

Harbours Risk Assessment Form					Title: West Pier Scarborough Harbour Operations				
					Ref Number: CHA S/31/Rev2				

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Task Description:
Risk assessment as to the interaction between the general public & industrialised port operations with regard to security, health & safety & public liability on the West Pier.

Location: West Pier, Scarborough Harbour

Hazards	Who might be harmed and How	Risk	Preventive and Protective Measures	Further measures to be taken	Residual Risk	Comments
Slips, trips and falls	People through slips in areas such as the Fish Market or on discarded materials on the Fish Quay, Trips on uneven surfaces and Falls from pier edges.	M	<p>Inspection procedures in place and auditable records kept.</p> <p>Supplementary inspection and reporting regime by Asset Management team.</p> <p>Promotion of 'See it, Sort it' with Harbour Staff to encourage good housekeeping.</p> <p>Intervention with West Pier businesses whereby a hazard is been caused by their practices.</p> <p>Cleaning procedures in place.</p> <p>Pier capping in place along the edge of the 'Car Park' and Fish Quay.</p> <p>No public access permitted in Fish</p>		L	ALARP

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			Market. Security/Access gate Lifebuoys positioned around the area.			
Person unintentionally entering in the Water	People through drowning or water related injuries. Environment through the possible introduction of polluting substances into the harbour.	M	Pier capping in place along the edge of the 'Car Park' and Fish Quay. Handrails present and inspected in places around the Car Park. Warning signage in place. CCTV in operation. Local Port Services in operation with contact to vessels (VHF) and town centre CCTV control room. Rescue throw bag in place at RNLI station. Lifebuoys positioned around the area.		L	ALARP
Pier-jumping	People through injuries caused by impact with infrastructure during the jump or collision with the seabed/object in the water.	H	Signage in place. Safety advice given by Harbour Staff. Harbour Standard Operating Procedure in place and reviewed. SBC media campaign to highlight the dangers via Social Media, TV and Radio. 'Intervention days' held during school summer holidays in conjunction with SBC Safeguarding, HMCG, RNLI and		M	ALARP Intervention dates for 2018: 09/08/2018 22/08/2018 23/08/2018 Intervention in 2017 provided effective and saw a large reduction in activity afterwards.

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			NYP. Lifebuoys positioned around the area.			
Vehicle to vehicle accident	<p>People through injuries sustained during collision between vehicles.</p> <p>Environment through fuel leakage from damaged vehicles entering the foul drainage network or the harbour/sea.</p>	M	<p>Traffic control at entrance to West Pier.</p> <p>Designated parking bays.</p> <p>Traffic Management Plan held and reviewed by Parking Services.</p> <p>Designated turning circle for LGV and HGV.</p> <p>Designated loading bay outside Fish Market.</p> <p>Road Markings/Signage</p>	<p>Remarking of lines on West Pier to segregate operational and public car park traffic including relocation of the turning circle.</p> <p>‘Code of Practice’ for vehicular operations on West Pier to be devised with input from stakeholders.</p> <p>‘Keep Clear’ areas such as loading bays to be enforced by Harbour Authority.</p> <p>Procurement of removable physical separation method between relocated turning circle and car park to be investigated.</p> <p>Deployment of existing lifting bollards to be considered.</p> <p>Relocation of bollards outside of Public Toilets.</p> <p>Additional signage to be procured.</p> <p>Request to be made to</p>	L	<p>Not yet ALARP but it is considered that the hazard will reach ALARP once further measures are implemented.</p> <p>These further measures should be implemented ASAP.</p> <p>Remarking of West Pier scheduled for 1st August 2018.</p>

