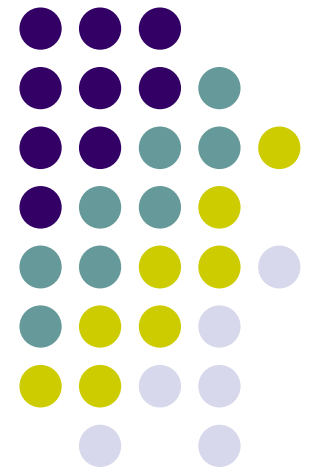


Health, Safety & Environment (CDB 1012/CEB 1032)

Module 2.2 Emergency Response Plan (ERP)



Objective
Legal requirement
ERP element
ERP development

EMERGENCY RESPONSE PLAN



- ❑ Emergencies and disasters can occur any time without warning. The more you are prepared for them, the better you will be able to act, minimizing panic and confusion when an emergency occurs.

- ❑ The purpose of Emergency Response Plan (ERP) is to establish policies, procedures and an organizational hierarchy for response to emergencies occurring any time.

Emergency + Unpreparedness = Cost +++



INCIDENT



UNPREPAREDNESS

**EXPENSIVE
LESSON**

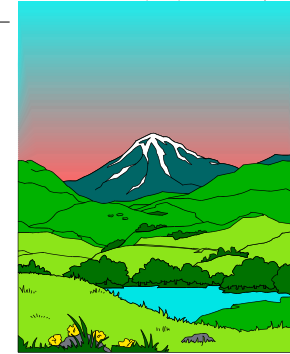
Cost of Un preparedness



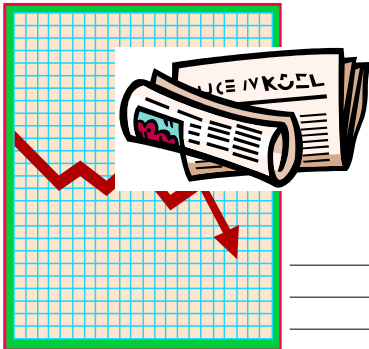
Legal



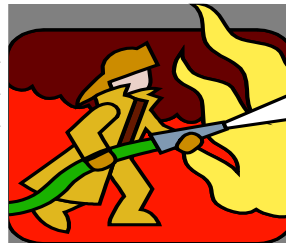
Medical



Environment



Business



Property Damage



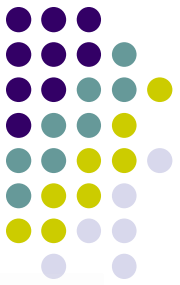
Human

Objectives of an ERP



1. Increase respondents' preparedness for emergency
2. Meet legal requirements
3. Prevent and eliminate risk of injuries & loss of life
4. Conserve & preserve the environment
5. Minimize property damage
6. Provide immediate resumption of normal operations
7. Protect image/reputation

Purpose of an ERP



- As a guidance on actions to be taken in organizing personnel and resources in the event of an emergency
- To provide immediate & appropriate responses
- To ensure that the emergency is ended with utmost speed & normal safe working conditions are resumed
- To ensure that all emergency equipment is maintained properly, ready for use and personnel are trained in the use of the equipment and the emergency procedure
- To coordinate the responses of off-site emergency services

Legal requirements



OCCUPATIONAL SAFETY & HEALTH ACT 1994

(Control of Industrial Major Accident Hazards) Regulation 1996

Regulation 18 : On-Site Emergency Plan

Regulation 19 : Updating of On-Site Emergency Plan

Regulation 20 : Review of On-Site Emergency Plan

Regulation 21 : Off-Site Emergency Plan

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) Section 34A

Under the guidelines issued by the Department of Environment Malaysia, Emergency Response Plan (ERP) is one of the procedural requirements for EIA Report approval under Chapter 9.2 i.e. when there is a risk of upset.

OSHA Emergency response plan elements



- Conduct pre-emergency planning.
- Establish personnel roles, lines of authority, and communications methods.
- Outline emergency recognition and prevention procedures.
- Identify safe distances and places of refuge.
- Provide for site security and control.
- Identify evacuation routes and procedures.
- Establish decontamination procedures.
- Provide for emergency medical treatment and first aid.
- Develop emergency alerting and response procedures.
- Provide for personal protective and emergency equipment.

NATIONAL SECURITY COUNCIL DIRECTIVE NO. 20

(Majlis Keselamatan Negara Arahan No. 20)

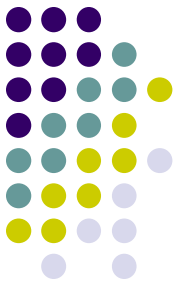


MKN 20 came into force on 11 May 1997 following its approval by YAB Prime Minister of Malaysia whereby the objectives are :-

- (a) to outline a multi-tiered Disaster Management & Assistance Policy for any land-based Disaster; and
- (b) to create a Management Mechanism which determines the roles & responsibilities of Government Agencies that are involved in the mitigation of any Disaster.

