

**REPORT OF THE INVESTIGATION INTO  
THE SINKING OF THE MUSSEL DREDGER  
“OLIVE RACHEL” 1 MILE NORTH EAST  
OF MIZEN HEAD ON 17<sup>th</sup> SEPTEMBER, 2003**

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## **1. SYNOPSIS**

- 1.1 The Mussel Dredger “Olive Rachel” encountered adverse weather and sank approximately 1 mile North East of Mizen Head on the 17<sup>th</sup> of September 2003.
- 1.2 The three crewmen boarded a life raft before the vessel turned over and were picked up by a local fishing vessel between 15 - 30 minutes after.
- 1.3 No injuries were sustained and the vessel was lifted from the seabed on the 10<sup>th</sup> December 2003.

## **2. FACTUAL INFORMATION**

### 2.1 Description of the craft:

The “Olive Rachel” is a mussel dredger built in 1950.  
It is constructed of steel and the principal dimensions are:

Length 28.22m

Breadth 4.89m

Moulded depth 2.30m

Moulded draught 1.79m

Tonnage

Gross.....81

Net.....28

(See Appendix 8.1)

### 2.2 Owner:

Mr Ger Kelly  
C/O Tardum Fisheries,  
Greencastle,  
Co Donegal

Skipper:

Mr Charles Kelly,  
Holds a Fishing 2<sup>nd</sup> Hand Special Certificate of Competency issued in 1986.

Crew:

Keith and Melvyn McIhenney,

Both had no formal sea training or Certificates of Competency, however Mr. Keith McElhinney completed a Basic Survival Course in March 2002.

### **3. EVENTS PRIOR TO THE INCIDENT**

- 3.1 The “Olive Rachel” was fishing out of Arklow for approximately the last three previous seasons.
- 3.2 The Harbour Master in Arklow stated that he had complained to the vessels Skipper about the apparent overloading of the vessel after several arrivals into the harbour with the decks awash.
- 3.3 The vessel does not have a stability book stating the maximum permissible draft or loading conditions.
- 3.4 The vessel departed Wicklow on the morning of the 17<sup>th</sup> of September 2003 to dredge for seed mussels in an area off Mizen Head Co. Wicklow.
- 3.5 The weather at the time of departure was South South West Force 4 (See Appendix 8.6).

#### **4. THE INCIDENT**

- 4.1 The weather changed locally to South Easterly force 5 to 6 around midday and was accompanied by a confused swell.
- 4.2 The Skipper decided to return to Arklow Harbour around 13.00 hours and stated that he had a half load of seed mussels on board. He maintains that he made his decision early “to be ashore well ahead of forecast freshening winds.
- 4.3 Approaching Arklow on a southerly course at approx 13.15 hours the Skipper stated that the vessel started taking water over the bow. The vessel broached (was turned beam on to the sea) and water entered the forward hold from the port side. The Skipper states at this stage he reduced speed from 5 knots to 2 knots and maintained his Southerly course. However the MCIB notes that in his enclosed response (see page ), the Skipper Mr. Charles Kelly now states “The vessel never broached. Whilst the vessel was on a SSW, the vessel’s head was clean into the water. However in the vicinity of the sinking, a confused swell across the wind (swell from SE) caused the problem of water tumbling along the side of the vessel and then filling into the mussel holds”.
- 4.4 The forward deck was awash and progressive flooding from the forward hold continued into the after hold.
- 4.5 Pumping of the hold was tried to no avail.
- 4.6 At approximately 13.23 hours the Skipper decided to abandon the vessel,
- 4.7 A Mayday and Digital Selective Calling (DSC) alert were sent by radio at approximately 13.32 hours.
- 4.8 At approximately 13.35 hours the life raft was prepared and boarded by all crew.
- 4.9 At approximately 13.45 hours the vessel capsized.

## **5. EVENTS AFTER THE INCIDENT**

- 5.1 The vessel remained afloat for approximately 30 minutes and then sank.
- 5.2 "Naomi Donnacha", a nearby fishing vessel picked up the crew.
- 5.3 Arklow Lifeboat was tasked by the Irish Coast Guard to assist and picked up the Emergency Position-Indicating Radio Beacon (EPIRB) from the vessel after it floated free (See Appendix 8.2).
- 5.4 The Lifeboat secretary confirmed the weather conditions at the time to be South Easterly 5 to 6. Choppy seas and confused swell.

## **6. CONCLUSIONS**

- 6.1 The weather deteriorated to such an extent as to cause concern to the Skipper but the decision to return to port was delayed for too long.
- 6.2 The load of seed mussels on board can not be determined nor the trim or stability of the vessel at the time of the incident, however it is considered that the vessel was not in a condition that was suitable for the prevailing weather conditions.
- 6.3 There were only two small freeing ports on each side of the foredeck space which resulted in water being trapped on the foredeck.
- 6.4 The forward hatch cover is below the level of the ships side and one securing clip was missing. (See photographs at Appendix 8.3). The likelihood of water entering this space is high when the foredeck is awash.
- 6.5 The two air pipes (either side of the after foredeck) are only approx six inches above the deck and have no closing arrangements to stop water entering the void spaces below and around the mussel holds. The Skipper was not aware of these vents existence.
- 6.6 The combination of the above factors contributed to the sinking of the vessel. When the vessel capsized, it remained afloat for approx thirty minutes, so the ingress of water into the vessel was not through the hull.
- 6.7 The body of water on the foredeck head would have a negative effect on the stability of the vessel and also affect the trim.  
It increases displacement and increases the rolling motion of the vessel which may result in capsizing.
- 6.8 The water entering the forward space would affect the trim and the stability of the vessel and the free surface effect would also reduce the vessels stability.
- 6.9 The water entering the void spaces through the air pipes would affect the trim and stability of the vessel.
- 6.10 The option of a port of refuge was not considered ie. making for Wicklow Harbour.



