

Leeson Lane, Dublin 2.
Telephone: 01-678 3485/86.
Fax: 01-678 3493.
email: info@mcib.ie
www.mcib.ie

**REPORT OF INVESTIGATION
INTO AN INCIDENT INVOLVING
THE NEPTUNE OUTDOOR
EDUCATION CENTRE
OFF CLOGHERHEAD,
CO. LOUTH
ON
26th MAY 2011.**

The Marine Casualty Investigation Board was established on the 25th March, 2003 under the Merchant Shipping (Investigation of Marine Casualties) Act, 2000.

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**REPORT No. MCIB/203
(No.X of 2012)**

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1. SYNOPSIS

- 1.1 On the morning of Thursday 26th May 2011, a group of pupils from St. Brigid's Girls National School, Glasnevin, Dublin 11 arrived at the Neptune Outdoor Centre in Clogherhead for a day's adventure sports. The group consisted of 27 girls from sixth class and one teacher. One group of 7 girls were taken out in kayaks by one instructor. In the rough conditions, all the kayaks capsized and the combined effect of the wind and remainder of the ebb tide was to carry the kayaks and their occupants away from the shore out to sea. The group was subsequently rescued by the RNLI, brought ashore to Port Oriel Harbour, where they were transferred by ambulance to Our Lady's Hospital, Drogheda for assessment. A seventh girl, who had become separated from the group managed, with some difficulty, to make her own way ashore. There were no injuries, fatalities or pollution associated with this incident. All times are quoted as local time.

2. FACTUAL INFORMATION

2.1 Name of facility:	Neptune Outdoor Education Centre.
Location:	Clogherhead, Co. Louth.
Accreditation:	Neptune Outdoor Education Centre held no accreditation at the time of the incident. Previously, the Centre had been accredited by the ISA for sailing and power boating only. The ISA do not accredit kayaking and the Irish Canoe Union has no record of any links with Neptune. The centre withdrew their ISA affiliation when the ISA certified senior instructor left Neptune in early 2010.
Instructor qualifications:	The Centre employs instructors who are qualified to FETAC level 5 in appropriate disciplines, however, the instructor involved in this incident held no formal qualifications although he was very experienced in all forms of water sports, including kayaking.
Kayaks:	RTM Mambo 'sit on top' style kayaks.
Instructor to pupil ratio:	In this case, the ratio was one to seven.
Group of pupils in kayaks:	Six girls from sixth class in National School aged 11 to 12 years.
Weather:	According to the local weather forecast provided by Met Éireann for the period from 06:00 hrs. to 14:00 hrs. on 26 May 2011, winds were west-north-west, veering north-westerly force 4 to 5 increasing force 5 to 6 and gusting up to gale force 8. A gale warning and small craft warning, issued by Met Éireann were in operation. The wind was blowing offshore. There was a significant swell with wave heights of 1.5 to 2m. Conditions were cloudy with sunny spells. Visibility was good.
Tide:	Low tide on the day was at 12:50 hrs., so the tide was almost fully out. Due to the low tide and gently sloping beach, the group were approximately 300m off the beach at the start.

Support boats: The Centre was equipped with two RIBs as support / rescue boats, however, neither was available at the time as the engine had been stolen from one and the other could not be started.

Communications: The instructor was equipped with a small handheld VHF radio enclosed in a waterproof case. He did not use it to contact shore based personnel during the incident.

- 2.2 The staff of St. Brigid's Girls National School had taken 6th class pupils to the Neptune Outdoor Adventure Centre for a day's adventure sports on a number of previous occasions with very satisfactory results.

3. EVENTS PRIOR TO THE INCIDENT

- 3.1 The group of pupils due to take part in the kayaking activity were kitted out with wet suits and buoyancy aids and each provided with RTM Mambo 'sit on top' style kayaks and paddles. It is understood that some of the buoyancy aids did not fit properly, nor were they checked.
- 3.2 At approximately 11:15 hrs., the group took their kayaks across the beach to the water's edge some 300m away, due to the low tide, and entered the water. The instructor was with them and led them away from the beach. A few of the girls detached themselves from the group and proceeded further away from the beach.
- 3.3 After approximately 30 minutes, as the kayaks moved further from the shelter of the shore, the sea became rougher. The instructor was bringing the group back towards the beach when they began to get into difficulty.

