

Protected B



DFO Hazardous Occurrence Investigation Report
into the fatality on board the Conservation and Protection Vessel
C18428NB on July 10, 2017

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1. Executive Summary

On July 10th, 2017 at approximately 10:30 am, in the waters east of Miscou Island, Mr. Joseph Howlett, a volunteer with the Campobello Whale Rescue Team was fatality struck by a North Atlantic Right Whale during a whale disentanglement rescue mission on board a Fast Response Rescue Craft (FRC) owned by the Department of Fisheries and Oceans Canada (DFO).



Although the victim is not an employee of Fisheries and Oceans Canada, the department has an obligation under the Canada Labour Code, Part II to investigate all hazardous occurrences that takes place on their property and work places. Since the incident occurred on-board a DFO vessel, the investigation and analysis of the hazardous occurrence allowed the department to get a better understanding of the contributing factors of the circumstances surrounding the events and has produced information that will lead to the identification of source causes and recommendation of corrective actions to be taken by the department. The investigation will also serve to prevent and mitigate similar incident in the future.

From the on-set, immediately after the incident, the department ceased all assistance in whale disentanglement operations until further notice. During the investigation additional information was analysed and validated to ensure that deviations in the normal work tasks were acted upon in a timely manner to address certain aspect of the methods of response and operations used for whale disentanglement operations in order to protect the staff and others people given access to the workplace.



2. Details of the events

2.1. Date and Time of the Hazardous Occurrence

July 10th, 2017 at approximately 10:30 am

2.2 Location of the Hazardous Occurrence

The hazardous occurrence took place in the waters of the Gulf of St Lawrence, 20 Nm east of Miscou Island on board a Conservation and Protection FRC.

2.3 Identification of the witnesses on board the FRC

- a. Paul Arseneault, DFO, C&P supervisor
- b. Marie-Josée Landry, DFO, C&P officer
- c. Allain Landry, DFO, C&P Officer
- d. Philip Hamilton, Volunteer with the New England Aquarium for right whale research

2.4 Identification of the Victim

Joseph Howlett, resident of Campobello, NB. Mr. Howlett was a volunteer with the Campobello Whale Rescue Team. He had 15 years experience in whale disentanglement operations, including with North Atlantic Right Whales (NARW).

2.5 Description of the injuries

Mr. Howlett was struck [REDACTED] by the tail of the whale once the whale was freed from the ropes. [REDACTED]

2.6 DFO equipment used at the time of the hazardous occurrence

- a. 9.3m Rosborough Rough Water 9.11 (vessel) owned by DFO

2.7 Weather condition at the time of the events



Sunny with clouds, wind of approx. 25 km/h. Small waves were present.

3. Description of the events

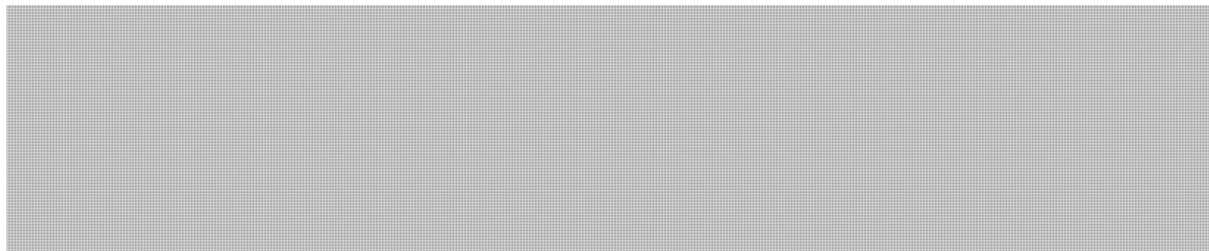
On July 10, 2017, at approximately 10:30 am, a DFO Fast Rescue Craft (FRC) from the Gulf Region was assisting in a whale disentanglement operation of a NARW that was entangled in fishing gear approximately 20 Nm east of Miscou Island. This operation was conducted in concert with the Shelagh, a Research vessel from the Canadian Whale Institute and a National Oceanic and Atmospheric Administration (NOAA) aircraft patrolling above the area.

