# CEDRE Information Day – 29 March 2022 X-Press Pearl Incident: Sri Lanka



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## Background

MV X-Press Pearl cargo ship catches fire and burns for around two-week period (May 20 – 2 June 2021) before sinking 19 Km off coast of Colombo, Sri Lanka

#### Key risks:

- Bunker fuel oil
- Hazardous and noxious substances (81 containers including 25 tonnes nitric acid, caustic sauda, methanol, epoxy resin)
- Plastic nurdles (87 containers; 1,680 tonnes)



#### **UNEP/OCHA Joint Environment Unit Response**

- Triggered on request of the Government of Sri Lanka both to UNEP/OCHA JEU and UNEP Executive Director
- Experts mobilized by UNEP/OCHA JEU Emergency Response Roster: the European Commission (DG ECHO - European Civil Protection and Humanitarian Aid Operations)
- Facilitated through the UN Resident Coordinator Office in Sri Lanka

#### <u>UN Team</u>



Dr. Camille La Croix Marine Litter Monitoring CEDARE, France



Mr. Luigi Al Caro Marine Environment Impact Assessment Ministry of Environment (ISPRA), Italy



Dr. Stéphane Le Floch Oil and HNS Spill Response CEDARE, France



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#### **PLUS Backbench of Scientific Experts at Head Offices**

### **Objectives**:

The aims of rapid environmental emergency mission were to provide:

- Technical assistance in scoping and assessing the environmental impacts of the MS X-Press Pearl incident;
- Advisory support on reducing the risks caused by the incident over the short and longer-term;
- Recommendations on longer-term recovery, including building national preparedness and incident management capacity for future events.

# **Key Activities**

- Review of technical documentation relating to incident
- Multi-stakeholder consultation meetings with over 20 institutions from Government,
  NGOs and academia
- Aerial and boat reconnaissance visits of ship-wreck
- Walkover site visits of impacted coastal zone
- Analysis of satellite imagery



## **Key Considerations**

- 1. Complex and multi-dimensional emergency:
  - ➢ Oil spill
  - Hazardous and noxious substances (HNS)
  - Plastic pellets
  - Burned residues
  - Wreck and containers
  - > Air pollution
- 2. Dynamic and evolving disaster
- 3. Transboundary Impacts
- 4. COVID Lockdown Restrictions
- 5. Sensitive and highly mediatized incident:i) compensation claims and ii) criminal enquiry

## **Reducing Risks: Oil and Plastic Pellets**

Leveraging agreements between the Government and shipowners/maritime insurance on:

- ✓ Offshore oil spill response plan. (Oil response equipment mobilized on-site)
- ✓ Shoreline oil spill response plan in the event of a slick reaching the coast developed





## **Reducing Risks: Plastic Pellet Clean-up**



Majority deposited on sand surface



Presence of burnt plastic particles



**Buried pollution** 

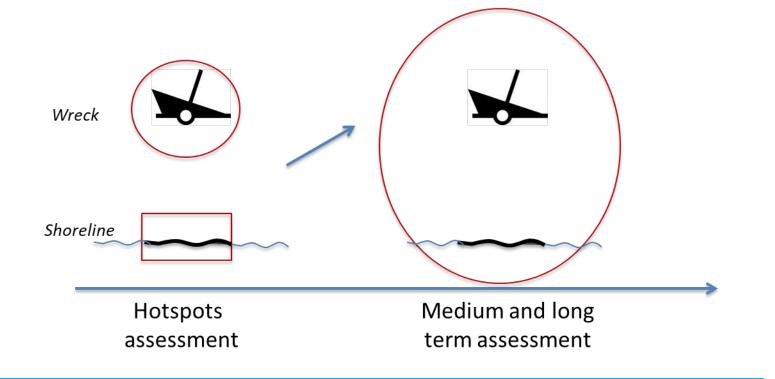
#### **Recommendations**

- Perform chemical analyses on pellets and burnt plastics
- Favor on site flotation to reduce sand removal
- Consider the environmental impact of clean-up techniques

#### Focus Assessment on Priority Hot spots

#### Assessing pollution in priority hot spots

i) wreck and containers (incl. biomonitoring)ii) shoreline (pellet contamination)



#### **Reducing Risks: Wreck and Container Removal**

- Elimination of the current risks by the removal of the wreck and container
- Decommissioning of the wreck and containers (onshore)
- Government oversight of the process



#### **Presentation of Findings and Recommendations**

- Inter-Ministerial Committee on X-Press Pearl chaired by Minister of Justice
- Detailed report shared with government
- Short and long-term recommendations including development of "Strategic Maritime Disaster Plan and Centre"
- Sri Lanka initiative for plastic pellets to be reclassified as a hazardous substance under the International Maritime Organizations (IMO) dangerous goods code for safe handling and storage



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# Thank you