Hazards	Who might be harmed and How	Risk	Preventive and Protective Measures	Further measures to be taken	Residual Risk	Comments
				NYCC for remarking of entrance road lines.		
Vehicle to Pedestrian/driver accident	People through impact with a vehicle including the potential for serious, life changing injuries or fatality.	H	<p>Traffic control at entrance to West Pier.</p> <p>Designated parking bays.</p> <p>Traffic Management Plan held and reviewed by Parking Services.</p> <p>Designated turning circle for LGV and HGV.</p> <p>Designated loading bay outside Fish Market.</p> <p>Bollards in place outside Public Toilets (see further measure)</p> <p>Road Markings/Signage</p> <p>Incident plan to minimise distress and maximise efficient resolution</p>	<p>Remarking of lines on West Pier to segregate operational and public car park traffic including relocation of the turning circle.</p> <p>Addition of marked pedestrian crossings during line marking including from parking to Harbour Café, parking to Northern end of Loading Bay, parking to balcony steps and parking to Public Toilets.</p> <p>‘Code of Practice’ for vehicular operations on West Pier to be devised with input from stakeholders.</p> <p>‘Keep Clear’ areas such as loading bays to be enforced by Harbour Authority.</p> <p>Procurement of removable physical separation method between relocated turning circle and car park to be investigated.</p> <p>Deployment of existing lifting bollards to be considered.</p>	M	<p>Not yet ALARP but it is considered that the hazard will reach ALARP once further measures are implemented.</p> <p>These further measures should be implemented ASAP.</p> <p>Remarking of West Pier scheduled for 1st August 2018.</p>

Hazards	Who might be harmed and How	Risk	Preventive and Protective Measures	Further measures to be taken	Residual Risk	Comments
				<p>Relocation of bollards outside of Public Toilets.</p> <p>Additional signage to be procured.</p> <p>Request to be made to NYCC for remarking of entrance road lines.</p>		
<p>Vehicle to Infrastructure accident</p>	<p>People through impact injuries caused during collision or risk to passers-by if collision leads to infrastructure collapse.</p> <p>Environment through fuel leakage from damaged vehicles entering the foul drainage network or the harbour/sea.</p> <p>Infrastructure through damage sustained during collision possibly leading to collapse.</p>	<p>M</p>	<p>Designated parking bays.</p> <p>Traffic Management Plan held and reviewed by Parking Services.</p> <p>Designated turning circle for LGV and HGV.</p> <p>Designated loading bay outside Fish Market.</p> <p>Bollards in place outside Public Toilets</p> <p>Road Markings/Signage</p>	<p>Remarking of lines on West Pier to segregate operational and public car park traffic including relocation of the turning circle.</p> <p>‘Code of Practice’ for vehicular operations on West Pier to be devised with input from stakeholders.</p> <p>‘Keep Clear’ areas such as loading bays to be enforced by Harbour Authority.</p> <p>Procurement of removable physical separation method between relocated turning circle and car park to be investigated.</p> <p>Relocation of bollards outside of Public Toilets.</p> <p>Additional signage to be procured.</p>	<p>L</p>	<p>Not yet ALARP but it is considered that the hazard will reach ALARP once further measures are implemented.</p> <p>These further measures should be implemented ASAP.</p> <p>Remarking of West Pier scheduled for 1st August 2018.</p>

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				Request to be made to NYCC for remarking of entrance road lines.		
Anti-social behaviour, Physical and Verbal Abuse/Assault of Staff and Public. Acts of Vandalism	<p>People through stress caused by incident or physical injuries incurred during assault.</p> <p>Environment where objects are thrown from the pier into the sea or harbour.</p> <p>Infrastructure through intentionally inflicted damage to property including Council or Private property.</p>	M	<p>24/7 watchkeeping staff with CCTV equipment which is maintained by third party contractor.</p> <p>Radio link to town CCTV control centre.</p> <p>Good relations maintained with local Police including via Community Impact Team.</p> <p>'Intervention days' held during school summer holidays in conjunction with SBC Safeguarding, HMCG, RNLI and NYP.</p> <p>Staff trained and procedures in place to reduce risk of physical assault.</p> <p>Lone worker procedure in place and records reviewed weekly.</p>		L	ALARP
Terrorism	<p>People through injuries sustained during a terrorist attack.</p> <p>Infrastructure through damage caused by arms fire and deliberate destruction caused</p>	M	<p>Compliance with International Ship and Port Facility Security code.</p> <p>Port Security Plans in place and audited by Department for Transport.</p> <p>Port Facility Security Officer and Deputy designated and trained to international standards.</p>	<p>Establish link between South Bay Traders and the Harbour Authority to confirm interoperability plans during an incident.</p> <p>Consider external training for all staff and stakeholders as part of Project Griffin.</p>	L	ALARP

