The Challenges of HNS incidents: MSC CHITRA

Kelly Reynolds, Senior Technical Advisor

Mumbai Seminar, 29th January 2015

Overview

• Assessing the risk
• Deciding upon strategy
• Implementation
HNS issues during MSC CHITRA

- Containership (33,113 GT, 2,314 TEU)
- Approximately 1,000 MT of heavy fuel oil lost
- Over 300 containers lost overboard
- Carrying 31 containers classified as Dangerous Goods

Oil and HNS
Understanding what is where

Parties involved
31 DG containers containing:

- Sodium hydroxide (24 containers, 6 overboard)
- Aluminium phosphide (1 container, 1 overboard)
- Organophosphorus pesticides (1 container, 1 overboard)
- Environmentally hazardous sub solid (2 containers, 1 overboard)
- Pyrethroid pesticide (2 containers, 0 overboard)
- Adhesive containing flammable liquid (1 container, 0 overboard)
- Hydrogen peroxide (4 empty non DG containers, all 4 overboard)
During the salvage operation, one container with Aluminium phosphide broke open and the contents were lost in the hull and sea.

- Contained 4,200 kg of AP in 2,800 x 1.5 kg canisters
- Reports received of canisters coming ashore

Understanding the risk

- Contained 4,200 kg of AP in 2,800 x 1.5 kg canisters
- Reports received of canisters coming ashore
Getting expert advice

Deciding on the strategy
Public health issues during MSC CHITRA

HAZARDOUS CHEMICAL ADVISORY

Keep an eye out for one-litre aluminium containers that could still have potentially harmful contents inside.

These are 10 inch metal containers (pictured here).

The contents of the container are hazardous.

IF FOUND:

• Do not touch it.
• Stay away.
• Immediately contact: +91 xxxxxxxxxx

• Clear, concise information distributed via leaflets
• Consideration of credible worst case scenario in risk assessment
• Monitoring and collection of lost cargo

HNS impacting shoreline clean-up work

United Phosphorus Ltd.
Air monitoring – sharing information

- Salvors had a marine chemist dedicated to monitoring harmful gases
- Varying levels of PH$_3$ detected; changed with wind conditions
- Respirators required to work in some areas; other no-go areas

Other HNS issues

- Rotting perishable goods in monsoon weather – H2S
- Status of packaging, interactions of cargo
Container processing

- Ability to discharge containers
- Salvors chartered all available barges
- Delays to salvage operation

Duration of response

- Incident occurred in early August, re-floated in late March
- Similar timelines for other containership incidents
Assessing the adequacy of a plan

Are:
• Risks well assessed? (i.e. most commonly transported chemicals in Indian waters)
• Response techniques pre-agreed?
• Sensitivities identified and priorities for protection agreed?
• Correct PPE available?
• Sufficient resources and back-up options identified?
• Waste storage and final treatment / disposal options identified?
• Roles and responsibilities of all clearly defined?
• Notification and mobilisation procedures clear?
• Arrangements for communications described?
• All aspects of the plan fully tested regularly?

Concluding comments

• Responsible Owners of MSC CHITRA
• Good cooperation is essential
• Importance of the assessment phase; need a timely response but assessment must be thorough and be capable of dealing with changes
• Knowing where and how to get expert advice
• Having an IMS that is sufficiently flexible to incorporate external parties who may be invited to provide expert advice
• Having an appreciation of what is necessary and possible
• Dealing with oil and HNS issues can be resource intensive
• Exercising an HNS scenario
Thank You!
Kelly Reynolds, Senior Technical Advisor
kellyreynolds@itopf.com