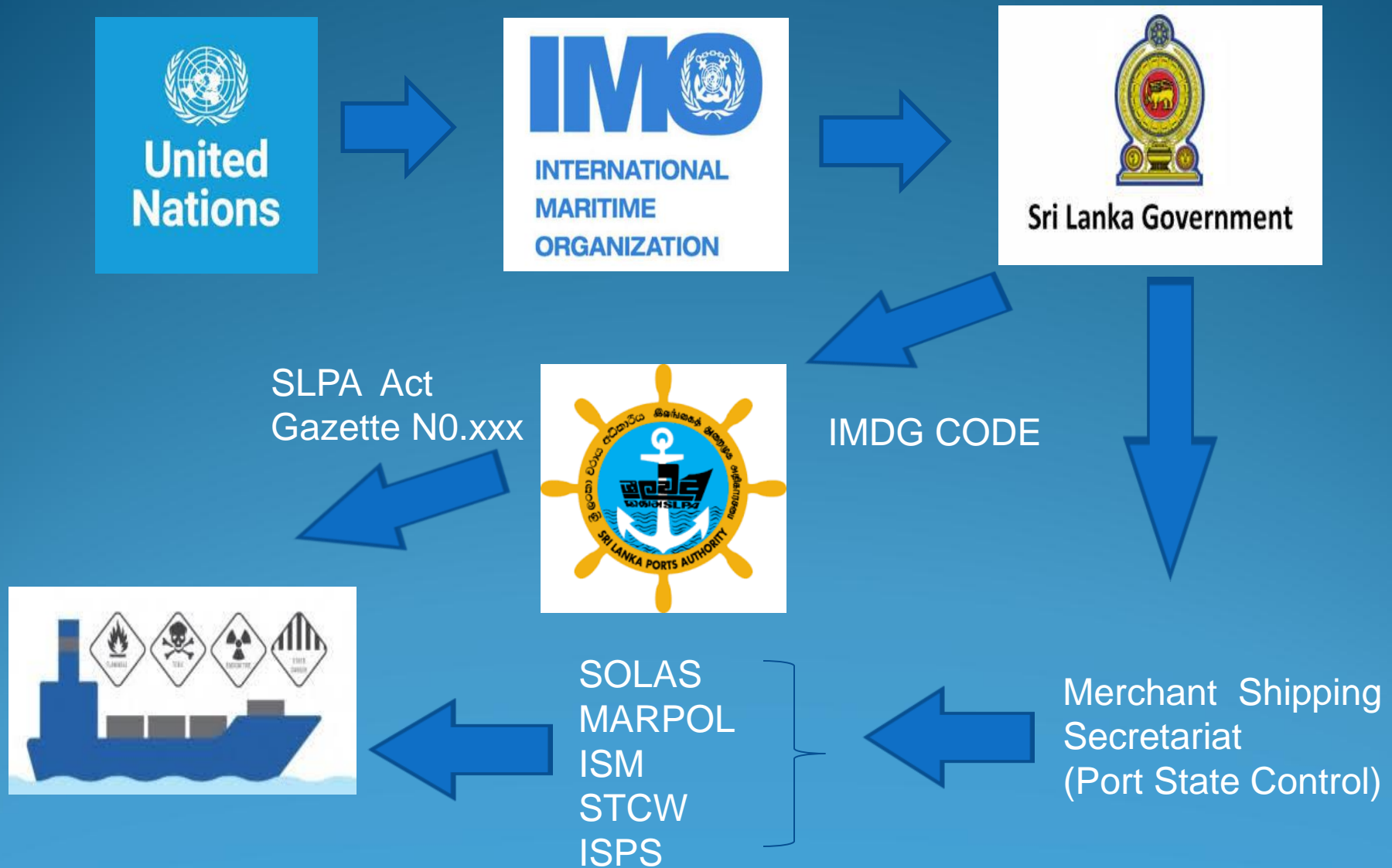


IMDG HANDLING in Sri Lanka & Lessons Learnt

General Imposing and Implementing Process



How Sri Lanka Ports Authority Sets standards of Procedures in relation to IMDG

- Power vested by *SLPA Act No 51 of 1979*
- Gazette No *462/16-1987* July 16

Sri Lanka Ports Authority (Dangerous Goods Regulations No 01 of 1987)





