *requirements* that an *organization* has to comply with and other requirements that an organization has to or chooses to comply with



A Law/regulation/ requirement	B Paragraph	C Revision	D Description	E Why relevant?	F G	H How is this managed?	I Responsible for managing	J Where can this be found?
Comprehensive Environmental Requirements								
Environmental Protection Law 环境保护法	Art.10, 13, 24, 26-28	1989-12-26 issued	It formulates the general targets and key policies of environmental protection.	It provides the framework for environmental protection registration in China.	Managed by establishment of environmental management system	Legal	All can be found in public EHS foleder	
EIA Law 中华人民共和国环境影响评价法	Art.16,17,21,22 ,24-27	2002-10-28 issued	The law defines the requirements of EIA which should be prepared at the project preparation stage.	EIA is categorized to three levels for projects which have impacts on environment.	Managed by assessing the environmental aspects	Project Manager	All can be found in public EHS foleder	
Management Regulation of Environmental Protection for Construction Project 建设项目环境保护管理条例	Art.3,4,5,7,8,9, 16,17,18,19,20 ,21	1998-11-29 issued	It stipulates in detail the environmental requirements for new, modification and expansion projects.	The regulation defines the requirements including environmental impact assessment; installation, operation and monitoring of pollutant facilities;	Evaluating impact by environmental assessment for the project.	Maintanance Manager	All can be found in public EHS foleder	
Completion Approval Management Methods for Environmental Protection of Construction Projects 建设项目竣工环境保护验收管理办法	Art.4,6,7,12,16 ,18	2001-12-27 issued	The aims are to assure the proper completion inspection of environmental protection facilities.	It is the methods of approval for environmental protection of construction projects.	Managing acc. to EHS WIZJG 14 and approved by local Bureau.	Environmental Manager	All can be found in public EHS foleder	



Keeping legal and other requirements up to date

The EMR is responsible for keeping this knowledge up to date. The responsibility includes information about legal and other requirements that concerns the facility. ESAB subscribes on updates on national laws and other related requirements. The time betwe

Follow-up on legal compliance

The organization shall periodically evaluate that the activities, products and services of the organization is in compliance with legal and other requirements and keep records of the result. The EMR is responsible for this evaluation and the time between

The evaluation should cover all legal and other requirements, which has been defined as relevant and special attention should be paid to requirements where the risk for a non-conformance situation is high.

The evaluation should be documented in a dated and signed record containing the table with legal and other requirements as described above but where a column is added with comments about how the organization is complying.

In case the evaluation shows there is a need for change, the EMR, without unnecessary delay, should report this to the site manager together with necessary information to make relevant changes possible to the EMS, as to avoid a non-conformance situation. Changes to the EMS, based on situations here described, are normally decided at the Management review, but in case urgent measures are needed decisions should be taken at a general management meeting or by the unit manager in cooperation with the EMR.

The EMR has the responsibility to, without any unnecessary delay, inform the ESAB group EMR in case a legal non-conformance situation exists or could be expected in the near future. Relevant measures, that could be carried out based on local decisions, should be decided on locally. In case central measures are needed to retain conformance, the ESAB group CEO, in cooperation with the ESAB group EMR and the ESAB group, have to take necessary action. The ESAB group EMR is, after having been informed by the local EMR, responsible to bring such matters to the ESAB group management for decision.

General

The organization is affected by a number of legal and other requirements. EMR is responsible for ensuring access to environmental laws, decisions from authorities and other demands that the organization is affected by. A list of relevant laws, demands from authorities and other requirements shall be kept as a record and include the following information:



The organization shall plan:

a) to take actions to address its:

- 1) significant environmental aspects;
- 2) compliance obligations
- 3) risks and opportunities identified in 6.1.1;

