# 2<sup>ND</sup> NATIONAL SEMINAR ON OCCUPATIONAL HEALTH, SAFETY, ENVIRONMENT & FIRE CONTROL

**ORGANIZED BY** 

# THE INSTITUTION OF ENGINEERS PAKISTAN

KARACHI CENTRE

# OCCUPATIONAL HEALTH, SAFETY, ENVIRONMENT & FIRE CONTROL

BY

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THE INSTITUTION OF ENGINEERS PAKISTAN

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# THREE PHASES OF SOCIAL DEVELOPMENT

- -FIRST WAVE: 12000 YEARS
  - LANDLORD FEUDALISM
- -SECOND WAVE: (STARTING 1760's)
  - 250-300 YEARS
  - INDUSTRIAL DEMOCRACY
- -THRID WAVE: (STARTING 1960's)
  - GLOBAL VILLAGE

## THREE MAJOR INVENTIONS

1764 – SPINNNING JENNY (ENGLAND)

1784 – POWER LOOMS (ENGLAND)

1794 – THE COTTON GIN (UNITED STATES)

#### STEAM AND ELECTRICAL MOTIVE POWERS

changed

CRAFTSMAN to FACTORY WORKER

WORK COTTAGES to FACTORY

# OHSE LEGISLATION

#### UNITED STATES

- 1913 HEALTH & SAFETY BECAME GENERAL ELECTION ISSUE
- 1914 WORKMEN'S COMPENSATION ACT
- 1918 AMERICAN ENGINEERING SERVICES
  COMMITTEE (AES)
- 1928 AMERICAN NATIONAL SAFETY INSTITUTE (ANSI)
- 1939 AMERICAN INDUSTRIAL HYGIEN ASSOCIATION
- 1970 OCCUPATION SAFETY & HEALTH ACT (OSHA)

## OHSE LEGISLATION

#### UNITED KINGDOM

1883 – FACTORIES ACT

- WORKERS COMPENSATION LAWS

1974 – HEALTH AND SAFETY ACT

#### **SUB-CONTINENT**

1883 – FACTORIES ACT

1934 – FACTORIES ACT

## OHSE LEGISLATION

#### UNITED NATIONS

ILO – INTERNATIONAL LABOR ORGANIZATION

1905

1906

BERNE CONFERENCES

1913

1976 – ILO PAKISTAN AGREEMENT "Strengthening of Factories Inspectorate in Sindh & Punjab

# THREE E's OF SAFETY

- E ENGINEERING
- E EDUCATION
- E ENFORCEMENT

If we can't afford safety,

we cannot afford to be in business

# OHSE & FC

# IDEAL OBJECTIVES

- No Accident
- No Harm to People
- No Damage to Environment

#### **OHSE MANAGEMENT SYSTEM**

- Safety and Accident Prevention
- Plant and Equipment Integrity
- Pollution Prevention
- Personal and Occupational Health
- Environmental Soundness
- Personal and Physical Security
- Product Stewardship
- Sustainable Development

# INDUSTRIAL ACCIDENTS REPORTED IN KARACHI

YEAR_	<u>FATAL</u>	<b>SERIOUS</b>	<b>MINOR</b>	TOTAL
1999	7	6	16	29
2000	6	25	58	89
2001	22	12	14	48
2002 (Sep)	27	3	20	50

Fatal: Accident resulting in death.

Serious: Injuring causing absence from work exceeding 20 days.

Minor: Causing a workman to be absent for 48 hrs from work.

## CARE IS A LOT BETTER THAN CURE

#### PLEASE TAKE CARE

THANK YOU