

Environment health and safety (EHS/HSE/SHE)

Environment (E), health (H) and safety (S) (together EHS) is a discipline and specialty that studies and implements practical aspects of environmental protection and safety at work. In simple terms it is what organizations must do to make sure that their activities do not cause harm to anyone.

From a **safety** standpoint, it involves creating organized efforts and procedures for identifying workplace hazards (A hazard is any agent that can cause harm or damage to humans, property, or the environment) and reducing accidents and exposure to harmful situations and substances. It also includes training of personnel in accident prevention, accident response, emergency preparedness, and use of protective clothing and equipment.

Better **health** at its heart, should have the development of safe, high quality, and environmentally friendly processes, working practices and systemic activities that prevent or reduce the risk of harm to people in general, operators, or patients.

From an **environmental** standpoint, it involves creating a systematic approach to complying with environmental regulations, such as managing waste or air emissions all the way to helping to reduce the company's carbon footprint.

Environmental health and safety (EHS or HSE) is the department in a company or an organization tasked with ensuring that the work undertaken by the company

- Does not cause undue environmental damage,
- Put the workers' health and safety at high risk
- Complies with applicable legislation, and
- Follows best practices

EHS aims to prevent and reduce accidents, emergencies, and health issues at work, along with any environmental damage that could result from work practices.

Environmental health and safety departments take a systematic and empirically informed approach to preventing accidents and injuries. They oversee a range of hazards, including ergonomic hazards, exposure to carcinogens, falls from height, and heavy machinery.

The work undertaken by EHS departments is motivated by a number of concerns:

The protection of workers, their health, and the natural environment

Compliance with legal requirements and regulatory standards

The increase in productivity, profit, and morale that comes with a safe and healthy workforce

Pakistan Environmental Protection Act PEPA 1997

OHS	Occupational health and safety
WHS	Work health and safety
HSE	Health, safety and environment
EHS / EH&S	Environment, health and safety
SHE	Safety, health and environment
QHSE	Quality, health, safety, and environment
HSEQ	Health, safety, environment and quality

History of EHS

In Environmental Health and Safety management, there are two main objectives, the first is the decrease of adverse effects that may risk the normal operating work conditions and the second is to prevent any type of accident or incident that could result in unnecessary situations in the work field.

the Environmental Health and Safety or EHS management first made its formal introduction back in 1985 by the chemical industry. The reason for its development is due to two catastrophic incidents, Bhopal disaster and Seveso disaster. With that, the involvement of 8 fundamental aspects that assures product and plant safety, environmental protection and occupational health was therefore establish. The “Responsible Care”, a worldwide voluntary initiative, was put in place in around 50 countries, which was coordinated by the ICCA or more formally known as the International Council of Chemical Associations. .

General concepts of the Environmental Health and Safety management has risen in the 1990s and could be found in OHSAS 18001 for occupational health and safety management and ISO 14001 international standards for environmental management. In 1998, the International Finance Corporation created the Environmental Health and Safety guidelines.

General Approach Of Environmental Health

And Safety Management

- (1) The general concept of Environmental Health and Safety management is per international standard of the OHSAS 18001 and ISO 14001. It is based on a methodology created by W. Edwards Deming called “Plan-Do-Check-Act” or the PDCA. This act in the Environmental Health and Safety context is described in the following:
- (2) Plan, proper documentation of the organization’s Environmental Health and Safety objectives and aims in the policy statement, registration and identification of environmental concepts that impacts occupational health and safety risks including regulatory requirements
- (3) Do, to define the Environmental Health and Safety targets and objectives, implementation of suitable strategic initiatives in order to deliver results according to the organizations legal requirements
- (4) Check, measure and monitoring the results towards objectives, policies, targets and legal aspects
- (5) Act, to take action to continuously improve the Environmental Health and Safety performance