

**MCIB**

Marine Casualty Investigation Board  
*Bord Imscrúdú Taisní Muirí*



**REPORT OF AN INVESTIGATION INTO  
A MARINE CASUALTY  
INVOLVING THE VESSEL  
SIMMERDIM  
OFF ARDMORE PIER,  
CO. GALWAY  
8 NOVEMBER 2022**

**REPORT NO. MCIB/321  
(No.9 OF 2023)**

The Marine Casualty Investigation Board (MCIB) examines and investigates all types of marine casualties to, or onboard, Irish registered vessels worldwide and other vessels in Irish territorial waters and inland waterways.

The MCIB objective in investigating a marine casualty is to determine its circumstances and its causes with a view to making recommendations to the Minister of Transport - for the avoidance of similar marine casualties in the future, thereby improving the safety of life at sea and inland waterways.

The MCIB is a non-prosecutorial body. We do not enforce laws or carry out prosecutions. It is not the purpose of an investigation carried out by the MCIB to apportion blame or fault.

The legislative framework for the operation of the MCIB, the reporting and investigating of marine casualties and the powers of MCIB investigators is set out in the Merchant Shipping (Investigation of Marine Casualties) Act, 2000.

In carrying out its functions the MCIB complies with the provisions of the International Maritime Organisation's Casualty Investigation Code and EU Directive 2009/18/EC governing the investigation of accidents in the maritime transport sector.

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## Glossary of Abbreviations and Acronyms

|            |   |
|------------|---|
| BIM        | Bord Iascaigh Mhara   |
| CGU        | Coast Guard Unit  |
| GUH        | Galway University Hospital  |
| HSE        | Health Service Executive  |
| IRCG       | Irish Coast Guard   |
| LOA        | Length Overall  |
| MCIB       | Marine Casualty Investigation Board   |
| MRCC       | Marine Rescue Coordination Centre   |
| MSO        | Marine Survey Office  |
| NEOC       | National Emergency Operations Centre  |
| S.I.       | Statutory Instrument  |
| SITREP     | Situation Report  |
| SOLAS      | Convention for the Safety of Life at Sea (SOLAS Convention)                                     |
| STCW       | International Convention on Standards of Training, Certification and Watchkeeping for Seafarers |
| UTC        | Universal Co-ordinated Time   |
|            |   |
| Horsepower | hp  |
| Hours      | hrs   |
| Kilometre  | km  |
| Metre      | m   |
| Millimetre | mm  |
| Tonne      | t   |

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## 1. SUMMARY

- 1.1 On the morning of 8 November 2022, the vessel Simmerdim departed Lettermullen, Connemara, Co. Galway with four salmon farm personnel onboard and proceeded to the offshore salmon farm site located off Ardmore Pier, Co. Galway. The vessel arrived at the worksite and made fast alongside the Feed Barge and all personnel transferred from the vessel to the Feed Barge.
- 1.2 A smaller vessel (Polar boat) carrying five people to the salmon farm Feed Barge rendezvoused at the site and moored outboard of Simmerdim to alight three persons, being two diver contractors (“Industrial Personnel”)<sup>1</sup> and one salmon farm personnel.
- 1.3 The first of the three passengers from the Polar boat transited across Simmerdim to the Feed Barge. As the second person (a diver) of the group was transiting across to the Feed Barge, there was a coming together of the vessels, which pinned the individual between both vessels causing crush injuries to the pelvic area.
- 1.4 The injured Casualty was brought back onboard Simmerdim and was subsequently airlifted to Galway University Hospital (GUH) where his injuries were assessed and included multiple fractures to the pelvis and fractured hip socket joints.

Note: Times are local time = UTC + 1 (Co-ordinated Universal Time + 1 hour).

1. The Casualty was a passenger within the meaning of the Merchant Shipping Act 1992 which defines a passenger as: “passenger” means any person carried on a vessel other than—
  - (a) the owner or a person to whom the vessel is on hire or a person employed or engaged in any capacity on board the vessel on the business of the vessel,
  - or
  - (b) a person on board the vessel either in pursuance of the obligation laid upon the master of the vessel to carry shipwrecked, distressed, or other persons or by reason of any circumstances that could not have been prevented or forestalled by the master or the owner of the vessel;In order to distinguish that the Casualty was not a conventional passenger the following definition as per amendments to the SOLAS Convention is used. “Industrial personnel”: are defined as “all persons transported or accommodated on board for the purpose of offshore industrial activities performed on board other ships and/or offshore facilities.”

## 2. FACTUAL INFORMATION

### 2.1 The Vessels

- 2.1.1 Name of Vessel: Simmerdim.
- Port of Registry: None.<sup>2</sup>
- Type: Motor vessel.
- Length Overall (LOA): est. 15.5 metres (m).
- Breadth: est. 6.0 m.
- Depth: est. 2.5 m.
- Tonnage: 62 Gross register tonnage.
- Year of Manufacture: 1991.
- Year of Purchase by Current Owner: circa. 2016.
- Type of Construction: Steel.
- Engine: Two Cummins main engines.
- Operation Licence: Passenger Boat Licence of a Class P3 Passenger Boat.



Photograph of Motor Vessel Simmerdim

2. Note re the Port of Registry being recorded as None: The Mercantile Marine Act 1955 includes interpretation of “ship” as: “ship” includes every description of vessel used in navigation not propelled by oars. Simmerdim should have been registered.

- 2.1.2 Simmerdim was operated under a P3 Passenger Boat Licence issued in accordance with the Merchant Shipping (Passenger Boat) Regulations, Statutory Instrument (S.I.) No. 273 of 2002. The Passenger Boat Licence (P3) expired on 2 December 2022, but it was in date at the time of incident.
- 2.1.3 Regulation S.I. No. 273 of 2002 provides that Class P3 Passenger boats with no more than 12 passengers onboard used for domestic voyages in smooth waters, in partially smooth waters<sup>3</sup> or to sea in the course of which the passenger boats are within 15 miles (exclusive of any smooth waters or partially smooth waters) from their designated points of departure and within three miles from land.
- 2.1.4 The licence required the vessel to operate in favourable weather: “favourable weather” means weather when the visibility is good and when the combined effects of wind, sea and swell on the passenger boat are never greater than those which would cause moderate rolling or pitching or result in the shipping of green seas on the weather deck or, in the case of an open boat, over the gunwale.
- 2.1.5 In accordance with the terms of the Passenger Boat Licence it must be operated by persons qualified in accordance with the Merchant Shipping (Passenger Boat) Manning Regulations 2005 S.I. No. 649 of 2005 and relevant marine notices.<sup>4</sup>

See Appendix 7.1 - Simmerdim Interim Passenger Boat Licence - Conditions and Restrictions.

- 2.1.6 Simmerdim’s plying limits were from Lettermullen or Kilkieran, three miles to sea and not more than 15 miles from point of departure.
- 2.1.7 Under Chapter 5, Sections 51 to 53 of the Merchant Shipping Act of 2010, the task of transferring personnel at sea from Simmerdim to the Feed Barge probably should have been carried out under a “Permit to Tender” required for a “tendering operation”. A “tendering operation” means the carrying of passengers or crew or both to or from a ship or boat at anchor from or to a place in the State by a tender or by a vessel’s tender.<sup>5</sup>
- 2.1.8 There may be a debate as to whether the transfer of personnel from a passenger boat to an object that is not involved in navigation and which has a fixed mooring like the Feed Barge, does not clearly fall within the definition of tendering contained in the Act. While it is the case that the definition of “ship” in the Mercantile Marine Act of 1955 is that it “includes every description of vessel used in navigation not propelled by oars”, the term “boat at anchor” must take into consideration the definition of “at anchor” in the 2010 Act. This provides that “at

3. “*partially smooth waters*” means the areas of water specified in a Marine Notice within period or periods, if any, specified therein.
4. The master is required to hold a certificate that certifies his/her training in the areas of personal survival techniques, first aid and medical fitness (issued by an authorised body under the Regulations 2005 S.I. No. 649).
5. A “tender” means a passenger boat or a passenger ship which carries passengers or crew or both to or from a vessel at anchor from or to a place in the State.



anchor” means at anchor or moored to a mooring device that is secured to the sea bed or is otherwise not in a position to provide direct means of access for passengers or crew or both to or from the shore. It is capable of a much broader interpretation and certainly appears to include the Feed Barge that was fixed by a mooring.

|       |                                    |                                      |
|-------|------------------------------------|--------------------------------------|
| 2.1.9 | Name of Vessel:                    | Referred to as Feed Barge.           |
|       | Port of Registry:                  | None. <sup>6</sup>                   |
|       | Type:                              | Wavemaster Akva Junior 96T Barge.    |
|       | LOA:                               | 14.5 m.                              |
|       | Breadth:                           | 8.0 m.                               |
|       | Depth:                             | 2.5 m.                               |
|       | Loading Capacity:                  | 96 tonnes (t).                       |
|       | Year of Manufacture:               | circa. 2016.                         |
|       | Year of Purchase by Current Owner: | circa. 2016.                         |
|       | Type of Construction:              | Steel with aluminium superstructure. |
|       | Engine:                            | No propulsion.                       |



Computer Drawing of a Wavemaster Akva Junior 96T Barge

6. Note re the Port of Registry being recorded as None: The Mercantile Marine Act 1955 includes interpretation of “ship“ as: “ship” includes every description of vessel used in navigation not propelled by oars. The feed barge was noted in the report as being non-self-propelled and on a fixed mooring and it may therefore fall outside of the definition of “ship” whilst on station; it can be unmoored and taken off site and is then a vessel used in navigation.

- 2.1.10 The Feed Barge was on a fixed mooring (equivalent to a “boat at anchor” under the Tendering Regulations) at Ardmore Bay, Co. Galway. It was not a passenger boat so did not need a Passenger Boat Licence. The mooring configuration resulted in the Feed Barge maintaining a south by east heading, which ensured the feed hoses ran unhindered to the fish cages and reduced the risk of entanglement.
- 2.1.11 There are no requirements for the person in charge of the Feed Barge to have any maritime qualifications. It is a work place within the meaning of the Health and Safety legislation and so the person in charge is subject to that legislative regime.

See Appendix 7.2 Photograph - Fixed Orientation of the Feed Barge.

- 2.1.12 Name of Vessel: Referred to as Polar boat.
- Manufacturer: Polarcirkel.
- Type: Open boat.
- Length: 5.6 m.
- Breadth: 2.07 m.
- Type of Construction: High density polyethylene.
- Engine: 40 horsepower (hp) Petrol 4-Stroke tiller operated outboard motor.



Polar Boat while Alongside the Stern of Feed Barge

- 2.1.13 As the Polar boat operated to transport personnel within the meaning of the Merchant Shipping (Passenger Boat) Regulations S.I. No. 273 of 2002, it should have held a Passenger Boat Licence. It did not have a Passenger Boat Licence.
- 2.1.14 Under Chapter 5, Sections 51 to 53 of the Merchant Shipping Act of 2010, the task of transferring personnel at sea from the Polar boat to Simmerdim should have been carried out under a “Permit to Tender” required for a “tendering operation”. A “tendering operation” means the carrying of passengers or crew or both to or from a ship or boat at anchor from or to a place in the State by a tender or by a vessel’s tender.
- 2.1.15 The Master of the Polar boat should have been qualified in accordance with the Merchant Shipping (Passenger Boat) Manning Regulations 2005 S.I. No. 649 of 2005 and relevant marine notices<sup>7</sup> in conjunction with the Passenger Boat Licence. While the Polar boat operator was experienced in the operation and handling of the Polar boat, he did not hold appropriate certification.
- 2.1.16 The salmon farm owned and operated four Polar boats, which were used in the servicing and maintenance of the farm. The Polar boats were used to tend to the salmon farm and to transport personnel to and from the Feed Barge and salmon cages.
- 2.1.17 The Polar boat used on the day of the incident to transport the industry personnel was operated by an employee of the salmon farm.

## 2.2 Incident Location

Ardmore Sea Site is located at Ardmore Bay, which is situated at the entrance to Kilkieran Bay in Connemara, County Galway. The depth of water at the location is about 3 to 4 m. The Sea Site is approximately 660 m east of Ardmore Pier.

See Appendix 7.3 Incident Location.

See Appendix 7.4 Incident Location in Relation to Ardmore Pier and Lettermullen.

See Appendix 7.5 Distance Between the Incident Location and Ardmore Pier.

See Appendix 7.6 Chart Showing Depth of Water at Ardmore Sea Site.

7. The master is required to hold a certificate that certifies his/her training in the areas of personal survival techniques, first aid and medical fitness (issued by an authorised body under the Regulations).

### 2.3 Mooring Configuration

The mooring configuration for Simmerdim was bow to stern with the Feed Barge, where Simmerdim would go starboard alongside the Feed Barge's starboard side. One head line and one stern line was the normal means of securing the vessel to the Feed Barge. The distance between the vessels when secured alongside was a minimum of 0.35 m. This distance was achieved by the tyre fenders on the Feed Barge. The smaller Polar boat (when used) moored outboard of Simmerdim to alight persons from it to Simmerdim and then on to the Feed Barge.

See Appendix 7.7 Photograph of Mooring Configuration.

### 2.4 Worksite Safe Systems of Work

The salmon farm operator issued a Permit to Work annually to the diving contractors to carry out their works. The Permit to Work issuing process included review of the diver's method statements, certification including training records and medical certificate. The salmon farm operator had a system of work for boarding and disembarking from vessels at the Ardmore Sea Site, which included a Risk Assessment, Policy and Procedure. Risks and Control Measures implemented by the salmon farm operator for boarding and disembarking from all vessels at piers and sea sites were outlined in their Risk Assessment SSWP001. The Risk Assessment was a task-based semi-quantitative type of risk assessment, where specific hazards and risk was assessed, and scoring applied to the likelihood and severity, resulting in a quantified risk rating. The assessment identified the following hazards pertinent to the boarding and disembarking from all vessels:

- Adverse Weather Conditions
- Drowning
- Falling from a Height
- Tripping/Slipping
- COVID-19 Pandemic.

Control measures were identified for each of the listed hazards.

| Ref | Specific Risk   | Control Measures   |
|-----|---|--|
| 1   | Rough Seas with High Tides.   | Secure Vessels to piers or Barges to allow safe boarding and disembarking. Certified Life Jacket to be worn always.  |
| 8   | Falling into water when changing from one vessel to another out at sea sites. | Reduce space between Working Boats and Barges by securing vessels, Certified Life Jacket to be worn at all times when boarding and disembarking on and off vessels.  |
| 19  | Falling into water at pier when tide is low.                                  | Ensure vessel is securely tied to pier and space is at a minimum. Use both hands when climbing down ladder for boarding and disembarking vessel at pier. Certified Life Jacket to be worn always as part of PPE. |
| 38  | Trip or slip when boarding and disembarking.                                  | Make sure deck of Vessels are kept clean and tidy at all times to avoid any tripping or slipping hazards. Safety footwear to be worn as part of PPE.   |
| 45  | Contracting Covid-19 Virus in the workplace.                                  | Apply social distancing where possible, comply with HSE.ie, GOV.ie and company guidelines by keeping up to date with the changes of the virus.   |

On the Risk Assessment form (See Appendix 7.8), a hazard of “Crushing” was an option to select from the prepopulated template but was not selected as a hazard.

See Appendix 7.8 - Risk Assessment Boarding and Disembarking from all Vessels at Lettermullen/Ardmore Pier and all Sea Sites.

See Appendix 7.9 - Policy and Procedure for Boarding and Disembarking from Vessels.

## 2.5 Means of Access

2.5.1 Workers including salmon farm employees and contractors were transported to the Sea Site daily from Lettermullen and Ardmore respectively. On the day of the incident four salmon farm personnel, being the Skipper and three other employees, departed Lettermullen onboard Simmerdim at around 08.00 hours (hrs) and transited to the Feed Barge, a voyage that took about 40 minutes.

