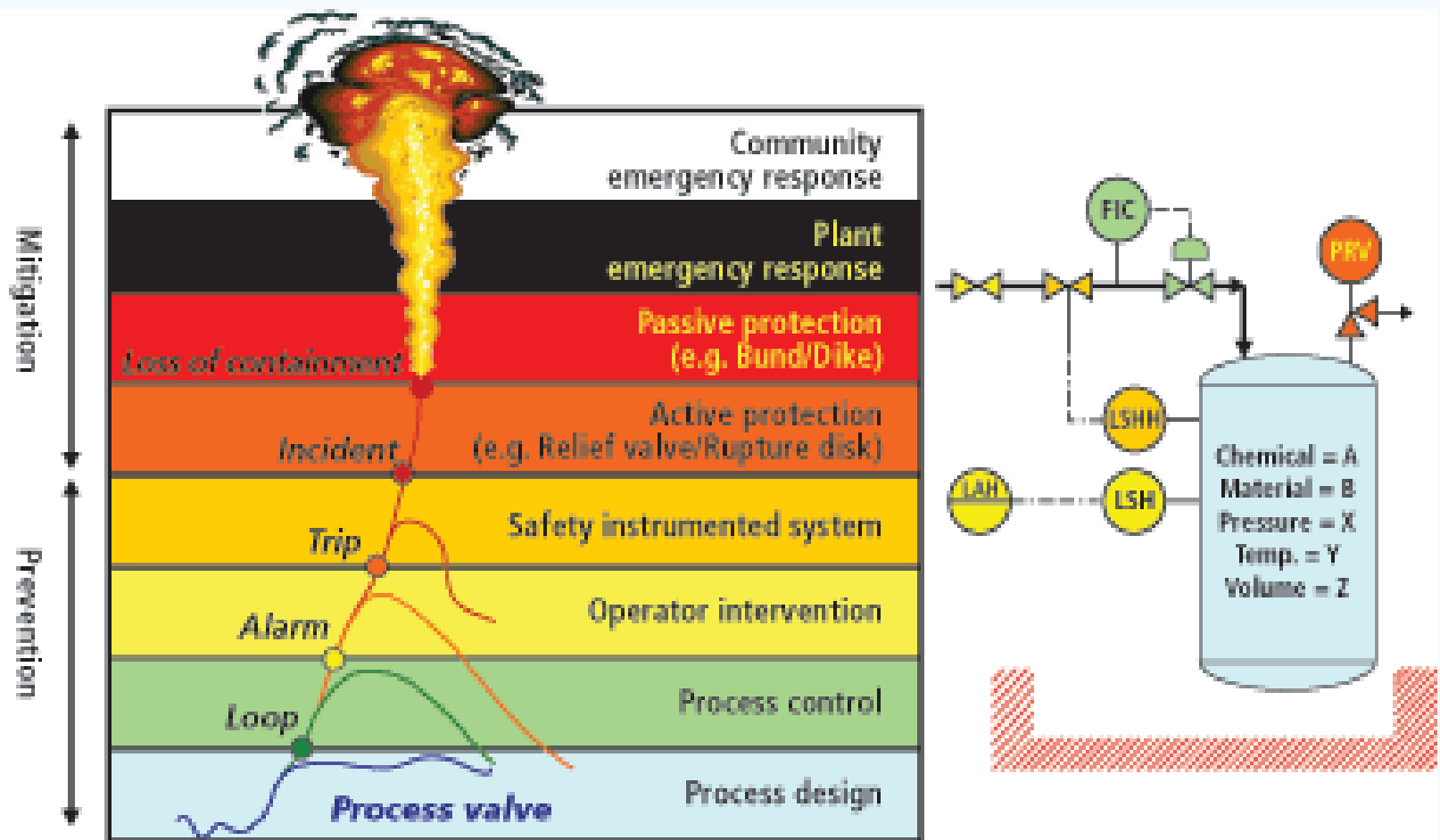