

ISO 14001:2015 Environmental Management System Design Guidance and Timeline

Context of the Organization - Food for Thought

The following sections contain some ideas to consider when developing your organizational context. By no means is it meant to be all inclusive as only you can analyze and develop the context for your organization.

Environmental Considerations:

Examples can include climate (change), air quality, water quality, land use, existing contamination, natural resource availability and biodiversity that can affect the organization's mission, be affected by its environmental aspects, or can play a role in the life cycle of the organization's products and services.

Climate:

-Do large scale climate fluctuations/changes have an effect on your operations, raw materials, disposal options? -Does local weather have an impact on production, services, facility equipment (e.g. temperature, humidity)? Is the local area susceptible to drought, flooding, tornadoes, hurricanes?

-Is the facility located in a floodplain or within a noted FEMA flood zone? Consult http://www.ncfloodmaps.com/ if needed.

-Does climate change pose an increased risk for insect infestations that would affect your operations.

Air Quality:

-Does the facility have process air emissions that are subject to regulation? Is a permit required, is registration required, or are emissions exempted?

-Is facility located in a non-attainment area for a priority pollutant? Does this affect expansion?

-Are there power generation facilities on site? Are they regulated? Is permitting required?

-Is a Risk Management Plan required for use of extremely hazardous substances as noted under Section 112(r) of the CAA?

-Could local ozone action days affect facility employees and required job functions? Is your organization located in a non-attainment area?

-Is there equipment on site with Freon or other refrigerants that require special handling?

Water Quality/Use:

-Do local pretreatment/sewer use ordinances affect production/expansion?

-Will drought conditions necessitate installation of supply wells or require new wells be drilled?

-Do NPDES direct discharge permit limits affect production/expansion?

-Do you own sewer lines/pump stations on site? Are you aware of reporting requirements for sewer overflows or inspection requirements for industrial pump stations?

-Is an industrial stormwater permit required and how does this affect operations?

-Are there any other local or state stormwater requirements (post-construction, HQW, ORW, coastal counties, nutrient sensitive waters)?

-Is cooling water needed? Is the direct discharge to surface waters permitted?

-Would facility/organization be affected by salt-water intrusion (groundwater supply) or tidal issues?

- -Could water availability/flow affect your operations?
- -Does your region have a Riverkeeper or other active organization?
- -Does your organization have common permits with other entities?
- -Does saltwater intrusion pose a risk to your operations?



ISO 14001:2015 Environmental Management System Design Guidance and Timeline

Land Use:

-Where is the facility located? Who are your neighbors; other industry, residential areas, schools, open space? -Is the facility required to report under EPCRA for the storage or release of chemicals?

-How long has the facility existed? Is there residual contamination that needs to be managed?

-Are there underground storage tanks that need to be managed/regulated?

-Are there above ground storage tanks or outdoor storage of totes and drums that fall under local fire codes or under secondary containment requirements under industrial stormwater or SPCC requirements.

-Are TSCA regulated chemicals stored near drinking water sources (2016 update)?

-Does the facility's activities create noise, truck traffic, or other issues that may draw complaints?

-Are there transformers on site? Who owns them? What type of oil do they contain? Do they contain PCBs?

-Do insects or other pest infestations affect your production?

-Is part of your facility set aside for wildlife or wetland protection?

-Do you have any tenants onsite? How could their operations affect you and vise versa?

Natural Resources/Biodiversity:

-What natural resources are needed as raw materials?

-Is biodiversity/wildlife affected by material usage or final disposal?

-Are ample supplies of potable water and wastewater available? How do operations affect these supplies?

-What types of energy/fuel is used? Have you explored options to reduce energy usage?

-Do invasive species threaten your raw materials?

Transportation:

-What types of transportation are used in supplying raw materials, shipping finished products, or transporting wastes off site?

-Is transportation supplied by the organization or is it contracted?

-How does transportation fit into our emergency management procedures/processes?

-What types of transportation are used to move intermediary/finished products within our facility?

Waste Generation:

-What types of wastes are produced?

-How are wastes disposed (landfill, incineration, land applied, beneficial reuse, etc.)?

-What is currently being recycled or reused?

-Are there corporate or other mandates for zero waste to landfill or waste minimization?

External Considerations:

Examples can include the cultural, social, political, legal, regulatory, financial, technological, economic, natural and competitive circumstances that can be international, national, regional, or local in nature.

Legal:

-Do we have any legal requirements from legacy contamination?

-Do we have any legal requirements from historic/current waste disposal (e.g. Superfund)?

-Do we have any active litigation due to environmental considerations?

-Have we identified our legal obligations from emergency situations?



ISO 14001:2015 Environmental Management System Design Guidance and Timeline

Regulatory:

- -What the regulatory requirements associated with facility operations (air, water, waste, land)?
- -What are the applicable federal, state, and local regulatory requirements from land or chemical use?
- -Are we meeting our obligations? What is the cause of noncompliance?
- -How do we stay up to date on regulations?
- -Are there any issues with proximitiy to neighbors/community (noise, oder, dust, etc.)?

Financial:

- -What are the financial constraints to implementing our EMS?
- -How is our industry performing? Shrinking or expanding?
- -How are the national and global markets performing? Social:
- -What is the public perception of our products/services?
- -Can we improve our environmental reputation?
- -What is our involvement in the community?

Economic:

- -What is our competition doing?
- -Is EMS being driven by a customer?
- -Are our suppliers on board with meeting our requirements?
- -Have we sourced additional suppliers/vendors based on cost?

Internal Considerations:

Examples include internal characteristics or conditions of the organization such as its activities, products and services, strategic direction, culture and capabilities (i.e. people, knowledge, processes, systems).

Work Force:

- -Are there language barriers that could affect our environmental performance?
- -What are our training requirements and who will provide it?
- -Will our culture support implementation of an EMS?

Corporate:

- -What are the corporate requirements for environmental performance?
- -Is there support for environmental initiatives?
- -Are requirements being applied to sister sites that can assist with EMS?
- -Are any new strategic initiatives on the horizon?

Knowledge:

- -Is knowledge of operations broad-based or localized to a few key individuals?
- -Is cross-training of staff needed for key job functions?
- -Have processes been formally documented?