CHALLENGES FACING OIL SPILL RESPONSE OPERATIONS DURING THE RECENT COVID PANDEMIC

Petroleum Association of Japan February 2022



Introduction

- My name is Robert Limb; I have been the CEO of Oil Spill Response since 2013. I started my career in the Oil and Gas industry in 1980 after graduating with a degree in Chemical Engineering and I have been fortunate to lived and work across the globe throughout my career.
- I would like to thank my esteemed colleague Andy Nicoll who
 assisted me with this presentation and provided his insights from
 responding to the recent m/v X-Press Pearl incident in Sri Lanka.

Overview of presentation

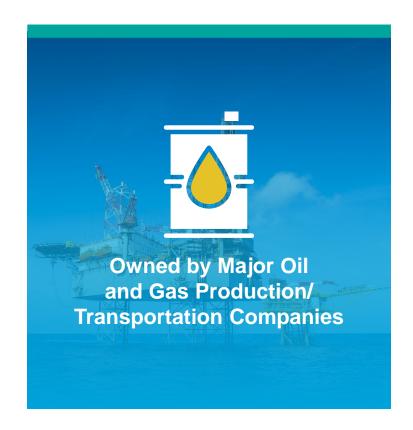
- Introduction to OSRL
- Risk Communications
- Industry working together
- OSRL experiences:
 - Information and Assurance
 - Exercises and Response Experience
- Final thoughts





Who is Oil Spill Response Ltd. (OSRL)







Risk Communications

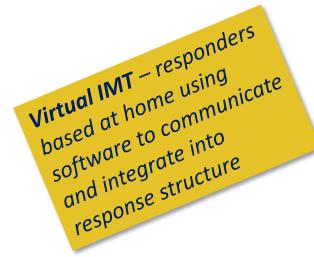
Many Parallels Between the Pandemic and Oil Spills

- Speed of decision-making (and subsequent action) is a critical success factor
- Stakeholder engagement (through a wide variety of media) is essential throughout:
 - There can be a need to convince sceptical voices
 - A place for "independence" and a source of "truth"
 - Trade-offs need to be explained in a clear, non-technical way
 - Things may get worse before they get better
- Social media cannot be ignored the space must be managed
- Use it to build consensus and communicate openly.



Oil Industry Working Group

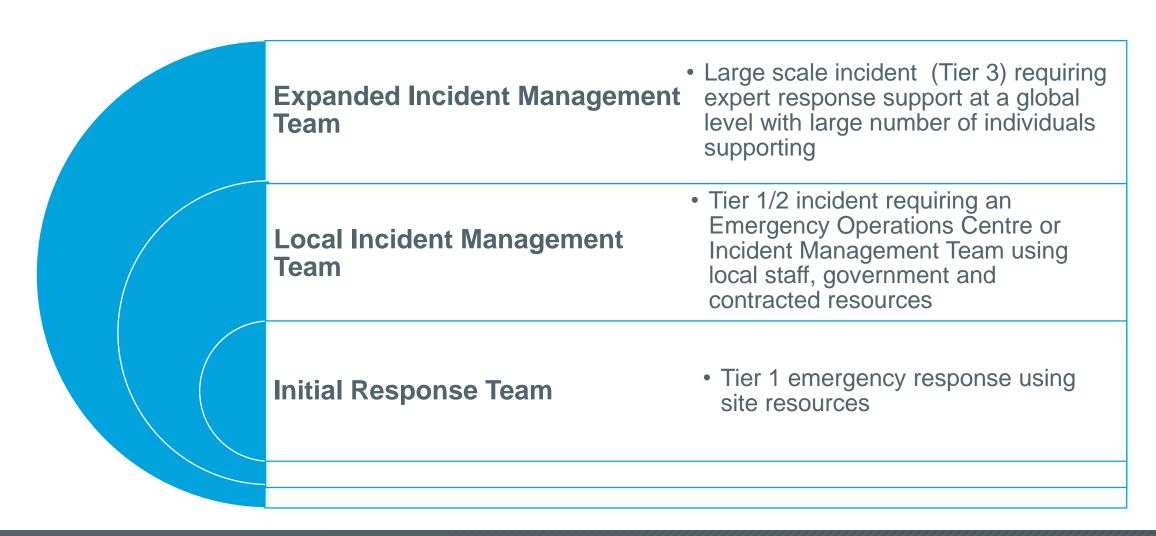
- ◆ Initial IPIECA meeting of the cohort was held July 2020
- Cohort split into 2 groups:
 - Pandemic physical response
 - Pandemic virtual response
 - ◆Identified response priorities:
 - Pandemic Response Models
 - Virtual Incident Management Team Etiquette, Hints, and Tips
 - Virtual Incident Management Team Lessons Learned
 - Virtual Training and Exercising Options
 - Physical Response Lessons Learnt
 - Mutual Aid
 - ◆ Tactical Response checklist



