

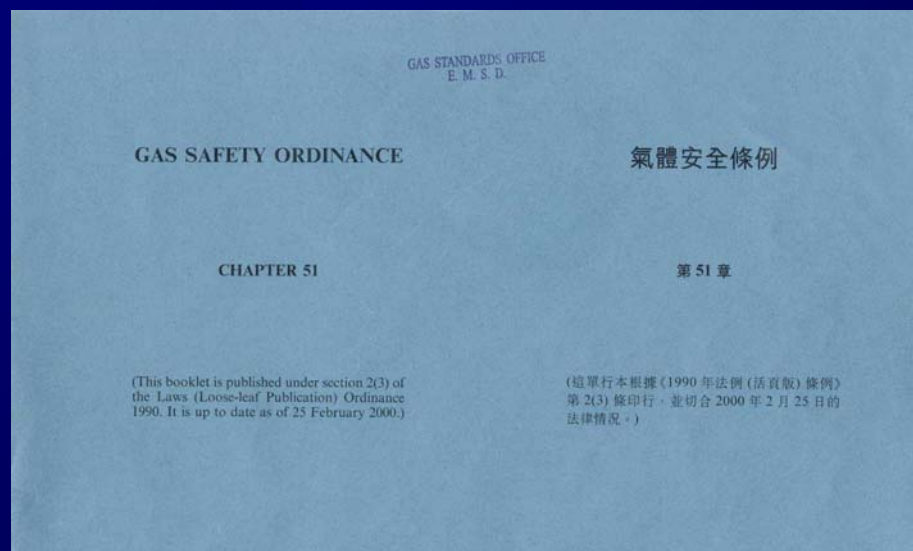
Managing Fuel Gas Risk in Hong Kong

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Gas Safety Ordinance, Cap. 51

To control in the interest of safety,

- Importation
- Manufacture
- Storage
- Transport
- Supply, and
- Use of gas



The Gas Authority :
Director of Electrical & Mechanical Services

Gas Safety (Registration of Gas Supply Companies) Regulations

- Self-regulating duties of Registered Gas Supply Companies (RGSCs)



Gas Safety (Gas Supply) Regulations

- Notifiable Gas Installations (NGIs)
- Construction approval
- Use approval



Safety Case

- Control of Major Accident Hazards (COMAH) Regulations in UK

Objectives:

- Operator fully aware of the potential hazards associated with the site; and,
- Safety management system and engineering provisions are well in place;

Potentially Hazardous Installations (PHIs)

- Include LPG terminals, towngas production plants, etc.
- Coordinating Committee on Land-use Planning and Control relating to PHIs (CCPHI)
- EMSD as risk advisor on fuel gas matters



The Risk Management

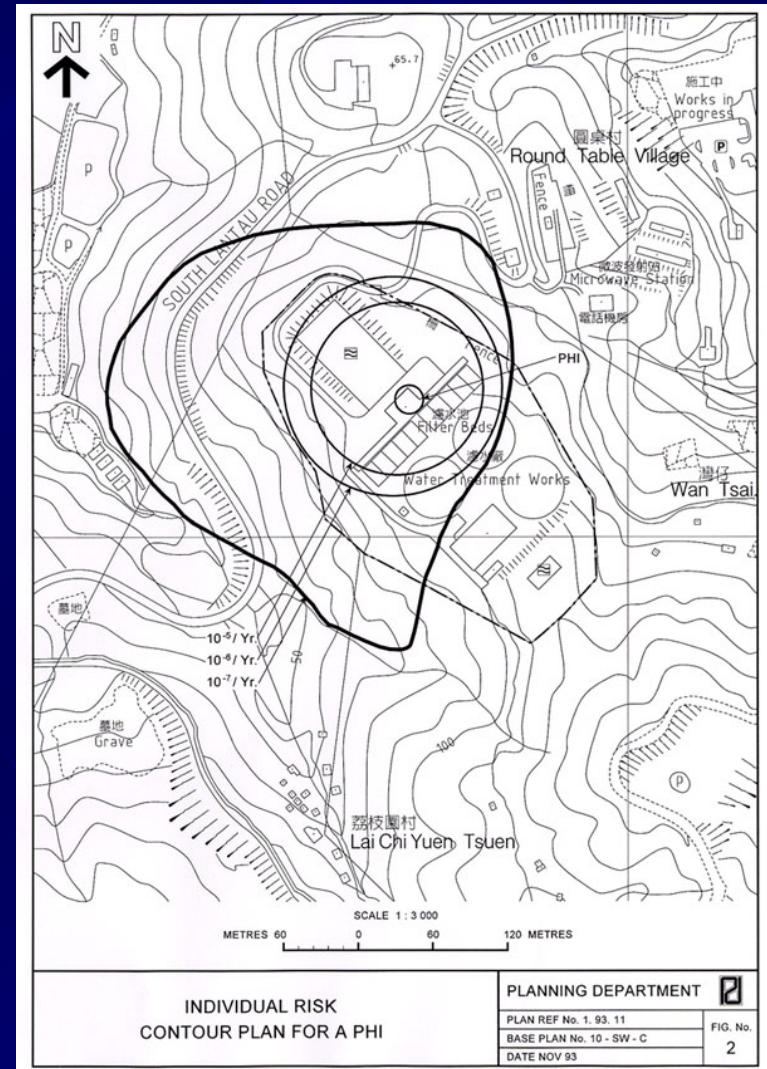
- A risk-based approach – a more pragmatic approach for controlling risk by taking into account the probability of an accident.