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	by perpetrator.		<p>Trained Local Port Services staff with access to CCTV.</p> <p>Regular Port Security exercises conducted with all staff.</p> <p>Senior staff have undertaken external Counter Terrorism training.</p> <p>Harbour Authority represented on local PREVENT Bronze group.</p> <p>Strong links maintained with NYP Special Branch Ports Division.</p> <p>Strong links maintained with UK Border Force.</p>			
Interference with equipment inc. davits and cranes by unauthorised persons	<p>People through injuries to themselves or other individuals such as crush or impact injuries.</p> <p>Environment through damage to equipment leading to hydraulic oil leakage or other substance entering the water.</p> <p>Infrastructure through damage to harbour equipment through inappropriate use.</p>	H	<p>24/7 trained staff with access to CCTV and radio links to town CCTV control room.</p> <p>Usage of equipment monitored to intervene during unauthorised use.</p>	Consider securing of control cabinets with key available from Port Control to authorised persons.	L	ALARP

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Impact or crush injuries from slung loads such as during fish landings or machinery removal	People through crush or impact injuries caught by a load	M	<p>Fish Quay 'top' vehicular gate kept closed other than for operational purposes to deter public entering the Fish Quay area.</p> <p>Fish Quay 'top' pedestrian gate includes warning signage and self-closing mechanism.</p> <p>Signage posted on other gates.</p> <p>Davit operators (stakeholders) aware of their environment.</p>	Consider full restrictions on public access to the Fish Quay as per Whitby Fish Quay.	L	ALARP
Overturning of Forklift trucks or dropped loads from cranes, davits and forklifts	<p>People through crush injuries including both the driver and pedestrians.</p> <p>Environment through dropped loads entering the water.</p> <p>Infrastructure through damage caused by dropped load or vehicle as it overturns.</p>	M	<p>Forklift operators must be trained in accordance with legalisation.</p> <p>Operators reminded of their obligations regarding training and operation of forklift trucks.</p> <p>Signage posted.</p> <p>Area cleared of persons who are not involved with the operation.</p> <p>24/7 watchkeeper with CCTV to monitor operations.</p>	<p>'Code of Practice' for vehicular operations on West Pier to be devised with input from stakeholders.</p> <p>Remarking of lines on West Pier to segregate operational and public car park traffic including relocation of the turning circle.</p> <p>Addition of marked pedestrian crossings during line marking including from parking to Harbour Café, parking to Northern end of Loading Bay, parking to balcony steps and parking to Public Toilets.</p> <p>'Code of Practice' for vehicular operations on West Pier to be devised with input from</p>	L	Not yet ALARP but it is considered that the further measures will reduce the risk to ALARP.

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				<p>stakeholders.</p> <p>'Keep Clear' areas such as loading bays to be enforced by Harbour Authority.</p>		
<p>Impact between forklift and pedestrian or another vehicle</p>	<p>People through crush or impact injuries including possibility of fatalities.</p> <p>Environment through leakage of fuel from a damaged forklift and other vehicle.</p>	<p>H</p>	<p>Forklift operators must be trained in accordance with legalisation.</p> <p>Operators reminded of their obligations regarding training and operation of forklift trucks.</p> <p>Signage posted.</p> <p>Area cleared of persons who are not involved with the operation.</p> <p>24/7 watchkeeper with CCTV to monitor operations.</p>	<p>'Code of Practice' for vehicular operations on West Pier to be devised with input from stakeholders.</p> <p>Remarking of lines on West Pier to segregate operational and public car park traffic including relocation of the turning circle.</p> <p>Addition of marked pedestrian crossings during line marking including from parking to Harbour Café, parking to Northern end of Loading Bay, parking to balcony steps and parking to Public Toilets.</p> <p>'Code of Practice' for vehicular operations on West Pier to be devised with input from stakeholders.</p> <p>'Keep Clear' areas such as loading bays to be enforced by Harbour Authority.</p>	<p>L</p>	<p>Not yet ALARP but it is considered that the further measures will reduce the risk to ALARP.</p>