ISO 14001 REQUIREMENTS

Clause 4.4.7 (Emergency Preparedness & Response)



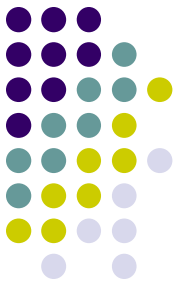
- The organisation shall establish and maintain procedures to identify potential and response to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them.
- The organisation shall review and revise, where necessary, its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations.
- The organisation shall also periodically test such procedures where practicable.



Why is There a Need for ERP?

Speed response to emergency can differentiate between life and death or between minimal damage and major damage.

Reaction with minimum hesitation can prevent panic, decrease likelihood of injury and damage and bring the situation under control in a timely manner.



Elements in an ERP

- Plan Administration & Maintenance
- Information
- Emergency Action Procedure and Format

Plan Administration & Maintenance



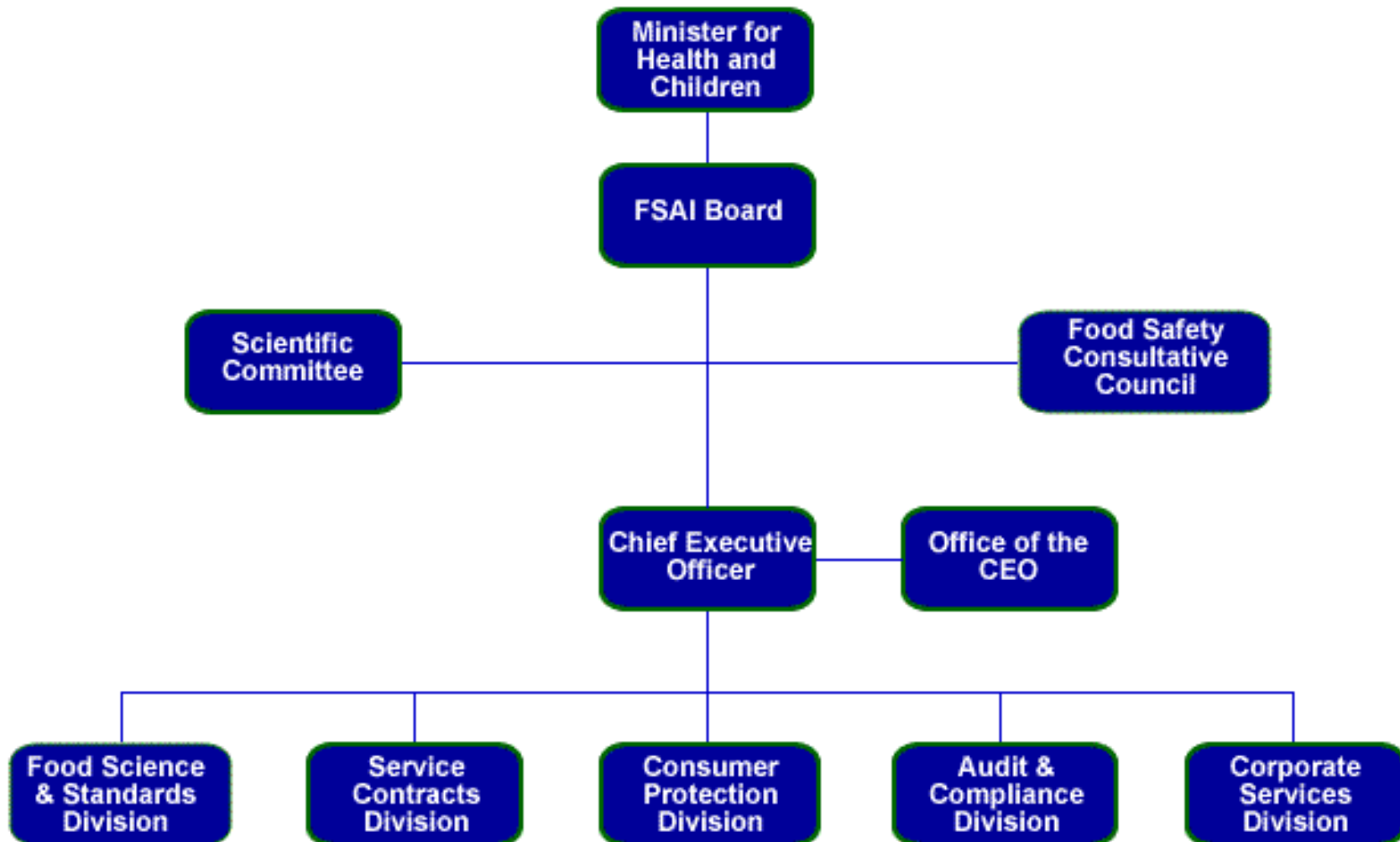
- Distribution List
- Preventive Maintenance & Testing
- Training & Drill Schedule
- Plan Review & Updates
- Equipment Alarm Testing
- Evaluation & Audit Reports
- Debriefing
- Amendment List