4. THE INCIDENT

- 4.1 The kayaks began to capsize dropping their occupants into the water. The instructor tried to marshal the girls and keep them all together along with the kayaks, two of which he tied together, but was only successful up to a point, managing to get some of the girls back onto their kayaks. The group began to fragment. At this stage, the instructor was also in the water.
- 4.2 At approximately 11:54 hrs., Mr. Declan Levins, Lifeboat Operations Manager (LOM) at the Clogherhead lifeboat station was in the lifeboat station. From the window, he spotted a group of kayaks from the next door adventure centre, which in his opinion was going too far offshore for the conditions that prevailed. As he watched, he noticed that they were drifting and being blown further offshore.
- 4.3 Mr. Levins consulted with the station mechanic, Mr. Pdraig Rath, who was also in the station at the time. They were concerned that the group was in trouble.
- 4.4 Mr. Rath spotted a shoreside member of the Neptune Outdoor Education Centre running up the beach towards the centre. He asked him if there was a problem and was told that the group appeared to be in difficulty. Two other centre personnel were preparing kayaks to go and assist, but Mr. Rath told them that they would launch the lifeboat.
- 4.5 At 12:06 hrs., the Clogherhead lifeboat launched and proceeded to the group of kayaks in the water, approximately 1km from the beach. When they arrived at the first group, they noticed that all the kayaks were empty and upturned. The lifeboat picked up three girls and one adult, who turned out to be the instructor. A second group of kayaks was soon spotted approximately 500m south and the lifeboat proceeded to them and at approximately 12:22 hrs., took two more girls from the water.
- 4.6 At this stage, the instructor was asked if there were any missing from his group. He appeared confused, but said that he thought they had all been picked up. The lifeboat crew made contact with the centre ashore who also appeared confused about the total number of people in the group.
- 4.7 Another member of the lifeboat crew was observing from the lifeboat station ashore with binoculars. He spotted something in the water approximately 1km south-east of the others and relayed this information to the lifeboat. The lifeboat immediately followed his directions and found a seventh person in the water no longer with her kayak. The sea state and prevailing conditions made it very difficult for the lifeboat crew to spot the person in the water and it was the assistance of the shore based individual on higher ground that made it possible to locate her. She was taken on board at approximately 12:40 hrs. The instructor was further questioned as to how many were in the group and in conjunction with the centre personnel ashore and the school girls teacher, it was confirmed that all the people in the group were accounted for.

5. EVENTS FOLLOWING THE INCIDENT

- 5.1 The group of schoolgirls and the instructor were taken in the lifeboat to Port Oriel Harbour where, at approximately 13:00 hrs., they were put aboard a number of ambulances and taken to Our Lady's Hospital in Drogheda. It is understood that they were discharged into the care of their parents very soon after.
- 5.2 All the kayaks were picked up by the lifeboat and brought ashore where they were reclaimed by Neptune Outdoor Education Centre personnel.

6. FINDINGS

- 6.1 Despite his wealth of experience in the field of marine sports, including kayaking, the instructor possessed no formal qualification for taking charge of a group of young persons on the water.
- 6.2 The instructor on the water was in possession of a VHF radio, however, he did not use it to make contact with persons ashore due to lack of opportunity.
- 6.3 No support boat or rescue craft, e.g. a RIB, was provided by the Neptune Outdoor Education Centre to assist in this type of emergency.
- 6.4 The wind and weather conditions at the time were not conducive to a group of 11 to 12 year old children with no experience of kayaking or water sports in general being on the water.
- 6.5 The ratio of one instructor to six pupils was insufficient for this particular group in the prevailing conditions.
- 6.6 It is understood that some of the schoolgirls involved in this incident had carried out a project on water / sea safety during the school year and were of the opinion that what they had learnt during the project had helped them to take the correct course of action when they were in the water, such as staying with their craft, floating with the waves on their backs and not panicking.
- 6.7 The girls, their parents and the Neptune Outdoor Education Centre staff all paid tribute to the efforts of the Clogherhead lifeboat and its crew during this incident.
- 6.8 It is noted that the Neptune Outdoor Education Centre has ceased to trade since this incident took place.

7. CONCLUSIONS

- 7.1 Due to the lack of any official register, this centre and all others like it are effectively unregulated with no monitoring of staff or operations.
- 7.2 All instructors should be suitably trained and qualified before taking groups of children on to the water.
- 7.3 If the group instructor had managed to make contact with personnel ashore, it is likely that assistance would have been provided much sooner.
- 7.4 The presence of a support boat such as a RIB would most likely have mitigated the need for the lifeboat to launch as it would have been in a position to assist the kayakers before the situation became out of control.
- 7.5 The gale warning and small craft warning issued by Met Éireann that were in operation on the day of the incident were either not known about or not heeded.
- 7.6 In the absence of a support boat, the ratio of instructor to pupils was inadequate.

