

Oil Spill Contingency Planning:

What are we talking about?

Richard Tindell

# What are we talking about?

## Oil spill contingency planning



# What and why?

## What

- Oil spill contingency planning is the process of **developing a suitable spill response capability**, that is in **compliance with the regulatory framework** and **commensurate with the oil spill risks** of an organisation, facility, nation

## Why

- OPRC 90
- International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990**

# OPRC 90

International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990



*Oil Spill Response*

# OPRC 90

## Who?

- 🔹 Developed by the IMO
  - 🔹 International Maritime Organization
- 🔹 Through the MEPC
  - 🔹 Marine Environment Protection Committee

## Basic intent of OPRC 90

- 🔹 Promote points of contact within countries
- 🔹 Promote the preparation of national and local contingency plans
- 🔹 Develop notification procedures
- 🔹 Promote and develop cooperation agreements
- 🔹 Develop national and regional resources
- 🔹 Encourage international cooperation

# OPRC 90

## Article 3

- OPRC 90, Article 3, **Oil Pollution Emergency Plans**
- Each party to OPRC 90 requires plans for
  - Flagged vessels
  - Offshore units under its jurisdiction
  - Authorities or operators in charge of sea ports, oil handling facilities under its jurisdiction

## Meaning

- Any of the entities that could have an oil pollution incident which could enter the marine environment, will have a written plan to assist with the containment, recovery and formal notification process of a spill and response effort
- Coordinated and approved within a national system, under the CNA, in accordance with Article 6

# OPRC 90

## Article 6

- OPRC 90, Article 6, **National and regional systems for preparedness and response**

## Meaning

- Each Party shall establish a national system for responding promptly and effectively to oil pollution incidents
- Coordinated and approved within a national system, under the CNA
- NOSCP
- Pre-positioned equipment, planned exercises/training, detailed plans and communications (TPR)

# Tiered preparedness and response

Internationally recognised planning approach



# Tiered preparedness and response

## What is TPR?

- Tiered preparedness and response is an internationally recognised system
- In accordance with OPRC 90, a CNA has the responsibility to understand and devise a country tiered structure for oil spill preparedness and response
- TPR is used to categorise and structure levels of preparedness and response to allow seamless escalation in the event of an oil spill incident
- Establishing a robust oil spill preparedness and response framework
- TPR also allows for resources to be cascaded rapidly from local, regional/national and international stockpiles

# Tiered preparedness and response

## What is the aim of TPR?

- Provide suitable resources at the right place allowing capability:
- Commensurate to the assessed risk
- Encouraging cooperation, mutual assistance and shared resources
- Scalable response via mechanisms for escalation (3 tier system)
- Tested, maintained and validated
- Employs appropriate response options reflecting NEBA/SIMA

## Basically, TPR ensures

- Pre-positioned, and warehoused, oil spill combatting equipment and ancillaries
- Exercise programme for organisations
- Training for personnel
- Detailed plans
- Communication capability
- Mechanism to coordinate

# Tiered preparedness and response

## Tier 1 - local

- Preparedness and response capability for spills that may be mitigated by locally available resources
- Facility specific OSCP

## Mechanisms for Tier 1

- Trained spill response personnel on-site
- Oil spill equipment and associated apparatus on-site

# Tiered preparedness and response

## Tier 2 - regional

- Preparedness and response capability for spills that require equipment and personnel resources beyond those available for Tier 1
- Assistance from entities outside of the immediate geographical area which include national resources
- Organisation/regional OSCP

## Mechanisms for Tier 2 delivery

- Mutual aid agreements
- Industry led cooperatives
- Government led cooperatives
- 'for profit' commercial centres

# Tiered preparedness and response

## Tier 3 – international/global

- Preparedness and response capability which requires resources on an international scale, mobilisation of national and international resources
- Bilateral and multilateral cooperation and agreements
- Customs and immigration procedures
- NOSCP

## Response network for Tier 3

- OSRL (Oil Spill Response Limited)
- MSRC (Marine Spill Response Corporation)
- CCA (Clean Caribbean and Americas)
- AMOSOC (Australian Marine Oil Spill Centre)
- PAJ (Petroleum Association of Japan)
- GRN (Global Response Network)
  - A collaborative group of companies from around the world*

