

Human Element Industry Group

ENCLOSED SPACES FATALITIES

PROJECT PLAN

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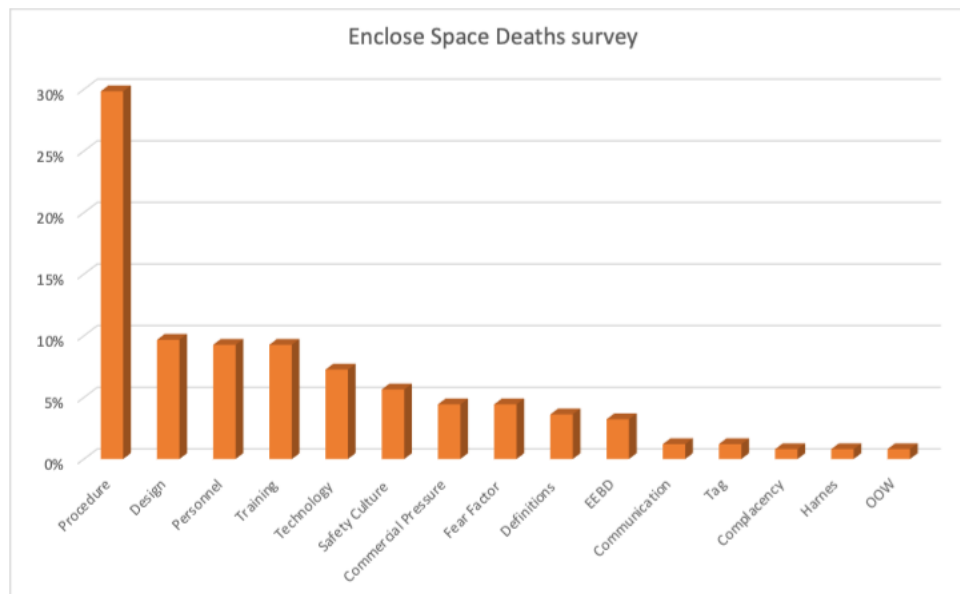
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Project Plan for Enclosed Space Fatalities

Introduction

Enclosed Space Fatalities are one of the major causes of death aboard ship. Both ship and shore personnel are exposed to this risk.

Intermanager carried out a survey and the figure below identified major concerns



HEIG agreed to progress this as a joint project.

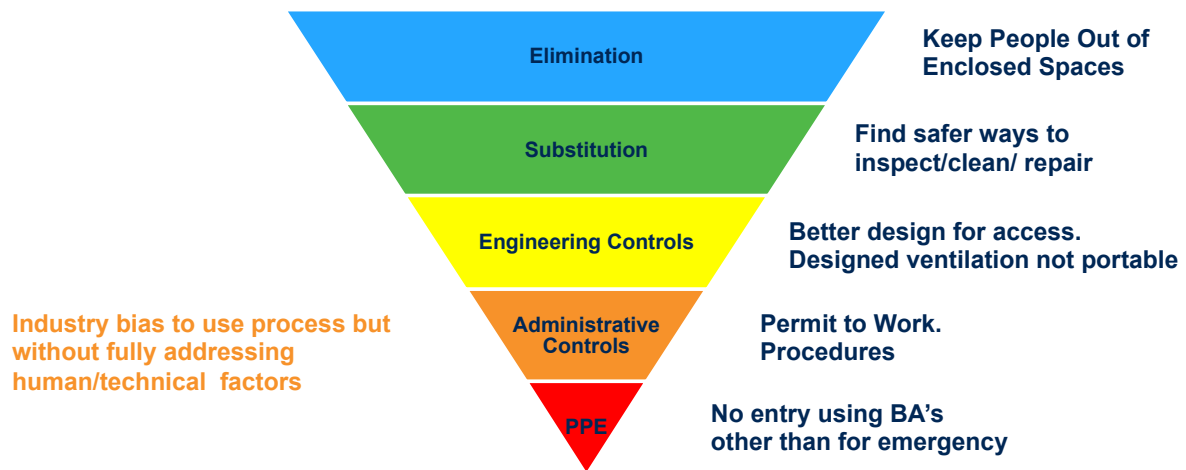
Objective

To reduce or even eradicate completely fatalities resulting from Enclosed Space Entry.

Strategy

Control of enclosed space entry has traditionally been dependent on procedural means supported by monitoring testing and breathing apparatus particularly in the case of emergencies.

A wider approach that uses the 'hierarchy of controls may be of value'. The figure below shows an outline strategy.



Author based on NIOSH

It is important to distinguish between entry to cargo spaces (tanks and holds) and non-cargo spaces.

Cargo Spaces

Non-Cargo Spaces

The group agreed a challenge given reduced manning and, in some cases, limited monitoring and rescue equipment availability.

Ships, their maintenance and operational standards as well as industry requirements should be designed such that ship's crew should not enter non cargo enclosed spaces other than in controlled conditions in dry-docks.

Project Deliverables

Specific deliverables to be created following delivery of Phase 1 but may include:-

1. Revised standards for access and ventilation of enclosed spaces.
2. Revisions of processes for cleaning and ventilation
3. Revision on requirement leading to enclosed space entry.

Project Risks

The following are the main risks to delivery of a successful revision to the HE Checklist. Mitigations will be kept under review.

Costs of Mitigating Risk to Charterers

Costs of Mitigating Risks to Shipowners

Cost of Mitigating Risks to Ports and Terminals

Shipping Legal Issues

Shipping Safety Culture Issues

Timeline

See Appendix 1

Resources

Resources will be drawn from the HEIG members.

Action List

No	Action	Responsible	Due Date	
1				
2				
3.				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Appendix 1-Timeline

Full GANTT Chart to be develop in due course.

	Phase 1	Phase 2
Definitions	Review definitions of enclosed and confined spaces	Propose revised definitions
Types of enclosed spaces and entry requirements in regulations	Inventory. LR Foundation study	Identify technical options
Data	Identify Data on enclosed spaces incidents	Create database
Investigation	Review current available investigations	Enhance investigations
Time pressure	Review time pressure	Develop changes
Stop Work	Identify stop work processes	

Appendix 2-Accident Investigation and Data

To be developed further

Appendix 3-Technical Aspects

To be developed further

Appendix 4-Time Pressure

To be developed further