Information



- Emergency Organisation Chart
- Roles and Responsibilities
- Notification List and Call Out List
- Plant Site, Maps and Security
- Equipment & Facilities List
- Evacuation, Rescue & First Aid Operation Procedures
- Emergency Shutdown Procedure
- List & Location of Hazardous Materials, incl. [MSDS](#)
- Audit Checklist

Organisation Chart



Emergency Response Checklist



Name: _____ Date: _____

Task	Action	Date
<input type="checkbox"/>	Contact the appropriate health authorities.	
<input type="checkbox"/>	Contact the IATA Medical Advisor if appropriate.	
<input type="checkbox"/>	Contact the company Medical Officer closest to the airport(s) where the emergency is in effect.	
<input type="checkbox"/>	If appropriate for the emergency, contact the hospital(s) that are receiving passengers in order to obtain relevant information.	
<input type="checkbox"/>	Determine whether there is a requirement to quarantine any equipment.	
<input type="checkbox"/>	Determine whether there is a requirement to disinfect the aircraft.	
<input type="checkbox"/>	Advise the Director Emergency Response of the actions required.	
<input type="checkbox"/>	Advise Company Maintenance of the actions required and ensure that the aircraft is properly disinfected.	
<input type="checkbox"/>	Assist Corporate Communications with press releases as required.	
<input type="checkbox"/>	If necessary, advise Flight Operations and In-Flight Services of the requirements for medical examinations for crewmembers.	



Emergency Action Procedure and Format

- Specific Emergency Response Procedures
- Notification & Call Out Lists
- Alarm Sequence
- Relative and Media Response Procedure
- Termination of Emergency

Site Emergency Plan



- ❑ A site emergency plan describes, in detail, an organization's policy and procedures for coping with an emergency situation on site.
- ❑ These policies and procedures should define how the organization will protect people and property.
- ❑ A site emergency plan should be consistent with the local government's emergency operations plan.

Why Organizations Should Plan for Emergencies?

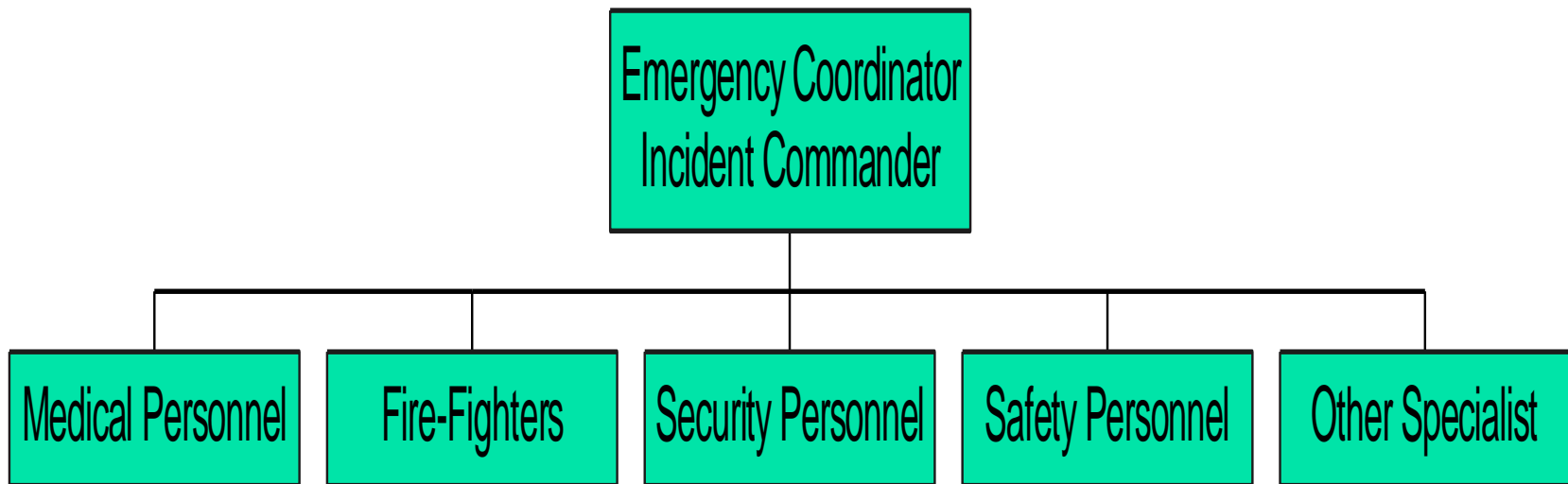


- ❑ Time and history has shown that a well thought out, coordinated response helps prevent personal injury, property damage, and lessen the resulting confusion.
- ❑ When an organization plans on how it will respond to an emergency threatening its operations, it is more likely to survive the incident.
- ❑ Employees and clients alike will need to know what to do to protect themselves during an emergency.