8. RECOMMENDATIONS

- 8.1 It is recommended that the Minister for Transport, Tourism and Sport review the existing arrangements for activity centres involved in marine activities and in particular to develop standards for such activities dealing with:
- a. Safety Management Systems of Centres
 - b. Qualifications of Instructors
 - c. Safety of the equipment they use.
- 8.2 It is recommended that all outdoor adventure centres ensure that the instructor on the water with a group carries a suitable means of communication with him / her at all times in order to communicate with personnel ashore and that they are trained in its use.
- 8.3 It is recommended that all outdoor adventure centres ensure that a designated staff member ashore is trained in the use of VHF and maintains constant contact with instructors who are afloat.
- 8.4 Where a group of young and / or inexperienced students is taken any distance offshore in vessels such as kayaks, it is recommended that all outdoor adventure centres provide a support boat to be in attendance to tend to any unforeseen circumstances and prevent potentially catastrophic situations.
- 8.5 Before any activity is undertaken on the water, it is recommended that a responsible person at all outdoor adventure centres obtains the local weather forecast and that any such activity is cancelled or postponed when a gale warning or small craft warning is in operation, particularly when that activity involves inexperienced persons.
- 8.6 It is recommended that all outdoor adventure centres carefully review the instructor to pupil ratio based on the weather, level of expertise and age of the pupils, etc and the number of instructors be increased where necessary. This is especially the case where a support boat is not available.

9. LIST OF APPENDICES

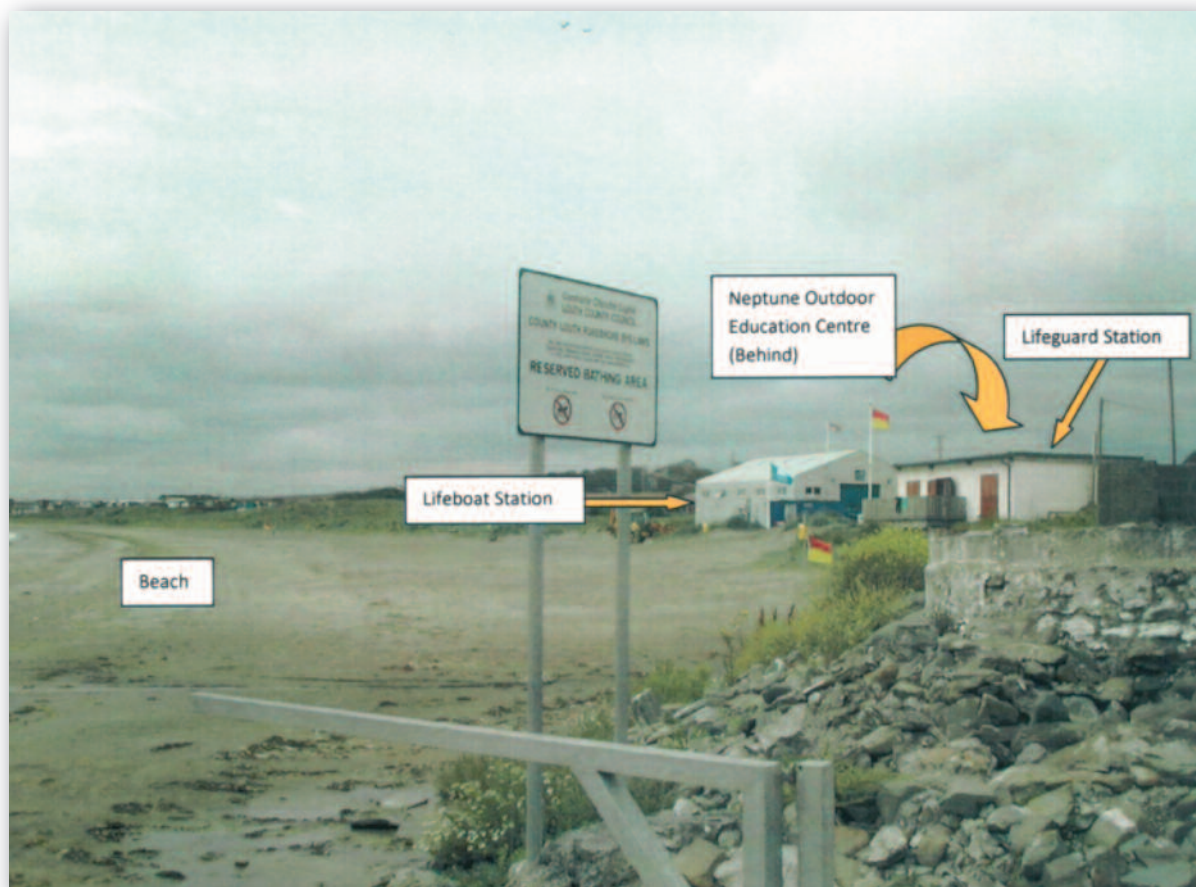
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APPENDIX 9.1