## **7. RECOMMENDATIONS**

- 7.1 Mussel Dredgers such as the “Olive Rachel” over 24 meters in length must have a “ Fishing vessel safety certificate of compliance” in accordance with EU Directive 97/70 as amended.  
This certificate covers construction, stability, machinery, operation and safety equipment of such vessels.  
The certificate is valid for 4 years with periodical surveys at two years for some items and one year for radio equipment.
- 7.2 The “Olive Rachel” should not be allowed to resume fishing without such a “ Fishing vessel safety certificate of compliance”
- 7.3 Adequate number of drainage openings (freeing ports) should be provided, to get rid of water fast.  
Marine Notice No 9 of 1999 Effect of Water on Deck (See Appendix 8.4).
- 7.4 All crew aboard fishing vessels must attend a Basic Sea Survival as per S.I No 587 of 2001 (See Appendix 8.5).
- 7.6 It is noted that the Department of Communications, Marine and Natural Resources have now implemented a programme to survey Mussel Dredgers for the issue of a Fishing Vessel Safety Certificate of Compliance and that mussel dredger owners and operators must ensure that their vessels comply with the EU Directive 97/70 as amended and obtain a “Fishing vessel safety certificate of compliance”.

## **8. LIST OF APPENDICES**

- 8.1 Original Certificate of Survey. Survey Application and relevant letters.
- 8.2 SITREP's from MRCC Dublin.
- 8.3 Photographs.
- 8.4 Marine Notice No. 9 of 1999 – Effect of Water on Deck.
- 8.5 S.I. No 587 of 2001.
- 8.6 Met Eireann weather report

**9. LIST OF CORRESPONDENCE RECEIVED**

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## **MCIB RESPONSE TO LETTER DATED 17<sup>th</sup> NOVEMBER 2004 FROM MR. GERARD KELLY**

The MCIB has noted the contents of this letter and have the following comments to make:

- 1.1 The report has been amended accordingly.
- 1.2 The report has been amended accordingly.
  
- 2.2 The statement in the draft report that both had no formal sea training or Certificates of Competency is still valid (See Appendix 8.5 paragraph 4).
  
- 3.2 The Harbour Master at the time again re-stated this occurrence when contacted in late March 2005. This remark was intended to convey the culture that prevailed at the time regarding the loading of such vessels.
- 3.3 The report has been amended accordingly.
- 3.4 See Appendix 8.6 in the report.
  
- 6.4 The statement in the draft report that the forward hatch cover is below the level of the ships side is still valid. If the level was raised as stated then it was still below the level of the ships side.
  
- 7.1-7.6 The report is a technical report and the recommendations are purely for the safety of the vessel and its crew. All other issues raised fall within the competency of the DCMNR (Department of Communications, Marine and Natural Justice) rather than MCIB. However the MCIB considers the safety of vessel and crew as paramount and from a safety perspective the principle of force majeure still applies.

**MCIB RESPONSE TO LETTER DATED 17<sup>th</sup> NOVEMBER 2004  
FROM MR. MEL McELHINNEY**

The MCIB has noted the contents of this letter and have the following comments to make:

The MCIB refer you to section 3.2 of the report and reiterate its content. The Harbour Master at the time again re-stated this occurrence when contacted in late March 2005. This remark was intended to convey the culture that prevailed at the time regarding the loading of such vessels.

**MCIB RESPONSE TO LETTER DATED 17<sup>th</sup> NOVEMBER 2004  
FROM MR. KEITH McELHINNEY**

The MCIB has noted the contents of this letter and have the following comments to make:

The MCIB refer you to section 3.2 of the report and reiterate its content. The Harbour Master at the time again re-stated this occurrence when contacted in late March 2005. This remark was intended to convey the culture that prevailed at the time regarding the loading of such vessels.

## **MCIB RESPONSE TO LETTER DATED 17<sup>th</sup> NOVEMBER 2004 FROM MR. CHARLES KELLY**

The MCIB has noted the contents of this letter and have the following comments to make:

- 1.3 The report has been amended accordingly.
- 1.4 The report has been amended accordingly.
- 2.2 The statement in the draft report that both had no formal sea training or Certificates of Competency is still valid (See Appendix 8.5 paragraph 4).
- 3.2 The Harbour Master at the time again re-stated this occurrence when contacted in late March 2005. This remark was intended to convey the culture that prevailed at the time regarding the loading of such vessels.
- 3.3 The report has been amended accordingly.
- 3.4 See Met Eireann report at Appendix 8.6 which concurs with the report that the weather at the time of departure from Wicklow was Force 4 from a southerly direction.
- 4.1 See Appendix 8.6 which concurs with the report that the weather at the time of departure from the fishing grounds was Force 5 to 6 from a southerly direction.
- 4.2 See Appendix 8.6 which would indicate that the decision to make for port was taken too late.
- 4.3 The comment that the vessel never broached but the sea entered the forward hold is an argument but with the result the same.
- 4.6 Noted.
- 4.7 Noted.
- 4.8 Noted.
- 6.1 The Met Eireann report at Appendix 8.6 would indicate that the decision to make for port was taken too late.
- 6.2 This statement has no bearing on the final report.
- 6.3 This statement does not alter the fact that the hatch cover was below the level of the ships side and has one securing clip missing. To suggest that the weight of the hatch cover was enough to stop the ingress of seawater is to underestimate the power of the sea.
- 6.5 The MCIB considers that a prudent Skipper of a vessel should be aware of the arrangement of the vessel.
- 6.6 Noted.
- 6.10 Noted, however a prudent Skipper would have considered the nearest point of refuge i.e. Wicklow in this instance.