

Emergency Planning

Or

Emergency Preparedness?

W.V.Peter Hunt

What is an emergency plan?

- “an informative **document** which acquaints facilities occupants with procedures
- A **document** which “also contains critical information which can assist emergency services personnel”
- “a **critical component** in implementing appropriate emergency management strategies and tactics ...”

(NSWFB)

Emergency plan & OHS laws

Employer to provide for emergencies

An employer must ensure that, in the event of an emergency, arrangements have been made for:

- the safe and rapid **evacuation** of persons,
- emergency **communications**,
- appropriate **medical treatment** of injured persons.

OHS Regulation continues:
an employer must take the following
into account:

- the **nature of the hazards** at the workplace
 - the **size and location** of the place of work,
 - the number, mobility and capability of **persons** at the place of work.
- [i.e. a risk management approach]**

OHS Regulation continues

the employer must ensure

- adequate arrangements for the **shutting down** and **evacuation** in an emergency, and
- details of the arrangements for any such evacuation are kept **on display** in an appropriate location, and
- one or more persons are appointed and appropriately **trained to oversee any such evacuation** and, if appropriate, in the **use of on-site fire fighting equipment**.

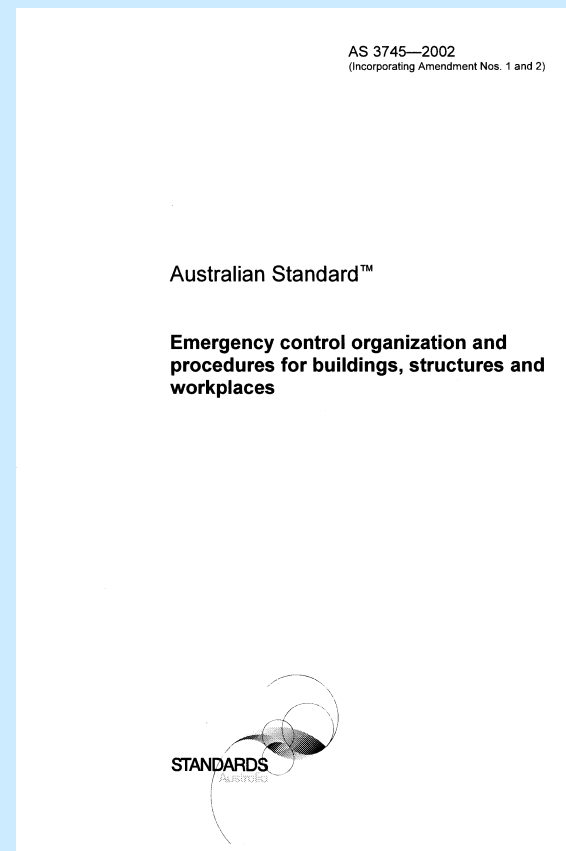
[Scope: shutdown, evacuate, warden, firefighting]

Preceding applies to **all** workplaces

Possible compliance by using

AS 3745:2002

“Emergency control organization and procedures for buildings, structures and workplaces”



AS 3745:2002

- Prepared by Standards Committee FP-017, **Emergency Evacuation Procedures**
- Addresses offices, warehouses, factories, public buildings, shopping centres etc
- **Is it enough for dangerous goods?**

DG legislation - fire

Fire protection (NSW OH&S Reg Cl 174ZB)

An occupier must ensure that the premises are provided with a fire protection system that has been **designed and constructed** to account of

- any **risk assessment** of the premises, and
- the **types and quantities** of dangerous goods and the **conditions** under which they are stored and handled, and **other materials** and substances ... at the premises, and
- [more requirements]

DG legislation - planning

Planning for emergencies An occupier of premises [exceeding manifest quantity] must ensure that a **written plan** for dealing with any emergency associated with the storage and handling of dangerous goods on those premises (an "**emergency plan**") is:

- (a) **developed, implemented and maintained**, and

NSW OH&S Reg 174ZC

DG legislation - planning

(b) **communicated** to persons:

- who .. **work at the premises** and may be exposed to risk as a result of an emergency,
- **in control of adjacent premises** to the extent that the emergency plan applies to those persons or property on the adjacent premises may be exposed to risk as a result of an emergency.

DG Legislation - Response

Response to serious incidents and other incidents


An **occupier must respond** to a serious incident or other incident involving dangerous goods ... by ensuring that:

- **immediate action is taken to assess and control any risk** associated with the incident, including making any associated plant or equipment and the surrounding area safe so far as is reasonably practicable, and
- only persons essential to carrying out the action referred to above remain in the vicinity of the incident, and
- the risk to each person engaged to carry out the action referred to above is reduced so far as is reasonably practicable.

[requirement for damage control] NSW OH&S Reg Cl174ZO


NSWFB Guidelines

POLICY NO. 1: GUIDELINES FOR EMERG. PLANS WITH DANGEROUS GOODS



Policy No. 1


**GUIDELINES FOR EMERGENCY PLANS
AT FACILITIES HAVING NOTIFIABLE
QUANTITIES OF DANGEROUS GOODS**



PRODUCED BY
STRUCTURAL FIRE SAFETY UNIT
COMMUNITY SAFETY DIVISION, NSW FIRE BRIGADES

Version	Date	Reviewed by:	Authorized by:
A	1 AUG 2006	MFSD	DRM
01.01	3 APR 2007	MSFSU	MSFSU

© 2007 NSW Fire Brigades
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the NSW Fire Brigades.