# What is an Oil Spill Contingency Plan (facility/operator)

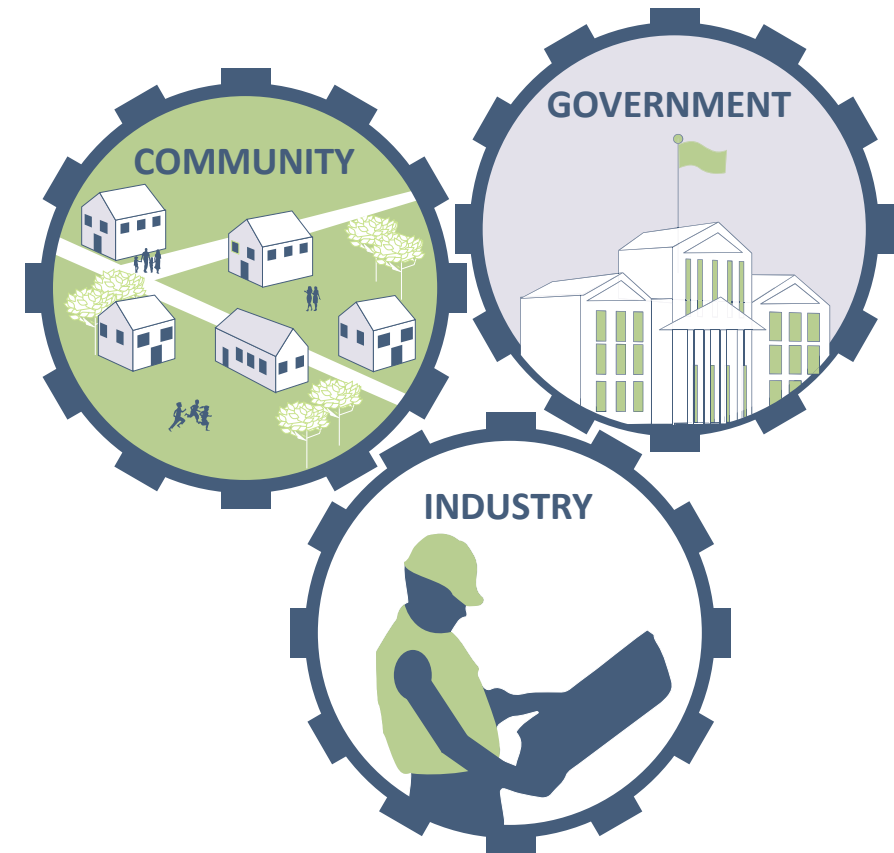
A plan with critical information

# What is an Oil Spill Contingency Plan

## Why plan?

- 💧 Legislative requirement
- 💧 Inline with industry good practices
- 💧 Better control of the incident
- 💧 Highlights tiered capability
- 💧 Delegated roles and responsibilities
- 💧 Ensure effective response
- 💧 Correct use of response techniques

## Who is involved?



# What is an Oil Spill Contingency Plan

## The plan should be

- Based on spill risk assessment
- User-friendly
- Concise
- Adaptable
- Practical
- Able to interact with other plans
- Agreed and communicated with stakeholders
- Updated and revised