DG documentation process



Ship's Agent

SLPA
Finance

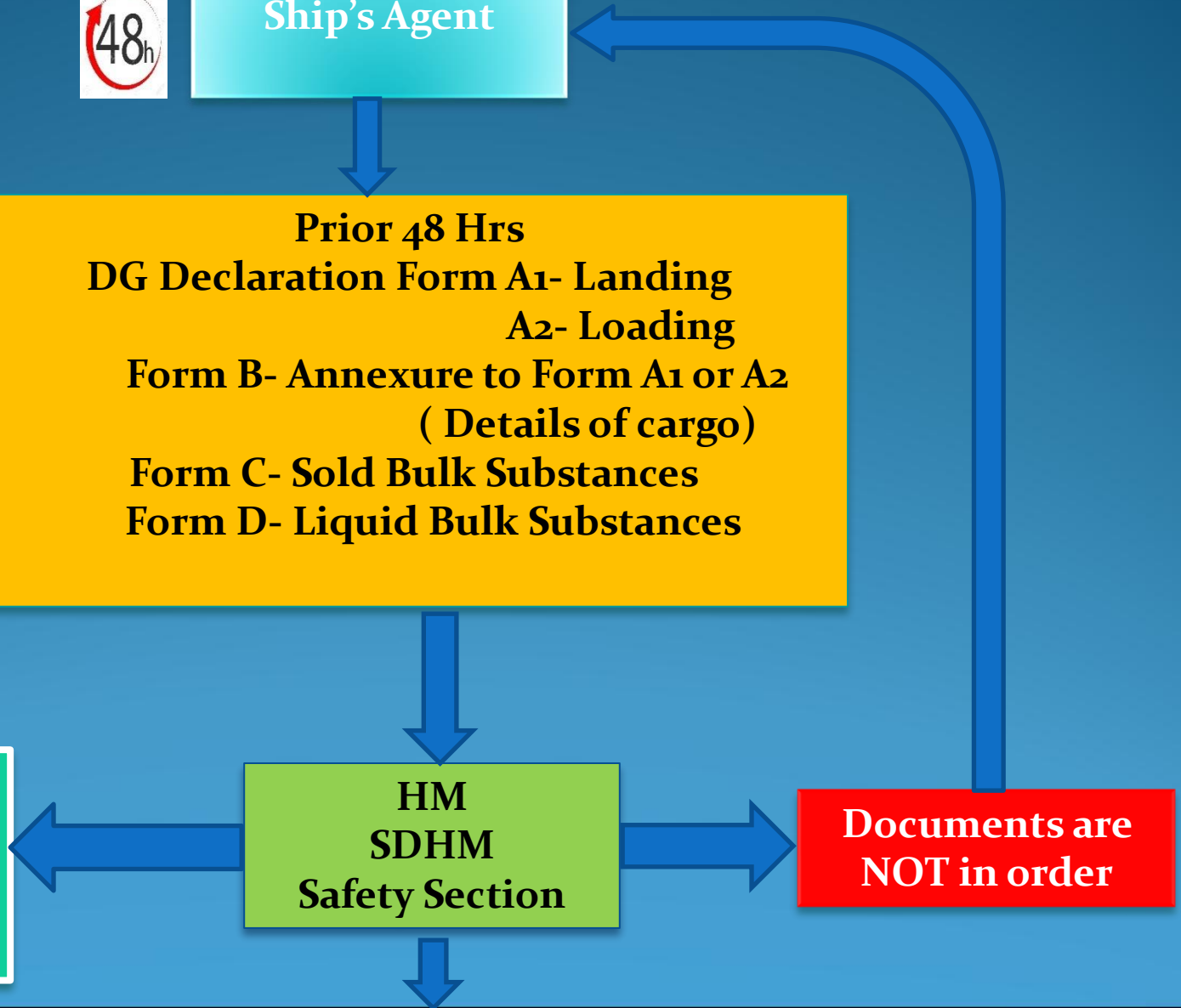
Impose
100%
surcharge as
per SLPA
tariff

Documents are
in order
(Supplementary
declaration after
sailing)

Prior 48 Hrs
DG Declaration Form A1- Landing
A2- Loading
Form B- Annexure to Form A1 or A2
(Details of cargo)
Form C- Solid Bulk Substances
Form D- Liquid Bulk Substances