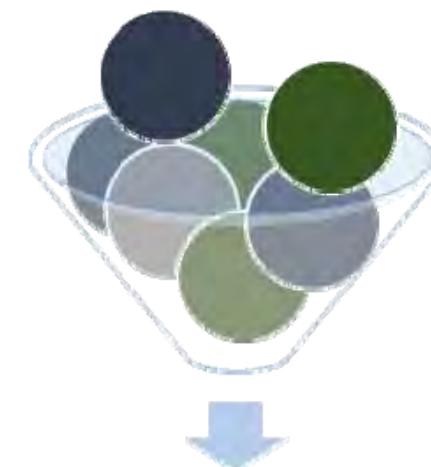
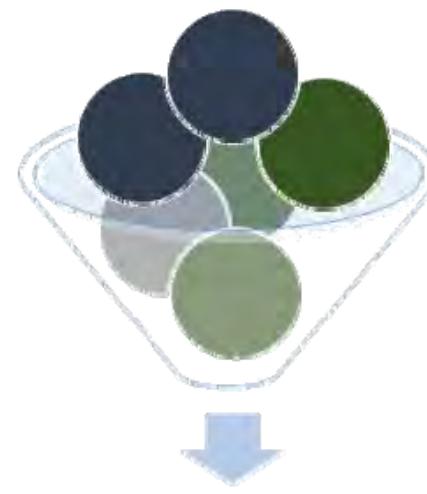
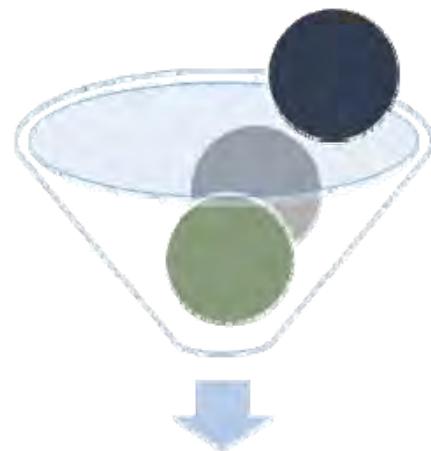
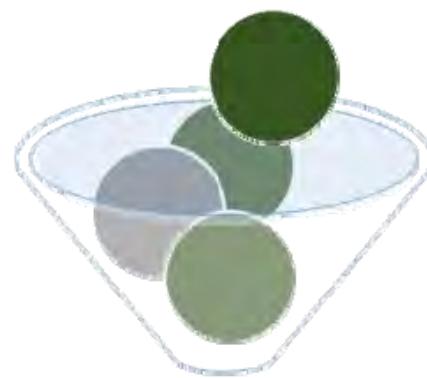
b) how to:

- 1) integrate and implement the actions into its environmental management system processes (see clauses 6.2, 7, 8 and 9.1), or other business processes;
- 2) evaluate the effectiveness of these actions (see 9.1).

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



6.1.4 Planning action



6.2.1 Environmental objectives

The organization shall establish environmental objectives at relevant functions and levels, taking into account the organization's significant environmental aspects and associated compliance obligations, and considering its risks and opportunities.

The environmental objectives shall be:

- a) consistent with the environmental policy;
- b) measurable (if practicable);
- c) monitored;
- d) communicated;
- e) updated as appropriate.

The organization shall maintain documented information on the environmental objectives.

6.2.2 Planning actions to achieve environmental objectives

When planning how to achieve its environmental objectives, the organization shall determine:

- a) what will be done;
- b) what resources will be required;
- c) who will be responsible;
- d) when it will be completed;
- e) how the results will be evaluated, including indicators for monitoring progress toward achievement of its measurable environmental objectives (see [9.1.1](#)).

The organization shall consider how actions to achieve its environmental objectives can be integrated into the organization's business processes.



Organization	Type of document	ISO 14001 reference
ESAB Welding Products AB/Co Ltd.	Record	4.1.3
Title	Signed by	Approved by
EMS Objectives and programmes	James Wang	Matthew Li
Document and revision No	Supersedes	Revision Date
6642-0500-411 PG2 Rev-01	6642-0500-411 PG2 Rev-01	29-Oct-09

No	Significant aspect	Objective	Target	Program	Responsible	Time Frame	Resources	Remarks
1	Use of energy (electricity) Aspects: 6.6,101,258,293,125,12,57,63,1 30,341,344	Decrease the total consumption of energy (electricity and natural gases) (electricity and natural gases) by 10% for per tonne of consumables in 5 years(2006-2010).	The usage of energy (electricity and natural gases) is reduced by 2% for per tonne of consumables manufactured in 2008 compared to that of 2007.	Record the electricity consumed which are related to the aspects listed.	Zhongming Guo	2014-2018	All departments	
				Analyze the data of the consumption of electricity in year 2007 to identify the key areas where there is possibility to reduce the electricity consumption.	James Wang Eric Yang	2014.11-2015.12.30	Engineering,EHS and HR departments	
				Establish the plan to reduce the electricity consumption through technical or management approaches.	James Wang Eric Yang	2015.11	All departments	Refer to the plan
2	Use of water Aspects 307,310,340,11,129	Decrease the total water consumption of by 40% for per tonne of consumables in 5 years(2006-2010).	The usage of water is reduced by 30% for per tonne of consumables manufactured in 2008 compared to that of 2007.	Record the water consumed which are related to the aspects listed.	Zhongming Guo	2014-2018	All departments	
				Analyze the data of the consumption of water in year 2007 to identify the key areas where there is possibility to reduce the water consumption.	Eric Yang	2014.11-2015.12.30	Engineering,EHS and HR departments	
				Establish the plan to reduce the water consumption through technical or management approaches(such as water cycle system or leakage prevent).	James Wang Eric Yang	2015.11	All departments	Refer to the plan



7.1 Resources

The organization shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the environmental management system.



