

Dry Cargo Risk Assessment

Terminal Name	Vessel Name	Date

Cargo Information	
Type of Cargo	Quantity of Cargo
Is the Cargo Familiar to Sprague? <div style="display: flex; justify-content: space-around; align-items: center;"> <input type="checkbox"/> NO <input type="checkbox"/> YES </div>	Previous Loss History at Sprague? <div style="display: flex; justify-content: space-around; align-items: center;"> <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A </div>

Step 1 – Estimate the Likelihood of Occurrence

Likelihood	Description	Years
Highly Unlikely to Occur	Catastrophic equipment/vessel failure required for a release.	100
Unlikely to Occur	Release estimated to occur once every quarter century or less frequently.	25 - 100
Likely to Occur	Release estimated to occur less than once, or has occurred within, every quarter century.	5 - 25
Very Likely to Occur	Release has occurred within, or is estimated to occur, every five years or more frequently.	< = 5

Step 2 – Estimate the Consequence Severity

Severity	Quantity Released	Distribution	Reportable Quantity	Response Complexity
Minor Harm or Impact	Negligible amounts from normal cargo operations	Waters around vessel and dock only	Less than State & Federal Reportable Quantity	Response fulfilled with onsite resources only
Moderate Harm or Impact	Significant amount from mishap during cargo operations	Localized distribution up to 1 NM from dock.	At or Above State & Federal Reportable Quantity	Response requires external resources of one week or less duration
Serious Harm or Impact	Substantial amount from mishap during cargo operations	Widespread distribution greater than 1 NM from dock	Significant Exceedance of State & Federal Reportable Quantity	Response requires external resources for more than one week

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Step 3 – Determine the Risk Factor Associated with the Cargo Operation			
<u>Risk Factor Matrix</u>	Minor Harm or Impact	Moderate Harm or Impact	Serious Harm or Impact
Highly Unlikely to Occur	Tolerable	Tolerable	Substantial
Unlikely to Occur	Tolerable	Moderate	Substantial
Likely to Occur	Moderate	Substantial	Intolerable
Very Likely to Occur	Moderate	Intolerable	Intolerable

Step 4 – Determine the Required Action	
<u>Risk Factor</u>	Required Action
Tolerable	Risk is considered as low as reasonably practicable. Cargo operations to adhere to existing safeguards and TOM 3.02.
Moderate	The risk is acceptable but should be monitored for factors that could increase the likelihood of occurrence or consequence severity. Loss events resulting from the cargo transfer should trigger reassessment.
Substantial	The risk is unacceptable and requires additional controls to lower the risk to an acceptable level. Substantial risk should result in a documented Risk Control Plan that is implemented before the commencement of cargo operations whenever practicable.
Intolerable	The risk is unacceptable and the transfer operation should not begin until controls are introduced to lower the risk to an acceptable level. Intolerable risk should result in a documented Risk Control Plan.

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Step 5 – Document a Risk Control Plan Specifying the Safeguards Needed to Reduce Risk

Nº	Description of improved or additional safeguards to lessen the risk	Responsible Persons
1.		
2.		
3.		
4.		
5.		