HM
SDHM
Safety Section

Documents are
NOT in order



**Fire Brigade
STAND BY
(LPG/FUEL
OIL/Naphtha/
IMDG Class
1 & 7)**

**All documents
IN ORDER
(Note :1)**

**Acceptance of DG Declaration
Dispatch DG approval with
Serial No to following parties;**

**Vessel will be
berthed to
respective
BERTH**

**DHM
G/T/H**

Agent

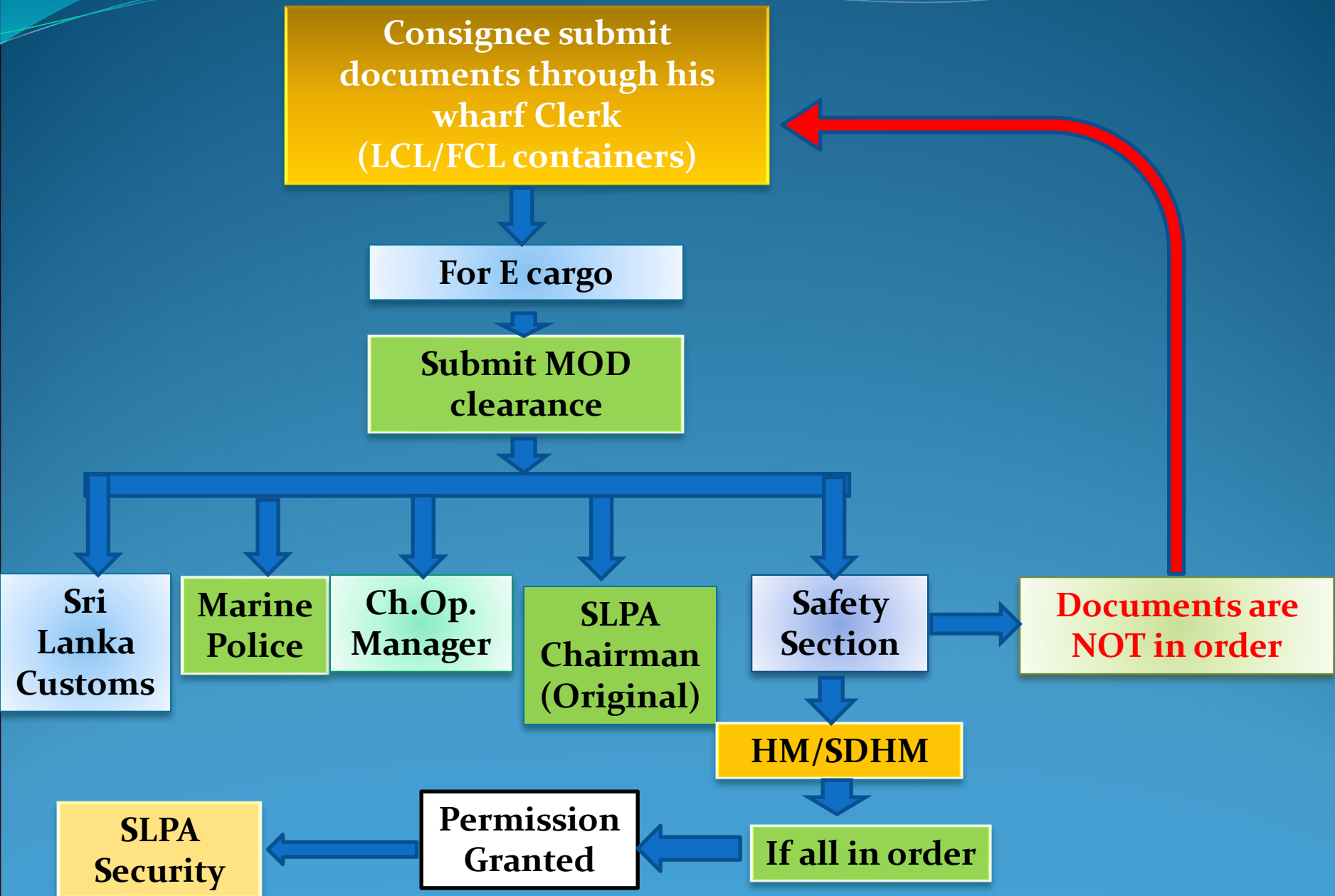
Terminal

**SLPA
Security**

**SLPA
Logistics**

**Port
Control**

DG-Local Clearing Process



Lessons learnt from past incidents

In Sri Lanka

1. Fire at CFS-1 at 23rd of May 2013

Vessel: M.V. TIGER BRIDGE

Agent: BTL Lanka

Berth: SAGT 21/05/2013

Reason: Non declared DG in the ware house

Non declared Cargo:

Toluene UN No.1294,
IMO Class: 3

Acetone UN No.1090,
IMO Class: 3

Acetone related products
UN: 1541,1695,2552,
3436 with IMO class 6.1





Damages to CFS-1 Warehouse

Reasons : Non/Miss declared DG in the warehouse

- Segregation is required for IMO class 6.1 and IMO class 3.0 whereas segregation is not required for Two products of same IMO 3.0 class.
- **Challenge :** To identify what is the exact UN No. of the Acetone related products if it is not declared or miss declared.
- **Lesson learnt :** should not be depends on the declaration and always cross check with Cargo manifest to confirm miss/non declaration possibilities.

2. Fire at M.V MSC DANIELA

April 2017 while crossing the Sri Lankan waters

Container capacity :13798



ON DECK CARGO

M.V. MSC DANIELA



ON DECK CARGO

M.V. MSC DANIELA



Reason: Undeclared DG container

- **Challenges** : Controlling and extinguishing the fire before being brought inside for discharging damaged containers
- **Obligation as Coastal state** : Offering Port of refuge immediately upon considering risks and provide all possible assistance
- **Success story** : Fire was brought under control and all damaged containers were safely discharged upon berthing.

3. Fire onboard M.V. ZIM CHARLESTON

08th of August 2022

Reason : Undeclared Lithium Battery







3. Fire in the Engine Room of M.T. NEW DIAMOND

03rd of Sep 2020 while crossing Sri Lankan water on its Passage from Kuwait to India.

270,000 MT OF CRUDE OIL(UN No 1267) WAS ONBOARD.



Reason: E/R Boiler explotion

- Challenges: Fixed Co2 System was delayed to activate due to missing crew member.

4. Fire at SAGT Terminal

18th of May 2021

(IMO Class 5.1, UN 3378 –Sodium Carbonate peroxyhydrate)

Discharged From M.V. ELEONORA MAERSK

Reason: Non declaration as IMDG



Reason:

Contact with combustible material may cause fire due to exothermal behavior of thermal decomposition of Sodium

- **Challenge** : Difficulty to approach root of the fire due to high container stacking
- **Success story**: Manage to control fire by boundary cooling until the container was stacked on the floor
- **Lesson learnt** :
 - 1) Purchasing a hydropen to pierce the container and direct water/foam to root of the fire.
 - 2) Have a database to identify shippers/country/shipping line of miss/non declared DG containers.

5. Fire at M.V X PRESS PEARL

20th of May 2021 (Western coast of Sri Lanka)

Reason: Leaking of Nitric Acid

(IMO Class: 8, UN 2031 - Nitric Acid)





M.V. X- Press Pearl





Loading Port:
Jabel Ali
Dep :10.05.2021

Hamad Port
Arrival: 10.05.2021
Detected Leaking
Dep: 11.05.2021

DC declaration to
Colombo Port at
1645hrs on 19.05.2021

HAZIRA Port
Arrival : 15.05.2021
Dep: 15.05.2021

V/l anchored At
Colombo Anchor age
until berth is Vacant
At 0030hrs on
20.05.2021

V/l reporting smoke/fire
in the **No : 2** Cargo hold
At 1205 hrs 20.05.2021



**Vessel reported fire under Control after
flooding CO₂ to Cargo Hold: 2 At 1230Hrs
on 20.05.2021**

What Could have been Done ?

1) Port of Refuge : Hamad Port / Qatar

Jabel Ali Port / UAE

Hazira Port / Gujarat, India

2) Incident Report to Nearest Coastal port/Next Arrival Port

Master's Obligation under SOLAS Chapter VII/ 7-4

3. Share all details before Arrival

- A) Stowage Plan with IMDG cargo locations
- B) General Arrangement Plan
- C) Fire fighting arrangement Plan
- D) Fuel Tank Sounding and their capacities
- E) Stability Data / Bending moments / Shear forces for the option of flooding cargo holds

4) Required shore assistance should be agreed upon well in advance

Shore authorities get more information/Time/
Confidence to tackle the fire.