## Benefits of a plan

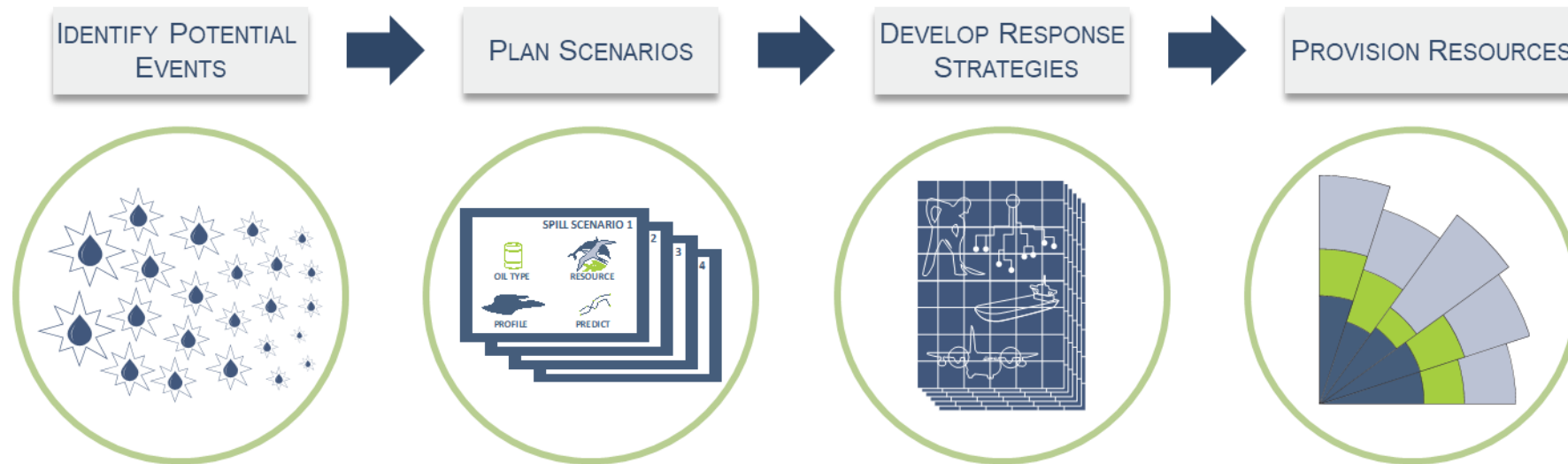
- Saves time in an emergency
- Provides a response structure and procedures
- Improves operational efficiency and effectiveness
- Instils confidence in response processes and teams
- Identifies links with response organisations
- Helps protect company reputation



# What is an Oil Spill Contingency Plan

## Key to preparedness

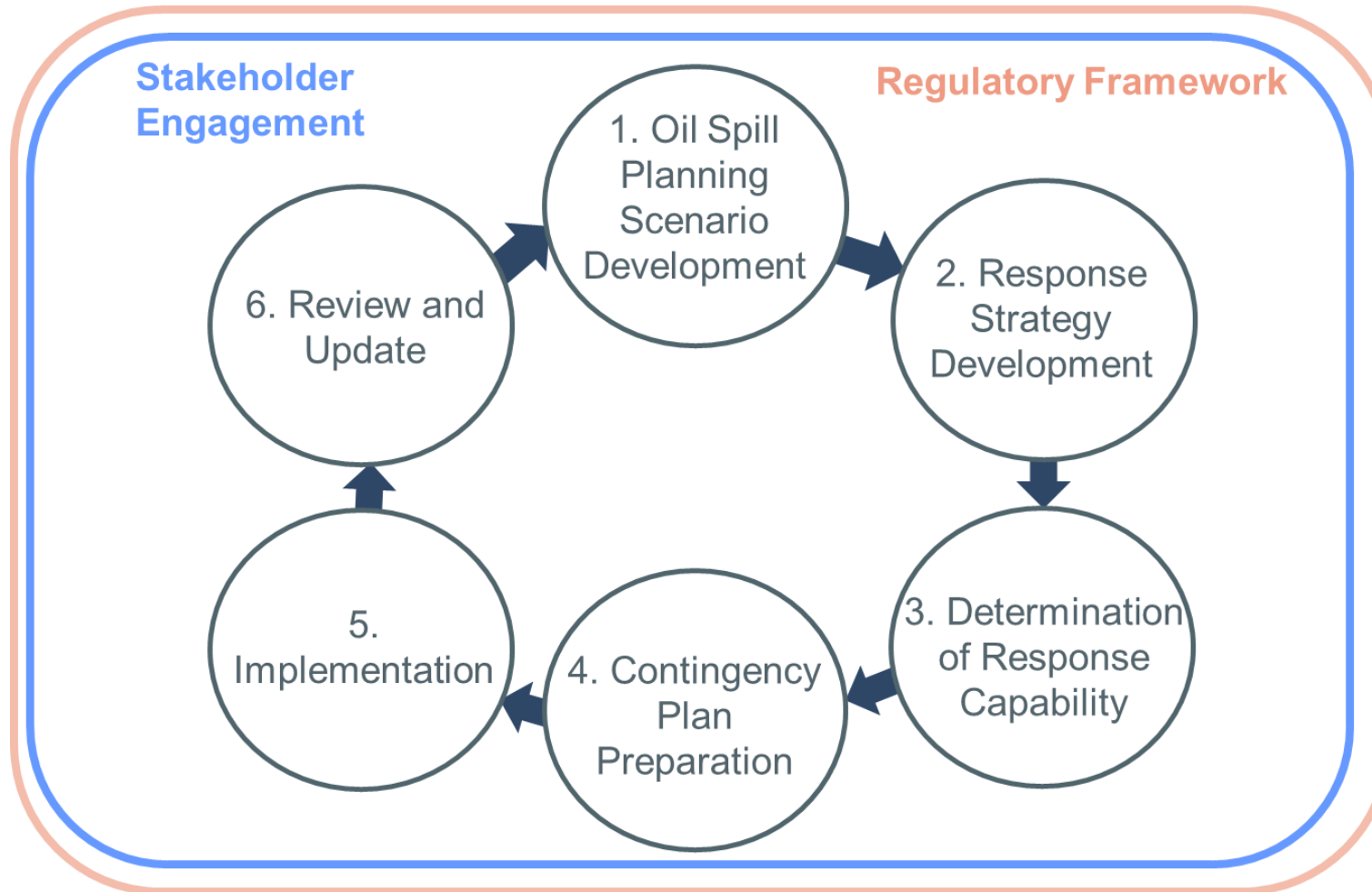
The key for contingency planning and preparedness is made up of four core components