Personnel	Inducción Ambiental/Capacitación del MASS	Entrenamiento básico de Salud y Seguridad (Inducción)	Desarrollo Sostenible como una estrategia aspectos 1)	EMS extended	LCA	Administración de Riesgos de MASS	Peligros Químicos	Peligros de Soldadura
Todos los empleados	Oct-05	Feb-05	-	-		-		-
Director General	-	-	Ene-07			-		-
Staff	-	-	Ene-07	-		-		-
Jefe MASS	-	-	Experience	-	Abr-07	Experience		-
Coordinador MASS	-	-	Experience	-	Abr-07	Experience		-
Gerente Técnico , Aux. de investigación y laboratoristas.					Abr-07	Mar-07	mar07- abr07	
Gerente de Operaciones, Gerente de Producción y Supervisores						Feb-07	mar07- abr07	-
Gerente de Compras y Compradores	-	-	-	-		-	nov 05-nov06	-
Gerente de Recursos Humanos y Jefe de Capacitación	-	-	-	-		Ene-07		-
Jefe de Mantenimiento y Supervisores	-		-	-		-		-
Soldadores	-		-	-		-		Mar-07
Comisión de Seguridad e Higiene								
Brigadistas								
Montacarguitas								
Personal de producción								



Purpose

The purpose of this procedure is to establish relevant training and/or competence requirements for all employees and all functions.

Scope

All functions and employees defined through the task. Define relevant training.

Human Resources

The Personnel Manager is responsible to arrange of all training schedule and maintain record of the training. This training schedule should be reviewed, whenever there are significant changes on the organization and new employees have been recruited or employees have change positions, the EMS training schedule must be reconsidered.

Managers and supervisors shall be responsible in identifying the training needs of personnel performing activities affecting EMS.

Example (a template for EMS Competence/Training requirements and training plan is available through the Intranet):

Competence/Training requirements and training plan

Personnel	Basic Env/EMI Training	Basic Doc. Health & Safety Training	Sustainable Dev. as a strategic issue ¹⁾	EMS extended	LCA	EHS Risk Management	Chemical Hazards	Welding Hazards	Fire prev and control	Env. Procurement	Waste Water Treatment	Waste Management

EMS Training

The EMR shall be responsible in planning and supervising the EMS Training Program for department managers, supervisors, and key staff personnel having duties or responsibilities described in EMS roles and responsibilities procedure.

The EMR shall develop and maintain up-to-date a roster by job title and a list of those personnel requiring training. The EMS Training Program shall consist of a series of courses covering the requirements of this procedure. Such training record shall be documented by personnel manager.

6448-0650-442 Rev 1

EMB.KYC.442.2

02 July 2007

Initial training shall be given following issuance of this procedure. Newly assigned managers and supervisors shall be given EMS training prior to being assigned duties or responsibilities under this procedure.

Managers and supervisors are responsible for training their personnel in the requirements of this procedure as applicable to their work. This training is accomplished through on the job training, normal supervision of daily activities and by use of written instructions.

New Employee Training

The personnel manager is responsible to arrange induction training for the new employee. This induction training should be given to the employee prior to being assigned duties or responsibilities under this procedure.

Induction training shall at least contained:

- PT. Karya Yasantara Cakti EMS Policy
- PT. Karya Yasantara Cakti Significant aspects and workplace hazard
- Other necessary item that might influence of the EMS on his work.

Additional general training of the EMS should be given to the new employee after some significant number of new employee

Refresher Training

Refresher training shall consist of a short course covering ISO 14001/18001 and procedures/work instruction changes. Such training shall be prepared and conducted by the EMR when changes occur.

Training Records

Records of EMS training shall be documented and maintained by the HR Manager.



The organization shall:

- a) determine the necessary competence of person(s) doing work under its control that affects its environmental performance and its ability to fulfil its compliance obligations;
- b) ensure that these persons are competent on the basis of appropriate education, training or experience;
- c) determine training needs associated with its environmental aspects and its environmental management system;
- d) where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken.

NOTE Applicable actions can include, for example, the provision of training to, the mentoring of, or the re-assignment of currently employed persons; or the hiring or contracting of competent persons.

The organization shall retain appropriate documented information as evidence of competence.



The organization shall ensure that persons doing work under the organization's control are aware of:

- a) the environmental policy;
- b) the significant environmental aspects and related actual or potential environmental impacts associated with their work;
- c) their contribution to the effectiveness of the environmental management system, including the benefits of enhanced environmental performance;
- d) the implications of not conforming with the environmental management system requirements, including not fulfilling the organization's compliance obligations.



EHS Awareness Training

**Part 1 Environmental – general
awareness and company aspects**

**Part 2 – Company EHS Policy and
Standards**

**Part 3 – The Environmental Management
System and your role and
responsibility in this**

7.4.1 General

The organization shall establish, implement and maintain the processes needed for internal and external communications relevant to the environmental management system, including:

- a) on what it will communicate;
- b) when to communicate;
- c) with whom to communicate;
- d) how to communicate.

When establishing its communication processes, the organization shall:

- take into account its context and its role in the environment;
- ensure that environmental aspects are considered within the environment.

