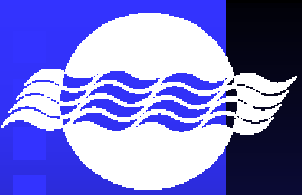


# WHAT ARE HNS?

Joe Nichols

Deputy Director/Technical Adviser  
International Oil Pollution Compensation Funds

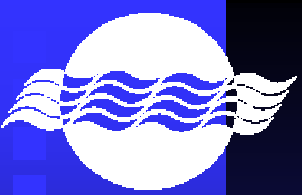
Workshop on implementation of the HNS Convention  
28 and 29 June 2005, IMO, London



# DEFINITION OF HNS

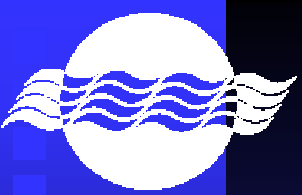
Based on lists of individual substances in international codes:

- ◆ MARPOL 73/78 (Appendix I of Annex I)  
(Appendix II of Annex II)
- ◆ IBC Code
- ◆ IMDG Code
- ◆ IGC Code
- ◆ BC Code



# MARPOL APPENDIX I of ANNEX I

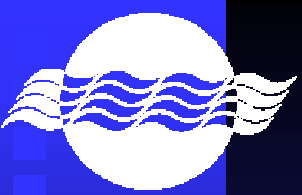
- ◆ Persistent oils, eg crude oil, heavy fuel oil
- ◆ Non-persistent oils, eg gasoline, jet fuel



# MARPOL

## APPENDIX II of ANNEX II

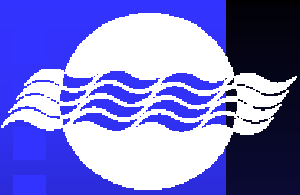
Noxious liquid substances carried in bulk & listed in Chapters 17 & 18 of the IBC Code that present a hazard to marine resources or human health & harm to amenities or other uses of the sea



# MARPOL

## APPENDIX II of ANNEX II

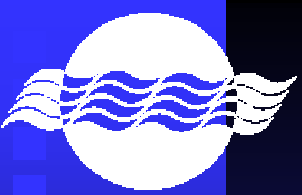
- ◆ Category A, eg tetra-ethyl lead, coal tar
- ◆ Category B, eg styrene monomer, chloroform
- ◆ Category C, eg sulphuric acid, coconut oil
- ◆ Category D, sodium hydroxide solution, fish oil



# OTHER SUBSTANCES LISTED IN IBC CODE

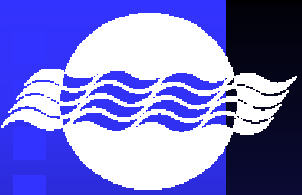
Dangerous liquid substances carried in bulk as listed in Chapter 17 of the IBC Code, eg molten sulphur, sodium chlorate solution

Liquid substances carried in bulk with a flash point  $\leq 60^{\circ}\text{C}$ , eg acetone, ethyl alcohol



# SUBSTANCES LISTED IN IMDG CODE

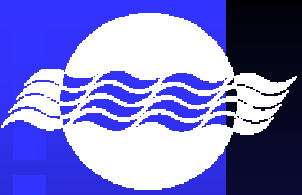
Substances, materials & articles which are dangerous, hazardous & harmful when shipped in packaged form, eg acids, cyanides, pesticides, ammunition



# SUBSTANCES LISTED IN IGC CODE

Liquefied gases listed in Chapter 19 of the IGC Code, eg LPG, LNG, ammonia, chlorine