A scalable process that can apply to one facility or multiple operations across an entire geographic region

# What is an Oil Spill Contingency Plan

## The planning process



# What is an Oil Spill Contingency Plan

## Regulatory framework

- International legislation implemented in country through national legislation and regulation
- OSCP may require consultation with relevant stakeholders
  - Government bodies
  - Environment groups
  - NGOs
- OSCP may require approval at a regional and/or national level

## Stakeholder engagement

- When forming a plan there should be coordination between:
  - Responsible party
  - Government
  - Industry
  - Communities
  - Scientific experts
  - Other potentially impacted stakeholders
- Open communication and transparent decision making
- Clarification of policy and realistic expectations

# What is an Oil Spill Contingency Plan

## 1. Scenario development

- Oil spill risk assessment
  - Likelihood
  - Types
  - Behaviours
  - Quantity
  - Sensitivities
- Identify and analyse potential oil spill incidents
- Evaluate response challenges and risk
- Select oil spill planning scenarios

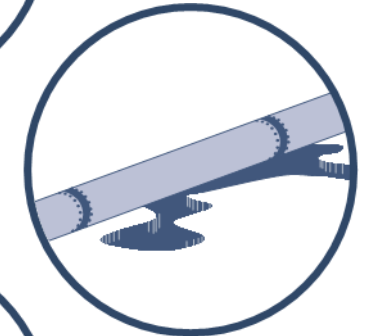
## Location



OFFSHORE



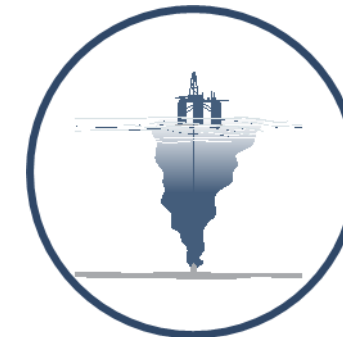
NEAR SHORE



ONSHORE



INLAND



SUBSEA

# What is an Oil Spill Contingency Plan

## 2. Response strategy development

- Set scenario response objectives
- Consider response strategy options
- Net Environmental Benefit Analysis (NEBA)
- Site Impact Mitigation Assessment (SIMA)