2.5.2 The Simmerdim made fast alongside the Feed Barge’s starboard side with one head line and one stern line. The mooring lines were left slack to compensate for the movement of the vessel while alongside the Feed Barge in the swell to

reduce the likelihood of lines parting. However, in accordance with International Labour Organization publication ‘Accident prevention on board ship at sea and in port’ (1996), there was no accommodation ladder or gangway arrangement provided<sup>8</sup> and safe means of access was not achieved as required by Merchant Shipping (Means of Access) Regulations, 1988 S.I. No. 108 of 1988 safe means of access.<sup>9</sup>

- 2.5.3 After the vessel was secured alongside the Feed Barge, all four personnel disembarked Simmerdim and boarded the Feed Barge by climbing over the guard rails and stepping off from Simmerdim’s starboard quarter onto the Feed Barge’s tyre fenders and walking along the tyre fenders and onto the Feed Barge’s forward access ladder.

See Appendix 7.10 Photograph Showing Means of Access.

- 2.5.4 At around 08.35 hrs, a smaller vessel referred to as a Polar boat departed Ardmore Pier with five people onboard including one salmon farm employee and two divers, one of which was the Casualty. The Polar boat rendezvoused with Simmerdim at the Feed Barge at around 08.40 hrs and temporarily made fast to the Simmerdim’s port side to alight the divers and the salmon farm employee.

- 2.5.5 Access to the Feed Barge at the time of the incident was from the Polar boat to Simmerdim (which was uneventful) and then was the same for the earlier three people, which included stepping off from Simmerdim’s starboard quarter onto the Feed Barge’s tyre fenders and walking along the tyre fenders and onto the forward access ladder and onto the Feed Barge deck guard rail.

## 2.6 Casualty Information

- 2.6.1 This incident was a Marine Casualty that resulted in a Casualty, who was airlifted to hospital and was subsequently confined to a wheelchair for initial stages of his recovery. The Casualty sustained multiple fractures and injuries including both hip socket joints and pelvis, which resulted in other complications. At the time of the interview with the Marine Casualty Investigation Board (MCIB) in January 2023, the Casualty was out of work. He had stopped using a wheelchair but walked aided by crutches.

The Casualty was a 33 year old male contract diver, who was contracted by the salmon farm operators to inspect and maintain the salmon cages.

8. Section 8.1.6 (Means of access to ship) of Accident Prevention on board ship at sea and in port (1996) “...Access should generally be by an accommodation ladder or gangway which is appropriate to the deck layout, size, shape and maximum freeboard of the ship”. Section 8.5.1 (Transport of persons by water) of the same publication requires “When persons have to be transported to or from a ship by water, suitable and proper measures should be taken to provide for their safe passage...”.
9. S.I. No. 108/1988 - Merchant Shipping (Means of Access) Regulations, 1988, Section 4 (1) Requires: “The employer shall provide adequate equipment and resources so as to ensure that there can be, at all times, a safe means of access between the ship and any quay, pontoon or similar structure or another ship alongside which the ship is secured...”.

## 2.6.2 Location Information

Date: 8 November 2022.

Time: 08.40 hrs.

Position: Latitude 53.301042 N - Longitude 009° .764144 W.

Location: Ardmore Sea Site, 600 m east of Ardmore Pier, Kilkieran Bay, Connemara, County Galway.

Boat Operations: Transfer of personnel from the Polar boat to Simmerdim and then to the Feed Barge.

## 2.7 Environment Information

### 2.7.1 Estimated weather conditions for the near-shore area off Ardmore Pier, Kilkieran Bay, Co. Galway (approximate 53° .3003 -9° .770) for the 24 hr period on 8 November 2022:

Wind: Winds on the 8th were generally fresh Force 5 to strong Force 6 (mean wind speed 17 to 27 knots) and gusty. Occasionally winds were lighter or stronger for brief periods due to the effects of the passage of a trough with rain or showers; in particular between 5am and 9am winds ranged between 13 knots to 30 knots with gusts up to 40 knots. During the afternoon winds increased for a time and reached near-gale Force 7 (mean wind speed 28 to 33 knots). Wind direction was southerly or southeasterly during the morning and veered south westerly by mid-morning then westerly by evening.

Weather: Frequent and blustery showers with isolated thunder affected the area from 03:00 hrs until around 17:00 hrs. Showers were heavy between 7am and 11am. The total daily rainfall total is estimated at 7 to 10 millimetres (mm).

Visibility: Visibility was moderate or poor (0.5 to 4 nm) in heavy showers otherwise visibility was good (greater than 5 nautical miles).

Temperature: Air temperature ranged between 9 and 12 degrees Celsius.

Sea Temperature: 13 to 13.5 degrees Celsius.

Sea State (offshore): The estimated sea state (offshore) was moderate to rough with significant total wave height of 2 to 4 metres. Swell direction was from south-westerly direction.

These were very challenging conditions for transfer of persons at sea.

See Appendix 7.11 - Met Éireann Weather Report.

## 2.8 Emergency Services Involvement

Irish Coast Guard (IRCG)

Reference: Medevac Simmerdim UIIN2499/22 - Situation Report (SITREP) One and Final

From Marine Rescue Sub-Centre (MRSC) VALENTIA Routine 08 1147Z Nov 22 to MRSC

Valentia SitRep Group

Day Time Group 08 1147Z Nov 22

|                              |   |
|------------------------------|---|
| A - Identity of Casualty:    | Simmerdim   |
| B - Position:                | 53° 18.06'N 009° 45.85'W  |
| C - Situation:               | MEDEVAC from Anchored Workboat  |
| D - Number of Persons:       | 1   |
| E - Assistance Required:     | R115 Extract Casualty, Crush Injury Unable to be Moved  |
| F - Coordinating RCC:        | MRSC Valentia   |
| G - Description of Casualty: | Male, Mature Person (25-65)   |
| H - Weather on Scene:        | /Wind: 4, South<br>/Sea: Moderate<br>/Swell: Low Wave<br>/Water Temp: 12.8°C<br>/SitRep Weather-Time: 08 0854Z NOV 22 |
| J - Initial Actions taken:   | Connect to Medico Cork, Tasked R115 and Aran Islands Lifeboat   |



K - Search Area: Ardmore Pier

L - Coordinating Instructions: Locate and Assist

M - Future Plans: N/A

N - Additional information:

0854 Call from Skipper of Simmerdim about 33-year-old male crewmember with crush injury anchored off Ardmore Pier.

0857 Skipper passed to Medico Cork. Tasked R115

0904 Aran Islands Lifeboat Tasked

0912 Costelloe Bay Coast Guard Tasked

0918 R115 Airborne

0921 Aran Islands Lifeboat Launched

0944 R115 On Scene, assessing

1010 Winchman Onboard Assessing Casualty with National Ambulance Service Paramedic

1013 Costelloe Bay Coast Guard Delta Launch

1038 R115 Departed Scene for Galway University Hospital. All Units Stood Down

1052 R115 Arrived at Galway University Hospital. Casualty handed over to Health Service Executive

1121 R115 Departed Galway University Hospital, Released.

See Appendix 7.12 - Irish Coast Guard SITREP.

## 2.9 Marine Notice

2.9.1 Marine Notice No. 25 of 2020 titled “Two Separate Fatal Incidents while Boarding Fishing Vessels”<sup>10</sup> was published by the Department of Transport, Tourism and Sport in response to recommendations made by the MCIB in two reports. The Marine Notice was to all fishing vessel owners/operators, skippers, fishers and seafarers. Amongst several points highlighted, the Marine Notice set out to remind fishing vessel owners/operators, skippers, fishers and seafarers of the following:

10. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/77715/61e07e89-3b9a-461e-afe0-d234ce65bb23.pdf#page=null>

- The dangers associated with boarding and transiting across vessels.
- To remind fishing vessel owners and skippers of the duty of care to provide a safe means of access to vessels while in the harbour and that a gangway or other suitable means, providing an appropriate and safe means of boarding a vessel shall be made available.

### 3. NARRATIVE

- 3.1 Simmerdim was purchased by the salmon farm operators around 2016 and serviced various salmon farm locations around Kilkieran Bay, Co. Galway. The Feed Barge was purchased around 2016 by the same entity and was located at the Ardmore Sea Site where the primary operation was to facilitate the pumping of fish feed into the fish cages.
- 3.2 At the time of purchase of the vessels, there was no purchasing policy in place and there was no formal assessment made of compatibility between the two vessels.
- 3.3 On the morning of 8 November 2022, Simmerdim departed Lettermullen, Connemara, Co. Galway at around 08.00 hrs to proceed to the salmon farm Feed Barge at Ardmore with four personnel onboard. The Skipper of Simmerdim assessed the weather before departing Lettermullen and during the voyage to the Ardmore Sea Site, deemed the conditions acceptable for the transit and for the intended works. The vessel arrived at the site around 08.40 hrs and made fast alongside the Feed Barge. All four persons transferred from Simmerdim to the Feed Barge via the starboard quarter of Simmerdim. The transit required stepping over the vessel's guard rail onto a tyre fender and onto a fixed ladder of the Feed Barge, then onto the deck of the barge. All four personnel successfully transferred across to the Feed Barge.
- 3.4 At around 08.40 hrs the smaller vessel (Polar boat) carrying five persons including the Casualty arrived at the sea farm site and moored outboard of Simmerdim to alight one fish farm employee and two contract divers including the Casualty and equipment. The Polar boat had departed from Ardmore Pier at around 08.30 hrs. They transited from the Polar boat uneventfully to Simmerdim. After the divers and employee boarded Simmerdim and took onboard the equipment, the Polar boat departed Simmerdim to carry out sea site inspections of the fish cages.
- 3.5 The three persons then went to make their way across the deck of Simmerdim and onto the Feed Barge. The first of the three who was one of the divers, transited across Simmerdim to the Feed Barge successfully, stepping over the vessel's guard rail. The Casualty (who was not carrying anything) was the second person of the group to attempt to transit from the vessel to the Feed Barge. Similar to the previous transits, the Casualty stepped over the guard rail and onto the tyre fender. The Casualty was standing on the tyre fender between Simmerdim's guard rail and the Feed Barge's deck structure. At this point, Simmerdim was forced towards the Feed Barge by the swell, that resulted in the Casualty being crushed between Simmerdim's guard rail and the Feed Barge structure.
- 3.6 The third person, who was still onboard Simmerdim, standing behind the Casualty observed the incident and quickly grabbed the Casualty by his life jacket, stopping him falling between the vessels, brought him back onboard Simmerdim and summonsed help from personnel who were in the Feed Barge.

- 3.7 Personnel onboard the Feed Barge exited the superstructure and observed the Casualty on the deck of Simmerdim and disembarked from the Feed Barge. First aid was commenced on the Casualty by the vessel and barge crew, including stabilising the injuries, keeping the Casualty warm and treating the Casualty for symptoms of shock. The Skipper of Simmerdim took the decision to depart the Sea Site and relocate to sheltered water to reduce the vessel's motion and make it more comfortable for the Casualty. As the vessel departed the Feed Barge, one of the team phoned the emergency services at around 08.54 hrs, reported the incident and requested assistance.
- 3.8 The vessel picked up a mooring around 300 m off Ardmore Pier in sheltered waters and prepared for Medevac. A short time after the vessel was moored, a National Ambulance Service ambulance arrived at Ardmore Pier. The attending Paramedic was picked up at the pier by the Polar boat, which was operated by a salmon farm employee. The Paramedic was transferred to Simmerdim and boarded the vessel. Once onboard, the Paramedic commenced casualty care.
- 3.9 At 09.44 hrs IRCG Rescue 115 helicopter was on location and assessed the situation. At 10.10 hrs Rescue 115's winchman was onboard Simmerdim and assessed the Casualty with the Paramedic. At 10.38 hrs the Casualty was onboard Rescue 115 and the helicopter departed the scene making for GUH. Rescue 115 arrived at GUH at 10.52 hrs and handed the Casualty over to the Health Service Executive (HSE).

See Appendix 7.13 Photograph - Medevac of the Casualty from the Vessel.

## 4. ANALYSIS

4.1 Transfers of personnel at sea is a high-risk activity. The risks can be mitigated by good planning, having control measures in place, personnel training and experience. The occurrence of this incident had a number of contributory factors including some dating back to the purchase and supply of the vessel and the Feed Barge.

4.2 The incident was caused by one distinct event; the Casualty got caught between the two vessels as he was transferring from one vessel to the other offshore. During the action of transiting, the vessels were impacted by the swell resulting in them coming together and crushing the Casualty. Analysis of this incident will consider the relevant causative and contributory factors that arose from:

- Permitting of operations
- Means of access onto the Feed Barge
- Safe system of work
- Purchasing of the vessel and the Feed Barge
- Weather impact on transfer at sea
- Training and qualifications.

### 4.3 Permitting of Operations

4.3.1 Under Chapter 5, Sections 51 to 53 of the Merchant Shipping Act of 2010, the actions of transferring passengers from the Polar boat to Simmerdim, and from Simmerdim to the Feed Barge fall under the definition of tendering operations and should have been carried out under a Permit to Tender approved by the Marine Survey Office (MSO). Had Simmerdim had a Permit to Tender in place, the salmon farm operator would have submitted a Tendering Operations Safety Plan Proposal to the MSO of the Department of Transport, that would have been reviewed independently of the salmon farm operator. This review by the MSO would have afforded the opportunity to interrogate the proposed task and verify appropriate safeguards, including means of safe access across both vessels and limits on sea conditions were in place to allow the safe transfer take place. Had the Polar boat also sought a Permit to Tender, its activities (and that of the operator's other Polar boats) would have also resulted in the interrogations of access to Simmerdim and thereby indirectly of the onward transfer to the Feed Barge.

4.3.2 Conditions on the P3 Simmerdim licence included the following:

- Operate in favourable weather conditions (condition 1); and

- All cargo operations to be carried out in accordance with the conditions of the Stability Book (condition 19).

In accordance with the definition on the P3 licence, favourable weather means weather when the visibility is good and when the combined effects of wind, sea and swell on the passenger boat are never greater than those which would cause moderate rolling or pitching or result in the shipping of green seas on the weather deck, or in the case of an open boat, over the gunwale.

- 4.3.3 The Met Éireann forecast on the day of the incident was moderate to rough with significant total wave height of 2 to 4 m, from a south westerly direction. The vessel was operated outside of favourable weather conditions.
- 4.3.4 The reference to “cargo operations” in the passenger licence conditions for Simmerdim is of some significance and does not mention any “at sea” transfer of personnel. Had the vessel operator informed the MSO of the at sea transfers Simmerdim was engaged in, the MSO could have noted the type of works on the licence and informed the operator of the need for a Permit to Tender.

#### **4.4 Means of Access onto the Feed Barge**

- 4.4.1 Simmerdim and the Feed Barge were built to independent specifications and were designed with safe access. The safe access to the Feed Barge was via bow and stern ladders, and safe access of Simmerdim was at the midships area of the vessel. The safe access areas of each vessel were not compatible with the other.
- 4.4.2 The access and egress to the Feed Barge from Simmerdim was via Simmerdim’s starboard quarter and this was the practice used since the company acquired the vessel and Feed Barge. From interview with employees of the salmon farm and witnesses to the incident, it was known to personnel involved in the works at the salmon farm that there was a risk of personnel falling into the water, however the practice of stepping over across from Simmerdim to the Feed Barge was normalised over time.
- 4.4.3 The salmon farm operator formally risk assessed boarding and disembarking vessels at the Sea Site and included the following hazards/risks in the documented risk assessment:
- Adverse weather conditions
  - Drowning
  - Falling from a height
  - Tripping/slipping
  - Contracting Covid-19 Virus in the workplace.

These five hazards/risks were all relevant to the transferring from Simmerdim to the Feed Barge. On the risk assessment, the control measure for adverse weather conditions was to “apply judgement”, with a specific control to “secure vessels to piers or barges to allow safe boarding and disembarking.” There were no abort parameters identified in the risk assessment and this resulted in subjective judgements being applied.