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Fire on a vessel, fuel tanker or other vehicle	<p>People through smoke inhalation or fire related injuries including harbour staff, harbour users and passers-by.</p> <p>Environment through fuel leakage entering the water and air pollution.</p> <p>Infrastructure through damage sustained by fire or explosion including damage to harbour buildings, facilities or structural infrastructure.</p>	M	<p>Port Emergency Plans which are reviewed annually and following an incident.</p> <p>Port Emergency Plan exercises conducted as per exercise programme.</p> <p>Emergency services invited to utilise harbour environment for their own training.</p> <p>Oil Pollution equipment on site with trained staff.</p> <p>Regular pollution exercises conducted.</p> <p>Ability to segregate Fish Quay to prevent access to area other than for emergency personnel.</p> <p>Trained 24/7 Local Port Services staff with CCTV.</p> <p>Bunkering procedures in place.</p>		L	ALARP
Explosion fuelled by gas bottles	<p>People through injuries sustained during explosion including the risk of fatalities.</p> <p>Infrastructure through damaged buildings and facilities.</p>	M	<p>Discarded gas bottles removed and stored in central location prior to onward disposal.</p> <p>Stakeholders encouraged to organise own disposal of gas bottles in the correct manner.</p>		L	ALARP

Hazards	Who might be harmed and How	Risk	Preventive and Protective Measures	Further measures to be taken	Residual Risk	Comments
Fire in fishing equipment, discarded packaging materials or Waste Disposal area.	<p>People through smoke inhalation or burns.</p> <p>Environment through air pollution and risk of contaminants entering the water.</p> <p>Infrastructure through damage to equipment or spread to buildings and other facilities.</p>	M	<p>Port Emergency Plans which are reviewed annually and following an incident.</p> <p>Port Emergency Plan exercises conducted as per exercise programme. Emergency services invited to utilise harbour environment for their own training.</p> <p>Oil Pollution equipment on site with trained staff.</p> <p>Regular pollution exercises conducted.</p> <p>Ability to segregate Fish Quay to prevent access to area other than for emergency personnel.</p> <p>Emergency vehicle access widths maintained</p> <p>Trained 24/7 Local Port Services staff with CCTV.</p> <p>Waste disposal facilities provided IAW approved Port Waste Management Plan.</p> <p>Abandoned/non-working fishing equipment to be removed from site by owner.</p>		L	ALARP
Contamination from fuel spillage from	People through slips on fuel.	M	Port Emergency Plans which are reviewed annually and following an		L	ALARP

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vehicle on car park.	Environment through contaminants entering drains or the sea.		incident. Port Emergency Plan exercises conducted as per exercise programme. Emergency services invited to utilise harbour environment for their own training. Oil Pollution equipment on site with trained staff. Regular pollution exercises conducted. Trained 24/7 Local Port Services staff with CCTV.			
Traffic delays caused by HGV 'stuck' outside of the traffic lights	People- Jaywalking between stuck vehicles	M	Raise awareness of Harbour businesses to pass information to Delivery company	NYCC requested to remark lines at entry to West Pier to ensure that outgoing vehicles correctly activate the traffic light sensor. Bollards outside Public Toilets to be relocated to reduce overhang of parked vehicles.	L	Not yet ALARP but it is considered that it will become ALARP once further measures implemented.
HGV blockage of 'chokepoints' and delays in landed product transshipment caused by traffic/access issues	People- Jaywalking between stuck vehicles Infrastructure through HGVs attempting to navigate smaller	M	The parking of HGVs on West Pier is prohibited due to lack of space. HGVs engaged in loading/unloading operations are permitted and must clear the site are the earliest opportunity.	'Code of Practice' for vehicular operations on West Pier to be devised with input from stakeholders. Use of Banksman for guidance.	L	Not yet ALARP but it is considered that it will become ALARP once further measures implemented.