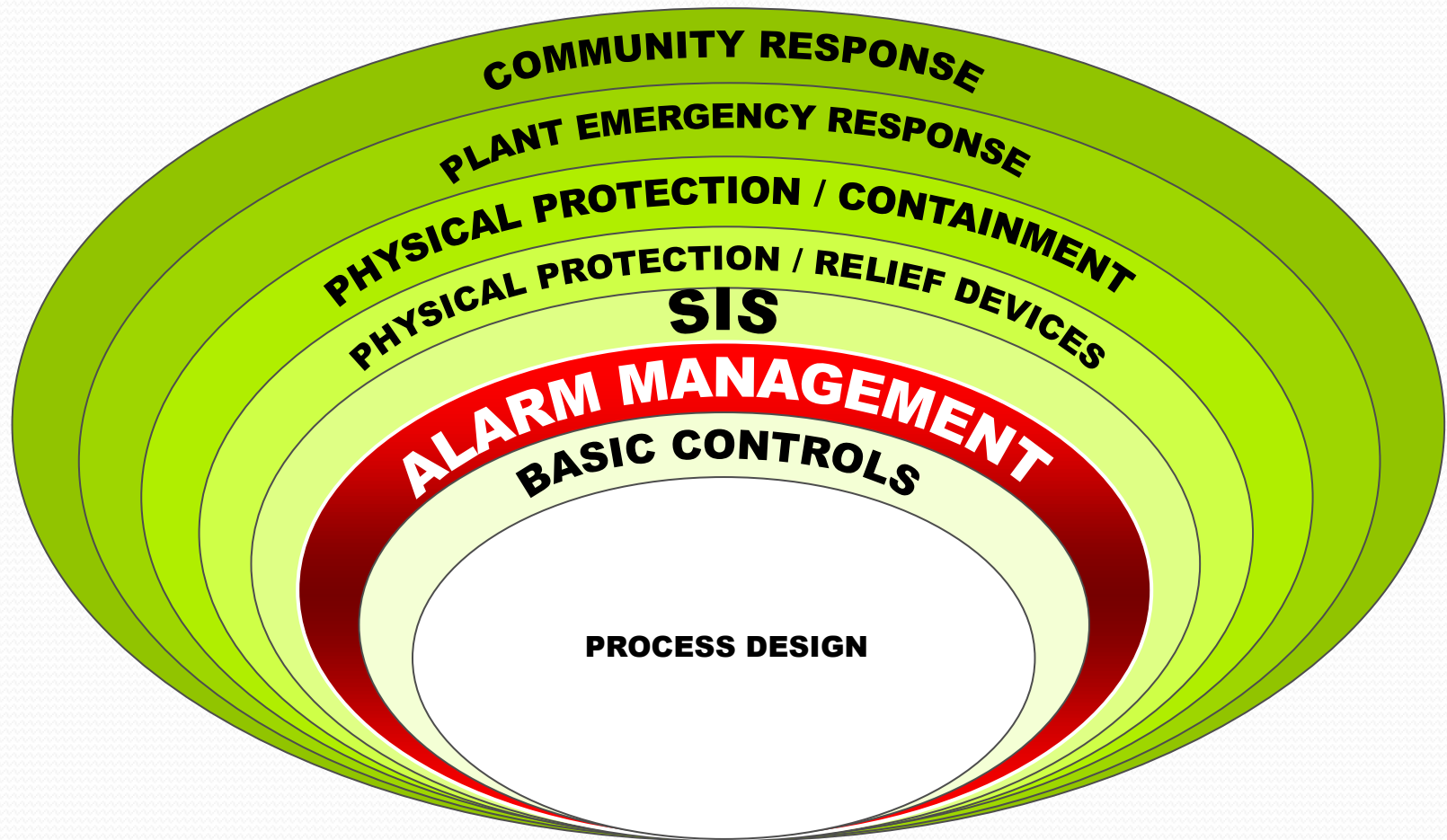# Alarm Management

