

UAE BRANCH MEETING 17.4.2019 – PRESENTATION 1 ATTACHMENT

REQUIREMENTS ISO 14001:2015 ENVIRONMENT MANAGEMENT SYSTEM

The International Standard ISO 14001:2015 identifies specific requirements for an environmental management system.

To identify which elements of a Companies' Integrated Management System (IMS) address the mandated requirements outlined in the ISO 14001:2015 standard, the following table has been prepared:

NOTE: THIS IS FOR ILLUSTRATION ONLY

ISO Standard Clause	Summary Description of Requirement.	IMS Procedures and other Documentation to address Requirements.
4.1 Understanding the organisation and its context		
-	Determine external / internal issues relevant to its purpose and affecting ability to meet EMS.	<ul style="list-style-type: none"> • HSE Legal and Other Requirements Identification • Aspects and Impacts – Environmental
4.2 Understanding the needs and expectations of interested parties		
-	Determine interest parties and their requirements relevant to the EMS. Determine the relevant needs and expectations of these interested parties.	<ul style="list-style-type: none"> • Interested Parties Register • Contract documents • Stakeholder Satisfaction Procedure
4.3 Determining the scope of the environmental management system		
Determine boundaries and application of EMS; (a), (b), (c).	Set scope based on external / internal issues (refer 4.1), compliance obligations, its organizational units, functions, physical boundaries, its activities, products and services, and its authority and ability to exercise control and influence. The scope shall be maintained as documented information and be available to interested parties.	<ul style="list-style-type: none"> • IMS Requirements (Manual) • HSE Legal and Other Requirements • Legal Register – HSE • Legal HSE & Other Requirements Register – Project • Environment Policy • Strategic Objectives • Document Control – IMS • Document Control – Retained Information
4.4 Environmental management system		
-	Establish, implement, maintain and continually improve an EMS, to achieve the intended outcomes. Consider knowledge gained in 4.1 and 4.2 when establishing and maintaining the EMS.	<ul style="list-style-type: none"> • Management Review • Continuous Improvement - IMS • Monitoring - HSE Performance • Audit Procedure

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
5 Leadership		
5.1 Leadership and Commitment		
-	Top management shall take accountability for the effectiveness of EMS, ensure environmental policy and objectives were established and are compatible with the strategic direction, ensure EMS is integrated into the business processes, ensure availability of resources, communicate importance of EMS, ensure EMS achieves its outcomes, directing and supporting persons, promoting continual improvement, and supporting other relevant management roles.	<ul style="list-style-type: none"> • Continuous Improvement - IMS • Document Control – IMS • Document Control – Retained Information • Employee Learning & Development • Environment Policy • Project Communications • Strategic Objectives
5.2 Environmental Policy		
-	Top Management to establish, implement and maintain an environmental policy which is appropriate to the purpose and context of the organization, is a framework to set and review environmental Objectives & targets, commits to protection of the environment including pollution prevention and other specific commitments. commits to fulfil its obligations commits to continual improvement of the EMS. Policy shall be maintained as documented information, communicated, understood and applied within the organization, and be available to interested parties.	<ul style="list-style-type: none"> • Continuous Improvement - IMS • Document Control – IMS • Document Control – Retained Information • Environment Policy • Management Review • Project Communications • Strategic Objectives
5.3 Organizational roles, responsibilities and authorities		
-	Top management to ensure responsibilities and authorities for relevant roles are assigned and communicated within the organization to ensure the EMS conforms to the requirements of this standard and EMS performance is reported.	<ul style="list-style-type: none"> • Job Description • Competency Matrix • Employee Learning & Development