Confine risks to internationally acceptable levels by :

- Controlling the siting of PHIs;
- Controlling the land-use and populations in the vicinity of PHIs; and,
- Requiring plant facilities to be constructed and operated to specified standards and to apply risk mitigation measures;

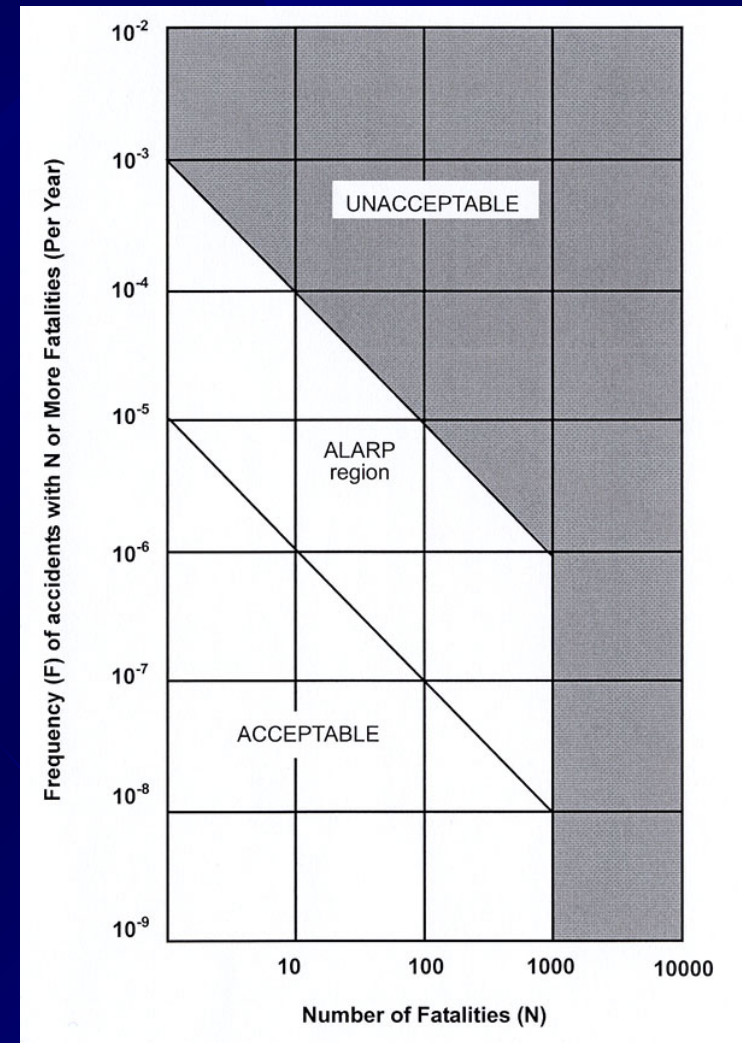
Hong Kong Risk Guidelines

- Individual risk is the predicted increase in the chance of death per year to an individual who lives or works near to a PHI.
- Offsite Individual Risk $< 1 \times 10^{-5}$



Hong Kong Risk Guidelines

- Societal risk expresses the risks to the whole population living near a PHI
- Consultation zone delineated for every PHI
- Applicable to non-PHI fuel-gas hazard sites



Quantitative Risk Assessment (QRA)

QRA – a chief component of the risk management system for fuel-gas installations

Challenges -

- The public see risks in a different way to the professional; and,
- Political elements in every risk issue;



Thank You