Remote IMT – responders

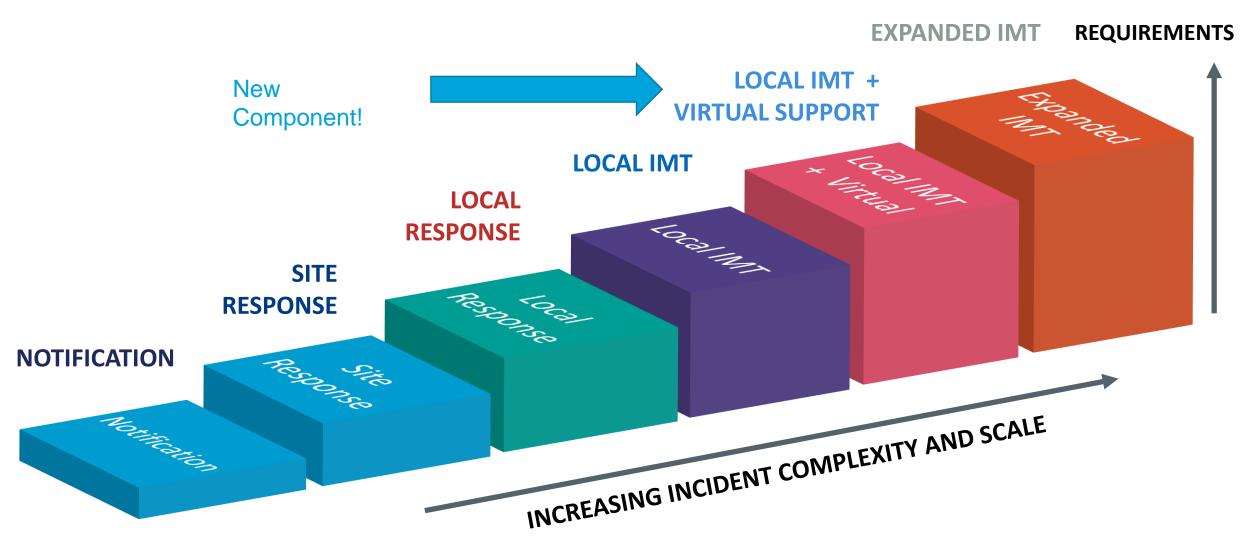
work face to face, but from
a command post that is at
where the incident is
taking place

Concept: Response Teams as Units



Escalating Incident Response

RESOURCE



Virtual Incident Management Teams

Learnings from exercises

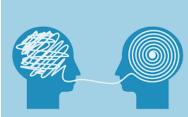
- Platform selection
 - ⇒ Provide instructions, procedures and test them
 - ⇒ Use systems that people are familiar with and use day-to-day
- Communication Protocol
 - ⇒ Clear ground rules
- Maintaining situational awareness and a common understanding
 - ⇒ Careful scene-setting and sharing of relevant documentation are vital at the start
 - ⇒ Use of 'liaisons' to prevent bottlenecking
- Fit for purpose IT
 - ⇒ Plan for **when** IT issues happen not **if** they happen.
 - ⇒ Provide a mechanism for back up dial-in numbers, audio calls, detailed meeting minutes after meetings.

v-IMT Platform Considerations:

- 1. Security
- 2. Number of users
- 3. Instant comms / chat
- 4. Breakout rooms facility
- 5. Material sharing
- 6. Intuitiveness
- 7. External agencies access
- 8. Compatibility with other platforms







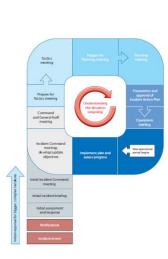


Virtual IMTs (Continued)

