

APPENDIX 6 - HAULAGE HAZARD REGISTER

People Environment & Equipment

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This document identifies hazards associated with the movement, storage, maintenance, equipment that is used in haulage at the Devonport Yacht Club, with accompanying risk assessments and management plan to prevent risk of injury, loss, damage or harm to members and the environment. It is to be used in conjunction with the Haulage Manual.

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Haulage Hazard List

Department / Work Area	Equipment or Operation
Workshop	1. Machinery.
	2. Storage racks
	3. Heavy Lifting
	4. Electrical circuit
Up Haul	1. Trolley
	2. Winch Wire
	3. Winch Operation
	4. Winch Guarding
	5. Trolley Security
	6. Slipways
Down Haul	1. Cradle
	2. Winch Wire
	3. Winch Operation
	4. Winch Guarding
	5. Wire Layout
	6. Wire Purchases
	7. Hardwood Ways
	8. Hand Signals
	9. Cradle Position
	10. Slipways
Crossing the Section	1. Cradle
	2. Winch Wire
	3. Winch Operation
	4. Winch Guarding
	5. Snatch Blocks
	6. Wire Layout

	7. Wire Purchases
	8. Hardwood Ways
	9. Heavy Lifting
	10. Hand Signals
	11. Cradle Position
	12. Deadman
	13. Lifting Jacks
Haulage Equipment	1. Inspection Plan
	2. Winch Wires
	3. Snatch Blocks
	4. Shackles
	5. Toe Jacks
	6. Wire Strops
	7. Chain Strops
	8. Hardwood Ways
	9. Heavy Lifting
	10. Section Deadman
	11. Winches (Western, Eastern & Side Haul)
	12. Dunnage
	13. Lifting Jacks
	14. Water blaster – Electrical & Operation
	16. Sump Pump – Electrical & Operation
	17. Slipways
	18. Haulage Equipment Trolley
	17. Storage Lockers & Workshop

Cradles	1. Materials
	2. Engineering Requirements
	3. Structural Integrity
	4. Heavy lifting
	5. Storage
Boat Maintenance	1. Working at height
	2. Ladders
	3. Scaffolding and Planks
	4. Antifouling – Removal & Application
	5. Painting
	6. Electrical Leads
	7. Sanding – Dust Nuisance
	8. Epoxy Resins
	9. Halyards – Noise Nuisance
	10. Dangerous Goods
	11. Water Usage
	12. Firefighting equipment
Cleaning, maintenance, or repair of machinery	1. Secured against movement.
	2. Locks or lock-out procedures.
Safety and Environment Protection Equipment	1. Restricted Access Signs
	2. Boat Maintenance Signs
	3. Hazard Signs
	4. Bastion Safety Barrier Arms and Cones
	5. First Aid Kit
	6. Oil/Chemical Pollution Spill Kit
	7. Water blasting Screens
	8. Settling Tank – Hazardous waste
Electrical Safety	1. Machinery - tagging and testing
	2. Power Leads - tagging and testing

Risk Assessment – Workshop

Hazard	Potential Harm	hazard?	<u>E</u> liminate <u>I</u> solate <u>M</u> inimise	Control Measures	Person Responsible	Date Completed
Misuse of machinery or equipment	Injury, crush, or amputation of limbs.	Y	Μ	Only trained operators / persons to assist with haulage and the use of haulage equipment, machines, or controls.		
Material projectiles from power tools or machinery.	Eye injury	Y	Μ	Safety glasses to be worn when operating power tools or drill press. Train, supervise new volunteers		
Noise	Hearing damage	Y	М	Ear protection should be worn by all persons near any equipment or machinery which are operating that require you to raise your voice to be heard.		
Falling Items from storage & workshop racks.	Crush injury to fingers, foot & toes.	Y	М	Gloves and Safety boots should be worn by all persons handling equipment associated with haulage.		
Heavy Lifting & extending	Back injury	Y	М	Use appropriate lifting equipment or another perrons assistance for heavy loads that cause straining to lift or uncomfortable extension to place equipment. Train, supervise new volunteers		
Electrical circuit Power Leads	Risk of electrocution Trips, falls	Y	М	Only trained personnel to work on power circuits. Disconnect leads when not in use		