Appendix 9.1 Photo of similar kayaks.



Appendix 9.2 Photo showing beach and lifeboat station.



Appendix 9.3 Photo of Clogherhead beach with Neptune Outdoor Education Centre group in the water.



Appendix 9.4 Photo of Neptune Outdoor Education Centre.



Appendix 9.5 Met Éireann Weather Report.



MET ÉIREANN
The Irish Meteorological Service

Glasnevin Hill,
Dublin 9, Ireland.

Cnoc Ghlas Naíon
Baile Átha Cliath 9, Éire.
www.met.ie

Tel: +353-1-806 4200
Fax: +353-1-806 4247
E-mail: met.eireann@met.ie

Ms Helen Conway
MCIB
Leeson Lane
Dublin 2

3/8/2011

Our Ref. WS3018/2C_14219
Your Ref. MCIB/203

Re: Estimate of weather conditions in the sea area off Clogher Head, Co. Louth at position 53° 48'N and 6° 12'W on the 25th and 26th May 2011.

Dear Ms Conway,

Please find enclosed the above report. Also attached are the texts of the Sea Area Forecasts in operation at that time. There were Gale Warnings and Small Craft Warnings in operation throughout.

Yours sincerely,

Evelyn Murphy B.Sc. M.Sc. Meteorologist
(Research & Applications Div)
Ph 01- 8064290 Fax 01 – 8064247
Email: evelyn.murphy@met.ie



Appendix 9.5 Met Éireann Weather Report.



MET ÉIREANN *The Irish Meteorological Service*

Glasnevin Hill,
Dublin 9, Ireland.

Cnoc Ghlas Naíon
Baile Átha Cliath 9, Éire.
www.met.ie

Tel: +353-1-806 4200
Fax: +353-1-806 4247
E-mail: met.eireann@met.ie

3/8/2011

Our Ref. WS3018/2C_14219
Your Ref. MCIB/203

**Estimate of weather conditions in the sea area off Clogher Head, Co. Louth at position 53° 48'N and 6° 12'W ,
between 6 hours and 14 hours on the 26th May 2011
with an overview of the general weather on the 25th and 26th May 2011.**

General Situation on the 25th and 26th May 2011.

A low pressure area in the Atlantic moved eastwards crossing northern counties of Ireland during the evening of the 25th May 2011. Associated frontal troughs moved eastwards across the Clogher Head area, together with fresh to strong southerly winds, gusting to Gale Force.

After midnight, as the depression centre moved into the North Channel, the winds eased light to moderate for a time and veered south-west to westerly.

The Low pressure centre continued to move eastwards over Britain during the morning of the 26th and the winds veered west-north-west, later north-westerly and increased fresh to strong and gusty in the Clogher Head sea area.

Details for the sea area off Clogher Head between 6 hours and 14 hours on the 26th May 2011.

Winds: west-north-west winds veered north-westerly during the morning. The winds were moderate to fresh, Force 4 to 5 at first, then increased fresh to strong Force 5 to 6 by mid morning with some stronger gusts, up to Gale Force.

Weather: It was mostly cloudy at first but sunny spells became longer in the afternoon. Some showers throughout were mostly light, but there were a few heavier showers with lightning nearby in the afternoon.

.....continued overleaf

Appendix 9.5 Met Éireann Weather Report.



MET ÉIREANN
The Irish Meteorological Service

Glasnevin Hill,
Dublin 9, Ireland.

Cnoc Ghlas Naíon
Baile Átha Cliath 9, Éire.
www.met.ie

Tel: +353-1-806 4200
Fax: +353-1-806 4247
E-mail: met.eireann@met.ie

WS3018/20_14219 continued.....