Learnings from exercises

- Managing energy, fatigue, concentration, stress, wellbeing
 - ⇒ Develop wellbeing management guidance.
 - ⇒ Ensure people have time to take screen breaks etc (e.g. scheduled breaks)
 - ⇒ Assign a buddy system of 'checking-in'
 - ⇒ Encourage participants to indicate their availability/status (busy, available)
- Ensuring there are enough people facilitation and information management need different consideration
 - ⇒ Assign a dedicated facilitator to own the process
- Core Incident Management principles still apply:
 - ⇒ Single open endless call vs. Planning 'P'
 - ⇒ Span of control
 - ⇒ Objective driven



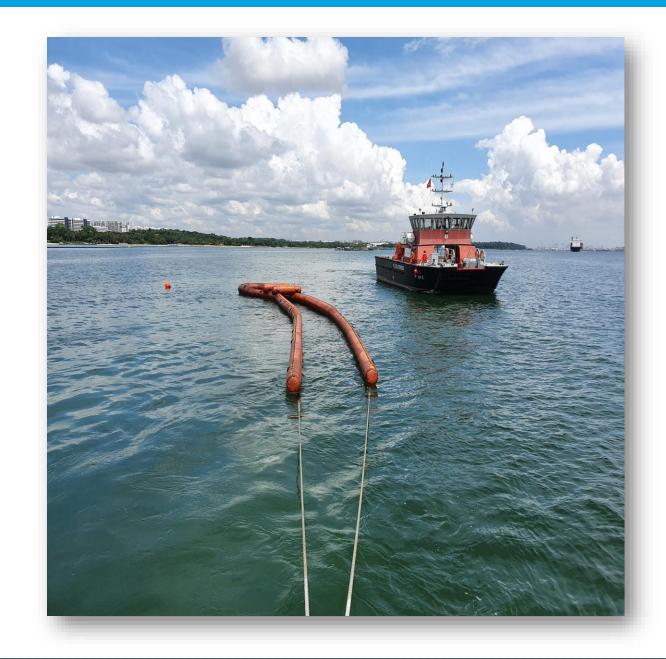




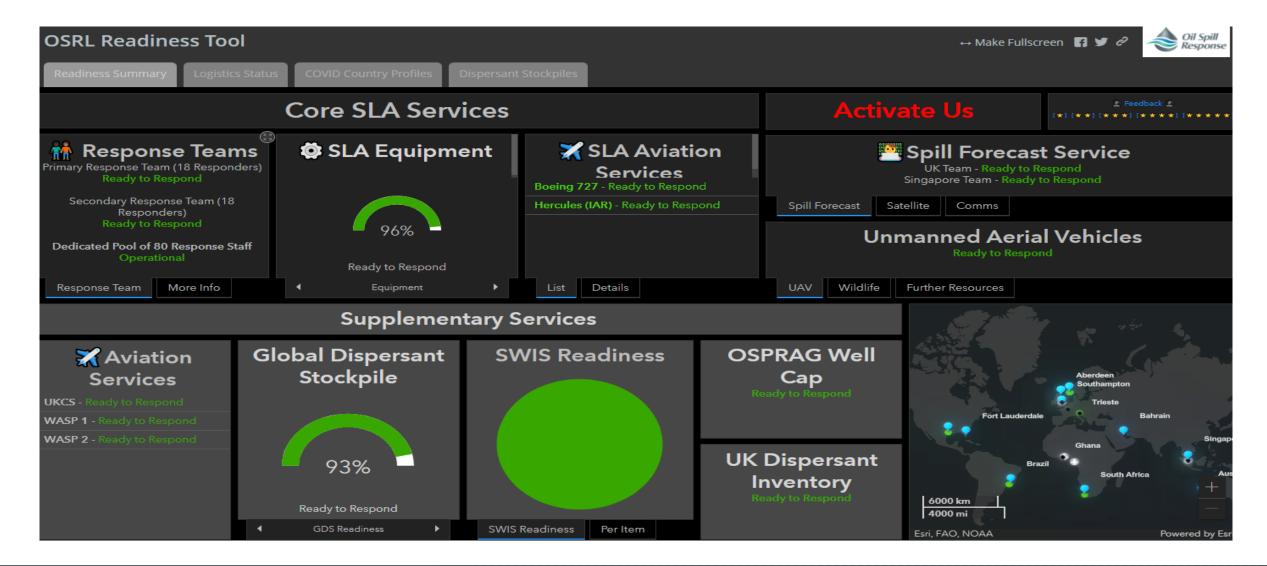


OSRL approach

- Information dashboard
- Country Profiles
- Operational assurance
- OSRL protocols:
 - Office /support functions
 - ♦ Infield: response and exercises
- Actual response experience