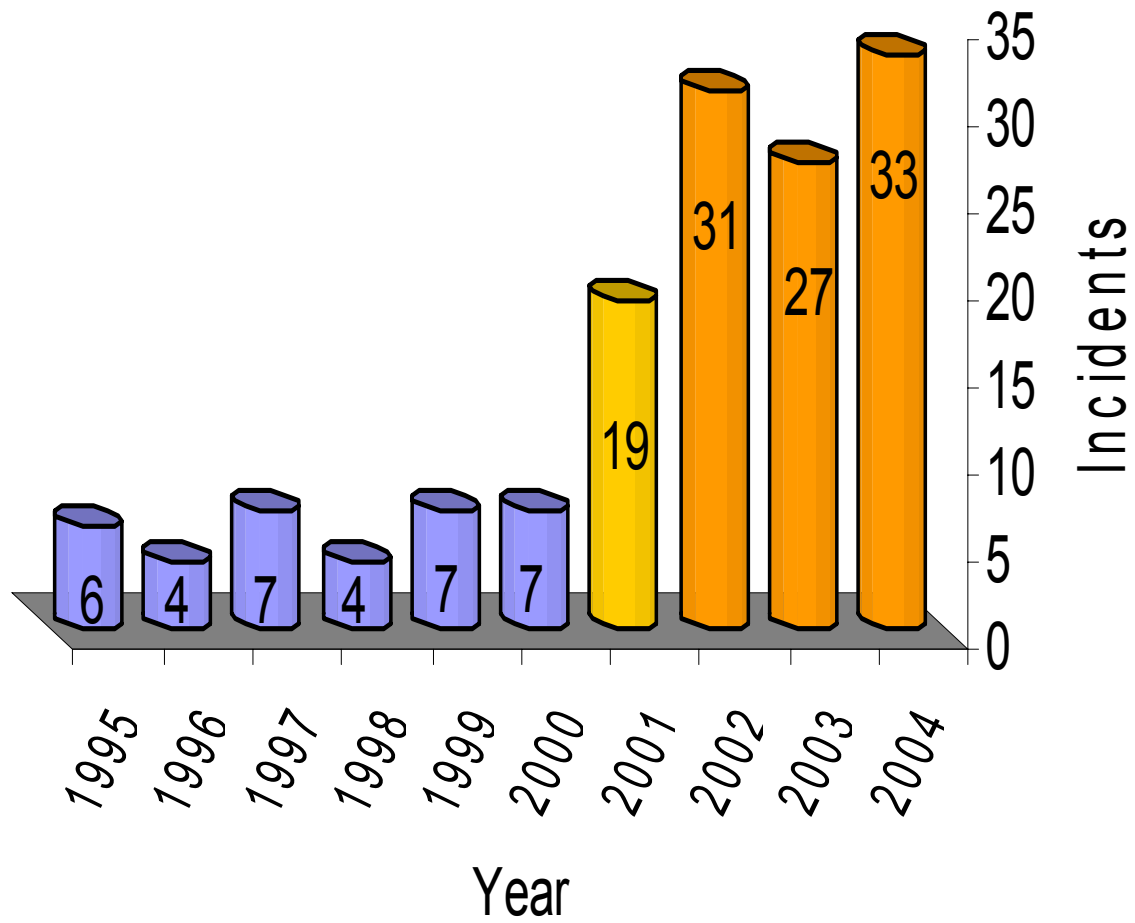


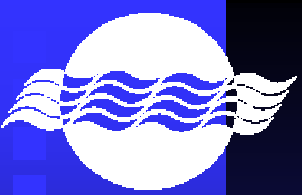


# SUBSTANCES LISTED IN BC CODE

Chemically hazardous solid bulk materials covered by appendix B of the BC Code if they are also subject to the provisions of the IMDG code when carried in packaged form, eg potassium nitrate, sulphur

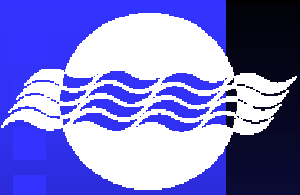
## Number of HNS Incidents





# CASON INCIDENT SPAIN 1997

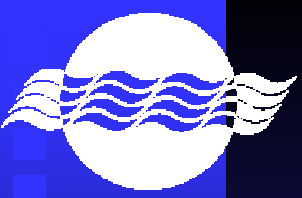




# CASON INCIDENT

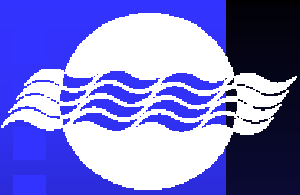
## SPAIN 1997

- ◆ 1 100 tonnes of chemicals in 5 000 packages, including at least 12 HNS
- ◆ Fire on board, 23 crew lost
- ◆ Explosion during unloading, 15 000 people evacuated, fishing and harvesting ban
- ◆ Costs and damages borne by Spanish Government



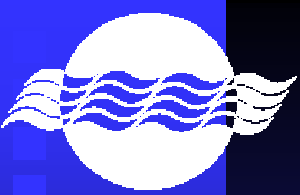
# IEVOLI SUN INCIDENT ENGLISH CHANNEL 2000





# IEVOLI SUN INCIDENT ENGLISH CHANNEL 2000

- ◆ Chemical tanker laden with 6 000 tonnes of styrene, methyl-ethyl-ketone (MEK) & isopropyl alcohol (IPA)
- ◆ Vessel evacuated after flooding & subsequently sank whilst under tow
- ◆ MEK & IPA posed no environmental threat - controlled release to sea
- ◆ Styrene & vessel's bunkers removed successfully - €10 million



# VICUÑA INCIDENT

## PARANAGUA, BRAZIL 2004

- ◆ Chemical tanker laden with 4 000 tonnes of methyl alcohol
- ◆ Explosion during cargo discharge, vessel sank alongside – 4 people killed
- ◆ Methyl alcohol evaporated/dissolved on release
- ◆ 400 tonnes of bunker fuel spilled affecting sensitive areas
- ◆ Pollution damage by oil not covered by HNS Convention or 1992 Civil Liability & Fund Conventions