

ENVIRONMENT ASSESSMENT SYSTEMS **ISO 14000**



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ORIGIN OF ENVIRONMENTAL ASSESSMENT

INDUSTRY = PROGRESS

Natural environment less polluted

Economic development

Production was over health



We got very high levels of pollution and symptoms of degradation

- Health problems
- Destruction of ecosystems



ORIGIN OF ENVIRONMENTAL ASSESSMENT

CORRECTION OF POLLUTION

The solution is to establish limits to pollution

We can pollute, but only to a certain degree



But pollution was still affecting our lives, health, environment



ORIGIN OF ENVIRONMENTAL ASSESSMENT

POLLUTION PREVENTION

Prevention is better than cure

Governments establish measures to prevent pollution

- Risk prevention
- Environmental regulation for transport, chemicals, etc.





ORIGIN OF ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT

It's not only a question of production

All the organization must be implied

We need to plan, develop, review and change

Continuous improvement – process to progress





ORIGIN OF ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL INTEGRATION

Environment considerations are not apart

They must be integrated in the organization policies

They form part of the organization decisions

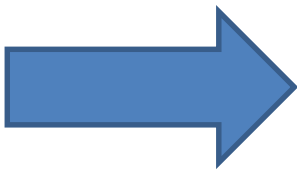




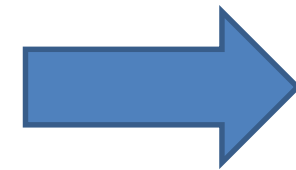
PRODUCTION ACTIVITY

INPUTS

Raw materials
Water
Energy



**BUSINESS
PROCESS**



OUTPUTS

Product/service
Waste
Emissions

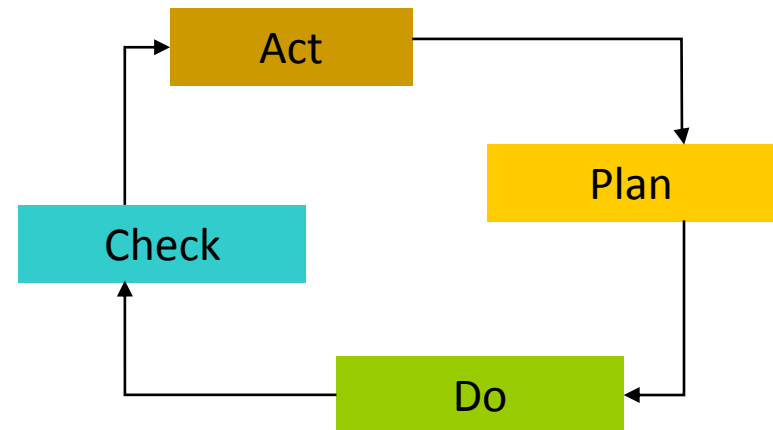


ENVIRONMENTAL ASSESSMENT SYSTEMS

“this part of the general assessment system that comprises the organizational structure, responsibilities, practices, procedures, processes and resources to determine and carry on with the environmental policy.”

Assess aspects/impacts and implement corrective actions

Based on continuous improvement





Steps to follow in an EAS:

- Define the environmental policy of the organization
- Identify environmental aspects
- Establish quantified objectives and goals
- Implant the adequate assessment
- Establish responsibilities
- Accomplish current regulations
- Introduction of procedures
- Form and make aware to workers
- Assessment and control
- Register and document
- Audit



Planning

Environment aspects and impacts

Procedure that ables to identify and assess the environmental effects that causes its activity

Environmental aspect: Element of the activities, products and services of an organization that can interact with the environment. (CAUSE)

Environmental impact: Every change in the environment, adverse or beneficial, resulting from the activities, products and services of an organization. (EFFECT)

The main task for an EAS must be:

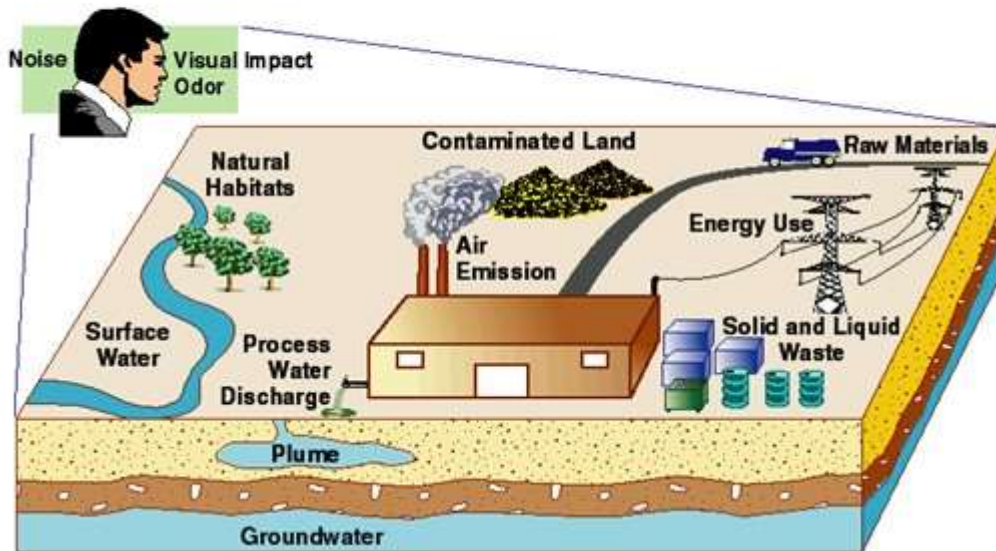
- Identification of environmental aspects and the associated impacts
- Eliminate or reduce the most significative ones



Planning

General aspects to assess

Aspects: Environmental Interactions



Raw material
Water
Energy
Soil

INPUTS

Waste
Spills
Emissions
Noise

OUTPUTS



EXERCISE

We are carrying on with the construction of a bridge. You're civil engineers at this site and have to assess the environmental aspects and impacts produced with the construction activity, and plan different actions to eliminate or reduce them.

- 1.- Divide in groups of 4-5 people. Designate a secretary
- 2.- Choose one of the processes listed

Excavation
Foundation
Structure
Paving

- 3.- Define the activities developed in your process
- 4.- Identify aspects and associated impacts
- 5.- Plan different actions to eliminate and reduce them
- 6.- The secretary presents the work developed to the rest of the class