Readiness Dashboard



Country profiles (~70 countries)

- Mobilization (entry requirements)
- Country specific information:
 - ♦ Response roles:
 - ◆ IMT technical advice
 - ◆ Aerial surveillance operations
 - ♦ Shoreline / Inland operations
 - Offshore vessel-based operations
 - ◆ Aerial dispersant operations
 - ♦ Oiled wildlife response



Japan COVID-19 Response Plan



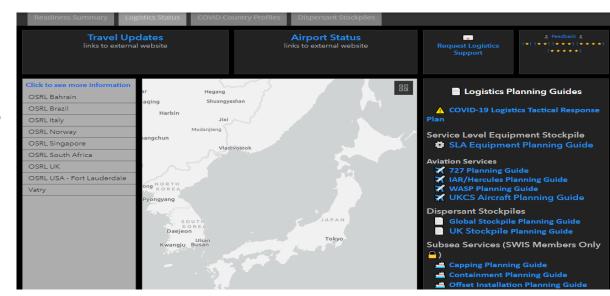
urpose

As a result of the COVID-19 pandemic, many governments and companies have imposed restrictions limiting the movement of people. This working document describes at a country level how OSRL will approach supporting Members during spill response incidents. It is intended to be referred to as guidance only, based on best-available information at the time of writing. It should be read in conjunction with the latest COVID-19 statement on OSRL's website: https://www.oilspillresponse.com/news--media/news/coronavirus-statement/

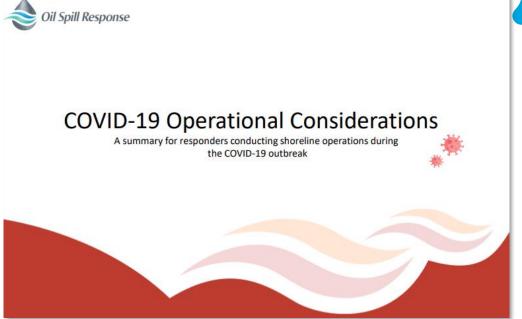
COVID-19 Response Readiness Dashboard

OSRL Members' Information Hub - a single location to cover your needs, keep you up to date and provide you with the latest information on our response readiness. https://www.oilspillresponse.com/external-links/covid-19

To discuss the country plan or for further information please contact: the authors (Yamuna@oilspillresponse.com or ThomasHeng@oilspillresponse.com) the duty manager, or your OSRL representative.



Covid 19 Operational Considerations

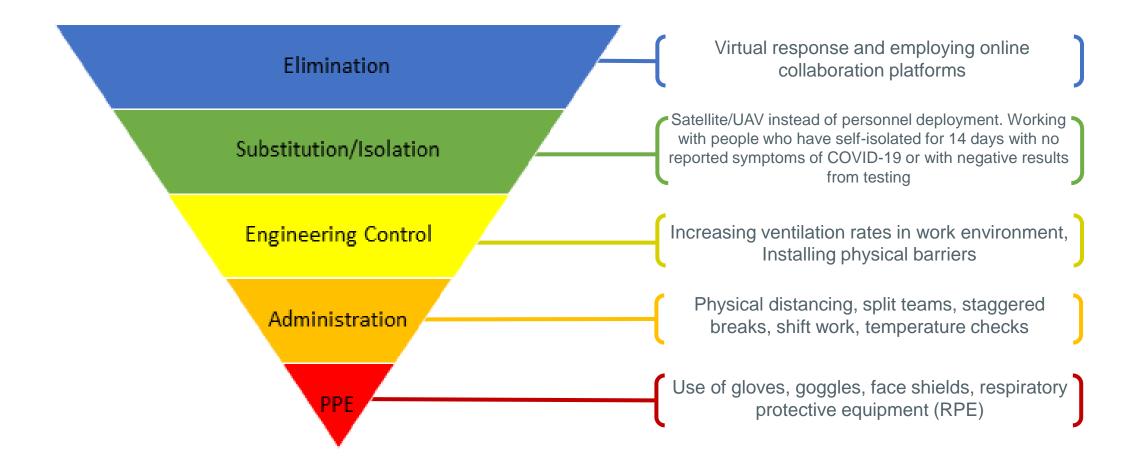






- Appendices to existing guides:
 - ◆ Containment & recovery
 - Shoreline Clean-up Assessment Technique
 - Shoreline Ops
 - Inland Ops
 - Aerial Surveillance
 - Dispersant Application & Monitoring
 - Waste Management
 - Offshore In-situ Burning
 - NEBA Considerations
 - Download: www.oilspillresponse.com