- 4.4.4 On the risk assessment document, which was created in 2021, there was an option to select “Crushing” as a potential hazard or risk, however this was not selected and therefore not formally assessed in the risk assessment or the procedure. Assessing potential crush injuries with a view of eliminating exposure to the hazard could have ignited consideration for reviewing the means of access to the Feed Barge and prompted the salmon farm operator to consider a gangway or ladder type of access from the vessel to the Feed Barge.

#### 4.5 Safe System of Work

- 4.5.1 The salmon farm operator had in place a system of work for boarding and disembarking including between vessels at sea at the time of the incident, which included a risk assessment and a documented procedure. The system of work was not prescriptive in describing the no-go parameters for boarding to take place and left the go, no-go decision with the Skipper. Had the go, no-go environmental parameters been set out in the risk assessment, this would have removed an amount of subjectivity when it came to making the decision to board the Feed Barge.
- 4.5.2 The Polar boat used to transport personnel from Ardmore Pier to Simmerdim did not hold a Passenger Boat Licence as required under the Merchant Shipping (Passenger Boat) Regulations 2002 S.I. No. 273 of 2002. The Polar boat departed from Ardmore Pier at around 08.30 hrs with five personnel onboard. During the short transit to the salmon farm site there was an opportunity for the salmon farm employees, including the site manager to perform a safety briefing with the industrial personnel and to highlight the hazards and risks associated with the transfer across to Simmerdim and onto the Feed Barge. Such a safety briefing would prompt discussion around performing the task in a safe manner and highlight any concerns that personnel may have. However, there was no evidence to suggest such a briefing took place.
- 4.5.3 The task of transferring across to the Feed Barge should have been done under a Permit to Tender, issued by the MSO as required under Chapter 5 (Section 52, Tendering Operations Regulations) of the Merchant Shipping Act 2010.
- 4.5.4 The transfer to the Feed Barge had been completed many times by the personnel involved, including the Casualty, without any reported incident. This method of transfer became normalised, which undermined the significance of the risk associated with the at sea transfer. When considering contributing

causes to the incident, human factors must be considered. As the Casualty made his way outboard of Simmerdim and waited for an opportunity to step across onto the Feed Barge's tyre fender, the vessels came quickly together and resulted in the incident. It was likely that the Casualty was focused on stepping onto the tyre fender and unaware of the likelihood of being crushed between the vessels as he stepped across onto the tyre fender.

- 4.5.5 Marine Notice No. 25 of 2020 was published by the Department of Transport, Tourism and Sport in June of 2020. This Marine Notice communicated two separate fatal incidents while boarding fishing vessels. The incidents outlined in the Marine Notice highlight the dangers involved in transferring onto a vessel. There was no formal mention of Marine Notices in the salmon farm operator's transfer procedures. However, the Skipper of Simmerdim and the Casualty were aware of such hazards and the potential consequences.

#### **4.6 Purchasing of Simmerdim and the Feed Barge**

- 4.6.1 Both vessels were purchased by the salmon farm operator around the same time. The Feed Barge was new when purchased and included means of access from the bow and the stern but no access ladder amidships. Simmerdim had a large open deck opening along the port and starboard guard rails by design for operational reasons. Both vessels were built to independent specifications and would have been designed with safe access. The safe access of each vessel was not compatible with the other as the access ladders on the Feed Barge did not align with access ways on Simmerdim. The safe access issue could have been assessed during the procurement process in 2016 but was not. After going into service with the vessels in operation, the access issue from Simmerdim to the Feed Barge was highlighted to the salmon farm operator by the Simmerdim crew and the salmon farm site manager. A subsequent Feed Barge that was purchased was fitted with an amidships ladder. A similar ladder is being retrospectively fitted to the Feed Barge post incident.
- 4.6.2 The salmon farm operator had no formal process in place to assess the safety interaction of both vessels. Had an assessment been done of the Feed Barge and Simmerdim with regards to safe access, a gangway or ladder amidships of the Feed Barge could have been considered and included in the design of the vessel.

#### **4.7 Weather Impact on Transfer at Sea**

- 4.7.1 The Skipper assessed the weather conditions before leaving Lettermullen and deemed the conditions acceptable for the works. There is no doubt that environmental conditions impacting the vessels and their interaction was a significant contributing factor to this incident. The Sea Site was greatly exposed from a southerly direction as there was no local landmass that offered protection from this direction. On the day of the incident the swell was reported



from a south-south westerly direction at about 2 m in height. The motion of the sea caused both vessels to pitch in the prevailing conditions, making the transfer from Simmerdim to the Feed Barge even more challenging.

- 4.7.2 The P3 Passenger Boat Regulations for Simmerdim specify operations within favourable weather conditions. In accordance with the definition on the P3 licence, “Favourable weather” means weather when the visibility is good and when the combined effects of wind, sea and swell on the passenger boat are never greater than those which would cause moderate rolling or pitching or result in the shipping of green seas on the weather deck, or in the case of an open boat, over the gunwale. Considering the weather forecast the day of the incident, describing the sea state for the 8 November as “moderate-to-rough with significant total wave height of 2 to 4 metres”, the vessel was operating outside the conditions and restrictions of its Passenger Boat Licence.
- 4.7.3 A notable control measure identified in the risk assessment for boarding or disembarking a vessel at a sea site was the application of judgement when assessing the impact of environmental conditions on safe operations. The application of judgement was subjective and there were no clear abort parameters, including weather parameters, identified in the risk assessment. From interview with the Skipper, the no-go parameters were, weather of greater than Beaufort Force 6, but this was dynamic due to the shelter offered to the Sea Site from nearby landmasses. At the time of the incident, the weather was marginal, with the forecast of Force 5 to Strong Force 6, with near Force 7 later in the day.
- 4.7.4 It's likely that the weather was too rough to allow safe transfer, however five people managed to access the Feed Barge before the incident. Transfer limits, operating and abort parameters should have been identified in the salmon farm operator's Safety Management System. If abort parameters were included in the risk assessment, it could have been the case that the Skipper would not have to apply judgement to the weather situation, which may have resulted in the operation being halted before attempting to board the Feed Barge.

## 4.8 Training and Qualifications

### Casualty

- 4.8.1 The Casualty was a self-employed professional diver who carried out contract work for the salmon farm operator. The Casualty maintained his professional certification, training and medical requirements. The following certification was held by the Casualty:
- Bord Iascaigh Mhara (BIM) Surface Supplied Diver National Framework of Qualifications Level 6 Certificate
  - Health and Safety Authority Certificate of Medical Fitness to Dive

- Prestige Training Manual Handling Certificate
- Professional Association of Diving Instructors Specialty Diver Oxygen First Aid Certificate.

4.8.2 Although the Casualty was competent and certified to carry out diving operations, the Casualty had no formal training for transfer at sea. The Casualty developed his transfer at sea skills through on-the-job training.

#### **Master/Skipper**

4.8.3 The Skipper of Simmerdim was an employee of the salmon farm operator and held a BIM Passenger Boat Proficiency Certificate and a BIM Basic Safety Sea Survival Training Card and held the following certification:

- BIM Passenger Boat Proficiency Certificate
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) Personal Survival Techniques
- STCW Elementary First Aid onboard ship
- Stability Course
- Manual Handling Techniques
- Forklift Training
- Deck Crane & Safe Lifting
- Cleaner Fish Workshop.

4.8.4 The Skipper of Simmerdim held appropriate certification to operate the vessel in accordance with the Merchant Shipping (Passenger Boat) Manning Regulations 2005 S.I. No. 649 of 2005 and relevant Marine Notices.

## 5. CONCLUSIONS

- 5.1 In summary, this incident resulted in serious injuries to the Casualty because he was crushed between two vessels as he transited from one to the other. Means of safe access was not appropriate for transferring from one vessel to another and the practice of stepping over the side rails and onto the Feed Barge's tyre fender became normalised.
- 5.2 The prevailing conditions including the direction and height of the swell were contributing factors to this incident.
- 5.3 The licence required the vessel to operate in favourable weather. The weather was not favourable as defined and Simmerdim was operating outside its licensed conditions.
- 5.4 There were missed opportunities during the purchase process to verify safe access to and from Simmerdim and the Feed Barge as although both vessels had safe means of access, they were not compatible when the vessels were moored alongside each other.
- 5.5 The safe access issue could have been assessed during the procurement process in 2016 but was not, as there was no procurement process in place that would assess safety aspects of both vessels. Changes were subsequently made as set out above.
- 5.6 The operator's risk assessment failed to identify the deficiencies in vessel transfer operations and in particular with regard to third parties such as the contracted diver.
- 5.7 The task of transferring across to the Feed Barge should have been done under a Permit to Tender, issued by the MSO as required under Chapter 5 (Section 52, Tendering Operations Regulations) of the Merchant Shipping Act 2010.
- 5.8 The operation was identified by the operator under their safe systems of work but was not authorised by the MSO by way of a Permit to Tender. A Tendering Operations Safety Plan Proposal, required to obtain a Permit, would have informed the MSO of the personnel transfer at sea and prompted scrutiny of the operation as well as independent oversight of the transfer planning. Such a permit would have set parameters for the transfer arrangements, means of safe transfer from and to Simmerdim.
- 5.9 Had the vessel operator, in the passenger licence application, informed the MSO of the at sea transfers Simmerdim was engaged in, the MSO could have noted the type of works on the licence and informed the operator of the need for a Permit to Tender.

## 6. SAFETY RECOMMENDATIONS

### 6.1 Recommendations to the Salmon Farm Operator, Owner of Simmerdim, Owner of the Feed Barge, Owner of Polar boat

6.1.1 That Boarding and Disembarking Risk Assessment and associated Policies and Procedures should immediately be reviewed to include additional control measures for safe boarding and disembarking at worksites.

6.1.2 That application is made immediately to the Marine Survey Office of the Department of Transport for a Permit(s) to Tender for “at sea” transfers.

6.1.3 That means of access to and from the Feed Barge or any related operational areas is reviewed with a view of providing appropriate safe access. A safe means of access is required between the Feed Barge and any quay, pontoon, other structure, or other vessel of any type alongside the Feed Barge or any related operational areas.

6.1.4 That a purchasing procedure is implemented to ensure the purchase of equipment is risk assessed with regard to the safety of personnel and operations. The assessment should include whatever is needed to plan and carry out work safely and without risks to health.

6.1.5 That application is made to the Marine Survey Office of the Department of Transport for Passenger Boat Licences for the Polar boats used to transfer personnel to and from the Feed Barge or any related operational areas.

### 6.2 Recommendations to the Minister for Transport

6.2.1 It is recommended that the Minister for Transport should in conjunction with the Minister for Agriculture, Food and the Marine as the Minister considers appropriate or not, issue a Marine Notice or similar, directed to the operators and those involved in marine aquaculture activities reminding them:

- of the dangers associated with boarding and transiting vessels at sea.
- that operators have a safe system of work including suitable and sufficient risk assessments in place for operations carried out at sea including transfer of personnel onto fish cages and Feed Barges.
- that operators take steps to ensure that vessels transferring personnel at sea are properly licensed in accordance with passenger boat legislation and Permit to Tender for tendering operations as applicable.
- that operators ensure compliance with the Merchant Shipping (Health and Safety General Duties and Reporting of Marine Incidents) Regulations 2023 (and have regard to the content of Marine Notice No.60 of 2023) which


impose a duty on every shipowner and master (skipper) to take all reasonable precautions to prevent marine incidents and occupational hazards, injuries and diseases onboard the ship.

## 7. APPENDICES

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Appendix 7.1 Simmerdim Interim Passenger Boat Licence - Conditions and Restrictions

MSO 1001.1 (FORM) Passenger Boat Report of Inspection (Rev 1.6)



**INTERIM**  
**PASSENGER BOAT LICENCE OF A CLASS P3 PASSENGER BOAT**

ISSUED BY THE DEPARTMENT OF TRANSPORT  
*(To be supplemented by Record of Equipment)*

|                         |   |                     |      |
|-------------------------|---|---------------------|------|
| NAME OF BOAT:           | Simmerdim   | LICENCE No:         | 1839 |
| NAME OF OWNER:          | [REDACTED]  | CLASS:              | P3   |
| ADDRESS OF OWNER:       | [REDACTED]  |                     |      |
| PERSON(S) IN CHARGE     | The passenger boat must be operated by persons qualified in accordance with the Merchant Shipping (Passenger Boat Manning) Regulations 2005 (S.I. No. 649 of 2005) and relevant Marine Notices. |                     |      |
| PLYING LIMITS:          | From Lettermullen or Kilkieran 3 miles to sea and not more than 15 miles from point of departure  |                     |      |
| MAXIMUM NO. PASSENGERS: | 12  | MINIMUM NO CREW:    | 1    |
|                         |   | MAXIMUM NO PERSONS: | 15   |

**THIS IS TO CERTIFY** that the provisions of the Merchant Shipping Acts relating to the inspection of passenger boats have been complied with, and that this boat is fit to ply within the limits and with the number of passengers and subject to the conditions and restrictions stated overleaf.

DATE OF EXPIRY: 02/12/2022      DATE OF ISSUE: 02/09/2022

SIGNED:

*For the Minister for Transport  
A person authorised in this behalf by the said Minister.*

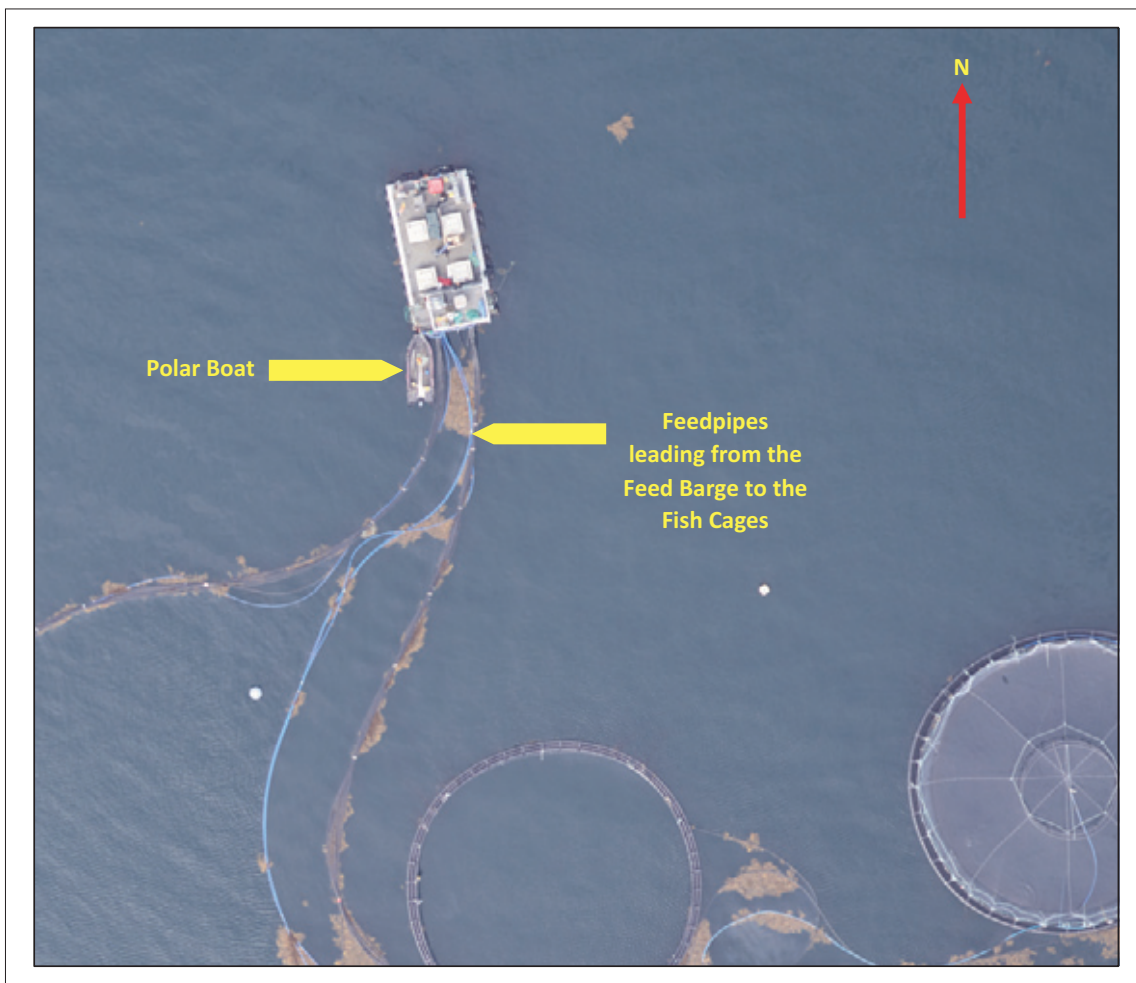
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**Appendix 7.1 Simmerdim Interim Passenger Boat Licence - Conditions and Restrictions**