On board the FRC for DFO at the time of the operation was Paul Arseneault, C&P supervisor, Marie-Josée Landry and Allain Landry both C&P officers with DFO Gulf region. During the process, the captain of the Shelagh, Joe Howlett and Philip Hamilton came onboard the DFO FRC in order to have a more stable platform. This allowed them to get closer to the whale in order to cut the heavy lines around it.

Although this is not normal practice for DFO to be involved directly with whale disentanglement operations, they allowed Mr. Howlett and Hamilton on board the FRC to attempt to free the whale from the ropes.

Once on board the FRC, the crew surveyed the area around the whale to determine the course of action. At that point Joe Howlett took his place in the bow of the FRC and Philip Hamilton was assisting Paul Arseneault in the cuddy in order to position the FRC for the operation of the disentangling procedures.

The operation consisted of approaching the whale in order to cut the lines with a long pole equipped with a makeshift knife. Joe Howlett was successful in cutting the first line when the whale flipped its tail and hit the water. Allain Landry was splashed during the event. Paul Arseneault re-positioned the FRC paralleled to the whale and after the third attempt Joe Howlett was successful in cutting the lines which freed the whale. At that point, the whale flipped his tail over the water and on its way down fatally struck Joe Howlett [REDACTED] in the front of the bow of the FRC.





The DFO crew was met by the area managers at the port of Shippagan and were offered debriefing sessions and assistance through EAP. No DFO employees were injured during the events.

4. Information reviewed and analysed during the investigation

- a. Statements received from members;
- b. Photography and videos;
- c. Timeline from C&P;
- d. Fisheries Act;
- e. Marine Mammal Regulations;
- f. Species at Risk Act;
- g. Marine Mammal Response Program;
- h. C&P THA - 001 - Operating a Motorized Program Vessel
- i. C&P THA - 038 - responding to Marine Animal incident;
- j. C&P Safe Work Procedures – 038 Responding to Marine Animal Incidents
- k. Training received by the members for whale disentanglement operations;
- l. Directive C&P Ride-Along;

5. Areas identified for contributing factors

During the investigation information from various sources were acknowledged and analysed in order to identify areas that could have been contributing factors in the events of July 10th, 2017.

The investigation focussed on four areas identified in accordance with employer's responsibilities in line with the *Canada Labour Code, Part II*. The areas have been identified as follow:

- a. Granting of access to non-DFO staff, notably in relation to the *Canada Labour Code, Part II* under sub-sections 125 (1) which states:
"Without restricting the generality of section 124, every employer shall, in respect of every work place controlled by the employer and, in respect of every work activity carried out by an employee in a work place that is not controlled by the employer, to the extent that the employer controls the activity,"

125(1) (II) provide every person granted access to the work place by the employer with prescribed safety materials, equipment, devices and clothing;



125(1) (w) ensure that every person granted access to the work place by the employer is familiar with and uses in the prescribed circumstances and manner all prescribed safety materials, equipment, devices and clothing;

125(1) (y) ensure that the activities of every person granted access to the work place do not endanger the health and safety of employees;

125(1) (z.14) take all reasonable care to ensure that all of the persons granted access to the work place, other than the employer's employees, are informed of every known or foreseeable health or safety hazard to which they are likely to be exposed in the work place;

- b. Training and supervision of the members in relation to whale disentanglement operations.

CLC Part II, 125(1) (q) provide, in the prescribed manner, each employee with the information, instruction, training and supervision necessary to ensure their health and safety at work;

(s) ensure that each employee is made aware of every known or foreseeable health or safety hazard in the area where the employee works;

- c. Specific hazards related whale disentanglement operations.