The organization shall respect the rights of persons affected by its activities.

The organization shall retain documented information showing that:

7.4.2 Internal communication

The organization shall:

- a) internally communicate information relevant to the environmental management system among the various levels and functions of the organization, including changes to the environmental management system, as appropriate;
- b) ensure its communication process(es) enable(s) persons doing work under the organization's control to contribute to continual improvement.

7.4.3 External communication

The organization shall externally communicate information relevant to the environmental management system, as established by the organization's communication process(es) and as required by its compliance obligations.



Plan de Comunicación	Adriana Bazar/Gustavo Sanchez/Laura Píñar/Héctor Santiago/Thalia Morales	Marcelo Tello
Document no. and revision Rev -02	Supersedes	Revision date 13/12/2005

Este documento describe las actividades que ESAB México S.A. de C.V. debe realizar para asegurar la comunicación interna y externa del sistema de administración ambiental. Aplica a todo el personal involucrado con el sistema de administración ambiental.

SAA: Sistema de Administración Ambiental
 Organización.- ESAB México, S.A. de C.V.
 GRUPO ESAB - Corporativo del Grupo ESAB responsable de la implementación del SAA Global
 Otras Partes Interesadas: Clientes, Vecinos, Instituciones educativas, otras empresas, etc.

Comunicación interna

La comunicación interna en ESAB Mexico se lleva a cabo a través de juntas y/o distribución de información impresa o electrónica. El Representante del Sistema de Administración Ambiental, en cooperación con el Gerente de Recursos Humanos, es responsable de establecer y mantener estos procedimientos.

Juntas.- Asegurar una adecuada comunicación de la Dirección con la organización y viceversa. El Representante del Sistema de Administración Ambiental es responsable de la programación y realización de juntas de comunicación necesarias. Ejemplos típicos de estas reuniones pueden ser: Juntas con los líderes de operaciones, con supervisores, con el grupo directivo, con el personal administrativo, con los operadores. En estas juntas el Representante del Sistema de Administración Ambiental provee información general del SAA, desempeño ambiental de la organización, proyectos específicos del SAA, problemas ambientales de la operación. Es responsabilidad de los empleados participantes de estas reuniones informar a sus compañeros de departamento la información ambiental relevante tratada en estas juntas (Juntas departamentales). Los problemas ambientales de la organización también deben ser tratados en las juntas de comunicación generales convocadas por la Dirección.

El Representante del SAA es responsable de asegurar la comunicación de las decisiones de la Revisión Gerencial del SAA así como cualquier otra decisión tomada en alguna otra junta directiva relacionada con el SAA a los interesados en menos de dos semanas.

Los Gerentes de Departamento/Área son responsables de comunicar la información relevante del SAA al personal bajo su administración y estimular al personal para identificar y reportar faltas o deficiencias del sistema a través del reporte de potenciales no conformidades. La información relevante incluye, pero no está limitada a, lo siguiente:

- a. Roles, responsabilidades y autoridades.
- b. Procedimientos de operación y consecuencias de desviación a los procedimientos establecidos.

Document no. and revision Rev -02	Supersedes	Revision date 13/12/2005
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Información impresa y electrónica.- El Representante del SAA o quien el delegue debe asegurar que la información relevante relacionada con el SAA es distribuida a todos los empleados involucrados. Esta información debe ser diseñada en colaboración con el responsable de dicha información (Ejemplo: Recursos Humanos, capacitación, etc.). Ejemplos de esta comunicación son: correos electrónicos, tableros de comunicación, boletines ambientales, boletines de la organización publicados periódicamente, etc. El tipo específico de medio de comunicación es seleccionado en base a la naturaleza de la información a ser comunicada y la audiencia objetivo.

Reporte interno al representante del SAA del Grupo ESAB - Anualmente antes de que termine el mes de Febrero del siguiente año, el Representante del SAA es responsable de enviar al Representante del SAA del Grupo ESAB la información necesaria para la evaluación total del impacto ambiental del Grupo ESAB. El Representante del SAA del Grupo ESAB es responsable de proveer el formato donde será enviada la información.

Política Ambiental- El Representante del SAA es el responsable en colaboración con el Departamento de Recursos Humanos de comunicar a todos los empleados cualquier cambio en la Política Ambiental. La localidad / planta debe seleccionar un sitio de contacto, ejemplo. caseta de guardias, recepción, acceso principal al sitio ó el que se asigne, para hacer disponible la Política Ambiental.

Aspectos ambientales significativos.- El Representante del SAA es responsable de comunicar los aspectos ambientales significativos de la organización a todos los departamentos incluyendo al Grupo ESAB.

COMUNICACIÓN EXTERNA

Comunicación externa relacionada con diferentes áreas:

Autoridades.- La comunicación con autoridades concerniente a requerimientos legales y otros requerimientos ambientales será manejada con el Representante del SAA en colaboración con el Director General o algún miembro de revisión gerencial asignado por la alta dirección y el Representante del SAA. Acuerdos con ó decisiones de las autoridades deben ser confirmadas por escrito.