| MSO 1001.1 (FORM) Passenger Boat Report of Inspection (Rev 1.6)  |           |            |      |
|--|-----------|------------|------|
| <b>Conditions and Restrictions:</b>  |           |            |      |
| NAME OF BOAT:  | Simmerdim | LICENCE NO | 1839 |
| <u>GENERAL</u>   |           |            |      |
| <ol style="list-style-type: none"> <li>1. Passenger boat must only operate in favourable weather conditions. "favourable weather" means weather when the visibility is good and when the combined effects of wind, sea and swell on the passenger boat are never greater than those which would cause moderate rolling or pitching or result in the shipping of green seas on the weather deck or, in the case of an open boat, over the gunwhale;</li> <li>2. Without prejudice to the Collision Regulations, every passenger boat shall be operated in a manner that takes account of other persons involved in waterborne activities, or persons who might otherwise be adversely affected by the operation of any passenger boat.</li> <li>3. A person shall not operate or be in charge or attempt to operate or be in charge of a passenger boat while that person is under the influence of an intoxicant to such an extent as to be incapable of safely operating and controlling the passenger boat.</li> <li>4. Every passenger boat, whilst holding a passenger boat licence, shall not be used for any other activity or purpose, which could affect or alter the conditions upon which the licence was granted, during the period of validity of the licence.</li> <li>5. Every passenger boat shall be maintained in a good structural and mechanical condition and the fittings and equipment specified in the licence shall be kept in good order and be available for immediate use at all times.</li> <li>6. The boat must not be used to tow another boat or craft except in an emergency.</li> <li>7. This licence does not relieve the licensee of the obligation to comply with the instructions and statutory requirements of Local Authorities and Harbour Authorities.</li> <li>8. Safety instructions concerning signals, life-saving appliances, means of escape, etc. must be announced to the passengers before the commencement of any voyage.</li> <li>9. No loose containers of any oil or flammable product shall be stored in the machinery space; loose containers of liquid having a flash point of 60 degrees centigrade or less, shall not be carried in any location on any such boat.</li> <li>10. Lifejackets to be stowed in a readily accessible location for use in an emergency.</li> <li>11. In the case of open cockpit vessels with marine outboard engines, no more than two approved portable fuel tanks may be carried and the transfer of fuel from a container to an approved portable fuel tank shall not be permitted on board.</li> <li>12. In the case of class P2 open vessels, every person shall wear the lifejacket or personal flotation device provided at all times when on board.</li> <li>13. In the case of class P4 every person shall wear the lifejacket or personal flotation device provided at all times when on board.</li> <li>14. Anchor to be stored in such a manner that it is readily available at all times.</li> <li>15. In the case of class P6 when specified by the Minister, the master shall ensure that all persons on board are suitably attired and are fully briefed on emergency procedures including the procedure when a person falls overboard;</li> <li>16. All persons on class P6 used for the carriage of divers shall wear wet or dry suits together with an approved lifejacket or approved personal flotation device at all times when in the vessel.</li> <li>17. In the case of class P6 passenger boats all persons shall wear an approved lifejacket or an approved buoyancy aid at all times when on deck at sea in such a vessel. All persons on board shall use safety lines when on deck at sea in cases where the bulwarks or guard rails do not comply with those requirements applicable to passenger boats of 7(1)(g). It shall be the responsibility of the master to ensure that all personnel are suitably attired and fully briefed in relation to any emergency procedures;</li> <li>18. The boat is permitted to operate at night time.</li> </ol> |           |            |      |
| <u>ADDITIONAL CONDITIONS AND RESTRICTIONS IMPOSED BY AUTHORISED OFFICER (IF ANY)</u>   |           |            |      |
| 19. All cargo operations to be carried out in accordance with the conditions of the Stability Book   |           |            |      |
| 20.  |           |            |      |
| 21.  |           |            |      |
| 22.  |           |            |      |

