

CDC RISK MANAGEMENT PLAN

Introduction

City of Darwin Cruises Pty Ltd risk assessment program complies with the requirements of AS/NZS ISO 31000:2009. The company has applied the following to promote consistency in the assessment and management of identified risks.

Term	Simple Meaning
Hazard	Something that exists and could cause harm (example - oil on deck)
Foreseeable Risk	A risk which a reasonable person should anticipate possible with commercial vessel operations.
Risk	The probability of a hazard resulting in an adverse event (example - personal injury due to slipping on the oil)
Likelihood	The probability of the risk/ hazard (example - What are the chances that someone could slip on the oil)
Consequence	What could happen if the identified risk/ hazard occurs (ie minor/serious personal injury etc)
Risk treatment Risk Management Risk Control	Measures have been put in place to eliminate the hazard/risk or reduce it (example Oil is cleaned up or the oily section of the deck is cordoned off to passengers and crew and cautionary signage erected)
Residual Risk	If the hazard or risk hasn't been completely eliminated but controlled in some way, what element of risk remains?
Tolerable Risk	If some level of risk remains it is considered acceptable given the nature of controls that are in place
Risk Register	A table or similar that records all the identified hazards and risks associated with the vessel and its operations including a summary of the risk assessment and risk management/control outcomes.
Risk Prioritisation	The order in which risks that are identified in the "Risk Register" are subject to treatment/control. For example - in most instances risks that receive an "Extreme" rating based on the likelihood and consequence would be treated/controlled prior to one that receives a "Medium" rating.

LIKELIHOOD

Category	Explanation
Almost certain/frequent	Expected to occur in most circumstances, or often in the life of a vessel.
Likely	Probably occur in most circumstances but unlikely to occur often in the life of a vessel.
Possible	Might occur at some time, unlikely to occur to every vessel but may occur to a few vessels of a type.
Unlikely/remote	Unlikely to occur but should be considered as possible.
Rare/improbable	So extremely remote that it should not be considered as possible unless exceptional circumstances exist.

CONSEQUENCE

Category	Human injury	Financial cost	Work/income/reputation	Environment
Catastrophe	Multiple fatalities	Loss of vessel	Operations halted/end of income	Extensive environmental damage
Major	Fatality	Extensive financial loss	Major disruption to operations	Major environmental damage
Moderate	Disabling injury requires medical treatment	Significant financial loss — rescue of vessel required	Significant production/achievement disruption	Significant environmental damage
Minor	First aid treatment — minor cuts bruises or bumps	Notable financial loss	Slight production/achievement disruption	Minor environmental damage
Insignificant	No injuries	Negligible financial loss	No effect on work	Negligible environmental damage

LIKELIHOOD AND CONSEQUENCE MATRIX

Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain/frequent	High	High	Extreme	Extreme	Extreme
Likely	Medium	High	High	Extreme	Extreme
Possible	Low	Medium	High	Extreme	Extreme
Unlikely/very remote	Low	Low	Medium	High	Extreme
Rare/improbable	Low	Low	Medium	High	High

RISK TREATMENT/CONTROL RATING

Risk Treatment Method	Risk Treatment Rating
1. Eliminate hazard/risk	(E) Effective
2. Isolate hazard/risk or apply re-engineer or re-design solution	(A) Adequate
3. Introduce administrative solution – (Staff training, Personal Protective Equipment, Cautionary Signage)	(W) Weak
4. Employ a combination of isolate, re-engineer/re-design and administrative solutions	(A) Adequate Dependent on the nature and type of these controls

Risk Management Risk Register – Vessel Operations

Operational Activity	Identified Risks or Hazards	Possible effect on crew or Passenger Safety	Initial Risk Assessment			Existing Risk Control Measures			Revised Risk Assessment			Revised Risk Control Measures			Residual Risk Accepted	
			Likelihood	Consequence	Risk Level	E	A	W	Likelihood	Consequences	Risk Level	E	A	W	Y	N
Crew – duties at night	Slips, trips or falls	Personal Injury or person overboard	Unlikely	Major	High		A		Unlikely	Moderate	Low		E		Y	
Sailing	Choppy seas causing slips/falls	Personal injury	Possible	Minor	Medium		E									

Risk Management Risk Register – Passenger Access and Underway

Passenger Activity	Identified Risks or Hazards	Possible effect on Passenger Safety	Initial Risk Assessment			Existing Risk Control Measures			Revised Risk Assessment			Revised Risk Control Measures			Residual Risk Accepted	
			Likelihood	Consequence	Risk Level	E	A	W	Likelihood	Consequences	Risk Level	E	A	W	Y	N
Entering the marina to walk to vessel from Marina gate	Slips, trips or falls on the marina gangway inside gate	Personal Injury	Possible	Moderate	High		A		Unlikely	Moderate	Medium		E		Y	
Walk to vessel from Marina gate daytime	Slips, trips or falls on the pontoon	Personal Injury	Possible	Minor	Medium		A		Unlikely	Minor	Low		E		Y	
Walk to vessel along pontoon daytime	Walks into vessel pelican pole or anchor	Personal Injury	Possible	Moderate	Low		A		Unlikely	Moderate	Low		A		Y	
Walk from vessel night time along B pontoon	Walks into vessel pelican pole or anchor	Personal Injury	Possible	Moderate	Medium		A		Rare	Moderate	Medium		A		Y	
Boarding Vessel	Slips or falls boarding	Personal Injury	Possible	Moderate	Medium		A		Rare	Moderate	Medium		E		Y	

