ENVIRONMENT MANAGEMENT SYSTEM

Environment Why?

CONSTITUTION OF INDIA

Article 51- (g):

"It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife and to have compassion for living creatures."

KEY ENVIRONMENT LEGISLATION FOR INDUSTRY

- WATER (Prevention and Control of Pollution) ACT, 1974
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- · AIR (Prevention and Control of Pollution) ACT, 1974
- ENVIRONMENT PROTECTION ACT, 1986
- · HAZARDOUS WASTE (Management & Handling) RULES 1989
- MANUFACTURE, STORAGE & IMPORT of Hazardous Chemical Rules, 1989
- PUBLIC LIABILITY INSURANCE ACT, 1991

ENVIRONMENT MANAGEMENT???

- Unplanned industrialization & urbanization
- Depletion of natural resources
- Contamination of ground water/rivers/creeks
- Loss of yield of fishing zones/agricultural lands
- Loss of livelihood/employment
- Poor air quality
- Human health/respiratory diseases

INDUSTRY INITIATIVES REQUIRED

- · On site/off site emergency preparedness plan
- Responsible care
- Pooling community resources
- Common effluent treatment plant
- · Hazardous waste disposal & treatment
- · Air pollution control equipments
- Environmental management system-ISO 14000

RESPONSE CARE

Guiding principles

- To recognize and respond to community concerns about chemicals and our operations.
- To develop and produce chemicals that can be manufactured, transported, used and disposed off safely.
- To make health, safety and environmental considerations a priority in our planning for all existing and new products and processes.
- To report promptly to officials, employees, customers and the public, information on chemical-related health or environmental hazards and to recommend protective measures.
- To counsel customers on the safe use, transportation and disposal of chemical products.
- To operate our plants and facilities in a manner that protects the environment and the health and safety of our employees and the public.
- To extend knowledge by conducting or supporting research on the health, safety and environmental effects of our products, processes and waste materials.
- To work with others to resolve problems created by past handling and disposal of hazardous substances.



- To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
- To promote the principles and practices of Responsible Care by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose off chemicals.

REASONS TO HAVE ENVIRONMENTAL MANAGEMENT SYSTEM (ISO-14000)

- Environmental
 - Loss of balanced ecology
 - Environmental pollution
 - Use of natural resources
 - Disposal of unwanted resources
- Financial
 - Pressure for improved profits
 - Bankers' concern
 - Insurers requirement
- Pressure from society
 - Consumer demand
 - Community
- Legislation and regulation
 - Ability to meet requirement
 - Ability to anticipate legislation
- Liability
 - Health and safety of employee
 - Environmental damage
 - Corporate liability
 - Directors personal liability
- Public image
 - Consumer opinion
 - Inter-company trade
 - International trade
 - Employee opinion

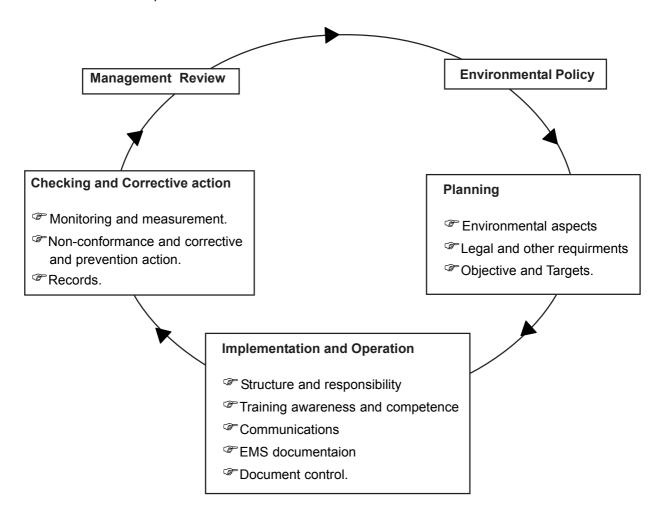
ENVIRONMENTAL MANAGEMENT SYSTEMS

The overall management system which includes;

- Organisational structure
- Planning activities
- Responsibilities
- Practices
- Procedures
- Processes and resources for developing, implementing, achieving, previewing and maintaining the environmental policy

ISO 1400 REQUIREMENTS

- The policy must
- [®]Be defined by top management
- *Be appropriate to the organisation's activities, products and services
- Include a commitment to continual improvement
- Finclude a commitment to comply with legislation, regulations and other requirements
- Provide for setting of objectives and targets
- *Be documented, implemented, maintained and communicated to all employees
- Be available to the public



Looking to the Future: Strategic Environmental Management

End of Pipe Controls ----- Process Conversion Risk Elimination ----- Risk Management

Monitoring ----- Modeling

Media-Specific Compliance ----- Multimedia Approach

Regulation ----- Economics

Cost Avoidance ----- Increased Efficiency