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	gaps and making contact with buildings.			Line markings to be made to prevent the loading/unloading of vehicles adjacent to the Bait Shed whereby blockages are caused.		
Contamination of landed product on the Market by public or animals	People through illness caused by contaminated product shipped from Scarborough Fish Market.	H	Maintain and enforce Seafish Authority and environmental regulation as to no unauthorised access to the fish market. Fish Market shutter doors to be closed whenever operations are not taking place.		L	ALARP

Any Other Comments & Notes:

The operational area of the West pier of Scarborough Harbour is very restricted in space and is a cul de sac leading towards the pier end. The safe working procedure for industry and businesses is a responsibility for both individual business lease holders, Stakeholders and Scarborough Borough Council, with the Management of the Harbour and Fish Market the responsibility of the Harbour Master.

The fish market is operated under strict Seafish Authority and environmental regulations and guidelines which demand that access is permitted only to authorised users for sake of safety, security and cleanliness it is not for public access and viewing.

The use of heavy plant machinery and the access of large articulated vehicles and fuel tankers to this area carry inherent risks to authorised Pier users and an unacceptable risk to the general public. With this in mind a number of initiatives have been established as of June 2018 to reduce the risk and segregate operational activity from the public car park areas. These will commence in August 2018 with the remarking of the West Pier car park to move the turning circle from the middle of the public car park to the lower area of the Pier near the Bait Shed.

The storage and access to fishing vessel operators equipment is seen as an essential part of the lower end of the West Pier around the Bait Shed/warehouse area and carries a large risk to the general public as a significant trip hazard. This risk can only be managed by improved housekeeping by the users and the Harbour Authority but the total removal of all fishing gear is unrealistic and not feasible for a working fishing port.

Uncontrolled access for public parking increases pressure on the already restricted space available for port operations and this in turn increases the risk potential to the general public by encouraging them to leave vehicles in a prohibited area. This problem could be reduced by access being controlled onto West Pier by a parking attendant to prevent gridlock.

The improved security of stakeholder businesses and equipment and the reduction of anti-social behaviour will reduce the risk to the general public through improved Health and Safety can be achieved by the segregation of the working industrialised areas of the lower west pier from the general public.

To remove the interaction between the hazards and risks inherent in this area and the general public would not detract from the public's use and enjoyment of Scarborough Harbour

No public facilities are located in this area and any operation on or around the Fish Market / Quay can be viewed from many authorised areas around the harbour. There is no requirement for the public to be allowed to access to the lower pier and interact with industrial operations.

The restriction of access to unauthorised personnel will enhance the corporate objectives of:

Objective 2: To reduce crime and disorder

Objective 3: To keep the population of the Borough healthy.

Objective 9: To provide leadership and vision to the local community

PPE	PPE issued as required, coveralls, safety boots, hi-viz clothing, lifejackets etc.
First Aid Arrangements	First aid box on site,; Dial 999 in an emergency and inform Duty Harbour Master. A reporting procedure is in place for all accidents which require first aid treatment.

Revision 2 (30/05/2018): Review of West Pier conducted by C. Burrows, Deputy Harbour Master, M. Pedley, Corporate Risk & Asset Manager and R. Webster, Health and Safety Officer during May 2018. During this review it was identified that the increase of HGV traffic on West Pier had substantially increased the risk to members of the public utilising the car park. A raft of measures were identified to reduce this risk and these have been reflected in this revision of the Risk Assessment.

Name of Assessor(s): Chris Burrows, Deputy Harbour Master	Signature(s): 	Date of Review: 30/05/2018 Date for next Review: 30/05/2019
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