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
6 Planning		
6.1 Actions to address risks and opportunities		
-	<p>Organization to establish, implement and maintain processes needed to meet the requirements of 6.1.1 to 6.1.4.</p> <p>Organization to consider the following when planning for EMS: issues referred to in 4.1; requirements of 4.2; scope of its EMS</p> <p>Determine risks and opportunities, related to the organization's environmental aspects (6.1.2), compliance obligations (6.1.3) and other issues and requirements identified in 4.1 and 4.2 that need to be addressed to:</p> <ul style="list-style-type: none"> - give assurance that EMS achieves its intended outcomes -prevent or reduce undesired effects, including potential for external environmental conditions that affect the organization. -achieve continual improvement <p>Determine potential emergency situations that have an environmental impact and are within the scope of the organization's EMS.</p> <p>Maintain documented information of risks and opportunities that need to be addressed, processes needed in 6.1.1 and 6.1.4 to the extent necessary to have confidence that are carried out as planned.</p>	<ul style="list-style-type: none"> • Aspects and Impacts – Environmental Continuous Improvement - IMS • Document Control – Retained Information Emergency Preparedness and Response • Environment Policy • HSE Legal and Other Requirements • Legal HSE & Other Requirements Register – Project • Monitoring - HSE Performance • Management Review
(6.1.2) Environmental Aspects	<p>Determine the environmental aspects of its activities, products and services under its control and those that it can influence and their associated impacts considering a life cycle perspective.</p> <p>Consider change and abnormal conditions and reasonably foreseeable emergency situations.</p> <p>Determine environmental aspects that have or can have a significant environmental impact.</p> <p>Communicate significant environmental aspects among all levels and functions of the organization.</p> <p>Document environmental aspects and associated impacts, criteria used to determine its significant environmental aspects, significant environmental aspects.</p>	<ul style="list-style-type: none"> • Aspects and Impacts – Environmental • Document Control – Retained Information • Emergency Preparedness and Response • Project Communications • Risk Assessment • Risk Assessment Register

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
(6.1.3) Compliance Obligations	<p>Determine compliance obligations related to environmental aspects and how these apply to the organization.</p> <p>Take these compliance obligations into account when establishing, implementing, maintaining and continually improving EMS.</p> <p>Maintain documented information of compliance obligations.</p>	<ul style="list-style-type: none"> • HSE Legal and Other Requirements • Aspects and Impacts – Environmental • Legal HSE & Other Requirements Register – Project • Legal HSE & Other Requirements Review – Project
(6.1.4) Planning Action	<p>Plan actions to address significant environmental aspects, compliance obligations, risks and opportunities identified 6.1.1.</p> <p>Plan how to integrate and implement the actions into its EMS processes as per 6.2, 7,8 and 9.1.</p> <p>Plan how to evaluate the effectiveness of these actions.</p> <p>Take into consideration technological options, financial, operational and business requirements.</p>	<ul style="list-style-type: none"> • Aspects and Impacts – Environmental • HSE Legal and Other Requirements • Emergency Preparedness and Response • Management Review
6.2 Environmental objectives and planning to achieve them		
6.2.1 Environmental Objectives	<p>Establish environmental objectives at relevant functions and levels, considering significant environmental aspects and compliance obligations and considering its risks and opportunities.</p>	<ul style="list-style-type: none"> • Strategic Objectives • Environment Policy • Project Communications
6.2.2 Planning Actions to Achieve Environmental Objectives	<p>Consider what is to be done, resources needed, responsible persons, timelines for completion, and how results will be evaluated, including indicators for monitoring progress.</p>	<ul style="list-style-type: none"> • Strategic Objectives • Employee Recruitment • Employee Learning & Development • Job Description

