

ISO 14001 Overview

The International Organization for Standardization (ISO) has developed, with the participation of industry experts worldwide, a series of standards related to environmental management systems (EMS). This series of standards is commonly referred to as "ISO 14000", with ISO 14001 and ISO 14004 outlining the specific elements required in an EMS.

ISO 14001 standards were designed to be very broad in nature, so that they can be adapted to any organization. As such, they do not provide specific environmental goals, they are merely meant to help the organization establish their own EMS in a standardized method.

The standards require organizations to establish and maintain a program that effectively manages environmental issues, provides and documents training of all personnel whose work may significantly effect the environment and establishes procedures for prevention of and response to accidents and emergency situations, which could impact the environment.

Commitment to comply

Among other elements, ISO 14001 requires that the organization be aware of, and comply with, all relevant regulations governing their wastes. Emergency response procedures must be documented, practiced, reviewed and revised periodically. Fortunately, for organizations that are in compliance with U.S. regulations, existing response plans and documentations can be incorporated into the ISO framework.

Section 4.4.7 (Emergency preparedness and response) of ISO 14001 requires: "The organization shall establish and maintain procedures to identify potential for and respond to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them."

Spill response kits are one method of stocking the absorbent supplies necessary to respond to accidental releases such as container overfills, pipeline ruptures, tank failures or any other spills that may occur at a facility and potentially cause harm to the environment. In addition to absorbents, dikes and drain covers are also available for spills that could enter drains or sensitive areas.

Proper use of spill response materials by trained responders can help prevent spills from impacting the environment outside a fixed facility or mitigate the impact of a spill outside the facility's walls. As part of an organization's response plans, space should be designated to store spill kits or suitable amounts of absorbents near areas where liquids are handled, used, or stored.

Safe storage

Proper storage of industrial liquids on spill containment devices can prevent environmental damage caused by accidental releases from the containers. Spill containment devices can be used in raw material storage areas, laboratories, product development areas, on the manufacturing floor, as well as at waste collection and storage areas in nearly any industrial facility.

Section 4.3.1 (Planning - Environmental Aspects) of ISO 14001 requires: "The organization shall establish and maintain (a) procedure(s) to identify the environmental aspects of its activities, products or services that it can control and over which it can be expected to have an influence, in order to determine those which have or can have a significant impact on the environment."

In addition to storage of traditional liquids, special precautions may need to be taken for storage of hazardous materials, such as flammable liquids, corrosives or reactive materials.

Commitment to maintain and improve

Organizations seeking certification must create a set of goals for environmental performance, and work to achieve those goals. Waste minimization and recycling are areas where a facility can significantly improve their impact on the environment, by reducing the amount of solid waste destined for disposal.

Section 4.3.4 (Planning - Environmental management programmes) requires: "The organization shall establish and maintain (a) programme(s) for achieving its objectives and targets."

Contained absorbents, such as sock and mat products, can help a facility reduce the amount of waste they generate when compared to traditional granular absorbents. Wringers and compactors can help reduce absorbent waste volumes even further.

Color-coded, sealable, Burpless® or Open-Head Drum Funnels can help facilitate a liquid recycling program, while preventing air emissions or accidental releases from the recycling containers.

The ISO 14000 series of standards can help contribute to making the development, manufacturing, and supply of products and services more efficient, safer, and cleaner. They also make trade between countries easier and fairer by having one set of agreed-upon environmental management standards to work with, rather than burdening exporting firms with conformity to a large number of differing national-level environmental management standards.

Sites who have achieved ISO 14001 certification, as well as those pursuing ISO 14001 certification, are very conscious of their responsibility to the environment. The commitment of these organizations is a beacon to anyone seeking to help preserve and better our environment. For more information from the Environmental Protection Agency (EPA) visit: <http://www.epa.gov/owm/iso14001/>.

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