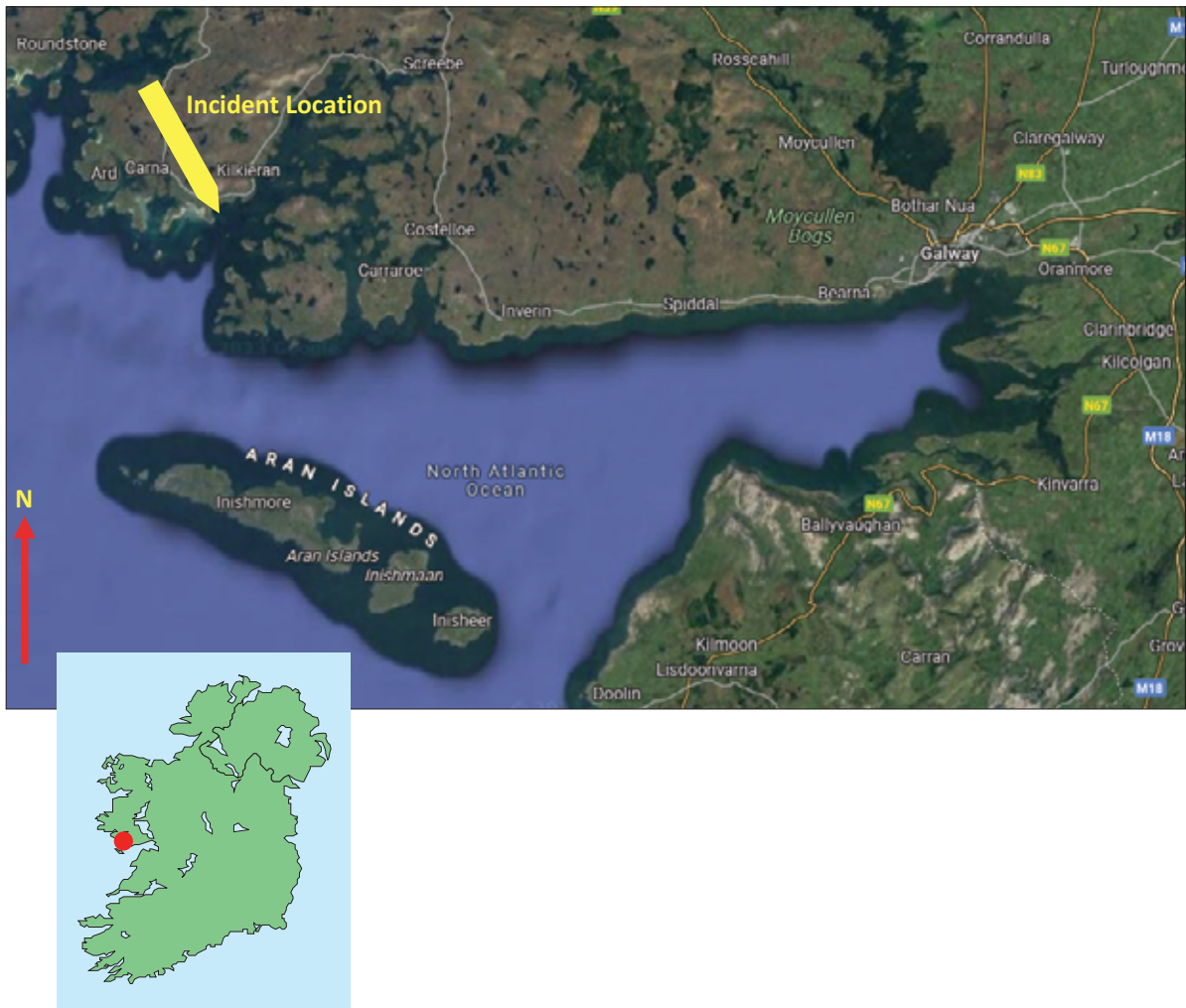


Appendix 7.2 Photograph - Fixed Orientation of the Feed Barge

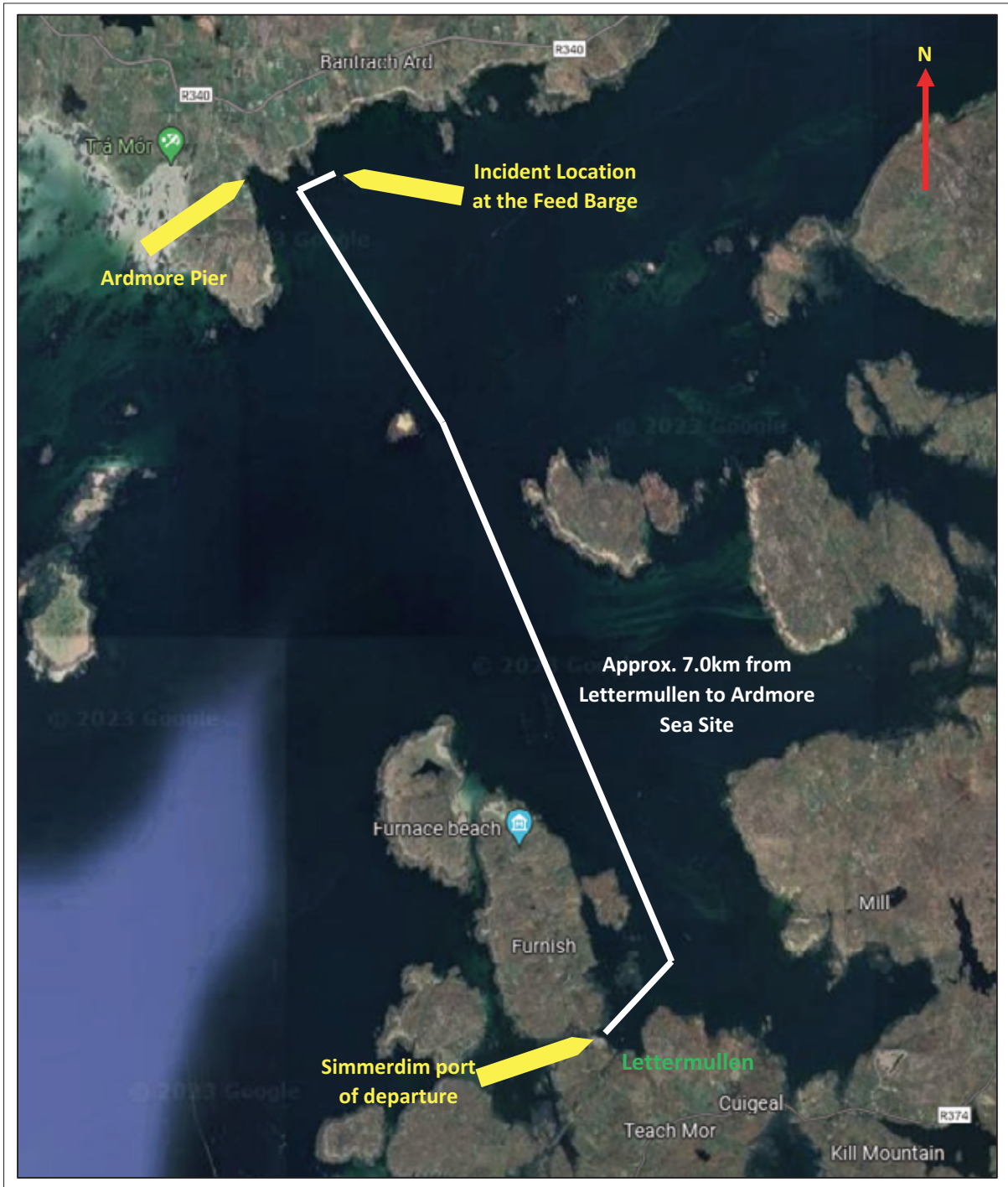


# APPENDIX 7.3

## Appendix 7.3 Incident Location

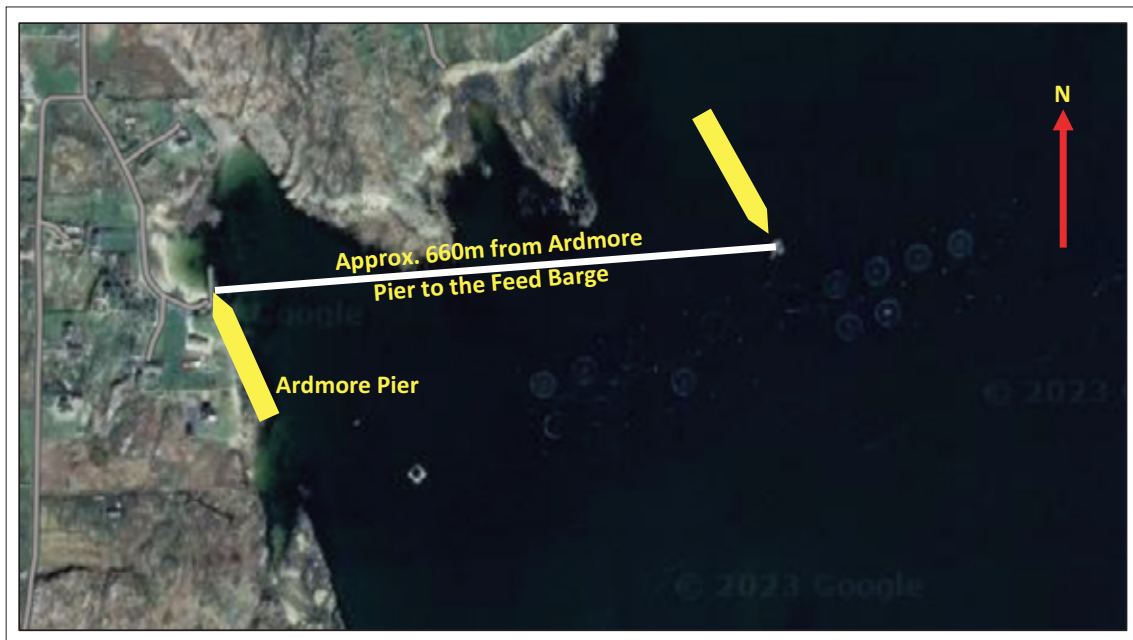


Appendix 7.4 Incident Location in Relation to Ardmore Pier and Lettermullen

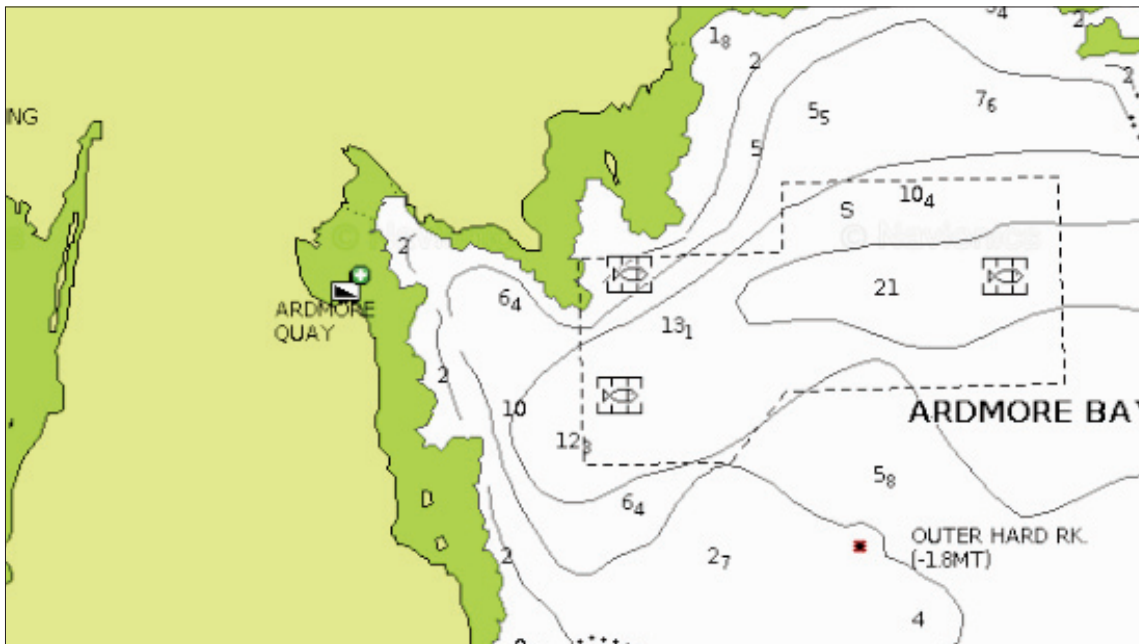


## APPENDIX 7.5

### Appendix 7.5 Distance Between the Incident Location and Ardmore Pier

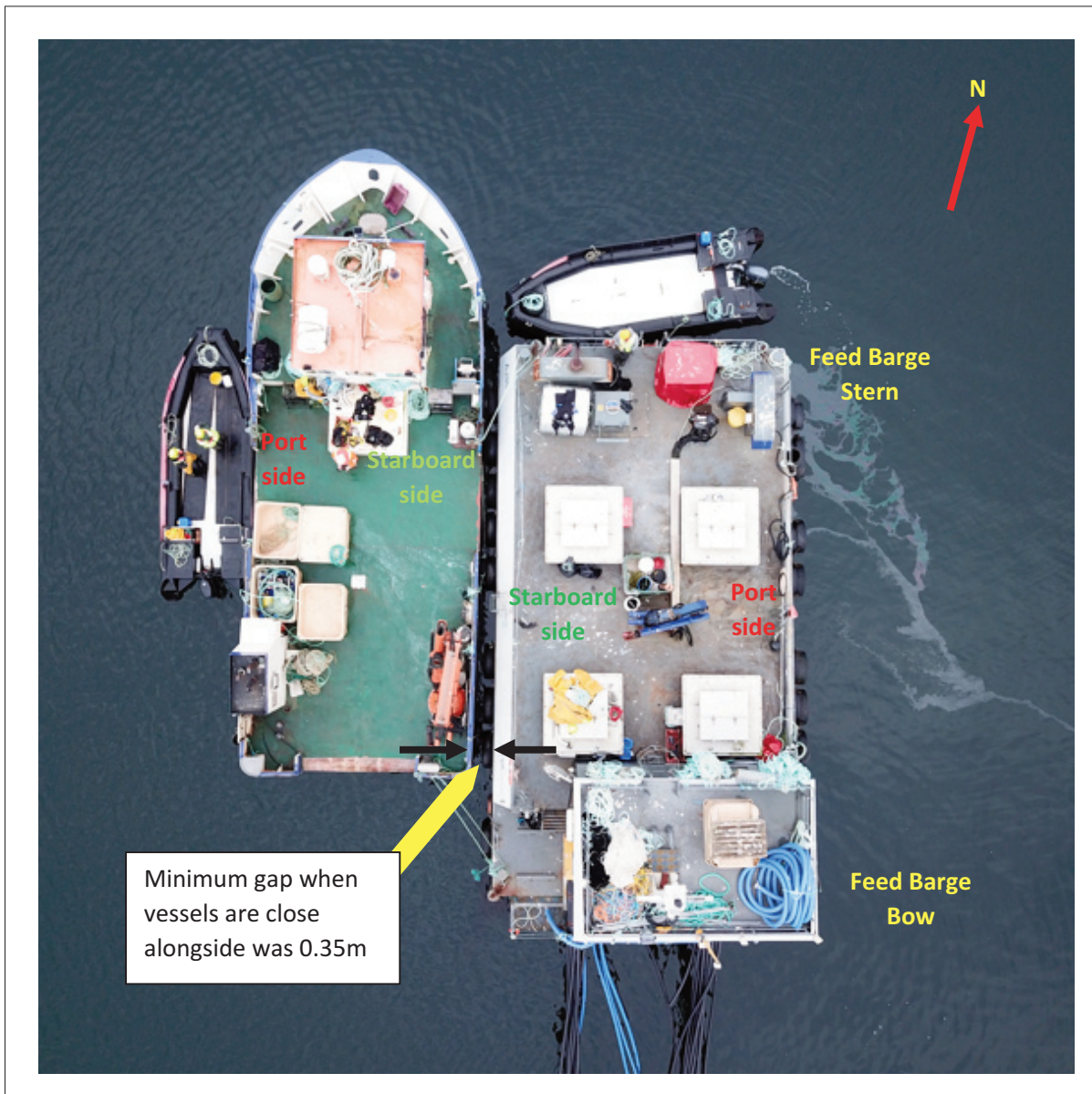


Appendix 7.6 Chart Showing Depth of Water at Ardmore Sea Site



# APPENDIX 7.7

Appendix 7.7 Photograph of Mooring Configuration



Appendix 7.8 Risk Assessment Boarding and Disembarking from all Vessels at Lettermullen/Ardmore Pier and all Sea Sites

**RA No.** **SSWP 001**

**RISK ASSESSMENT**

Associated RA No. / Continuation sheets:

Workplace / process / task description: **BOARDING AND DISEMBARKING FROM ALL VESSELS AT LETTERMULLEN / ARDMORE PIER AND ALL SEA SITES SSWP 001**

Names of risk assessors:

People affected:

Expiry date:  
31-December

| Ref | Potential Hazard / Risk                    | MA | T | AJ | RR |
|-----|--|----|---|----|----|
| 1   | Adverse weather conditions                 | X  |   |    |    |
| 2   | Asphyxiation                               | X  |   |    |    |
| 3   | Breathage                                  | X  |   |    |    |
| 4   | Burns / scalds                             | X  |   |    |    |
| 5   | Collaps of structure / excavation          | X  |   |    |    |
| 6   | Crushing                                   | X  |   |    |    |
| 7   | Electrocution / electric shock             | X  |   |    |    |
| 8   | Entanglement in moving parts               | X  |   |    |    |
| 9   | Entrapment                                 | X  |   |    |    |
| 10  | Explosion                                  | X  |   |    |    |
| 11  | Exposure to asbestos                       | X  |   |    |    |
| 12  | Exposure to disease causing substances     | X  |   |    |    |
| 13  | Exposure to ionising radiation of fissiles | X  |   |    |    |
| 14  | Exposure to noise                          | X  |   |    |    |
| 15  | Falling                                    | X  |   |    |    |
| 16  | Falling from a height                      | X  |   |    |    |
| 17  | Eye injury                                 | X  |   |    |    |
| 18  | Eye strain                                 | X  |   |    |    |
| 19  | Falling from a height                      | X  |   |    |    |
| 20  | Fire                                       | X  |   |    |    |
| 21  | Health damage - adverse environment        | X  |   |    |    |
| 22  | Hearing damage                             | X  |   |    |    |
| 23  | High pressure injection injury             | X  |   |    |    |
| 24  | Inadequate training                        | X  |   |    |    |
| 25  | Inadequately workers (task/workplace)      | X  |   |    |    |
| 26  | Ingestion of hazardous chemicals           | X  |   |    |    |
| 27  | Inhalation of fat, dusts / gases / fumes   | X  |   |    |    |
| 28  | Impact injury                              | X  |   |    |    |
| 29  | Injury from falling objects                | X  |   |    |    |
| 30  | Leakage                                    | X  |   |    |    |

| Ref | Potential Hazard / Risk                 | MA | T | AJ | RR |
|-----|---|----|---|----|----|
| 31  | Pregnant / breast feeding workers       | X  |   |    |    |
| 32  | Prolonged use of VDU's                  | X  |   |    |    |
| 33  | Repetitive strain / vibration injuries  | X  |   |    |    |
| 34  | Safety Equipment Failure                | X  |   |    |    |
| 35  | Skin contact with hazardous chemicals   | X  |   |    |    |
| 36  | Skin laceration injury                  | X  |   |    |    |
| 37  | Strain to back / limbs                  | X  |   |    |    |
| 38  | Tripping / Slipping                     | X  |   |    |    |
| 39  | Workers with language limitations       | X  |   |    |    |
| 40  | Workers with physical limitations       | X  |   |    |    |
| 41  | Working with biological / haz. wastes   | X  |   |    |    |
| 42  | Working for a long time without a break | X  |   |    |    |
| 43  | Young workers (under 18 years)          | X  |   |    |    |
| 44  | Working Alone for prolonged periods     | X  |   |    |    |
| 45  | COVID-19 PANDEMIC                       | X  |   |    |    |

**Risk Rating: L = Likelihood (0-5), S = Severity (0-5), R = Rating = LxS. If Rating is: 1 to 3 = I (tolerable), 4 to 5 = AJ (apply judgement), 8 - 25 = RR (reduce risk and re-assess).**

| Ref | Specific Risk  | Control Measures   | Risk Rating |   |   |   |
|-----|--|--|-------------|---|---|---|
|     |  |  | L           | S | R |   |
| 1   | Rough Seas with High Tides   | Secure Vessels to piers or Barges to allow safe boarding and disembarking. Jacket to be worn always.   | DG, AR      | 1 | 3 | 3 |
| 8   | Falling into water when changing from one vessel to another out at sea sites | Reduce space between Working Boats and Barges by securing vessels, Certified Life Jacket to be worn at all times when boarding and disembarking on and off vessels.  | DG, AR      | 1 | 5 | 5 |
| 19  | Falling into water at pier when tide is low                                  | Ensure vessel is securely tied to pier and space is at a minimum. Use both hands when climbing down ladder for boarding and disembarking vessel at pier. Certified Life Jacket to be worn always as part of PPE. | DG, AR      | 1 | 5 | 5 |
| 38  | Trip or Slip when boarding and disembarking                                  | Make sure deck of Vessels are kept clean and tidy at all times to avoid any tripping or slipping hazards. Safety footwear to be worn as part of PPE.   | DG, AR      | 1 | 2 | 2 |
| 45  | Contracting Covid-19 Virus in the workplace                                  | Apply social distancing where possible, comply with HSE.ie, GOV.ie and company guidelines by keeping up to date with the changes of the virus.   | DG, AR      | 1 | 5 | 5 |

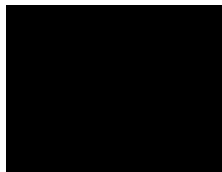
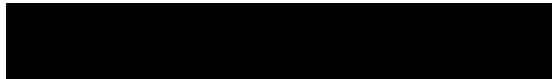
**Risk Assessor Signatures:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**REMEMBER TO COMMUNICATE THIS RISK ASSESSMENT TO ALL PERSONNEL AFFECTED**

Display at workplace: \_\_\_\_\_

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## Appendix 7.9 Policy and Procedure for Boarding and Disembarking from Vessels



**HEALTH & SAFETY IN THE WORKPLACE**

**BOARDING AND DISEMBARKING FROM VESSELS**

**AT LETTERMULLEN PIER AND ALL SEA SITES**

**SAFE SYSTEM OF WORK PLAN**

**POLICY SSWP: 001**

| <b>Prepared by:</b> | <b>Date</b> | <b>Version No.</b> |
|---------------------|-------------|--------------------|
|                     |             |                    |
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**Latest revision approved by:**



\_\_\_\_\_  
**CEO,  
Managing Director**



## Appendix 7.9 Policy and Procedure for Boarding and Disembarking from Vessels

### 1. Scope:

- This procedure is to highlight the risks involved when boarding and disembarking from all Vessels at the pier in Lettermullen and when transferring between vessels at sea. Vessels include all Tender Boats, Workboats, Feed Barges, Working Rafts and Fish Pens.

### 2. COVID-19 PANDEMIC In the Workplace

- As we are working on a Safe to Work Policy regarding the COVID-19 Pandemic, it is vital that all staff follow the HSE.ie, Government and Company Guidelines regarding the COVID-19 Pandemic.
- The HSE Helpline contact number is: **1800 700 700**
- Or email at [www2.hse.ie](http://www2.hse.ie)
- Follow all hygiene etiquette and disinfect hands at all times. Apply 2m social distance where possible.
- Wear Face Mask that has been provided to you by the company.

### 3. Personal Protective Equipment:

- All Staff will have completed the Personal Sea Survival Safety Training.
- Only Staff that have completed a Passenger Boat Proficiency Certificate may operate the Working Boat.
- All Staff must wear mandatory PPE supplied by Bradan Bco Tcoranta.
- Certified Life Jackets, Safety Wellington Boots, High Visibility Oil Skins, Hard Hat, Safety Glasses and Protective Gloves, Face Mask protection during the COVID-19 Pandemic.

### 4. Responsibilities:

- **General Manager:** - To make sure that all Staff are compliant with the Health & Safety regulations in the workplace and maintain good communication between Site Foreman / Assigned Supervisor to carry out all procedures in a safe manner.
- **Site Foreman / Assigned Supervisor:** - Check weather forecast to make sure it is safe to proceed with all procedures.
- To communicate with all staff and making sure staff comply with a written and signed Risk Assessment. To use work equipment supplied in a safe manner and report any accidents or near misses that have occurred while carrying out all procedures.
- Ensure that other staff members are not adversely affected by their work.