Hazard	Potential Harm	hazard?	<u>E</u> liminate <u>I</u> solate <u>M</u> inimise	Control Measures	Person Responsible	Date Completed
Winch Wire breakage	Collision, cuts, falls, amputation, or crush	Y	Μ	Keep eyes out for loads being moved by winches? Keep well clear of load and operators unless your trained to assist. Never stand or walk in the bite of a load under tension. Always wear gloves when handling wires. Safety chain to be connected to trolley when stationary. Train, supervise new volunteers		
Crosshaul Winch Operation failure.	Unexpected movement of load causing damage to persons or vessels.	Y	Μ	Winch operator training. Twice yearly inspection by winch maintenance team and haulage inspector of winch components to detect / repair any wear. Safety chain to be connected to trolley when stationary.		
Brake failing	Unexpected free falling of trolley down slipway causing damage to persons or vessels.	Y	Μ	Winch operator training.		
Clutch or Gear lever disengaging.	Unexpected movement of load causing damage to persons or vessels.	Y	Μ	Winch operator training. Ensure gear/clutch dog is engaged fully. Use clutch lock if installed.		

Risk Assessment – Uphaul/Downhaul/Crosshaul/Winches

Slipway Winch operation failure	Unexpected free falling of trolley down slipway causing damage to persons or vessels.	Y	Μ	Winch operator training. Twice yearly inspection by winch maintenance team and haulage inspector of winch components to detect wear. Safety chain to be connected to trolley when stationary.	
Public entering yard during haulage	Trips, falls, Injury	Y	Μ	Place signs and cones and communicate to warn public of the controlled space and to keep clear.	
Hose traps in below ground positions	Trip, falls, injury	Y	Μ	Keep covers in place when not in use	
Slipways and sumps	Falls, Injury	Y	Μ	High visibility markings on edges of channels. Caution signs. Train, supervise new volunteers. Keep covers in place when not in use	
Trapping of fingers in rotating parts	Risk of partial amputation or crushing of fingers.	Y	I	Machine must be switched off and isolated before removing guards.	
Trapping of fingers in wire drum	Risk of partial amputation or crushing of fingers.	Y	I	No unauthorised personnel inside barriers when motor is running.	
Electrical circuit	Risk of electrocution	Y	Μ	Only trained personnel to work on power circuits	

Hazard	Potential Harm	hazard?	<u>E</u> liminate <u>I</u> solate <u>M</u> inimise	Measures	Person Responsible	Date Completed
Snatch Blocks and pulleys	Injury, crushed fingers. Back injury	Y	Μ	Should only be handled with gloves and when winch is stopped and all clear is given by the haulage manger. Bend knees when lifting and ask for assistance if moving multiple blocks or repositioning. Train, supervise new volunteers		
Steel Plates	Crush injury to fingers, foot & toes	Y	Μ	Gloves and Safety boots should be worn by all persons handling equipment associated with haulage. Train, supervise new volunteers		
Chains	Crush injury to fingers, foot & toes	Y	Μ	Gloves and Safety boots should be worn by all persons handling equipment associated with haulage. Train, supervise new volunteers		
Section Deadman	Falls, trips, injury if failure occurs	Y	Μ	Identified on the yard with yellow safety paint. Inspected twice yearly for wear or damage.		
Toe Jacks	Crush injury to fingers, foot &	Y	М	Gloves and Safety boots should be		
Toe Jacks	toes Potential risk to anyone nearby if load moves unexpectedly	Y	М	worn by all persons handling equipment. Only trained operators / persons to assist with haulage and the use of haulage equipment.		