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
7 Support		
7.1 Resources		
-	Determine and provide resources needed for establishment, implementation, maintenance and continual improvement of EMS.	<ul style="list-style-type: none"> • Project HSE Plan • Strategic Objectives • Continuous Improvement - IMS • Employee Recruitment • Employee Learning & Development
7.2 Competence		
-	<p>Determine necessary competence of person doing work that affects its environmental performance.</p> <p>Ensure persons are competent on the basis of education, training or experience.</p> <p>Determine training needs.</p> <p>Take actions to acquire necessary competence and evaluate effectiveness of these actions.</p>	<ul style="list-style-type: none"> • Competency Matrix • Employee Learning & Development • Employee Mobilisation & Induction • Employee Recruitment • Job Description
7.3 Awareness		
	Ensure awareness of Environmental Policy, significant environmental aspects, required conformity with EMS, implications of nonconformity.	<ul style="list-style-type: none"> • HSE Induction- Branch Office • HSE Induction- Projects • STARRT (Pre-Work Briefings) • Employee Learning & Development
7.4 Communication		
7.4.1 General	<p>Establish, implement and maintain the processes needed for internal and external communications.</p> <p>Communication processes to consider compliance obligations, and communicated information shall be consistent with information generated in EMS.</p> <p>Retain documented information on communication.</p>	<ul style="list-style-type: none"> • Project Communications • HSE Legal and Other Requirements • Document Control – Retained Information • HSE Incident Notification • HSE Incident Investigation • HSE Performance Stats
7.4.2 Internal Communication	<p>Internally communicate information related to EMS among all relevant levels and functions.</p> <p>Ensure communication process enables contribution to continual improvement.</p>	<ul style="list-style-type: none"> • Project Communications • HSE Legal and Other Requirements • Document Control – Retained Information • Management Review • Continuous Improvement - IMS
7.4.3 External Communication	Externally communicate information of EMS as per communication processes and compliance obligations.	<ul style="list-style-type: none"> • Project Communications • HSE Legal and Other Requirements • Document Control – Retained Information
7.5 Documented information		
(7.5.1) General	EMS to include documented information required by this standard and that determined to be necessary for the effectiveness of EMS.	<ul style="list-style-type: none"> • Document Control – Retained Information • Monitoring - HSE Performance
(7.5.2) Creating and Updating	Ensure appropriate identification and description, format and media, and review and approval for suitability and adequacy.	<ul style="list-style-type: none"> • Document Control – IMS • Document Control – Retained Information • Management Review • Job Description

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(7.5.3) Control of Documented Information	<p>Documented information is controlled to ensure availability and suitability for use, and is adequately protected.</p> <p>Address distribution, access, retrieval and use, storage, preservation, control of changes and retention and disposition.</p> <p>Identify documented information of external origin necessary for planning and operation of EMS.</p>	<ul style="list-style-type: none"> • Document Control – IMS • Document Control – Retained Information • Management Review

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
8 Operation		
8.1 Operational planning and control		
	<p>Establish, implement and maintain the processes needed to meet EMS requirements and to implement the actions identified in 6.1 and 6.2.</p> <p>Establish operating criteria for the process and implement control of the process in accordance with the operating criteria.</p> <p>Control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects.</p> <p>Ensure outsourced processes are controlled or influenced.</p> <p>Establish controls to ensure environmental requirements are addressed in the design and development of the product/service considering each life cycle stage.</p> <p>Determine environmental requirements for procurement of products and services.</p> <p>Communicate environmental requirements to external providers.</p> <p>Consider providing information of significant environmental impacts associated with transportation or delivery, use, end-of-life treatment and final disposal of products and services.</p>	<ul style="list-style-type: none"> • Environment Policy • HSE Legal and Other Requirements • Strategic Objectives • Aspects and Impacts – Environmental • Emergency Preparedness and Response • Incident Reporting and Investigation – HSE • Reporting – HSE Performance • Monitoring - HSE Performance • Document Control – IMS • Document Control – Retained Information • Project Environmental Management Plan • Project HSE Plan • Vendor Qualification & Selection • Various Task Specific Environmental Protection Procedures : Based on scope of work / services. • Examples might include: Dust and Air emissions control Noise & Vibration control Soil & Groundwater pollution control Waste Management Protection of Aquatic & Terrestrial Environments Dewatering Erosion & Sediment Control
8.2 Emergency preparedness and response		
	<p>Establish, implement and maintain process to prepare for and respond to potential emergency situations as per 6.1.1.</p> <p>Plan actions to prevent or mitigate adverse environmental impacts from emergency situations.</p> <p>Respond to actual emergency situations.</p> <p>Take action to prevent or mitigate consequences of emergency situations.</p> <p>Periodically test the planned response actions.</p> <p>Periodically review and revise the process and response actions, especially after occurrence of emergencies.</p> <p>Provide relevant information and training related to emergency preparedness and response.</p> <p>Maintain documented information to ensure process is carried out as planned.</p>	<ul style="list-style-type: none"> • Emergency Preparedness and Response • Management Review • Project Communications • Document Control – IMS • Document Control – Retained Information