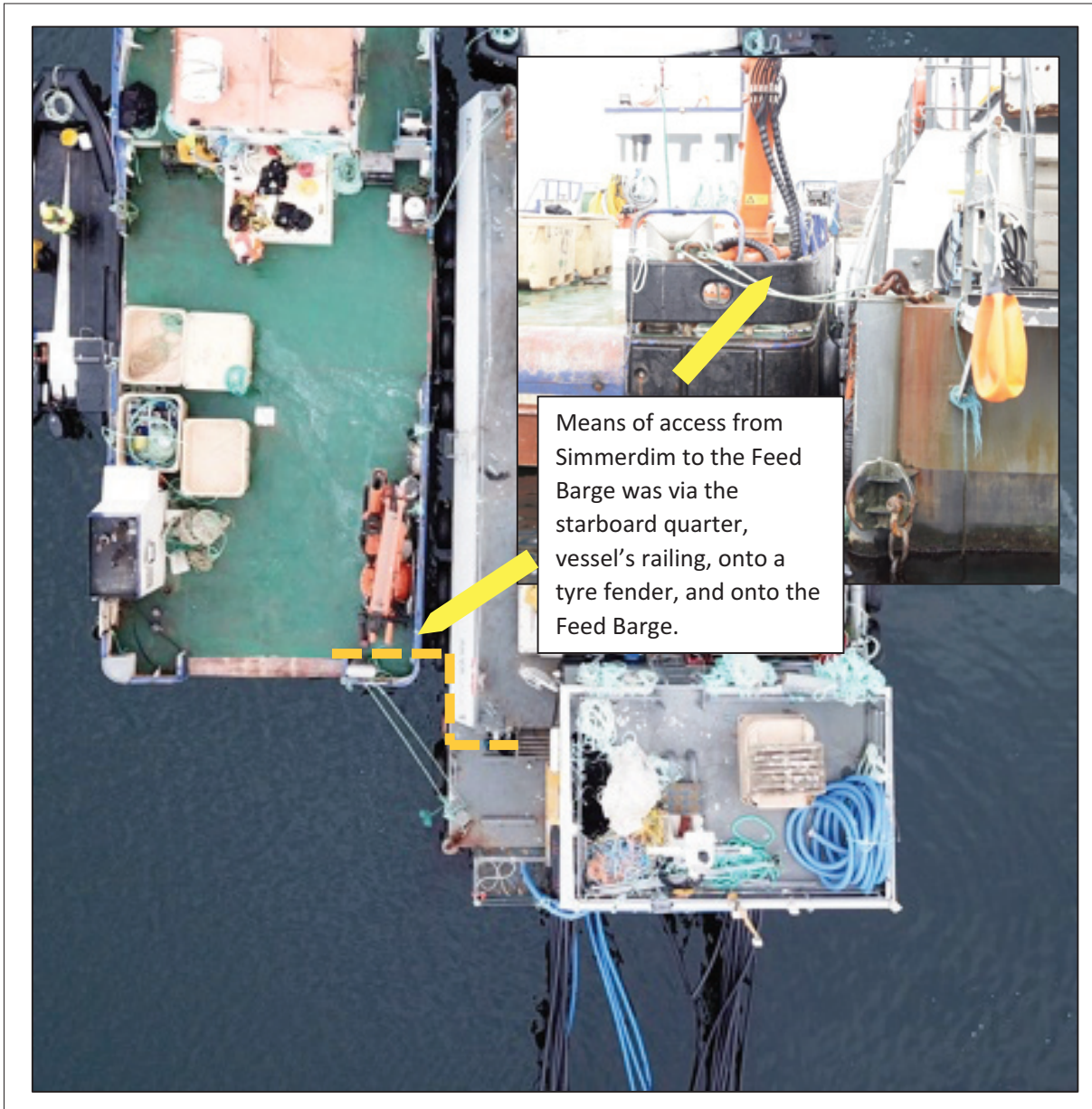
**Appendix 7.9 Policy and Procedure for Boarding and Disembarking from Vessels****5. Working Procedure:**

- Weather Forecast and Sea Tidal conditions should be adhered to at all times.
- All safety elements are put in place when Boarding and Disembarking all Sea Vessels at the pier or changing from one vessel to another.
- Ensure the Vessel is securely tied to the pier and the space between the vessel and the pier is to a minimum.
- Certified Life Jacket must be worn always before you Board or Disembark from all Vessels.
- Use Handrail on Boats where required to do so.
- Avoid carrying any items when Boarding and Disembarking.
- Extreme care should be taken when transferring between a vessel or vessels at sea, especially in rough conditions.

**6. Risk Assessment:**

- A Risk Assessment will be completed by all Fisheries Staff involved in this procedure to ensure that adequate control measures are put in place to reduce or eliminate the risk to the safety of those carrying out the task.

Appendix 7.10 Photograph Showing Means of Access



## Appendix 7.11 Met Éireann Weather Report



### Met Éireann

The Irish Meteorological Service

Climate Services  
Glasnevin Hill  
Dublin 9

Seirbhísi Aeráide  
Cnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Email: [legal@met.ie](mailto:legal@met.ie)

Our Ref: WS1730/2303\_6

Your Ref: MCIB/12/321

### WEATHER REPORT

#### Tuesday 8-November -2022

**Meteorological Synopsis:** The complex area of low pressure to the northwest of Ireland deepened as it tracked northwards towards Iceland. This depression continued to steer an unstable and strong to near-gale force southerly later westerly airflow over the country with frontal troughs.

#### **Estimated weather conditions for the near-shore area off Ardmore Pier, Kilkieran Bay, Co. Galway (approximate 53.3003 -9.770) for the 24 hour period on 8-November -2022**

**Wind:** Winds on the 8<sup>th</sup> were generally fresh Force 5 to strong Force 6 (mean wind speed 17 to 27 knots) and gusty. Occasionally winds were lighter or stronger for brief periods due to the effects of the passage of a trough with rain or showers; in particular between 5am and 9am winds ranged between 13 knots to 30 knots with gusts up to 40 knots. During the afternoon winds increased for a time and reached near-gale Force 7 (mean wind speed 28 to 33 knots). Wind direction was southerly or southeasterly during the morning and veered southwesterly by mid-morning then westerly by evening.

**Weather:** Frequent and blustery showers with isolated thunder affected the area from 03:00 hrs until around 17:00 hours. Showers were heavy between 7am and 11am. The total daily rainfall total is estimated at 7 to 10 mm.

**Visibility:** Visibility was moderate or poor (0.5 to 4 nm) in heavy showers otherwise visibility was good (greater than 5 nautical miles).

**Temperature:** Air temperature ranged between 9 and 12 degrees Celsius.

**Sea State (offshore):** The estimated sea state (offshore) was moderate to rough with significant total wave height of 2 to 4 meters. Swell direction was from southwesterly direction.

**Sea temperature:** 13 to 13.5 degrees Celsius.

This report was issued on: 08 March 2023

Met Éireann | Climate Services Division | Enquiries Legal Unit | Email: [legal@met.ie](mailto:legal@met.ie)

Appendix 7.11 Met Éireann Weather Report

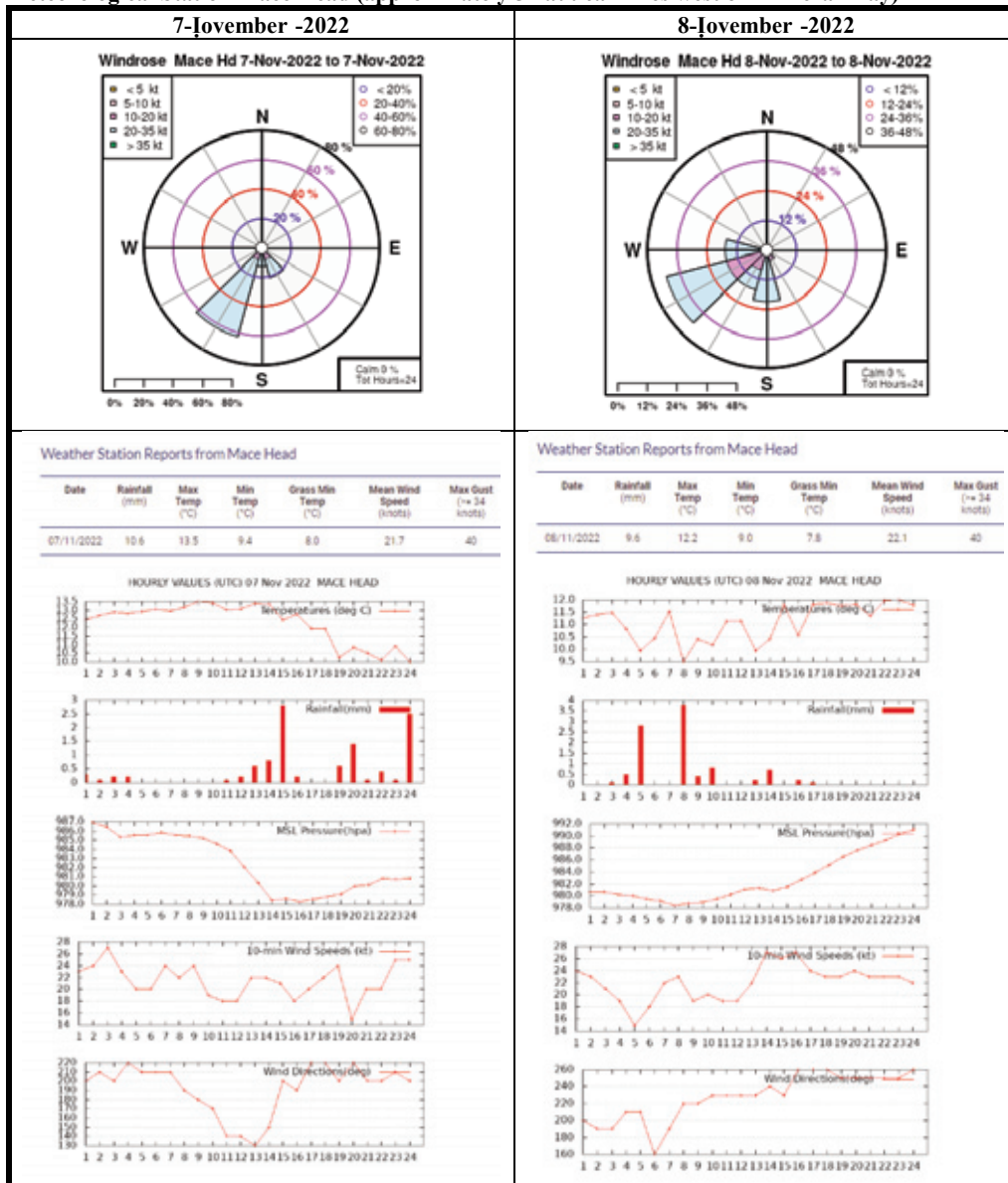


**Met Éireann**  
The Irish Meteorological Service  
Climate Services  
Glasnevin Hill  
Dublin 9

Seirbhísi Aeráide  
Cnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Email: legal@met.ie

**Appendix 1a Wind Rose and Data Graph**  
**Meteorological Station Mace Head (approximately 5 nautical miles west of Kilkieran Bay)**



Met Éireann | Climate Services Division | Enquiries Legal Unit | Email: [legal@met.ie](mailto:legal@met.ie)

Appendix 7.11 Met Éireann Weather Report



**Met Éireann**

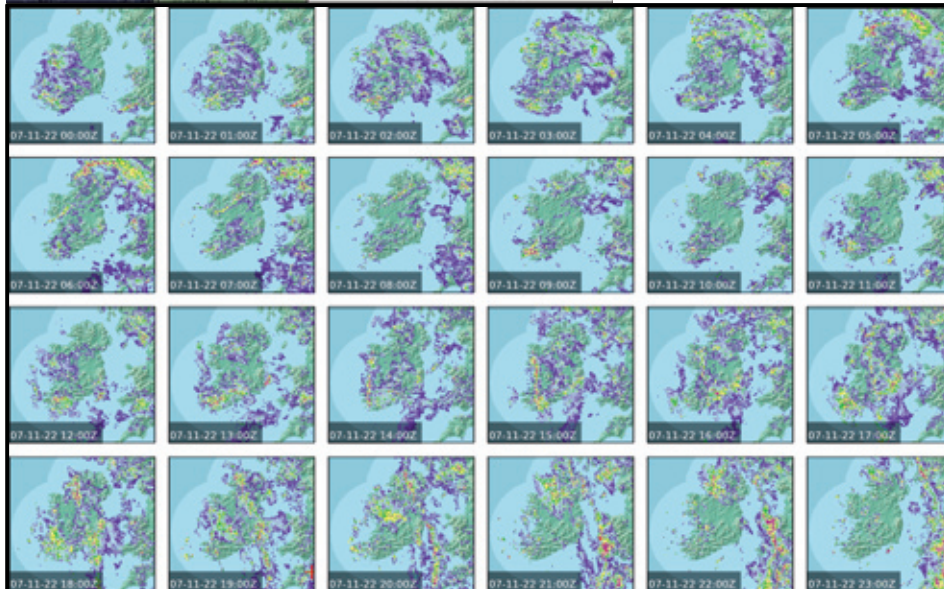
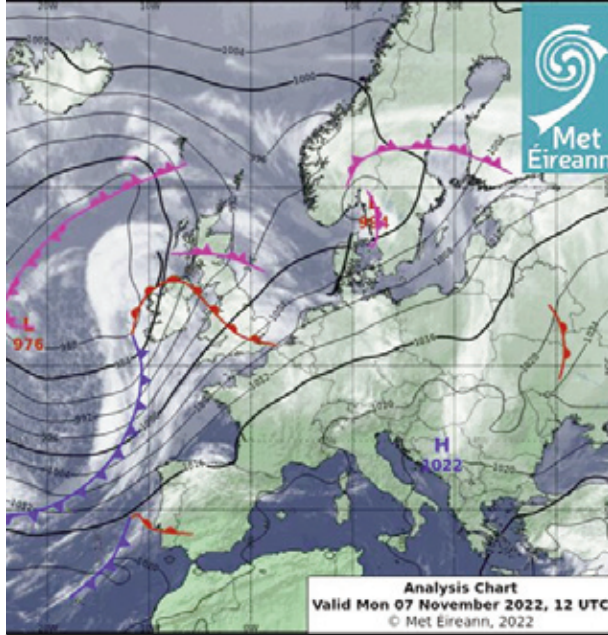
The Irish Meteorological Service

Climate Services  
Glasnevin Hill  
Dublin 9

Seirbhís Aeráide  
Chnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Email: [legal@met.ie](mailto:legal@met.ie)

**Appendix 1b Analysis Chart, Satellite and Rainfall Radar 7-November -2022**



Met Éireann | Climate Services Division | Enquiries Legal Unit | Email: [legal@met.ie](mailto:legal@met.ie)

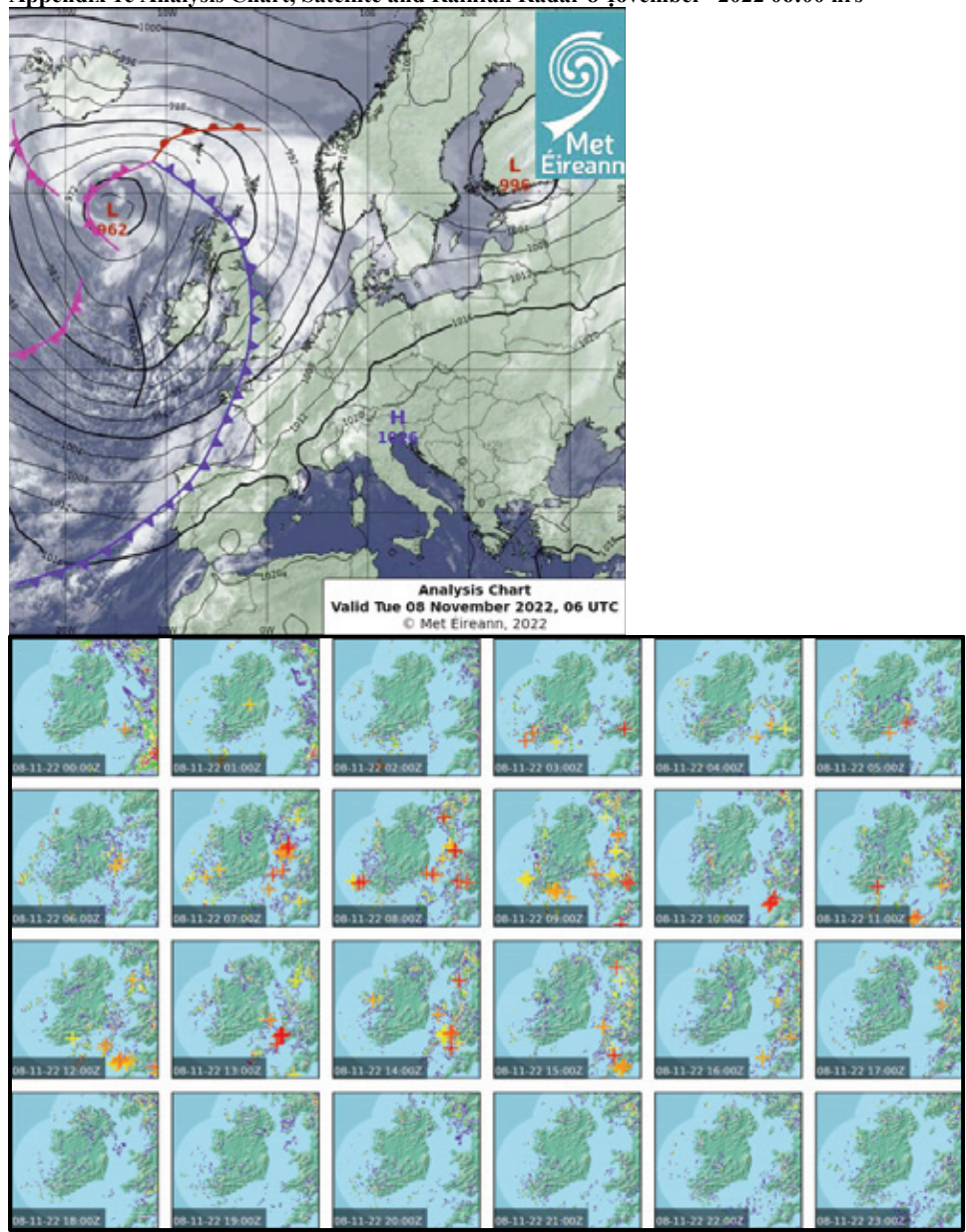
### Appendix 7.11 Met Éireann Weather Report



