

Oil spills may have serious ecological and socio-economic consequences, and are potentially hazardous to workers and the wider community. Significant effort and priority is dedicated to designing operations and employing procedures that prevent spills from occurring in the first instance, and improving the efficacy and speed of clean-up operations should an incident occur. The industry constantly incorporates new research, understanding and lessons learned to improve spill prevention.





In the unlikely event that an oil spill does occur, the industry's primary goal is to minimize the impact of the spill on people and the environment. This is achieved by ensuring a well-planned, rapid and effective response. While response objectives will vary depending on the specific circumstances of the spill, there are certain basic objectives that will guide any response:

- safeguarding the safety and health of people—both of responders and communities;
- stopping the source of the spill as quickly as possible;
- minimizing environmental and community impact;
- minimizing the risk of oil reaching the shore in offshore scenarios.

Even with a strong focus on prevention, there is still a possibility that oil spill incidents may occur. Operators therefore need to have effective, actionable contingency plans in place that are capable of mounting a response up to and including the worst credible case release.

Spill Response Techniques

The resources required to respond effectively to a spill vary greatly based on the size and location of the spill, proximity of people, sensitive environmental areas, and other operating facilities. The planned response techniques to be used must be verified as appropriate or modified as necessary, prior to deployment. Effectiveness of techniques and incident conditions are assessed and adjusted throughout the response.

At-Sea Containment and Recovery	In-situ Burning	Surface/ Subsea Dispersant Application	Shoreline Protection
			
The controlled encounter and collection of oil from the water's surface	The controlled ignition and burning of spill oil at, or close to, the spill site	Dispersants enhance natural biodegradation to speed removal of oil from the water	Every reasonable effort should be made to prevent oil from reaching the shore

What can you do?

A successful oil spill response has a set of core good practices at its heart.

- **Incident Management System:** Ensures the ability to establish command and control of the response activities. The IMS defines and standardizes the management organizational structure and processes to enable seamless integration of various involved organizations.
- **Tiered Preparedness and Response:** Establishes capability that can be escalated and cascaded to the scene. This approach avoids the proliferation of impractical stockpiles of large quantities of response resources yet can still provide an appropriate and credible response through the integration of local, regional and international capabilities.
- **Active Stakeholder Engagement:** Preparedness efforts rely on ensuring, to the extent feasible, that the concerns, expectations and priorities of all stakeholders are understood and considered when developing oil spill contingency plans.
- **Spill Impact Mitigation Assessment (SIMA):** A methodology used to ensure that impacts of oil spills on people and the environment are minimized. It involves consideration and judgement to compare likely outcomes of using different spill response techniques.
- **Situational Awareness:** A shared view of the situation, using surveillance, modelling and visualization tools as inputs to a 'common operating picture' (COP) will ensure that all stakeholders are operating from the same perspective.
- **Training & Exercise Program:** Enables response personnel to undertake simulated emergency response actions in a controlled, low-risk setting, and provides the opportunity to assess and validate oil spill contingency plans, training, and clarify the roles and responsibilities of emergency response and incident management teams

Article Information Sources:

- [IPIECA Oil Spill Preparedness & Response: An Introduction, 2019](#)
- [IPIECA, Oil Spill Exercises, 2014](#)

Process Safety is Everybody's Responsibility!

An initiative of the Process & Engineering Committee

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