Visibility: good

Waves: Moderate away from the shelter of the shore, 1 to 2 metres Significant wave height,

Sea temperature: 10.5°C

Mid Irish Sea weather buoy M2 reports as follows

Time	Significant wave height (metres)	Maximum wave height (metres)	Mean wave direction (degrees from North)	Mean wave period (sec)	Wind direction (degrees from North)	Gust speed (knots)	Wind speed (knots)	Sea temperature (°C)
26-may-2011 06:00:00	1.1	1.7	187	4.5	298.1	26.4	16.9	10.6
26-may-2011 07:00:00	1.2	1.5	185.6	4.3	298.1	23.7	18.7	10.6
26-may-2011 08:00:00	1.1	1.6	208.1	4.1	302.3	23.2	17.8	10.6
26-may-2011 09:00:00	1.3	1.6	247.5	4.1	310.8	21.9	17.3	10.5
26-may-2011 10:00:00	1.3	1.6	272.8	4	316.4	26.4	21	10.5
26-may-2011 11:00:00	1.3	1.7	279.8	4	315	26	20.5	10.5
26-may-2011 12:00:00	1.6	2	298.1	4.1	312.2	27.3	21.4	10.5
26-may-2011 13:00:00	1.7	2.5	306.6	4.3	315	34.6	26.4	10.5
26-may-2011 14:00:00	1.9	2.6	310.8	4.6	313.6	31	23.7	10.5
26-may-2011 15:00:00	2	3.3	329.1	4.8	316.4	24.1	19.1	10.5

Evelyn Murphy B.Sc. M.Sc. Meteorologist
Research & Applications Division
Met Éireann



10. CORRESPONDENCE RECEIVED

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Note: The address and contact details of the individual respondents have been obscured for privacy reasons.

Unit G5 Pottery Business Centre
Pottery Rd
Dun Laoghaire
Co Dublin

Ms Eve Reddin
MCIB
Leeson Lane
Dublin 2

23/04/2012

Your Ref: MCIB 12/203

Dear Ms Reddin

Thank you for the copy of the draft report sent to me on the 28th March.

I act on behalf of the board of the now Defunct Neptune Outdoor Education Ltd.

I was quite disturbed by the heading on the letter 'Fatal Incident'. I would request that this be removed since there were not only no fatalities but indeed no injuries. I trust that this is just a misprint and have treated it as such.

There are just a few issues of slight inaccuracy in the report which are of concern. I have listed them in page 2. We would appreciate their amendment for inclusion in the final report.

Other than those few points we will support the report fully.

Yours Sincerely



Peter Cronin



Comments and Requests for changes in the report of MCIB. Reference MCIB 12/203

1. Synopsis
There is no reference to the fact that when the group were taken on the water there was a force 3 wind locally.
There is no reference to the fact that the group were being brought ashore because of the change in weather conditions at the time of the incident
There is no reference to the key fact that in spite of instruction a number of the group deliberately detached themselves from the instructor and paddled out to sea. This was the actual cause of the incident.
2. Factual Information
Accreditation
The company withdrew from the ISA scheme in 2011. It did not lose its accreditation
Weather:
When the group were taken on the water there was a force 3 wind locally. (as per p 18 of the report) The swell also developed later.
3. Events Prior
3.1 The instructor led them to a point parallel to the shore in the shallows similar to the photo at appendix 9.3 and in line with the safety policy. (the point as it exists implies something quite different)
3.3 They were on the water for some 30 minutes before conditions worsened
4. The incident
4.1 The instructor got most of the girls back into or onto kayaks
5. No Issues
6. Findings
6.3 There were extenuating circumstances which could be noted here
7. Conclusions
7.2 Suggest Fetac L5 and perhaps the exclusion of the word children
7.5 The actual conditions were f3 when the group set out
8. Recommendations
We fully support the recommendations.

Appendix 9.2 Picture Label Lifeguard station is in fact part of the Centre made available by the owners for use by lifeguards.

MCIB RESPONSE

The MCIB notes the contents of this correspondence and has made the necessary amendments. The Board did not find any evidence that a number of the group deliberately detached themselves from the instructor and paddled out to sea.