La comunicación relacionada a las áreas especiales tales como preparación y respuesta a emergencias o manejo de materiales peligrosos será manejada por el Jefe de Medio Ambiente en conjunto con el Jefe de Salud y Seguridad. El representante del SAA del Grupo ESAB en coordinación con el Comité de Administración de Medio Ambiente, Salud y Seguridad, maneja la comunicación con autoridades y organizaciones no gubernamentales relacionadas a acuerdos internacionales u otros compromisos globales o fuera del entorno nacional.



7.5.1 General

The organization's environmental management system shall include:

- a) documented information required by this International Standard;
- b) documented information determined by the organization as being necessary for the effectiveness of the environmental management system.

NOTE The extent of documented information for an environmental management system can differ from one organization to another due to:

- the size of organization and its type of activities, processes, products and services;
- the need to demonstrate fulfilment of its compliance obligations;
- the complexity of processes and their interactions;
- the competence of persons doing work under the organization's control.



7.5 Documented information

1. The scope
2. The environmental policy
3. Environmental aspects, the significant aspects and the criteria to determine their significance
4. Compliance obligations
5. Environmental objectives
6. Evidence of Competence
7. Evidence of communication (as appropriate)



8. Whatever is needed to have confidence that processes are carried out as planned
9. Evidence of monitoring, measurement, analysis and evaluation
10. Audit plans and results
11. Evidence of management reviews
12. Nonconformities and corrective action



The organization shall establish, implement, control and maintain the processes needed to meet EMS requirements, and to implement the actions identified in 6.1 and 6.2, by:

- establishing operating criteria for the process(es);
- implementing control of the process(es), in accordance with the operating criteria.

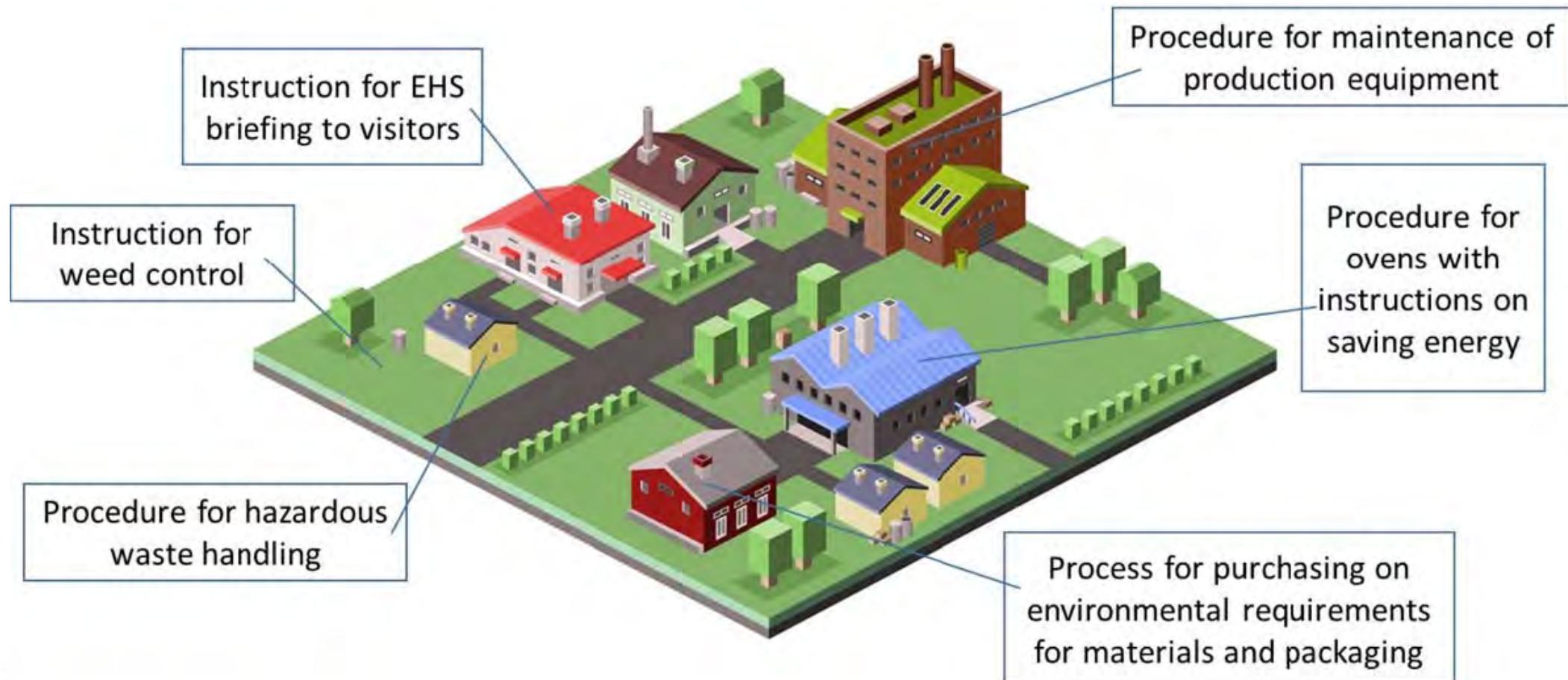
The organization shall control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

The organization shall ensure that (an) outsourced process(es) is (are) controlled or influenced. The type and extent of control or influence to be applied to the process(es) shall be defined within the environmental management system.