Risk Assessment – Haulage Equipment

Hardwood Ways	Crush injury to fingers, foot & toes. Back injury	Y	Μ	Train, supervise new volunteers. Should only be handled with gloves and safety boots. Bend knees when lifting and ask for assistance if moving or repositioning. Train, supervise new volunteers	
Water Blaster	Eyesight, breathing, skin irritation. slip, falls, overspray. Environmental damage	Υ	M	Full PPE gear should be worn when operating. Care taken when moving around the vessel. Screens are to be placed around the vessel when water blasting. The sump pump must be used and checked for operation before blasting commences. Train, supervise new volunteers.	
Electrical circuit	Risk of electrocution	Y	Μ	Power leads tagged and correctly plugged in. Only trained personnel to work on power circuits	
Settling Tank	Hazardous Waste Trips, Falls	Y	Μ	Disposal for treatment by Envirowaste Ltd. Covers intact and correctly installed.	

Risk Assessment – Cradles

Hazard	Potential Harm	hazard?	<u>E</u> liminate <u>I</u> solate <u>M</u> inimise	Control Measures	Person Responsible	Date Completed
Vessel tipping over	Potential risk to anyone nearby and property.	Y	Μ	Cradles and vessels must be approved by the Haulage Master and Safety Inspector prior to the commencement of haulage.		
Heavy Lifting & extending	Back injury	Y	Μ	Use appropriate lifting equipment or another person's assistance for heavy loads that cause straining to lift or uncomfortable extension to place equipment. Train, supervise new volunteers		

Risk Assessment – Boat Maintenance

Hazard	Potential Harm	Signific ant hazard? Yes/ No	<u>E</u> liminate <u>I</u> solate <u>M</u> inimise	Control Measures	Person Responsible	Date Completed
Working at height	Falls from ladders/scaf folding/plan ks	Y	Μ	Ladders must be secured to prevent tipping. Scaffold and planks must be appropriate for use. Train, supervise new volunteers		
Noise	Hearing damage. Noise Nuisance	Y	Μ	Ear protection should be worn by all persons near any equipment or machinery which are operating that require you to raise your voice to be heard. Halyards must be securely tied off to prevent clanging on masts.		

				Tarpaulins must be secured to prevent excessive noise.	
Material projectiles from power tools or machinery.	Eye injury	Y	М	Safety glasses to be worn when operating power tools or drill press.	
Dust	Respiratory, dust nuisance, environmen tal damage	Y	М	Dust masks to be worn when sanding or removing paint and antifoul. Vacuum or dust extractors must be used on power tools to eliminate dust nuisance to surrounding persons or boats. Groundsheets and tarpaulins must be used to mitigate nuisance and prevent damage to environment.	
Paint / Glues	Hazardous Substances	Y	М	Refer to Safety Data Sheets.	
Fire	Burns, damage to boats and surrounding property	Y	М	Fire extinguishers on vessels and winch house. Fire hoses in winch hose. Train, supervise new volunteers	
Oil/Chemica l Spill Pollution	Hazardous substances. Environmen tal damage.	Y	I	Spill Kit located in the workshop. Follow the guidelines in the Haulage Manual (Section 5 – Health and Safety)	
Waste	Trips, falls, environmen tal damage	Y	M	Use rubbish bins provided or take your rubbish away. Keep areas around boats clear of clutter.	
Power Leads	Trips, falls	Y	М	Disconnect leads when not in use	

Electrical circuit	Risk of electrocutio n	Y	М	Power leads tagged and correctly plugged	
				in.	

Risk Assessment – Machinery

Hazard	Potential Harm	hazard?	<u>E</u> liminate <u>I</u> solate <u>M</u> inimise	Measures	Person Responsible	Date Completed
Cleaning and Maintenance	Injury	Y	Μ	Moving parts must be secured against movement. Locks or lock-out procedures must be followed. Train, supervise new volunteers		
Electrical circuit	Risk of electrocution	Y	Μ	Only trained personnel to work on power circuits. Tagging and testing kept up to date.		