What is Alarm Management?

"Process by which alarms are *engineered*, *monitored*, and *managed* to ensure *safe*, *reliable* operations"

Layers of protection and impact on process

Alarm Management is a Core Layer of Protection.

COMMUNITY RESPONSE

PLANT EMERGENCY RESPONSE

PHYSICAL PROTECTION / CONTAINMENT

PHYSICAL PROTECTION / RELIEF DEVICES

SIS

ALARM MANAGEMENT
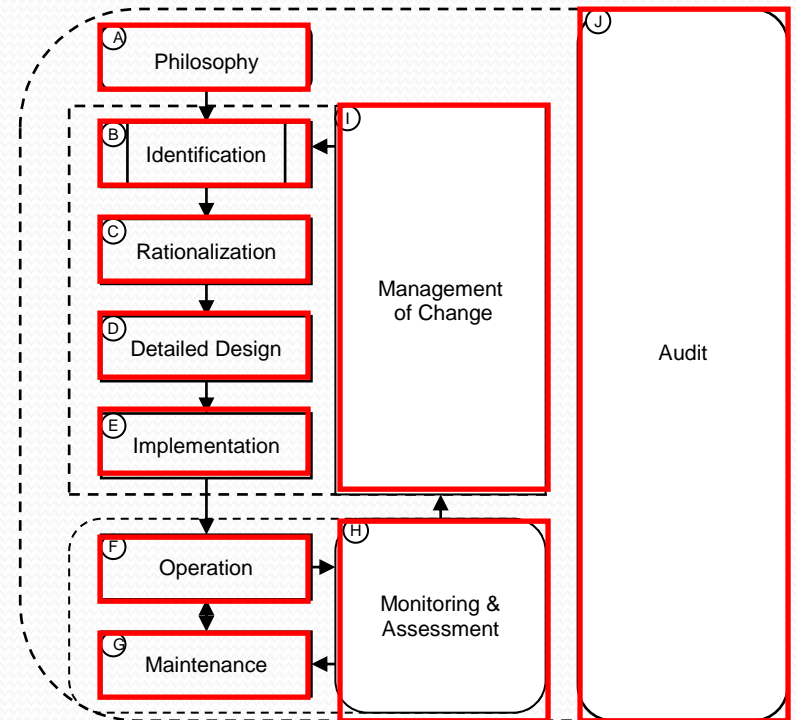
BASIC CONTROLS

PROCESS DESIGN

What else is Alarm Management?

- Continuous lifecycle
- Plant maintenance/reliability
- Good process control
- Outcome of a risk assessment
- Related to equipment failure
- A form of Enhanced/Advanced Control
- Abnormal Situation Management
- It has been "widely ignored" for a long time
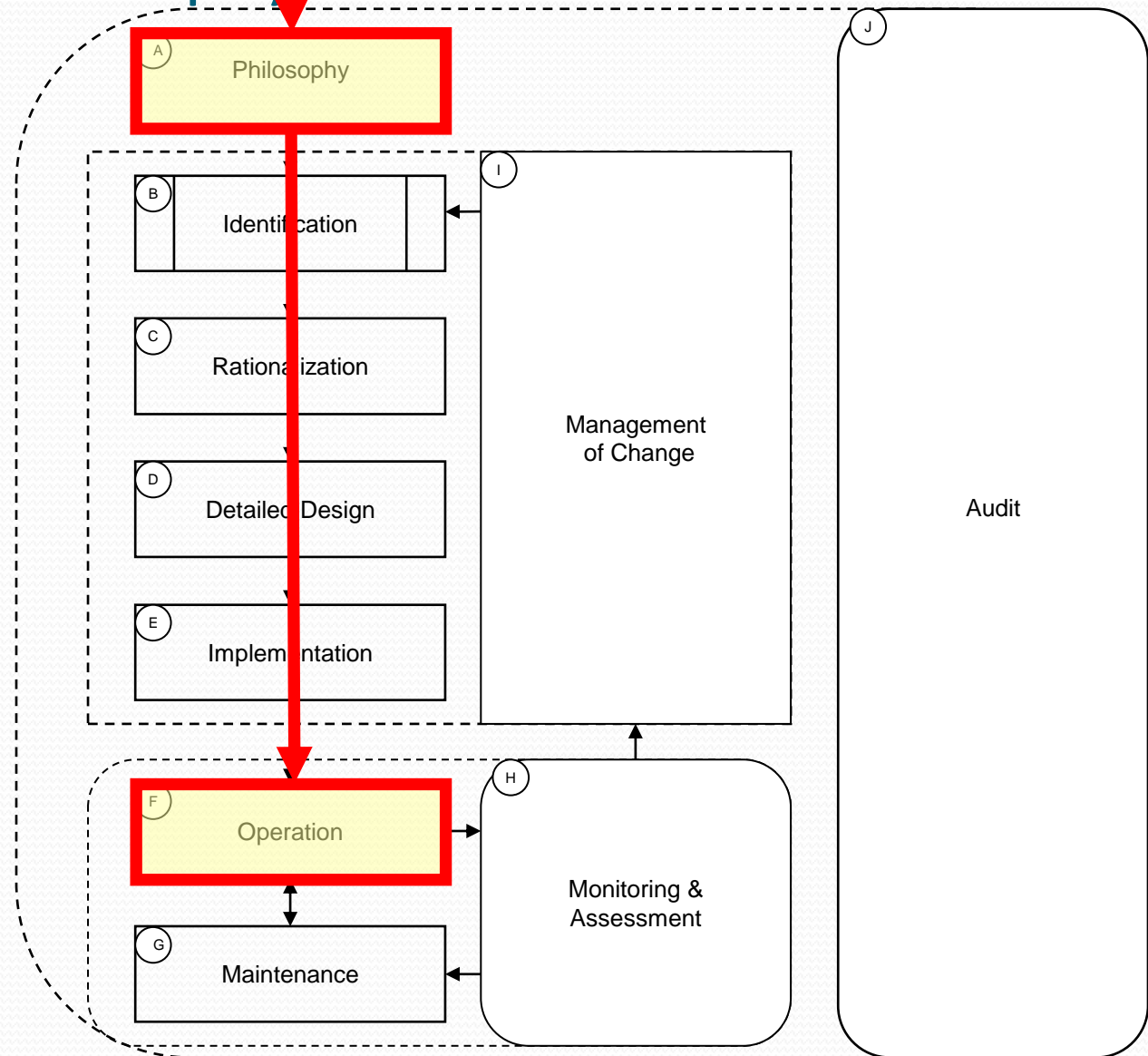
Alarm Management Lifecycle