14001:2015

8.1 Operational planning and control for Hot Cups Inc



The organization shall establish, implement and maintain the processes needed for how it will prepare for and respond to potential emergency situations identified in 6.1.1.

The organization shall:

- a) prepare to respond by planning actions to prevent or mitigate adverse environmental impacts from emergency situations;
- b) respond to actual emergency situations;
- c) take action to prevent or mitigate the consequences of emergency situations, appropriate to the magnitude of the emergency and the potential environmental impact;
- d) periodically test the planned response actions, where practicable;



8.2 Emergency preparedness and response



- ❖ Fires
- ❖ Explosions
- ❖ Major spillages
- ❖ Major construction failures
- ❖ Floodings
- ❖ Earthquakes
- ❖ Tornados
- ❖ Strokes of lightning
- ❖ Major gas leakages
- ❖ Major uncontrolled emmisions to water
- ❖ Major uncontrolled emmisions to air
- ❖ Major power failure
- ❖ Sabotage
- ❖ Terrorist threats



EMS Identification of Workplace Hazards and Risk Assessment and definition of Significant Workplace Risks Acc.to OHSAS 18001 4.3.1(4) Document no. revision and revision no.: 6642-0650-431.P03 Rev.02							Total Points for Risk Assessment - normal condition	Total Points for Risk Assessment - abnormal conditions	Comments (also state where you put the line for significant risks)
Hazard Number	Department/ Process	Activity (from all personnel, own, subcontractors, visitors)	Workplace Hazard under routine or nonroutine conditions (see cell comments for guidance)	How high is the probability of injury under normal conditions? (1-5 point)	How severe would the consequences typically be under abnormal conditions? (1-5 points)	How high is the probability of injury under abnormal conditions? (1-5 points)			
301	General weather disaster	Typhoon 台风	Workshop falling down 车间倒塌	1	5	2	45	10	
58	Pickling Workshop 酸洗车间	Maintenance in pickling area 酸洗车间的维护	Use broken electricity tools 使用破损的电动工具	2			40		
74	Boiler Room 锅炉房	Heating water 加热水	Fire 火灾	1	5	2	40	10	
77	Boiler Room 锅炉房	Diesel oil tank 柴油储罐	Smoking 吸烟	2			40		
93	MAG 实芯	MAG BD 实芯相拉	Safety machine guarding 安全围栏损坏	2			40		
108	MAG 实芯	MAG FD 实芯粗拉	Safety machine guarding 安全围栏损坏	2			40		
182	FCW 药芯	Form the tube and pre-drawing 成型和粗拉	Safety machine guarding 安全围栏损坏	2			40		
194	FCW 药芯	FCW FD 药芯精拉	Safety machine guarding 安全围栏损坏	2			40		
228	Logistic Warehouse 供应链---仓库	Goods shelf 货架	Overweight goods on the shelf 超重货物在货架上	2			40		
	Logistic Warehouse 供应链---仓库	Goods shelf 货架	Fire						
Health & Safety Hazards		(+)							



14001:2015 9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

The organization shall monitor, measure, analyse and evaluate its environmental performance. The organization shall determine:

- a) what needs to be monitored and measured;
- b) the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;
- c) the criteria against which the organization will evaluate its environmental performance, and appropriate indicators;
- d) when the monitoring and measuring shall be performed;
- e) when the results from monitoring and measurement shall be analysed and evaluated.



Detailed information is presented in the table below.

What is measured?	Method of measurement	Where?	Frequency	Responsibility
Use of water	Meter	Water meter sumps	Once in 3 (Three) months	Engineering Dept. Manager
Electrical energy use	Meter	Low-voltage switching station	Once in 3 (Three) months	Engineering Dept. Manager
Thermal energy use	Meter	Heat exchanger room	Once in 3 (Three) months	Engineering Dept. Manager
Waste	Weight	At the receiver	Once a month	Production Manager, Engineering Dept. Manager , Supply Chain Manager

Monitoring

Monitoring devices:

- Fire alarm system,
- System of explosion prevention

Calibration

All measuring devices are the property of external companies, so they are calibrated by the owners.

Frequency

The procedures for monitoring and measurement should be reviewed when the significant aspects, objectives and targets are changed or when the operations significantly changes.



9.1.2 Evaluation of compliance

The organization shall establish, implement and maintain the processes needed to evaluate fulfilment of its compliance obligations.