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
9 Performance evaluation		
9.1 Monitoring, measurement, analysis and evaluation		
(9.1.1) General	<p>Monitor, measure, analyse and evaluate environmental performance. Determine what needs to be monitored and measured, methods of monitoring and measurement, criteria to evaluate performance and indicators, when to monitor and measure, analysis and evaluation of monitoring results.</p> <p>Ensure calibrated and verified monitoring and measurement equipment are used and maintained.</p> <p>Communicate environmental performance information internally and externally as per communication process and compliance obligations.</p> <p>Retain documented information of monitoring and measurement, analysis and evaluation results.</p>	<ul style="list-style-type: none"> • Calibration of Measuring & Monitoring Equipment • Reporting – HSE Performance • Document Control – IMS • Document Control – Retained Information • Project Communications • Reporting - HSE Performance • Monitoring - HSE Performance • Environmental Management Plan
(9.1.2) Evaluation of Compliance	<p>Establish, implement and maintain process to evaluate fulfilment of compliance obligations.</p> <p>Determine the frequency of compliance evaluation.</p> <p>Take action if required.</p> <p>Maintain knowledge and understanding of compliance status.</p> <p>Retain documented information as evidence of compliance evaluation results.</p>	<ul style="list-style-type: none"> • Management Review • Document Control – Retained Information • HSE Legal and Other Requirements • Aspects and Impacts – Environmental
9.2 Internal Audit		
(9.2.1) General	<p>Conduct internal audits at planned intervals to ensure EMS conforms to own requirements and requirements of this standard and is effectively implemented and maintained.</p>	<ul style="list-style-type: none"> • Audit Procedure • Reporting – HSE Performance • Monitoring - HSE Performance

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
(9.2.2) Internal Audit Programme	<p>Establish, implement and maintain an audit programme that includes frequency, methods, responsibilities, planning requirements and reporting of organization's internal audits.</p> <p>Define audit criteria and scope of each audit.</p> <p>Auditors must ensure objectivity and impartiality of audit process.</p> <p>Ensure results of audits are reported to management.</p> <p>Retain documented information of audit programme and results.</p>	<ul style="list-style-type: none"> • Management Review • Continuous Improvement - IMS • Audit Procedure • Document Control – Retained Information
9.3 Management review		
	<p>Top management shall review EMS at planned intervals for suitability, adequacy and effectiveness.</p> <p>Consider actions from previous management reviews.</p> <p>Consider changes in:</p> <ol style="list-style-type: none"> 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. <p>Consider extent of environmental objective achievement.</p> <p>Consider information on environmental performance, adequacy of resources, relevant communications from interested parties and opportunities for continual improvement.</p> <p>Retain documented information of management reviews.</p>	<ul style="list-style-type: none"> • Management Review • Continuous Improvement - IMS • Document Control – Retained Information • Project Communications • HSE Legal and Other Requirements • Legal Register – HSE • Legal Requirements Review – HSE • Aspects and Impacts – Environmental

ISO Standard Clause	Summary Description of Requirement.	IMS Documentation to address Requirements.
10 Improvement		
10.1 General		
-	Determine opportunities for improvement and implement actions to achieve intended outcome of EMS.	<ul style="list-style-type: none"> • Management Review • Continuous Improvement - IMS • Audit Procedure
10.2 Nonconformity and corrective action		
-	<p>React to nonconformity through taking action to control and correct it.</p> <p>Deal with and mitigate consequences and adverse environmental impacts.</p> <p>Evaluate the need to eliminate causes of nonconformity to prevent recurrence.</p> <p>Implement actions including review of effectiveness of corrective actions taken and make changes to EMS.</p> <p>Corrective actions shall be appropriate to the significance of effects of non-conformity.</p> <p>Retain information as evidence of nonconformities, corrective actions taken and results of these actions.</p>	<ul style="list-style-type: none"> • Incident Reporting and Investigation – HSE • Audit Procedure • Document Control – Retained Information • Emergency Preparedness and Response • Monitoring - HSE Performance • Aspects and Impacts – Environmental
10.3 Continual improvement		
-	Continually improve the suitability, adequacy, and effectiveness of EMS to enhance environmental performance.	<ul style="list-style-type: none"> • Environment Policy • Management Review • Continuous Improvement - IMS • Audit Procedure • Strategic Objectives