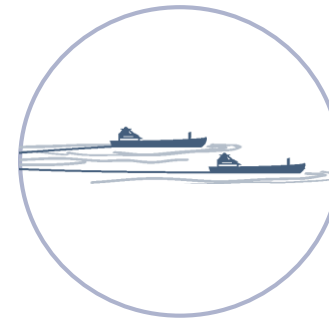
## Type



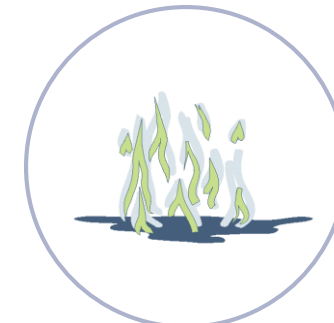
**NATURAL PROCESSES**



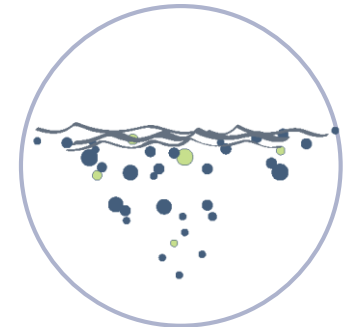
**PHYSICAL REMOVAL**



**MECHANICAL RECOVERY**



**IN-SITU BURNING**



**DISPERSANTS**

# What is an Oil Spill Contingency Plan

## 3. Determine response capability

- 💧 Tactical planning and resource identification
- 💧 Tiered provision of resources
- 💧 Supporting response elements

## 4. Plan preparation/key components

- 💧 Operational Overview
- 💧 Key actions and checklist
- 💧 Response organisation
- 💧 Risk assessment
- 💧 Oil spill modelling
- 💧 Response strategy
- 💧 Response resources
- 💧 Waste management
- 💧 Contacts

# What is an Oil Spill Contingency Plan

## 5. Implementation

- 💧 Familiarisation of the plan
- 💧 Conduct training and exercises
- 💧 Verify capability and usability of the plan



## 6. Review and update

- 💧 Review the planning process
- 💧 Plan maintenance should be scheduled in line with company policy
- 💧 Plan update should occur
  - 💧 Inline with statutory regulation
  - 💧 When an operational risk changes
  - 💧 Following lessons learnt from a real-time incident and/or exercise

# What is a National Oil Spill Contingency Plan

A plan with critical information



# What is a National Oil Spill Contingency Plan

## What is a NOSCP?

- It is a plan prescribing national preparedness and response systems to effectively respond to oil spill incidents
  - It ensures an effective oil spill response will reduce environmental, economic and health impacts
  - Includes public, non-governmental organisations, and private resources, for responses to marine oil spills
- A NOSCP explains and describes the national preparedness and response system as prescribed in OPRC 90, article 6

# What is a National Oil Spill Contingency Plan

## NOSCP objectives

- The main objective of the NOSCP is to ensure a coordinated, timely and effective response to oil spills
- The NOSCP will communicate government expectation, and focus, on national policies and protocols for oil spill preparedness and response for industry
- The NOSCP will describe government roles and responsibilities, alongside procedures and processes when responding to an oil spill
- The NOSCP should remain strategic, not tactical
- Tactical plans are authored regionally and/or by owners/operators (facility/regional OSCP)

# What is a National Oil Spill Contingency Plan

## Critical elements of a NOSCP

- Oil spill risk assessment
- Notification process
- Oil spill assessment
- National oil spill response management organisation
- Sensitivity mapping
- Response resources
- Response strategies
- Waste management
- Demobilisation and termination of response
- Restoration and post-spill monitoring
- Training, exercising and plan updating requirements
- Cost recovery (claims, etc.)

# What is a National Oil Spill Contingency Plan

## Basically, an NOSCP

- Provides critical information **at a national level**
- Highlights operational plans
- Defines the oil spill response management structures **nationally**
- Should be readily available prior to a **major** oil spill

## Remember...

- The NOSCP should define national policy and roles and responsibilities for oil spill preparedness, planning and response
- The NOSCP should highlight legislation that authorises the CNA or lead agency to prepare and implement the plan



Thank you...