ERP Development



Organisation and Coordination



ERP Development



Why must they present?

To ensure that :-

- Aware of the local organization response plans so that efforts to control an incident can be properly coordinate
- Confusion about the 'chain of command' can be avoided
- Capabilities of emergency response units are known
- Good working relationship are developed
- Communication links are established

ERP Development

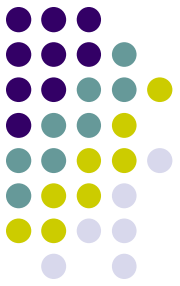


Emergency Coordinator

- Frontline management to tackle the problem
- Tactical planning and execution
- Determine if outside assistance is needed
- Have the authority to:
 - assume command
 - activate resources
 - implement the emergency plan
 - determine response strategies
 - declare the incident is “over”
 - assess the situation
 - order evacuation

ERP Development

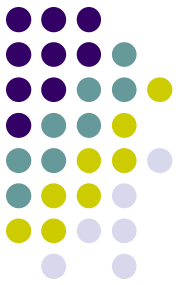
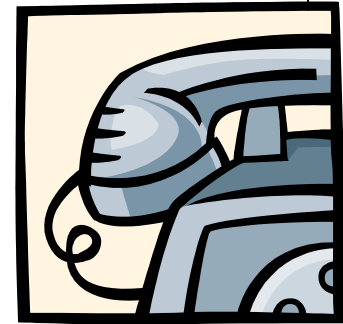
Emergency Operations Center (EOC)



- Communications equipment
- Copies of emergency plan / EOC procedures
- Blueprints, maps, status boards
- A list of Emergency Action Group (EAG) members and their duties
- Technical information and data
- Data/info management capabilities
- Telephone directories
- Back-up power, communications and lighting

ERP Development

Communications

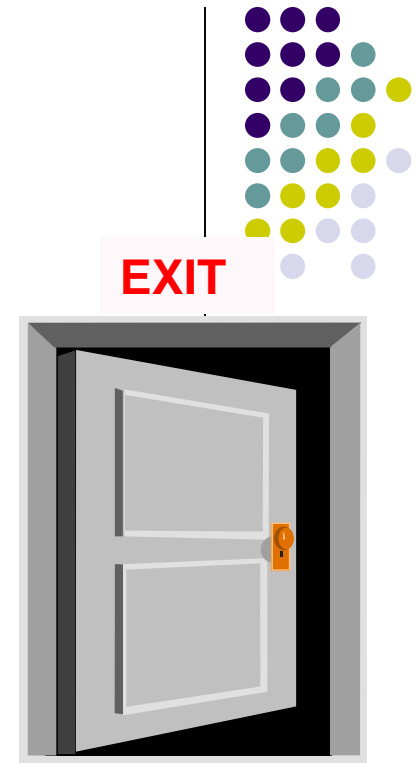


- Communications - Notification
 - How should employees report an emergency
 - Post emergency telephone numbers
 - MAINTAIN a list of responders' numbers
 - Consider a weather radio watch
- Communications - Alarm
 - Be audible or within view of ALL personnel
 - Auxiliary power supply
 - Distinct and recognizable signal

ERP Development

Other Consideration

- Evacuation planning
 - Pre-determine conditions warranting evacuation
 - Identify personnel authorized to order evacuation
 - Use a system to account for personnel
 - Establish alternate muster areas
 - disabled / non-English speaking persons



To Ensure the ERP Effectiveness



- Audit and review program in place
- Response centers are to be maintained
- Plans and procedures are to be reviewed & updated at defined intervals to ensure compliance
- Emergency communications equipment are to be maintained
- Training and exercises are to be carried out to an agreed program
- Learning experiences are to be incorporated into existing plans and procedures as appropriate

10 Most Common Errors in ERPs

(source: www.nsc.org)



1. No upper management support
2. Lack of employee buy-in
3. Poor or no planning
4. Lack of training and practice
5. No designated leader
6. Failure to keep the plan up to date
7. No method of communication to alert employees
8. OSHA regulations are not a part of the plan
9. No procedures for shutting down critical equipment
10. Employees are not told what actions to take in an emergency