Document Overview



COVID-19 Operational Considerations





Administration

Personnel are to be reminded to take their temperature daily before and after their work shift



Personnel are to maintain physical distancing according to local regulation wherever possible and practicable



Administration

Personnel are to conduct self-assessment and record their temperature/self-assessment in a log-book

Administration

Regularly wash/sanitise hands preferably with clean warm water and soap or utilise alcohol-based sanitiser. Avoid touching the face/mouth/eyes/nose

Do refer to <u>Specific Measures for In-field Response</u> document which can be found at https://www.oilspillresponse.com/covid-19/ for more specific details. Task specific risk assessment should be used to govern the specific measures implemented.



COVID-19 Operational Considerations

Shoreline Operations

Administration

Personnel are to communicate via VHF radio when in-field and avoid in-person communication as much as possible



Ensure that proper waste management is carried out at all sites. Respirators and masks are to be disposed of properly



Administration

Avoid large gatherings – stagger meals and breaks where possible



PP

Don appropriate PPE based on risk assessment and do not share PPE and personal items

Do refer to <u>Specific Measures for In-field Response</u> document which can be found at https://www.oilspillresponse.com/covid-19/ for more specific details. Task specific risk assessment should be used to govern the specific measures implemented.



Practicalities



For documents that require to be passed around, methods to minimise cross-contamination



Use nitrile gloves when sterilising equipment to minimise direct contact of the disinfectant spray from skin.



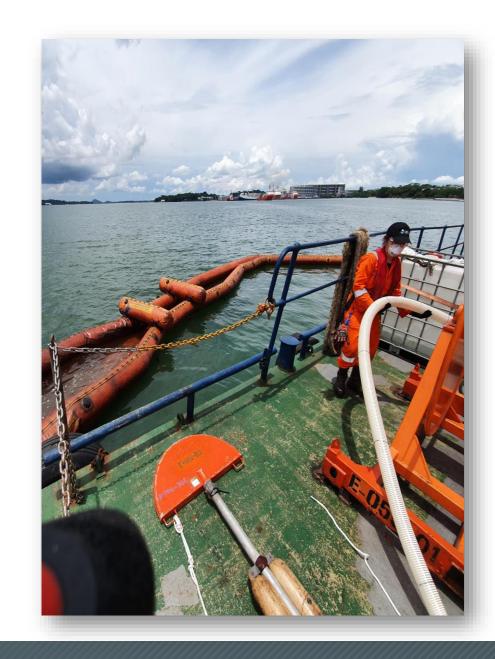
Surgical tapes to prevent fogging of safety glasses



A cool down period is needed before conducting temperature taking after working in hot weather conditions.

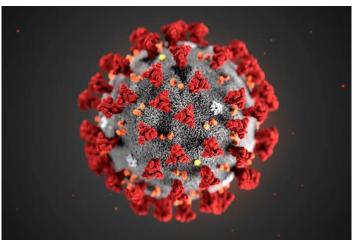


More frequent breaks as it is more taxing when working with masks



Operational Guidance: Summary





- Guidance sits alongside the OSRL Field Guide appendices
- IPIECA Good Practice Guide on NEBA and SIMA still apply
- Human health has to come first (PEAR principle)
- COVID-19 adds an extra layer of complexity
- Are there less man-power intensive techniques that can be deployed?
- No one answer this will vary according to a specific country's infection rate, spill scenario etc.

Recent Case Histories

OSRL Responses During Covid-19



Modified Procedures / Processes

Stakeholder Engagement & Comms



Virtual Support

Human Factors





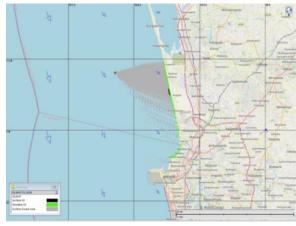


m/v X-Press Pearl

- 2700 TEU container feeder v/l (built 2021)
 - 1486 containers on board
 - 81 classified as 'Dangerous Goods'
 - 25 te. nitric acid and other chemicals
 - 300 m³ Low Sulphur Fuel Oil
 - Virgin plastic pellets (nurdles)
- Incident timeline:
 - 20th May 2021 Fire starts
 - 25th May 2021 OSRL notified by ITOPF
 - 2nd June 2021 Vessel sinks
- Loss of cargo and risk of oil spill
 - 10 km north-west of Colombo, Sri Lanka
- OSRL mobilised on 26th May 2021 under BiMCO RESPONSECON 3rd party contract







A Wide Range of Pollution Challenges

Oils: bunkers, hydraulic, lube, etc.