- Philosophy
- Identification
- **Rationalization**
- **Detailed Design**
- Implementation
- **Operation**
- **Maintenance**
- **Monitoring & Assessment**
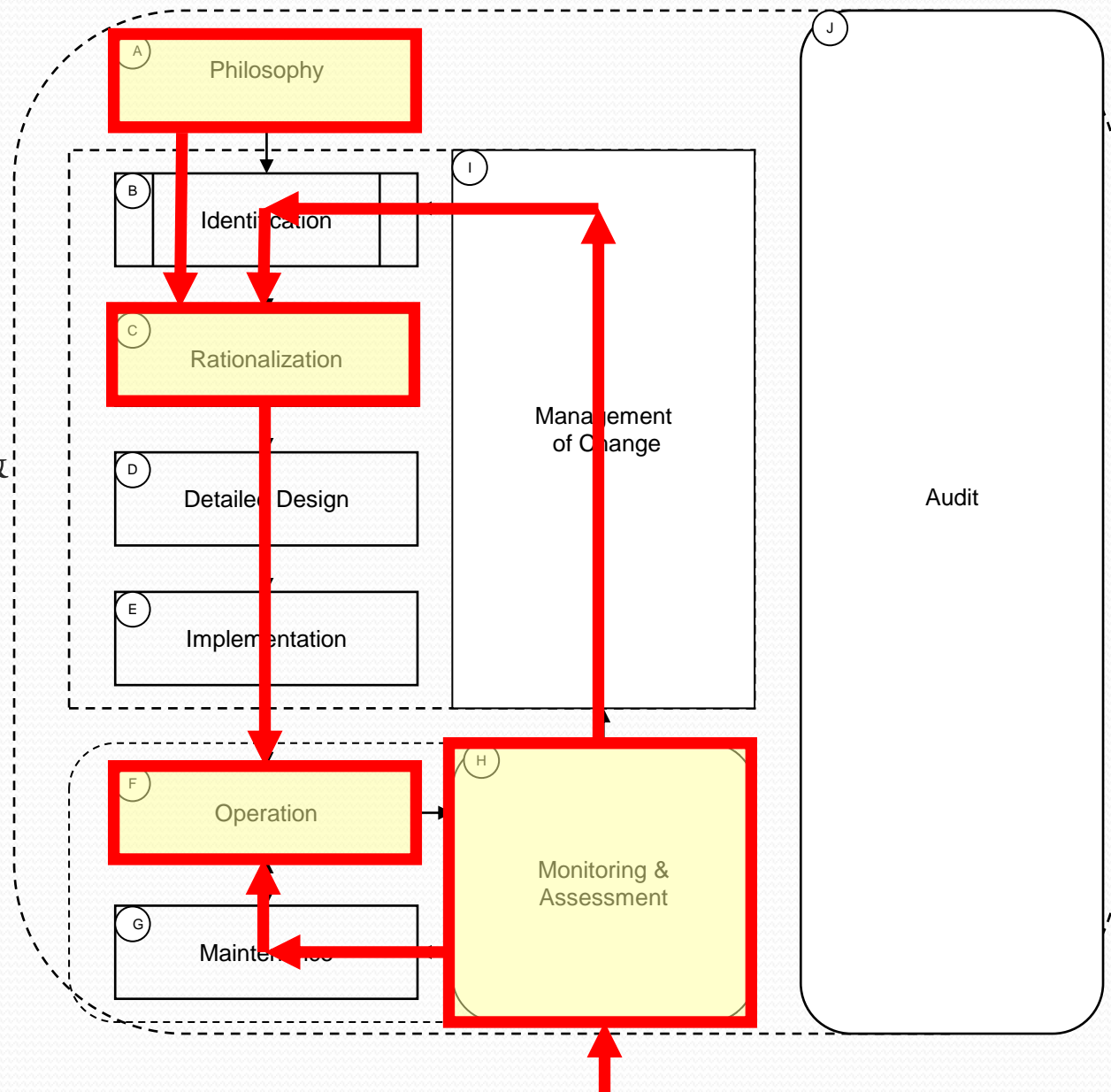- **Management of Change**
- Audit

• Greenfield or Brownfield sites
• Objectives of the alarm system
• Design it correctly and keep it there

- Focus on quantitative analysis to determine gaps
- Follow Maintenance & MOC paths to resolve

Audit