NSWFB Guidelines

The plan must also nominate staff positions which will perform specific functions as required under the emergency plan.

Functions should be addressed in priority specific to the site, and include the following principles:

- containment,
- rescue,
- first aid,
- emergency procedures.

Is the plan implemented?

Based on past inspection history at refineries and large chemical plants, US OSHA has found that **employers may have an extensive written process safety management program, but insufficient program implementation**

Case 1 – service station

Typically includes:

- Underground fuel tanks
- Fuel dispensers
- Above ground LPG tanks
- General goods shop



Plan?

- No plan
- No appreciation of hazard
- Nobody in charge (no “incident controller”)
- No evacuation
- No communication with emergency services

A recipe for disaster!

Case 2 – Toxic gas transfer

Compressed, liquefied chlorine

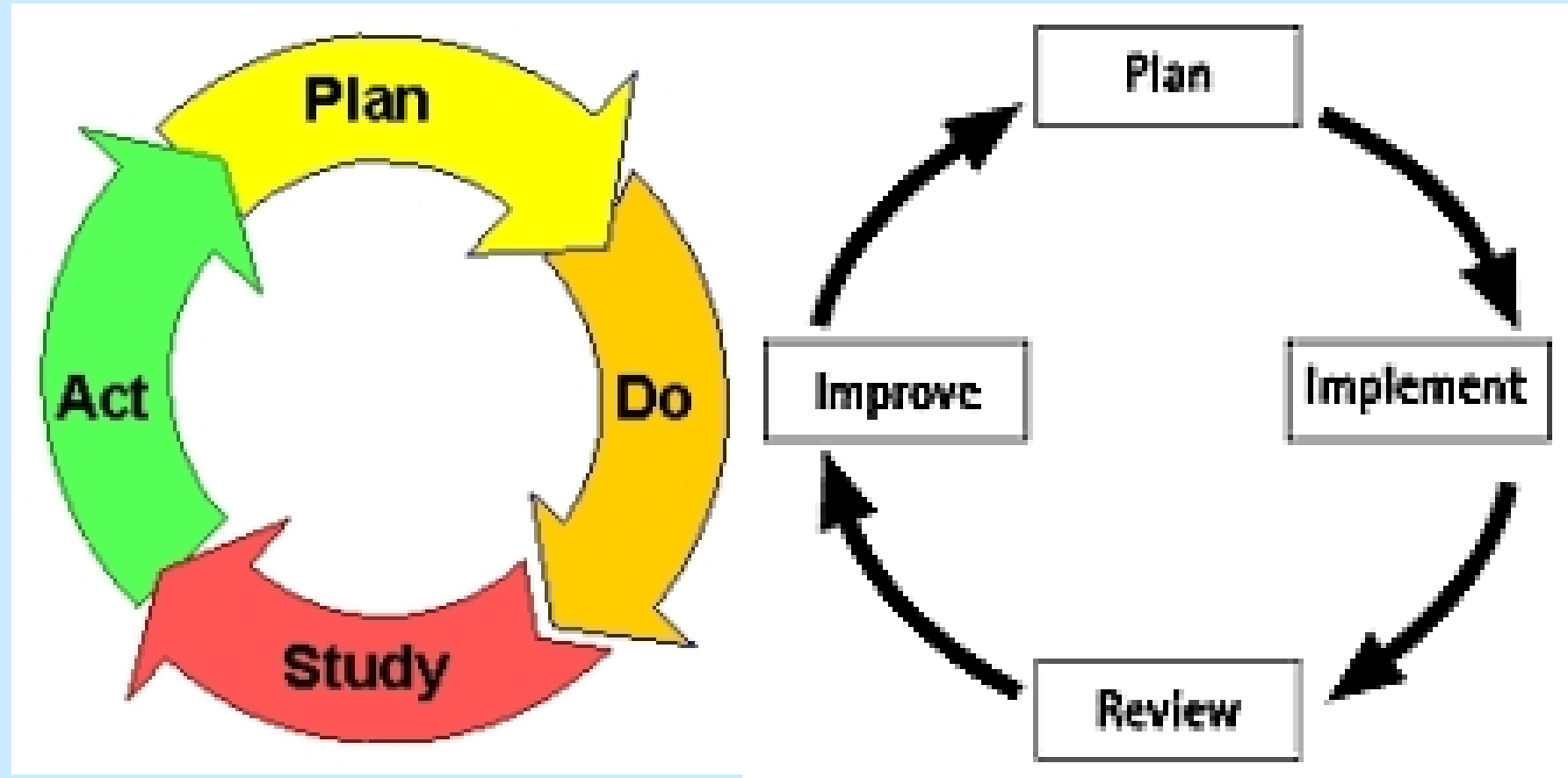
- Transfer from rail car to plant
- Transfer hose fails
- Trained operators present
- Appropriate PPE on site



Good planning?

- PPE in wrong place – why?
- Inadequate risk assessment?
- Poor/no scenario postulated?
- No damage control exercises conducted?
- Inadequate review of plan?
- 3 hours to adequate response – why?
- No external response plan?

Keep going round the cycle



Questions

What was the LPG technician supposed to be doing in Case 1?

