Preventing Spills from Vessels Meeting Kit

WHAT’S AT STAKE

Spills from vessels can range in size and magnitude. They can occur from large tankers or cargo ships, as well as smaller vessels like fishing boats, recreational boats, or barges. The volume of the spilled substance ranges from small-scale incidents to major catastrophic events involving thousands of tons of pollutants.

WHAT’S THE DANGER

HAZARDS AND DANGERS WITH SPILLS FROM VESSELS

Vessels often carry various types of hazardous chemicals, such as oil, fuels, or other toxic substances. When a spill occurs, workers may come into contact with these substances, leading to skin irritation, burns, respiratory problems, or other acute or chronic health effects.

Spills create slippery surfaces, especially when liquids are spilled onto decks or walkways. Workers may lose their footing and suffer from slip and fall accidents, which can result in injuries such as fractures, sprains, or head trauma.

Spilled flammable substances, can create a fire or explosion hazard, in the presence of ignition sources. Workers involved in spill response may be at risk of burns, inhalation of smoke, or other fire-related injuries.

If spills occur near or on water bodies, workers may be exposed to drowning hazards. Slippery decks or poor visibility can increase the risk of falling into the water during spill response operations.

Spills can result in physical hazards, including falling objects or equipment, shifting cargo, or structural failures of vessels. Workers may sustain injuries such as cuts, bruises fractures, or even more severe trauma.

Spills can have severe environmental impacts, affecting marine life, ecosystems, and coastal areas. Workers involved in spill cleanup activities may be exposed to contaminated environments, leading to long-term health effects.

Dealing with hazardous situations, witnessing environmental damage, or working under pressure can contribute to mental health challenges.

HOW TO PROTECT YOURSELF

BEST PROTECTIVE MEASURES TO PREVENT SPILLS

- Implement a rigorous maintenance and inspection program for vessels to ensure that all equipment, including pipelines, valves, and storage tanks, is in proper working condition.
- Provide comprehensive training to vessel operators and crew members on spill prevention measures, emergency response procedures, and the proper handling of hazardous materials.
- Conduct thorough risk assessments to identify potential spill hazards and vulnerabilities. Develop contingency plans that outline the steps to be taken in the event of a spill, including communication protocols, response procedures, and resource mobilization.
- Ensure compliance with all applicable local, national, and international regulations related to vessel operations, spill prevention, and environmental protection.
- Employ advanced technologies such as leak detection systems, monitoring devices, and automatic shut-off valves to detect and prevent spills.
- Follow best practices for handling and securing cargo on vessels. Ensure that containers are properly sealed, stabilized, and labeled, reducing the risk of spills during transportation.

- Maintain a well-prepared and trained emergency response team equipped with appropriate spill response equipment, such as booms, skimmers, and absorbent materials. Conduct regular drills and exercises to test response capabilities.
- Promote a culture of environmental awareness among crew members and vessel operators. Emphasize the importance of protecting the environment and the potential consequences of spills.
- Foster collaboration among vessel operators, industry stakeholders, and regulatory authorities to share best practices, lessons learned, and new technologies for spill prevention.
- Regularly evaluate and review spill prevention measures, taking into account feedback from crew members, incident reports, and lessons learned from spills or near-miss incidents.

PRIORITIZE WORKER SAFETY DURING A SPILL

In the event of a spill from vessels, it is important to prioritize worker safety and take appropriate measures for protection:

- Stay informed: Stay updated on local news, alerts, and advisories related to spills or hazardous material incidents from vessels in your area.
- Evacuate if necessary: If there is an immediate danger or if authorities advise evacuation, follow their instructions promptly.
- Seek shelter: If evacuation is not necessary, seek shelter indoors to minimize exposure to the spill. Close all windows and doors and turn off ventilation systems to prevent the entry of contaminated air.
- Follow protective instructions: Use appropriate respiratory protection, gloves, eye protection, and clothing to minimize direct contact with the spilled material.
- Avoid contact with the spilled substance: Avoid touching or coming into direct contact with the spilled substance. If you accidentally come into contact with the substance,

immediately wash the affected area with soap and clean water.

- Stay upwind and uphill: If you are in the vicinity of the spill and cannot evacuate, try to position yourself upwind and uphill from the spill source.
- Follow local advisories on water use: If the spill has the potential to contaminate water bodies, follow local advisories on water use, including restrictions on swimming, fishing, or consuming water from affected sources.
- Follow decontamination procedures: If you believe you have been exposed to spilled substances, follow decontamination procedures as advised by emergency response personnel or healthcare professionals.
- Seek medical attention if needed: If you experience symptoms such as difficulty breathing, skin irritation, nausea, or other health issues after a spill incident, seek medical attention promptly.
- Stay informed about cleanup efforts: Follow updates from local authorities or cleanup crews regarding the progress of spill cleanup and any precautions you should take during the recovery phase.

FINAL WORD

Preventing spills from vessels is crucial for safeguarding the environment, protecting wildlife, ensuring human health and safety, supporting economic stability, and promoting sustainable practices in the maritime industry.