6. Onboard Chemical Spillage at M.V. SEASPANE LAHORE

27th of Jul 2021

(IMO Class: 8, UN 2031 - Nitric Acid)

Reason: Poor packing material and No of stacking heights





07. Chemical Spillage at BQ II

23rd of Jul 2022

Non declared DG (IMO Class: 9, UN 3082 - Environmentally Hazardous Substance, Liquid)

Reason: Substandard packing material





08. Chemical Leakage at M.V NORTHERN GUARD

04th of Sep 2022 at UCT

Cargo: Hydrochloric Acid 34% in IBC
tanks IMO Class 8, UN No. 1789

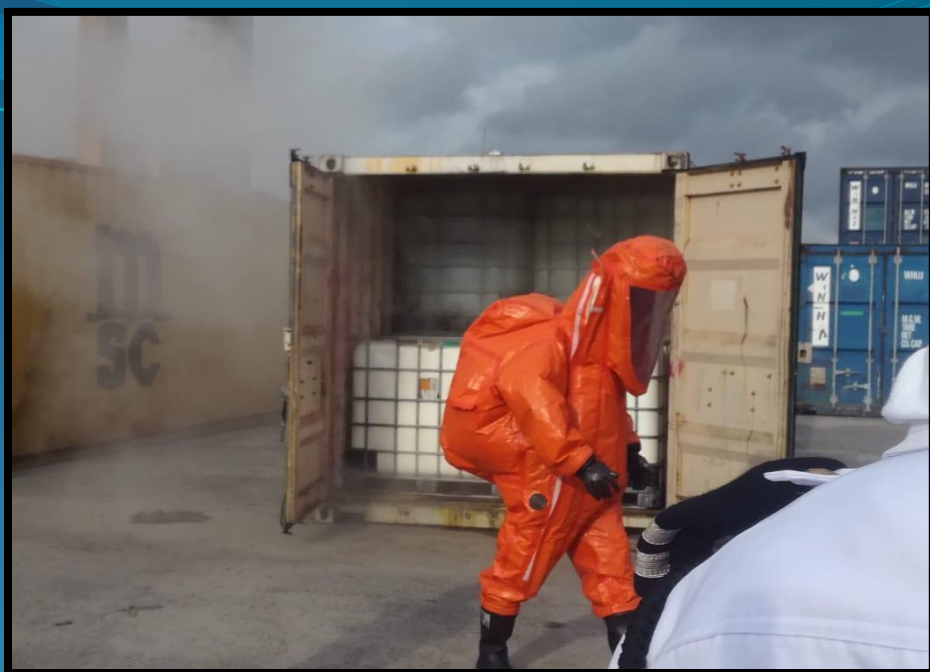
Container No. RWAU 2406045 &
NEWU 2035979

Vessel Agent: Simatech Lanka

Container Agent: Navoka Shipping and
Logistics

Re-work: Hamka Shipping

Reason: Poor conditions of IBC tanks



09. Fire at POONAC (Copra Cake) Container

Shipper - New Asian Trades(Colombo)

Agent - Far Shipping

Date – 30th of March 2022

Container No – JFSU 0131437

Location - JCT



Beirut explosions- 223 casualties



What are the remedies to minimize above incidents ?

- 1) Most of incidents are DG Liquids
- 2) Loading into substandard/ incorrect receptacles/IBC tanks
- 3) Allowable Stacking heights are not known to shippers or not considered important
- 4) Re-usage of IBC tanks for international transportation
- 5) Suggest to have Extra bottom valve to 1000L IBC tanks.
- 6) Suggest to issue Packing certificates by independent third party for Liquid DG

To Conclude;

IMDG Cargo shall be;

Classified according to it's inherent hazard levels,

Packed as per packing instructions.

Marked and labeled.

Placarding when transporting.

Preparing for emergencies related to the cargo.

Arrange **Medical First Aid** according to the risks involved.

Be prepared for the worst case scenario.