Walking around on vessel	Slips or falls on vessel	Personal Injury	Possible	Moderate	Medium		A		Possible	Low	Low		E		Y	
Going down stairs to toilet	Slips or falls going down stairs	Personal Injury	Possible	Moderate	Medium		A		Possible	Medium	Low		E		Y	
Accessing crew only areas	Slip or fall in crew area	Personal Injury	Unlikely	Low	Low		E		Unlikely	Low	Low		E		Y	
Movement during sailing seas choppy	Slip or fall underway	Personal Injury	Possible	Moderate	Medium		A		Possible	Moderate	Medium		A		Y	

RISK ASSESSMENT AND TREATMENT

Risk Category – Passenger Access and Underway

Passenger Activity – Entering the marina to walk to vessel from Marina gate

Initial Risk Assessment							
Identified Hazards or Risks	Risk Factors			Existing Control Measures	Control Measure Rating		
	Likelihood	Consequence	Risk Level		E	A	W
Slips, trips or falls on the marina gangway inside gate	Possible	Moderate	Medium	Crew to warn clients of the angle and they should take care.		E	
Slips, trips or falls on the pontoon	Possible	Low	Low	Crew to walk clients to the vessel, single file observing everyone.		E	
Walks into vessel pelican pole or anchor daytime	Possible	Moderate	Low	Crew to point out any dangers.		E	
Walks into vessel pelican pole or anchor night time	Possible	Moderate	Medium	Crew to lead group from the vessel and point out with torch any hazards and request single file past them.		E	
Slips or falls boarding	Possible	Moderate	Medium	Crew to be on hand to assist and provide direction. Position the vessel against the pontoon with least risk for boarding or obtain a step to board thru vessel gate.		E	
Slips or falls on vessel moving about	Possible	Low	Low	Advise clients to not move around whilst underway. Point out risk areas. Place dark mat above the step.		E	
Slips or falls going down stairs	Possible	Moderate	Medium	Advise clients and assist when required.		E	
Slip or fall in crew area	Unlikely	Low	Low	Advise during brief of the no access areas.		E	
Slip or fall underway	Possible	Moderate	Medium	Advise during brief of the no access areas.		E	
Revised Risk Assessment							
Identified Hazards or Risks	Risk Factors			Additional or Revised Control Measures	Control Measure Rating		
	Likelihood	Consequence	Risk Level		E	A	W
Slips, trips or falls on the marina gangway inside gate	Possible	Moderate	Medium	Crew to warn clients of the angle and they should take care. Hold handrail. Advise Marina if faults are identified.		E	
Slips, trips or falls on the pontoon	Possible	Low	Low	Crew to walk clients to the vessel, single file observing everyone. Advise Marina if faults are identified.		E	
Walks into vessel pelican	Possible	Moderate	Low	Crew to point out any dangers.		E	

pole or anchor daytime				Advise Marina of dangerous protrusions onto pontoon path. identified.			
Walks into vessel pelican pole or anchor night time	Possible	Moderate	Medium	Crew to lead group from the vessel and point out with torch any hazards and request single file past them. Advise Marina of dangerous protrusions onto pontoon path identified and lack of lighting.		E	
Slips or falls boarding	Possible	Moderate	Medium	Crew to be on hand to assist and provide direction. Position the vessel against the pontoon with least risk for boarding or obtain a step to board thru vessel gate.		E	
Slips or falls on vessel moving about	Possible	Low	Low	Advise clients to not move around whilst underway. Point out risk areas. Place dark mat above the step. Include in briefing or warnings as required.		E	
Slips or falls going down stairs	Possible	Moderate	Medium	Advise clients and assist when required. Use handrails, caution if wet.		E	
Slip or fall in crew area	Unlikely	Low	Low	Advise during brief of the no access areas. . Include in briefing or warnings as required.		E	
Slip or fall underway	Possible	Moderate	Medium	Advise during brief of the no access areas. . Include in briefing or warnings as required.		E	

Implementation of Revised Control Measures							
Responsible Person	Priority			Completion Date	Verification of Effectiveness of Controls		
	H	M	L		Responsible Person	Signature	Date
Deck hand		M			Designated Person		
Additional Comments							

RISK ASSESSMENT AND TREATMENT

Risk Category – Vessel Operations

Activity – Crew Injury

Initial Risk Assessment							
Identified Hazards or Risks	Risk Factors			Existing Control Measures	Control Measure Rating		
	Likelihood	Consequence	Risk Level		E	A	W
Personal Injury or person overboard duties at night	Unlikely	Major	High	Boat design to highest safety standard with lifelines and secure access areas.		E	
Personal injury sailing	Possible	Minor	Medium	Crew to warn clients to remain seated. Provide adequate lighting for nighttime.		E	

Revised Risk Assessment							
Identified Hazards or Risks	Risk Factors			Additional or Revised Control Measures	Control Measure Rating		
	Likelihood	Consequence	Risk Level				

Implementation of Revised Control Measures							
Responsible Person	Priority			Completion Date	Verification of Effectiveness of Controls		
	H	M	L		Responsible Person	Signature	Date
Deck hand		M			Designated Person		

Additional Comments