Risk Assessment – Safety and Environment Protection

Hazard	Potential Harm	hazard?	<u>E</u> liminate Isolate <u>M</u> inimise	Control Measures	Person Responsible	Date Completed
Unauthorised Accesss	Injury to public	Y	M	Restricted area signage in place during haulage operations		
Settling Tank	Hazardous Waste	Y	М	Disposal for treatment by Envirowaste Ltd. Covers intact and correctly installed.		
Water blasting	Eyesight, breathing, skin irritation. slip, falls, overspray. Environmental damage	Y	Μ	Full PPE gear should be worn when operating. Care taken when moving around the vessel. Screens and caution signs are		

to be placed around the vessel when water blasting. The sump pump must be used and checked for operation before
operation before
blasting commences.
Train, supervise new volunteers.

Hazard Assessment & Inspection Survey

Copy this sheet for use when carrying out inspection and hazard assessment on the yard. These notes to be transferred to the DYC Master File by the Haulage Master.

The Haulage Safety Officer is required to be trained and have a complete understanding of all hazards, risk management and control measures when undertaking the following Inspection Survey. **DEVONPORT YACHT CLUB (Inc)**

KING EDWARD PARADE



PHONE: 64 9 4450048

http://www.dyc.org.nz

DEVONPORT, AUCKLAND 9

Bi-ANNUAL HAULAGE EQUIPMENT INSPECTION SURVEY

Date:

ITEM	Component	Pass/Fail	Comment/Work Required
West Slip Winch	On/Off Switches		
	Transmission		
	Dog Clutch		
	Brake		
	Cable		
West Crosshaul Winch	On/Off Switches		
	Transmission		
	Dog Clutch		
	Brake		
	Cable		
West Slip Trolley	Wheels and bearings		
	Chassis		
	Cable Attachment		
	Safety Chain		
	Slides and ropes		
West Slip	Rail and Fastenings		
	Safety Chain		
East Slipway Winch	On/Off Switches		
	Transmission		
	Dog Clutch		
	Brake		
	Cable		
East Crosshaul Winch	On/Off Switches		
	Transmission		
	Dog Clutch		
	Cone Clutch		
	Brake		
	Cable		
East Slip Top Trolley	Wheels and bearings		
	Chassis		
	Cable Attachment		
	Slides		
	Safety Chain		

ITEM	Component	Pass/Fail	Comment/Work Required
East Slip Trackwork	Rail and Fastenings		
	Safety Chain		
Haulage Gear Trolley	Wheels and tyres		
	Mechanical Jacks		
	Chains		
	Blocks		
Water blaster	Power Cables		
	Switches		
	Low Pressure Hose		
	High Pressure Hose		
	Blaster operation		
Workshop	Welder		
	Clean & Tidy		
	Drill press		
	Offhand Grinder		
Sump Pump	Power Cable		
	Pump Operation		
Yard	Deadman chains		
	Power Outlets		
	Fire Extinguishers		
	Water meter readings		

At the time of this inspection and to the best of my knowledge the equipment is safe for use other than for any items identified by me as requiring attention. If any item affecting safety has been noted, that equipment has been eliminated or taken out of service until I have been satisfied that suitable repairs have been made.

Inspected By:

Date:

Repairs Inspecte	d and	Passed:	
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Date:

Original To Secretary for filing when completed.

Haulage Safety Briefing

HAULAGE SAFETY BRIE	FING / CHECKLIST
HAULAGE DATE	
VESSEL (S) HAULED	
NAMED OFFICERS	OF THE DAY
HAULAGE / SAFETY MANAGER	
FOREMAN	
HAND SIGNALS	
WINCH OPERATOR (S)	
	(Initialled)
RESTRICTED AREA NOTICE BOARDS IN PLACE	
WINCH BASTION ARMS & CONES IN PLACE	
HAZARDS IDENTIFIED	
* Trips * Falls * Wires & Chains	
* Heavy Lifting * Crush Injury	┥┝───┥
H&S INDUCTIONS COMPLETED	
PPE WORN BY ALL VOLUNTEERS	
FIRST AID KIT LOCATED IN WORKSHOP	
COMMENTS /	ACTIONS