**Met Éireann**  
The Irish Meteorological Service  
Climate Services  
Glasnevin Hill  
Dublin 9  
Seirbhísi Aeráide  
Cnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Email: [legal@met.ie](mailto:legal@met.ie)

**Appendix 1c Analysis Chart, Satellite and Rainfall Radar 8-November -2022 06:00 hrs**



Met Éireann | Climate Services Division | Enquiries Legal Unit | Email: [legal@met.ie](mailto:legal@met.ie)

Appendix 7.11 Met Éireann Weather Report



**Met Éireann**

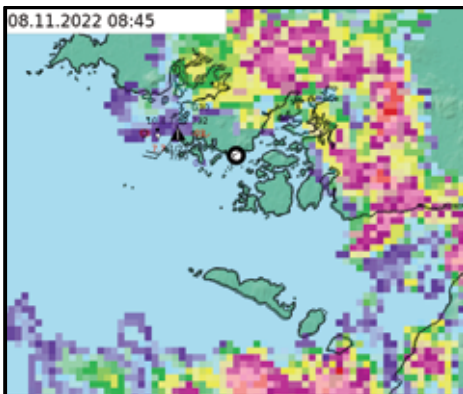
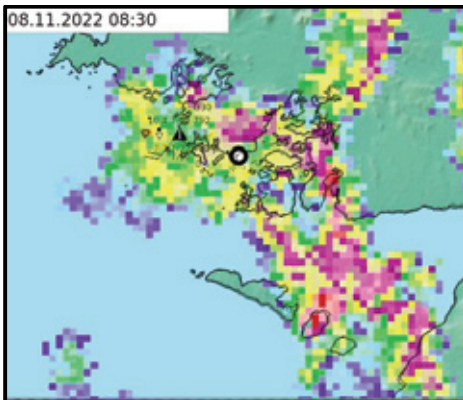
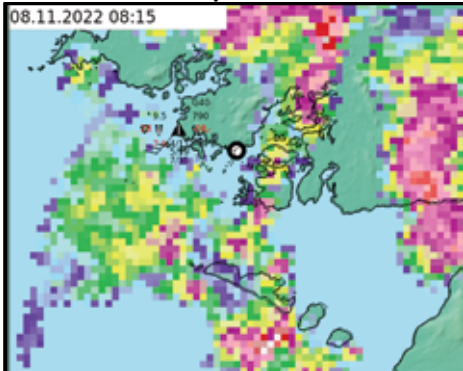
The Irish Meteorological Service

Climate Services  
Glasnevin Hill  
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Email: [legal@met.ie](mailto:legal@met.ie)

**Appendix 1d zoomed in Rainfall Radar Image with approximate location Kilkieran Bay marked with black/white circle. 8-November -2022 between 08:15 and 08:45 (note rainfall location approximate)**




Met Éireann | Climate Services Division | Enquiries Legal Unit | Email: [legal@met.ie](mailto:legal@met.ie)



Appendix 7.11 Met Éireann Weather Report

Appendix 2. Copy of Archived Sea Area Forecast as were issued on 7<sup>th</sup> and 8<sup>th</sup> November 2022



## 24-hour Sea Area Forecast

Updated at 0000 / 0600 / 1200 / 1800  
Sea Area Forecast until 0000 Tuesday, 8 November 2022  
Issued at 0000 Monday, 7 November 2022


- Gale warning:** In operation  
**Small craft warning:** In operation
- Meteorological situation at 2100:** A depression of 975 hPa to the northwest of Ireland maintains a strong to near gale force southwesterly airflow over the country. A warm front will move northwards over Ireland overnight with a strong to gale force southerly airflow developing.
- Forecast for Irish coastal waters from Erris Head to Bloody Foreland to Fair Head**  
Wind: Southwest force 6 or 7 and gusty, decreasing south to southwest force 5 or 6 imminent, later backing south to southwest and increasing force 6 or 7, then veering southwesterly and reaching gale force 8.  
Weather: Outbreaks of rain, heavy at times  
Visibility: Mostly moderate or poor

**Forecast for Irish coastal waters from Fair Head to Carrmore Pt to Valentia and for the Irish sea**  
Wind: Southwest force 5 or 6, increasing force 6 or 7 imminent, soon increasing force 7 or gale force 8 west of Carrmore Pt, later increasing force 7 or gale force 8 between Fair Head and Carrmore Pt and reaching strong gale force at times, veering southwesterly and decreasing force 5 or 6 by the end of the period.  
Weather: Fair at first. Rain overnight and on Monday, heavy at times later.  
Visibility: Moderate to good, decreasing moderate or poor in rain.

**Forecast for Irish coastal waters from Valentia to Slyne Head to Erris Head**  
Wind: South to southwest force 6 or 7, increasing force 7 or gale force 8 imminent, soon decreasing force 5 to 7, later becoming southwesterly force 6 or 7, decreasing force 5 or 6 by the end of the period.  
Weather: Outbreaks of rain, heavy at times  
Visibility: Mostly moderate or poor

**Warning of Heavy Swell:** Open Atlantic coasts

- Outlook for a further 24 hours until 0000 Wednesday 09 November 2022:** Fresh to strong, gusty south to southwest winds, later becoming southwest to west. Occasional heavy showers.



**Text of Gale Warning**

- South to southwest winds will occasionally reach gale force early on Monday on coasts from Valentia to Slyne Head to Erris Head.
- Southerly gales or strong gales will develop on Monday evening on coasts from Fair Head to Carrmore Pt to Valentia and for the Irish sea.
- Southwest gales developing on Monday evening on coasts from Erris Head to Rosnare Pt to Malin Head.

**Text of Small Craft Warning**

South to southwest winds will reach force 6 or higher at times on all Irish coasts.

**Coastal Reports**

11 PM Sunday, 06 November 2022

South: 20 Knots. Gull 32 Knots. Fair: 9 Miles. 987. Rising slowly

South-Southwest: 9 Knots. Frow: 16 Miles. 993. Rising slowly

Southwest: 18 Knots. Wave Ht: 3.4 m. The visibility at Turkur is greater than 10 Miles. 997. Rising slowly

South-Southwest: 20 Knots. Rain shower. 3 Miles. 995. Steady

South-Southwest: 20 Knots. Rain shower. 2 Miles. 994. Falling slowly

South-Southwest: 24 Knots. Gull 34 Knots. Moderate rain. 3 Miles. 991. Falling slowly

South-Southwest: 23 Knots. Moderate rain. 1.4 Miles. 988. Steady

South-Southwest: 17 Knots. Gull 29 Knots. Rain shower. 5 Miles. 995. Rising slowly

Rain not available

Southwest: 21 Knots. Wave Ht: 1.6 m. 993. Rising slowly

Southwest: 21 Knots. Wave Ht: 1.8 m. 993. Rising slowly

Southwest: 25 Knots. Gull 35 Knots. Moderate rain. 3 Miles. 994. Rising slowly

West-Southwest: 15 Knots. Wave Ht: 1.5 m. 983. Falling slowly

West-Southwest: 15 Knots. Wave Ht: 1.5 m. 983. Falling slowly

Disclaimer: buoy locations are approximate and are not for navigational purposes

**Sea Crossings**

Dublin - Holyhead: Moderate to rough

Rosnare - South Wales: Rough to very rough


Cork - South Wales: Rough to very rough

Rosnare - France: Very rough to high, decreasing rough to very rough Monday night.

Cork - France: Very rough to high, decreasing rough to very rough Monday night.

**Next update before 0700 Monday, 07 November 2022**

Appendix 7.11 Met Éireann Weather Report



## 24-hour Sea Area Forecast

Updated at 0000 / 0600 / 1200 / 1800  
Sea Area Forecast until 0600 Tuesday, 8 November 2022  
Issued at 0600 Monday, 7 November 2022

1. Gale warning: In operation  
Small craft warnings: In operation
2. Meteorological situation at 0300: Depressions to the west and northwest of Ireland, maintain a strong to near gale force southwest airflow over the country. A southerly airflow will strengthen further to day and a cold front will move eastwards over the country.
3. Forecast for Irish coastal waters from Malin Head to Howth Head to Carnsore Pt and for the Irish Sea
 

Wind: South to southwest force 6 or 7, soon increasing southerly gale force 8 or strong gale force 9, later decreasing south to southwest force 5 to 7

Weather: Spells of rain, clearing early tonight with showers following

Visibility: Moderate or poor, increasing good as rain clears

Forecast for Irish coastal waters from Carnsore Pt to Mizen Head to Loop Head

Wind: South to southwest force 6 or 7, backing southerly and increasing force 7 or gale force 8 imminent, soon occasionally reaching strong gale force 9, then veering southwest and decreasing force 5 to 7, continuing the same for the rest of the period.

Weather: Spells of rain, clearing later this evening with showers following

Visibility: Moderate or poor, increasing good as rain clears


Forecast for Irish coastal waters from Loop Head to Erris Head to Malin Head

Wind: South to southwest force 5 or 6, soon becoming south to southwest and increasing force 7 or gale force 8 and possibly strong gale force 9 for a time, later veering southwesterly, then decreasing force 5 or 6 overnight.

Weather: Spells of rain, clearing later this evening with showers following

Visibility: Moderate or poor, increasing good as rain clears

Warning of Heavy Swell: Today Connacht and Munster coasts
4. Outlook for a further 24 hours until 0600 Wednesday 09 November 2022: Fresh to strong, gusty south to southwest winds, later becoming southwest to west. Occasional heavy showers.



**Text of Gale Warning**

1. Southerly gales or strong gales from late morning (Monday) until tonight on Irish coastal waters from Malin Head to Carnsore Pt to Loop Head and for the Irish Sea. 2. South to southeast winds veering with rain from late afternoon (Monday) until evening on coast from Loop Head to Erris Head to Malin Head.

---

**Text of Small Craft Warning**

South to southwest winds will reach force 6 or higher at times on all Irish coasts.

---

**Coastal Reports**

8 AM Monday 07 November 2022

South-Southwest, 14 Knots, Gust 25 Knots, Mod rain shower, 5 Miles, 665, Falling slowly.

South, 14 Knots, Gust 24 Knots, Recent rain, 10 Miles, 991, Falling slowly.

Report not available

South-Southwest, 26 Knots, Gust 34 Knots, Recent drizzle, 3 Miles, 992.

Roches Point Automatic

Falling slowly

South-Southwest, 22 Knots, Gust 40 Knots, Rain shower, 0.9 Miles, 991.

Sherkin Island Automatic

Falling slowly

South-Southwest, 18 Knots, Gust 31 Knots, Recent drizzle, 5 Miles, 989.

Valentia Automatic

Falling slowly

South-Southwest, 20 Knots, Gust 30 Knots, Recent drizzle, 2 Miles, 986.

Mace Head Automatic

Steady

South-Southwest, 15 Knots, Mist, 4 Miles, 984, Shifty.

Balmallick Automatic

Report not available

Buoy M1.5: TN 14 127W

Report not available

Buoy M1.5: TN 15 127W

Report not available

Buoy M1.5: TN 16 127W

Report not available

Buoy M1.5: TN 17 127W

Report not available

Buoy M1.5: TN 18 127W

Report not available

Buoy M1.5: TN 19 127W

Report not available

Buoy M1.5: TN 20 127W

Report not available

Disclaimer: buoy locations are approximate and are not for navigational purposes

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**Sea Conditions**

State of sea until 0600 Wednesday 09 November 2022

Dublin - Howth Head

Moderate to rough

Dublin - South Wales

Very rough

Cork - South Wales

Very rough and very rough to high for a time on Monday afternoon

Rosslare - France


Very rough to high, decreasing rough to very rough early on Tuesday

Cork - France

Very rough to high, decreasing rough to very rough early on Tuesday

**Next update before 1300 Monday, 07 November 2022**

Appendix 7.11 Met Éireann Weather Report



**24-hour Sea Area Forecast**  
Updated at 0000 / 0600 / 1200 / 1800  
**Sea Area Forecast until 1200 Tuesday, 8 November 2022**  
**Issued at 1200 Monday, 7 November 2022**

1. Gale warning: In operation  
Small craft warning: In operation

2. Meteorological situation at 0900: A depression of 975 hPa to the west of Ireland, maintains a strong to near gale force southwest airflow over the country. The southerly airflow will strengthen further this afternoon as a sub low deepens to the west of Ireland and an associated developing cold front approaches and moves eastwards over the country.


3. Forecast for Irish coastal waters from Carnsore Pt to Malin Head to Loop Head  
Wind: Southerly force 7 or gale force 8 and occasionally reaching strong gale force 9, imminently veering southwest and decreasing force 5 to 7. Soon southwest to west force 5 to 7 and gusty.  
Weather: Showery outbreaks of rain with embedded thunderstorms possible. Soon, scattered showers or thunderstorms.  
Visibility: Moderate to poor in precipitation, occasionally good soon.

Forecast for Irish coastal waters from Loop Head to Erris Head to Malin Head  
Wind: Southeast veering southwest force 6 to gale force 8 and gusty, imminent. Soon easing south to southwest force 5 to 7. Later further easing force 5 or 6 and gusty, before veering southwest to east and increasing force 5 to 7 once more towards the end of the period.  
Weather: Showery outbreaks of rain with embedded thunderstorms possible. Soon, scattered showers or thunderstorms.  
Visibility: Moderate to poor in precipitation, occasionally good soon.

Forecast for Irish coastal waters from Malin Head to Howth Head to Carnsore Pt and for the Irish Sea  
Wind: South to southwest force 6 to gale force 8 imminent and reaching strong gale force 9 at times. Soon veering southwesterly. Later decreasing south to southwest force 5 to 7 and gusty.  
Weather: Showery outbreaks of rain with embedded thunderstorms possible. Later, scattered showers or thunderstorms.  
Visibility: Moderate to poor in precipitation, occasionally good later.

Warning of Heavy Swell: Today on Connacht and Munster coasts

4. Outlook for a further 24 hours until 1200 Wednesday 09 November 2022: Fresh to near gale and gusty southwest to west winds. Weather: Scattered showers with isolated thunderstorms. Mostly fair on Wednesday with showers becoming more isolated.



**Weather Forecast from Met Éireann**

**Text of Gale Warning**  
South to southeast winds will reach gale force 8 or strong gale force 9 at times this afternoon throughout and this extending on all Irish coastal waters and on the Irish Sea.