The organization shall:

- a) determine the frequency that compliance will be evaluated;
- b) evaluate compliance and take action if needed;
- c) maintain knowledge and understanding of its compliance status.

The organization shall retain documented information as evidence of the compliance evaluation result(s).



9.2.1 General

The organization shall conduct internal audits at planned intervals to provide information on whether the environmental management system:

a) conforms to:

- 1) the organization's own requirements for its environmental management system;
- 2) the requirements of this International Standard;

b) is effectively implemented and maintained.



9.2.2 Internal audit programme

The organization shall establish, implement and maintain an internal audit programme(s), including the frequency, methods, responsibilities, planning requirements and reporting of its internal audits.

When establishing the internal audit programme, the organization shall take into consideration the environmental importance of the processes concerned, changes affecting the organization and the results of previous audits.



3.2 Audit Findings

ISO 14001-2004(E) Section	Finding Type	Requirement	Evidence of Nonconformity
4.1 General Requirements (Scope)	Meets Standard		
4.2 Policy	Meets Standard		
4.3.1 Environmental Aspects	Meets Standard		
4.3.2 Legal and Other Requirements	Minor Finding	4.3.2 The organization shall...determine those requirements that apply to its environmental aspects	The Environmental Policy refers to Executive Orders and Agency Directives but the OP says it is Region 7's policy to not view Federal statutes, Executive Orders, and other similar policies as a legal or other requirement. The relationship of legal and other requirements to Executive Orders and Agency Directives is not clear.
4.3.3 Objectives, targets and environmental programs	Recommendation	OP EMS 006.7210.05G If an update to the form is considered significant enough by the Program Lead to warrant updating the version number of the form...	It is unclear what is meant by "significant enough" changes. Program leads had a different view of significant enough changes from the EMS Coordinator. Clarification is needed.

UNCONTROLLED WHEN PRINTED



2438-NC-IA-01 (Competence, Awareness, and Training)

As identified in the attached audit checklist, it was recognized that significant progress has been made towards the development of policies, procedures, guidelines, checklists, and training. During field verification and interviews, results showed similar issues arising that were identified in previous audits.

Field results with respect to this non-conformity show the following:

- Lack of TDG training as per Federal TDG regulations
- Lack of knowledge regarding spill response and emergency procedures for operators and chip truck drivers (could not produce “Field Guide or Emergency Contact card”)
- Lack of awareness with respect to FRBU EMS program
- FRBU employees unaware of appropriate procedures to follow for operations monitoring and completion of inspections

2438-NC-IA-03 (Emergency Preparedness and Response)

As identified in the attached audit checklist, it was recognized that significant progress has been made towards the development of policies, procedures, guidelines, checklists, and training. During field verification and interviews, results showed similar issues arising that were identified in previous audits.

Field results with respect to this non-conformity show the following:

- Lack of adequate fire equipment as per both Federal regulations for fuel storage, the 2006 Forest Protection Plan (Provincial regulations), and FRBU EMS policies



Clause Type Description

4.5.3 Major No internal nonconformities documented



**Internal
Audit
Finding**

**Subject : Environmental
Area : Pollution
Owner : Zhangjiagang plant**

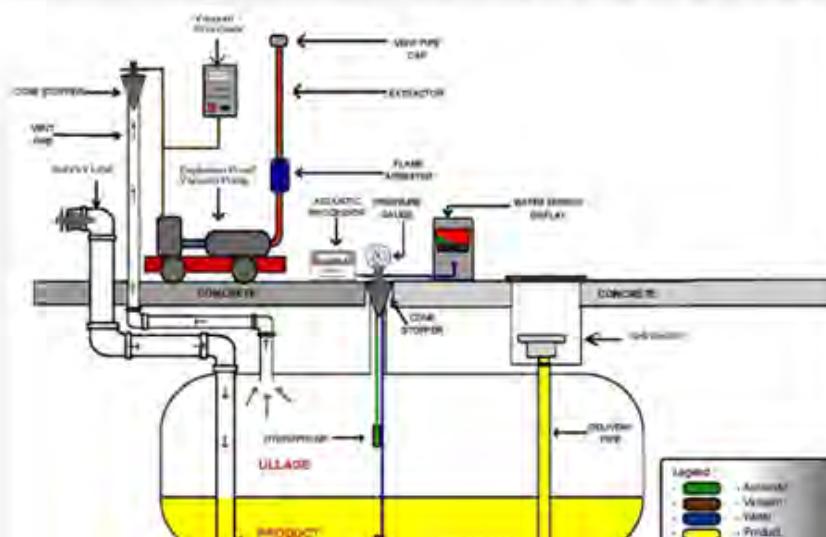
**Finding : EHS4
Severity : High
Time Limit : <2 months**

Description of Finding

There should be a programme in place for periodical checking and monitoring of the integrity of the underground fuel tank. As it is now it could leak huge amounts for a very long time without anyone taking notice.