Micro-plastics: less than 5 mm in diameter, particularly in the form of virgin plastic pellets (nurdles)

Macro-plastics: between 5 and 50 mm in diameter (including melted nurdles)

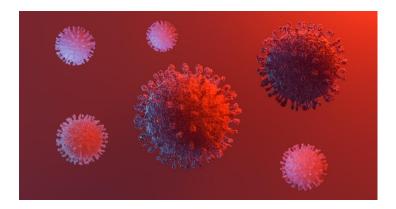
Other macro pollution: various forms of debris/pollution from the ship between 5mm and 50 mm in diameter

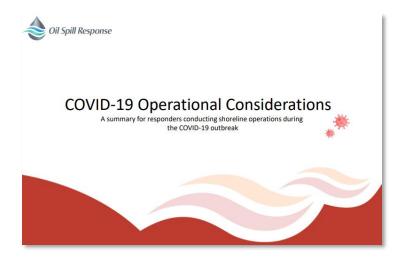
Mega pollution: any item > 50 mm in diameter, potentially reaching several metres in size (items include burnt plastic, whole or damaged containers, and loose, spilt cargo from damaged containers)



Responding and COVID-19

- Acknowledging and overcoming the fear
 - Human factors, comms and assurance
- Bio-bubble arrangement for Quarantine Waiver on arrival
 - Approved accommodation with restricted access
 - Dedicated vehicle and driver
 - Movement restrictions
 - Military escort
- National lockdown impacts
- Vaccinated responders
- PCR tests
- Twice weekly LFTs
 - OSRL and drivers
- Isolate and monitor protocol for 'close contact' situations
- Advice from medical service provider 'ISOS'
- Documentation:
 - Covid-19 specific measures and OSRL Covid-19 field guide





Human Factors: A Responder's Perspective

Concerns

Wellbeing

- Medical Provision
- Risk Assessment
- Mental Health

Travel Safety

- Air Travel
- Land Travel

Family

- Family Support
- Returning Home

Human Factors consider the mindset, emotions and the personal worries, thoughts, concerns and motivations that Responders are likely to experience when responding during a pandemic.

Accommodation

- Quarantine
- Cleanliness

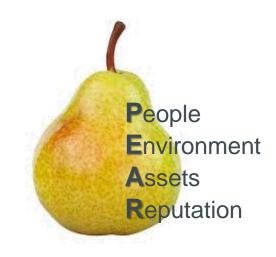
Mitigations

- ✓ Hospital standards and capacity
- ✓ Repatriation plans / assurance
- ✓ Awareness building and easy access to support
- ✓ Briefing on traveller safety measures
- ✓ Traveller numbers, mask use
- ✓ Land transportation (e.g. private car)
- ✓ Plain English language information packs
- ✓ Employee-family support networks
- ✓ Mitigations for 14-day quarantine
- ✓ Early scouting team for the assessment of conditions

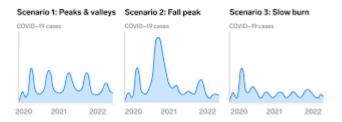
Final thoughts

Maintain Incident Management Core Principles

- Establish and maintain key priorities:
 - PEAR principle to build objectives, worst case scenario planning and inform decisions
 - 'People first' / 'Nobody gets hurt'
- Prudent Over-Response
 - Get Big Quick, Worst Case Scenario (WCS) planning, 'No Regrets'
 - ⇒ Be proactive, you can't buy time and rebuilding trust and confidence isn't easy
- Communication:
 - Communicate early, clearly, consistently and don't stop...
 - ⇒ Any communication vacuum is filled with hearsay, speculation and fear
 - ⇒ Don't let up, even if the crisis is abating; people rely on a steady reliable feed of info
 - ⇒ Messages must be clear, and unequivocal
 - ⇒ Unless everyone is on message (ALL of the time) the impact is diluted or destroyed



Possible coronavirus wave scenarios





Thank You

www.oilspillresponse.com

Subsea Well Intervention Service

> www.oilspillresponse.com/subsea subseaservices@oilspillresponse.com

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