Royal National Lifeboat Institution

Chairman: Admiral the Lord Boyce KC CBE DBE DL
Chief Executive: Paul Bosser

RNLI (Trading) Ltd 01073377, RNLI (Sales) Ltd 200240 and RNLI (Interpreters) Ltd 1764500
are all companies registered at West Quay Road, Poole, Dorset, BH10 1HE

From:
Divisional Base Ireland
Airsides, Swords, Co. Dublin, Ireland
Tel (01) 8900460
Fax (01) 8900458

Mr. John O'Donnell,
Chairman
Marine Casualty Investigation Board
Leeson Lane
Dublin 2

19th April 2012

Sir,

INCIDENT OFF CLOGHERHEAD BEACH, CO. LOUTH ON 26TH MAY 2011

Reference: Yr letter MCIB/12/203 dated 28th March 2012.

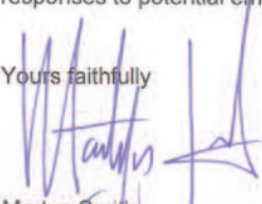
Firstly may I thank the board of the MCIB for giving the RNLI the opportunity to comment on their investigation into the events that took place off Clogherhead on 26th May 2011.

There is no doubt about the immense value that well planned and conducted adventurous water activities have in the development of young people. Amongst other things it encourages self reliance, responsibility, team work and a respect for the sea as well as being a source of fun.

On this occasion the combination of the vigilance of the lifeboat crew, common sense on the part of the school pupils and sheer luck resulted in a positive outcome and the avoidance of what so easily could have been an absolute tragedy.

This incident is a salutary reminder as to why those who lead any form of water based adventurous activity should be fully prepared. This includes the availability of experienced leadership, the provision of correct and well maintained equipment, the correct training, sound planning, effective communications and an appropriate assessment on whether or not an activity should take place in the prevailing environmental conditions. Safety should be the absolute priority and safety management plans should include responses to potential emergency situations.

Yours faithfully


Martyn Smith
RNLI Inspector of Lifeboats
Ireland



The RNLI is the charity that saves lives at sea

Charity number CHY 2676 in the Republic of Ireland and registered in England and Wales (209603) and Scotland (SC037736)

MCIB RESPONSE

The MCIB notes the contents of this correspondence

Marine Casualty Investigation Board,
Leeson Lane
Dublin 2

Dear Eve Reddin,

We are writing to you in regards to the report we received into the investigation of the kayaking incident in Clogherhead REF MCIB/12/203.

We are the parents of the last girl to be rescued by the RNLI in Clogherhead on the 26 May 2011. We are very happy with the thoroughness of the investigation however there are a few inaccuracies in which we would wish to highlight.

1. Page 4 : Instructor to pupil ratio

The ratio was 1:7 not 1:6

One of the students involved managed to kayak back to shore with great difficulty and helped to raise the alarm. Maybe this is why there was so much confusion about numbers.

2. Page 7 4.7

When our daughter fell into the water she lost her kayak straight away and could not retrieve it. When she was picked up she was NOT with her kayak as stated.

We appreciate the time and effort that you put in to this investigation and if you wish to contact us on these issues or any other issues please do not hesitate to contact us on the above numbers.

Thanking you again,
Elaine and Gary Fowler.



MCIB RESPONSE

The MCIB notes the contents of this correspondence and has made the necessary amendments.

Marine Casualty Investigation Board,
Lesson Lane,
Dublin 2.

Ref: MCIB/12/203

Dear Ms. Reddin

With regards to the draft report of the investigation into the incident involving Neptune Outdoor Education Centre off Clogherhead, Co. Louth on 26th May 2012, I would like to make the following observations.

With reference to **section 3.1** when the girls were been kitted out with lifejackets – not all the jackets fitted properly and were not checked by the instructor before going out in the water.

With reference to **section 4.7**, my daughter is in no doubt that the seventh person found in the water was **not** still with her kayak contrary to what is stated in the report.

With reference to **section 6.2** my daughter was with the instructor in the water and was one of the first group to be picked up by the lifeboat. She said that at no time did she see the instructor using or in possession of a VHF Radio. He instead was shouting at the people on the shore trying to attract their attention. She thought that he was doing this because he was panicking as she was aware that he couldn't be heard onshore.

With reference to **section 6.6** – my daughter had not done a course on water/sea safety, but did her best to follow instructions from the instructor. She was one of the lucky ones and was with him all the time.

Yours Sincerely,
Douglas Bolger
Josephine Bolger



MCIB RESPONSE

The MCIB notes the contents of this correspondence and has made the necessary amendments.