Potential Consequences

Soil contaminated with diesel will have to be removed. Potential contamination to greater depths resulting in very costly remediation in the future.



9. 3 Management review

Top management shall review the organization's environmental management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

The management review shall include consideration of:

- a) the status of actions from previous management reviews;
- b) changes in:
 - 1) external and internal issues that are relevant to the environmental management system;
 - 2) the needs and expectations of interested parties, including compliance obligations;
 - 3) its significant environmental aspects;
 - 4) risks and opportunities;
- c) the extent to which environmental objectives have been achieved;
- d) information on the organization's environmental performance, including trends in:
 - 1) nonconformities and corrective actions;
 - 2) monitoring and measurement results;
 - 3) fulfilment of its compliance obligations;
 - 4) audit results;
- e) adequacy of resources;
- f) relevant communication(s) from interested parties, including complaints;
- g) opportunities for continual improvement.

The outputs of the management review shall include:

- conclusions on the continuing suitability, adequacy and effectiveness of the EMS;
- decisions related to continual improvement opportunities;
- decisions related to any need for changes to the EMS, including resources;
- actions, if needed, when environmental objectives have not been achieved;
- opportunities to improve integration of the environmental management system with other business processes, if needed;
- any implications for the strategic direction of the organization.

The organization shall retain documented information as evidence of the results of management reviews.



When a nonconformity occurs, the organization shall:

a) react to the nonconformity and, as applicable:

- 1) take action to control and correct it;
- 2) deal with the consequences, including mitigating adverse environmental impacts;

b) evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:

- 1) reviewing the nonconformity;
 - 2) determining the causes of the nonconformity;
 - 3) determining if similar nonconformities exist, or could potentially occur;
- c) implement any action needed;
- d) review the effectiveness of any corrective action taken;
- e) make changes to the environmental management system, if necessary

Corrective actions shall be appropriate to the significance of the effects of the nonconformities encountered, including the environmental impact(s).

The organization shall retain documented information as evidence of:

- the nature of the nonconformities and any subsequent actions taken;
- the results of any corrective action.



10.3 Continual improvement

The organization shall continually improve the suitability, adequacy and effectiveness of the environmental management system to enhance environmental performance.



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- 4.1 General (2)**
- 4.2 Environmental Policy (1)**
- 4.3.1 Environmental aspects (3)**
- 4.3.2 Legal and other requirements (2)**
-
- 4.3.3 Objectives, targets, programme(s) (6)**
- 4.4.1 Resources, roles, resp. & authority (4)**
- 4.4.2 Competence, training & awareness (6)**
- 4.4.3 Communication (4)**
- 4.4.4 Documentation (1)**
- 4.4.5 Control of documents (3)**
- 4.4.6 Operational control (1)**
- 4.4.7 Emergency Prep. & response (4)**
- 4.5.1 Monitoring and measurement (4)**
- 4.5.2 Evaluation of compliance (4)**
- 4.5.3 Nonconformity, corr/prev action (4)**
- 4.5.4 Control of records (3)**
- 4.5.5 Internal audit (4)**
- 4.6 Management review (5)**
-
- **4.1 Understanding the context of the organisation (2)**
- **5.1 Leadership (1)**
- **4.4 Environmental Management System (2) + 4.3 Scope (3-4)**
- **5.2 Environmental Policy (2)**
- **6.1.1 Risk & Opp General (3) + 6.1.2 Significant env aspects (5)**
- **4.2 Needs & Expectations (1) + 6.1.3 Compliance obligations (2)**
- **6.1.4 Planning action (2)**
- **6.2 Environmental objectives & planning to achieve them (5)**
- **5.3 Roles, resp. & authority (2) + 7.1 Resources (1)**
- **7.2 Competence (2) + 7.3 Awareness (1)**
- **7.4 Communication (6)**
- **7.5.1 + 7.5.2 Documented Information (2)**
- **7.5.3 Control of documented Information (3)**
- **8.1 Operational planning and control (6)**
- **6.1.1 R & O General (1) + 8.2 Emergency prep & response (3)**
- **9.1.1 Monitoring, measurement, analysis - General (6)**
- **9.1.2 Evaluation of compliance (3)**
- **10.1 Nonconformity and corrective action (3)**
- **7.5.3 Control of documented Information (3)**
- **9.2 Internal audit (5)**
- **9.3 Management review (4)**
- **10.3 Continual Improvement (1)**



Environmental Management Systems

according to ISO 14001:2015

Improvement

Nonconformities
Corrective Action
Continual Improvement

Performance Evaluation

Monitoring and Measurement
Evaluation of compliance
Internal Audit
Management Review



Planning

Identify key issues (aspects, compliance obligations, emergencies and other issues)
Plan to take action
Set objectives

Support & Operation

Resources and Competence
Awareness and Communication
Documented Information
Operational Control
Emergency Preparedness