**Text of Small Craft Warning**  
South to southwest winds will reach force 6 or higher at times on all Irish coasts.

**Coastal Reports**  
12 Noon Monday, 07 November 2022  
Malin Head Automatic South, 20 knots, gust 31 knots, Fair, 13 Miles, 989, Steady  
Dublin Airport South, 15 knots, gust 25 knots, Cloudy, 10 Miles, 950, Patchy Showers  
Buoy M5 51° 41'N 0° 42'W South, 23 knots, gust 38 knots, Wave Ht. 3.4 m, The vicinity at 10knots 5 Miles, 900, Fair  
Broches Point Automatic South, 30 knots, gust 39 knots, Light breeze, 2 Miles, 948, Falling  
Sherkin Island Automatic South, 32 knots, gust 48 knots, Rain shower, 2 Miles, 965, Falling  
Valentia Automatic South, 20 knots, gust 30 knots, Recent rain, 4 Miles, 983, Falling rapidly  
Mace Head Automatic Southeast, 18 knots, Rain shower, 3 Miles, 982, Falling  
Beaumeil Automatic South, 23 knots, Rain shower, 4 Miles, 981, Falling  
Buoy M1 53° 0'N, 11° 12'W Report not available  
Buoy M2 53° 29'N, 5° 26'W South, 25 knots, Wave Ht. 2.7 m, 992, Steady  
Buoy M3 51° 13'N, 10° 33'W South, 26 knots, gust 40 knots, Wave Ht. 5.5 m, 982, Falling rapidly  
Buoy M4 55° 0'N, 10° 0'W South-Southwest, 20 knots, Wave Ht. 4 m, 981, Falling  
Buoy M6 53° 4'N, 15° 56'W West-Southwest, 9 knots, Wave Ht. 3.8 m, 977, Falling slowly


Disclaimer: buoy locations are approximate and are not for navigational purposes

**Sea Crossings**  
Dublin - Holyhead Moderate to rough  
Rosslare - South Wales Very rough  
Cork - South Wales Mostly very rough, very rough to high for a time on Monday afternoon and evening  
Rosslare - France Very rough to high, decreasing rough to very rough on Tuesday evening  
Cork - France Very rough to high, decreasing rough to very rough on Tuesday evening

**State of sea until 1200 Wednesday 09 November 2022**  
Dublin - Holyhead Moderate to rough  
Rosslare - South Wales Very rough  
Cork - South Wales Mostly very rough, very rough to high for a time on Monday afternoon and evening  
Rosslare - France Very rough to high, decreasing rough to very rough on Tuesday evening  
Cork - France Very rough to high, decreasing rough to very rough on Tuesday evening

**Next update before 1900 Monday, 07 November 2022**  
A detailed forecast may be obtained by dialling FRANKFURT on 1599 123 855.

Appendix 7.11 Met Éireann Weather Report




## 24-hour Sea Area Forecast

Updated at 0000 / 0600 / 1200 / 1800  
Sea Area Forecast until 1800 Tuesday, 8 November 2022  
Issued at 1800 Monday, 7 November 2022

- Gale warning:** In operation  
**Small craft warning:** In operation
- Meteorological situation at 1500:** A complex area of low pressure of 972hPa to the west of Ireland generates a strong to gale force southerly airflow over the country. As the depression deepens and track northwards, the airflow will ease early tonight as an associated cold front clears eastwards with showery troughs following.
- Forecast for Irish coastal waters from Rosshan Point to Belfast Lough to Hook Head and for the Irish Sea**  
Winds: South to southwest force 7 or gale force 8, occasionally strong gale force 9, decreasing south to southwest force 6 or 7 and gusty imminent. Soon becoming force 5 to 7 and gusty. Later becoming southwesterly and occasionally reaching gale force 8.  
Weather: Showery outbreaks of rain with embedded thunderstorms possible, clearing eastwards to scattered showers or thunderstorms imminent.  
Visibility: Moderate to poor in precipitation.

**Forecast for Irish coastal waters from Hook Head to Valentia to Rosshan Point**  
Winds: Southwesterly force 6 or 7 and gusty, decreasing force 5 or 6 and gusty imminent, occasionally reaching force 7. Later increasing force 5 to 7 and gusty, strongest on southern sea areas. Veering westerly by the end of the period.  
Weather: Showery outbreaks of rain with embedded thunderstorms possible, clearing eastwards to scattered showers or thunderstorms soon.  
Visibility: Moderate to poor in precipitation.  
Warning of Heavy Swell: Nil

- Outlook for a further 24 hours until 1800 Wednesday 09 November 2022:** Fresh to near gale and gusty southwest to west winds. Weather: Scattered showers with isolated thunderstorms becoming mostly fair on Wednesday with showers becoming more isolated. Rain and drizzle from the west later.



**Text of Gale Warning**

South to southeast winds will reach gale force 8 or strong gale force 9 at times this evening (Monday), tonight and tomorrow (Tuesday) on Irish-coastal waters from Rosshan Point to Strangford Lough to Dungarvan and on the Irish Sea.

**Text of Small Craft Warning**

South to southwest winds will reach force 6 or higher at times this evening (Monday), tonight and tomorrow (Tuesday) on all Irish coasts.

**Coastal Reports**  
5 PM Monday, 07 November 2022  
South-Southeast, 22 Knots. Rain shower. 6 Miles. 960. Falling rapidly.  
Dublin Airport  
South-Southeast, 13 Knots. Light rain. 8 Miles. 966. Falling.  
Buoy M5 51° 41'N 0° 42'W  
South-Southeast, 26 Knots. Gust 41 Knots. Wave ht. 4.2 m. The visibility at Turkur is 2 Miles. 987. Falling rapidly.  
Roches Point Automatic  
South-Southeast, 26 Knots. Gust 50 Knots. Recent rain. 2 Miles. 993. Falling.  
Sharkin Island Automatic  
West 26 Knots. Gust 38 Knots. Mod rain shower. 1.4 Miles. 983. Steady.  
Valentia Automatic  
South-Southeast, 11 Knots. Mod rain shower. 3 Miles. 982. Rising slowly.  
Macle Head Automatic  
Southwest, 20 Knots. Rain shower. 5 Miles. 978. Steady.  
Beinnin Automatic  
South, 19 Knots. Light drizzle. 6 Miles. 976. Falling slowly.  
Report not available  
Buoy M1 53° 5'N, 11° 12'W  
South, 30 Knots. Gust 41 Knots. Wave ht. 3.2 m. 988. Falling.  
Buoy M2 53° 29'N, 9° 26'W  
Southwest, 15 Knots. Wave ht. 5.2 m. 982. Steady.  
Buoy M3 51° 13'N, 10° 33'W  
Southwest, 15 Knots. Wave ht. 3.4 m. 974. Falling.  
Buoy M4 55° 0'N, 10° 0'W  
South-Southwest, 23 Knots. Wave ht. 3.8 m. 975. Falling slowly.  
Buoy M6 53° 4'N, 15° 56'W  
South-Southwest, 10 Knots. Wave ht. 3.8 m. 976. Falling slowly.

Disclaimer: buoy locations are approximate and are not for navigational purposes

**Sea Crossings**  
1800 Wednesday 08 November 2022  
Dulín - Holyhead  
Rough to very rough, decreasing moderate by Tuesday night.  
Rosslare - South Wales  
Mostly very rough, decreasing rough by Tuesday night. Further decrease moderate to rough Wednesday afternoon.  
Cork - South Wales  
Mostly very rough, decreasing rough by Tuesday night. Further decreasing moderate to rough Wednesday afternoon.  
Rosslare - France  
Very rough to high, decreasing very rough Tuesday evening. Decreasing rough to very rough Wednesday morning and further decreasing rough Wednesday afternoon.  
Cork - France  
Very rough to high, decreasing very rough Tuesday evening. Decreasing rough to very rough Wednesday morning and further decreasing rough Wednesday afternoon.

**Next update before 0100 Tuesday, 08 November 2022**

## Appendix 7.11 Met Éireann Weather Report



### Met Éireann

The Irish Meteorological Service

Climate Services  
Glasnevin Hill  
Dublin 9

Seirbhísí Aeráide  
Chnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Email: legal@met.ie

### Appendix 3a Terminology Sea Area Map & Beaufort Scale of Wind



| Beaufort Scale of Wind |                 |        |            |  |                           |
|------------------------|-----------------|--------|------------|--|---------------------------|
| Force                  | Description     | Speed* |            | Specification<br>-sea  | Wave height**<br>(metres) |
|                        |                 | knots  | km/hr      |  |                           |
| 0                      | Calm            | <1     | <1         | Sea like mirror  |                           |
| 1                      | Light air       | 1-3    | 1-5        | Ripples  | 0.1 (0.1)                 |
| 2                      | Light breeze    | 4-6    | 6-11       | Small wavelets   | 0.2 (0.3)                 |
| 3                      | Gentle breeze   | 7-10   | 12-19      | Large wavelets, crests begin to break                          | 0.6 (1)                   |
| 4                      | Moderate breeze | 11-16  | 20-28      | Small waves becoming longer, frequent white horses             | 1 (1.5)                   |
| 5                      | Fresh breeze    | 17-21  | 29-38      | Moderate waves, many white horses, chance of spray             | 2 (2.5)                   |
| 6                      | Strong breeze   | 22-27  | 39-49      | Large waves, white foam crests, probably some spray            | 3 (4)                     |
| 7                      | Near gale       | 28-33  | 50-61      | Sea heaps up, streaks of white foam                            | 4 (5.5)                   |
| 8                      | Gale            | 34-40  | 62-74      | Moderately high waves of greater length                        | 5.5 (7.5)                 |
| 9                      | Strong gale     | 41-47  | 75-88      | High waves, dense streaks of foam, spray may reduce visibility | 7 (10)                    |
| 10                     | Storm           | 48-55  | 89-102     | Very high waves, long overhanging crests, visibility affected  | 9 (12.5)                  |
| 11                     | Violent storm   | 56-63  | 103-117    | Exceptionally high waves, long white foam patches cover sea    | 11.5 (16)                 |
| 12                     | Hurricane       | 64+    | 117 & over | Air filled with foam and spray, sea completely white           | 14 (-)                    |

\*Speed = mean speed at a standard height of 10 metres.  
\*\*Wave height is only intended as a guide to what may be expected in the open sea.  
Bracketed figures indicate the probable maximum wave height.

Appendix 7.11 Met Éireann Weather Report



**Met Éireann**

The Irish Meteorological Service

Climate Services  
Glasnevin Hill  
Dublin 9

Seirbhísi Aeráide  
Cnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Email: enq@met.ie  
Email: legal@met.ie

**Appendix 3b Terminology Sea State & Visibility**

**Wave Heights / State of Sea:**

The wave height is the vertical distance between the crest and the preceding or following trough. The table below gives a description of the wave system associated with a range of significant wave heights.

The Significant wave height is defined as the average height of the highest one-third of the waves. (It is very close to the value of wave height given when making visual observations of wave height.)

| <b>Sea State (Descriptive)</b> | <b>Significant Wave height in meters</b> |
|--------------------------------|--|
| Calm                           | 0 – 0.1                                  |
| Smooth(Wavelets)               | 0.1 – 0.5                                |
| Slight                         | 0.5 – 1.25                               |
| Moderate                       | 1.25 – 2.5                               |
| Rough                          | 2.5 – 4                                  |
| Very rough                     | 4 – 6                                    |
| High                           | 6 – 9                                    |
| Very high                      | 9 – 14                                   |
| Phenomenal                     | Over 14                                  |

Individual waves in the wave train will have heights in excess of the significant height. **The highest wave of all will have a height about twice the significant height.**

**Visibility Descriptions:**

| <b>Visibility (Descriptive)</b> | <b>Visibility in nautical miles (kilometres)</b> |
|---------------------------------|--|
| Good                            | More than 5 nm (> 9 km)                          |
| Moderate                        | 2 – 5 nm (4 – 9 km)                              |
| Poor                            | 0.5 – 2 nm (1 – 4 km)                            |
| Fog                             | Less than 0.5 nm (< 1km)                         |

**Please Note:**

If there are no measurements or observations available for an exact location, then the estimated conditions in this report are based on all available meteorological measurements and observations which have been correlated on the routine charts prepared by Met Éireann.

## Appendix 7.12 Irish Coast Guard SITREP

ROUTINE  
 08 1147Z NOV 22  
 FROM MRSC VALENTIA  
 TO MRSC VALENTIA SITREP GROUP  
  
 BT  
 MEDEVAC SIMMERDIM  
 UIIN2499/22  
 SAR SITREP ONE AND FINAL  
  
 A - IDENTITY OF CASUALTY:  
 SIMMER DIM  
  
 B - POSITION  
 53°18.06'N 009°45.85'W  
  
 C - SITUATION  
 MEDEVAC FROM ANCHORED WORKBOAT  
  
 D - NUMBER OF PERSONS  
 1  
  
 E - ASSISTANCE REQUIRED  
 R115 EXTRACT CAS, CRUSH INJURY UNABLE TO BE MOVED  
  
 F - COORDINATING RCC  
 MRSC VALENTIA  
  
 G - DESCRIPTION OF CASUALTY  
 RECREATIONAL VESSEL  
  
 MALE, MATURE PERSON (25-65)  
  
 H - WEATHER ON SCENE  
 WIND: 4, S / SEA: MODERATE / SWELL: LOW WAVE / WATER TEMP: 12.8°C / SITREP WEATHER-TIME: 08  
 0854Z NOV 22  
 J - INITIAL ACTIONS TAKEN  
 CONNECT TO MEDICO CORK, TASK R115 AND ARAN ISL LB  
  
 K - SEARCH AREA  
 ARDMORE PIER  
  
 L - COORDINATING INSTRUCTIONS  
 LOCATE AND ASSIST  
  
 M - FUTURE PLANS  
 N/A  
  
 N - ADDITIONAL INFORMATION  
 0854 CALL FROM SKIPPER OF SIMMER-DIM ABOUT 32 Y/O MALE CREW MEMBER WITH CRUSH INJURY  
 ANCHORED OFF ARANMORE PIER  
 0857 SKIPPER PASSED TO MEDICO CORK  
 TASKED R115  
 0904 ARAN ISL LB TAKSED  
 0912 COSTELLOE BAY CG TASKED  
 0918 R115 AIRBORNE  
 0921 ARAN LB LAUNCHED  
 0944 R115 ON SCENE, ASSESSING  
 1010 W/M ONBOARD ASSESSING CAS WITH NAS PARAMEDIC  
 1013 COSTELLOE BAY CG DELTA LAUNCH  
 1038 R115 DEP SCENE FOR GUH. ALL UNITS STOOD DOWN.  
 1052 R115 ARR GUH, CAS HANDOVER HSE  
 1121 R115 DEP GUH, RELEASED.  
 BT

Appendix 7.13 Photograph - Medevac of the Casualty from the Vessel





## SECTION 36 PROCESS

### Section 36 of the Merchant Shipping (Investigation of Marine Casualties) Act, 2000

It is a requirement under Section 36 that:

- (1) Before publishing a report, the Board shall send a draft of the report or sections of the draft report to any person who, in its opinion, is likely to be adversely affected by the publishing of the report or sections or, if that person be deceased, then such person as appears to the Board best to represent that person's interest.
- (2) A person to whom the Board sends a draft in accordance with subsection (1) may, within a period of 28 days commencing on the date on which the draft is sent to the person, or such further period not exceeding 28 days, as the Board in its absolute discretion thinks fit, submit to the Board in writing his or her observations on the draft.
- (3) A person to whom a draft has been sent in accordance with subsection (1) may apply to the Board for an extension, in accordance with subsection (2), of the period in which to submit his or her observations on the draft.
- (4) Observations submitted to the Board in accordance with subsection (2) shall be included in an appendix to the published report, unless the person submitting the observations requests in writing that the observations be not published.
- (5) Where observations are submitted to the Board in accordance with subsection (2), the Board may, at its discretion -
  - (a) alter the draft before publication or decide not to do so, or
  - (b) include in the published report such comments on the observations as it thinks fit.'

The Board reviews and considers all observations received whether published or not published in the final report. When the Board considers an observation requires amendments to the report, those amendments are made. When the Board is satisfied that the report has adequately addressed the issue in the observation, then no amendment is made to the report. The Board may also make comments on observations in the report.

Response(s) received following circulation of the draft report (excluding those where the Board has agreed to a request not to publish) are included in the following section.

The Board has noted the contents of all observations, and amendments have been made to the report where required.

## SECTION 36 CORRESPONDENCE

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### 8. MSA 2000 - SECTION 36 OBSERVATIONS RECEIVED

No correspondence was received on the draft of this report.





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