CLC, Part II 125 (1)(z.03) develop, implement and monitor, in consultation with the policy committee or, if there is no policy committee, with the work place committee or the health and safety representative, a prescribed program for the prevention of hazards in the work place appropriate to its size and the nature of the hazards in it that also provides for the education of employees in health and safety matters;

- d. DFO Policies and procedures specific to the response whale disentanglement operations

C&P Ride-Along Directive;

C&P THA - 001 - Operating a Motorized Program Vessel;

C&P THA - 038 - responding to Marine Animal incident;

C&P Safe Work Procedures – 038 Responding to Marine Animal Incidents



5.1 Causal Factors Analysis

a) Granting access to non-DFO staff on DFO work sites

The *Canada Labour Code, Part II* requires that a number of precautions be taken by the employer when persons are granted access to a work site. This includes providing every person granted access to the work place with prescribed safety materials, equipment, devices and clothing.

In the case of prescribed safety equipment related to DFO vessels, adherence with section 5 of the Small Vessel Regulation is required. DFO adheres with the Regulation and this equipment was available during the operation.

With respect to safety equipment required for the specific tasks related to whale disentanglement, none was available on-board the FRC as DFO employees are only involved in the tagging of the whales for position location which does not require specific safety equipment.

Mr. Howlett and Hamilton brought their own equipment on board the FRC to conduct the whale disentanglement operation. The equipment in question consisted of a long pole equipped with a knife used to cut cables restraining the whale.

The CLC Part II also includes ensuring that every person granted access to the work place is familiar with and uses in the prescribed circumstances and manner all prescribed safety materials, equipment, devices and clothing.

Although not documented at the time, Mr. Howlett was qualified to conduct this type of operation and he had conducted similar operations in the past. He had over 15 years experience in whale disentanglement.

Finally, the CLC, Part II also requires that the activities of every person granted access to the work place do not endanger the health and safety of employees. It also involves that all reasonable care is taken to ensure that all of persons granted access to the work place, other than the employer's employees, are informed of every known or foreseeable health or safety hazard to which they are likely to be exposed in the work place.

Whale disentanglement operations can be very hazardous for interveners as whales are unpredictable and can at any time respond aggressively. This was communicated by Philip Hamilton to the staff on-board the FRC during the operation on the day of the event.



Observations

1. DFO FRC had the required safety equipment on-board in regards to nautical requirements;
2. No DFO policy is currently in place to allow non-DFO personnel to come on board DFO vessels to conduct whale disentanglement operations. C&P has a ride along policy but is more targeted towards educational purposes;
3. The Staff on board the FRC did not confirm with Mr. Howlett and Hamilton who were granted access on board the FRC, that they had the knowledge, experience and training to conduct the whale disentanglement operations;
4. No safety briefing was given to Mr. Howlett and Hamilton prior to on-boarding the FRC and prior to the operation;
5. DFO staff confirmed that they were made aware by Phillip Hamilton of the risks associated with Right Whales and the fact that they could at any time react aggressively as was the case on July 10th, 2017;

Recommendation #1

It is recommended that a Policy instrument be developed to provide clear guidelines on granting of access to non-DFO personnel on-board DFO operations on water. The guidelines should explain clearly the duties and responsibilities of DFO staff prior to granting access to non-DFO staff in operational zones and during specific events as well as the restrictions.

The guidelines should include the requirement to confirm if the people granted access have the experience, knowledge and training required to execute the tasks at hand and that they have been briefed on any hazards associated with the operations.

These verifications must be conducted before the activities are taking place to ensure the safety of staff and non-DFO personnel.

b) Specific hazards related whale disentanglement operations.

As part of the CLC, Part II requirement to develop, implement and monitor a program for the prevention of hazards in the work place, the employer must identify and assess hazard in the workplace and take preventive measures to address them.

Due to the skills, knowledge and specific risks associated with whale disentanglement operations, a task hazard analysis should be completed to identify preventive measures



and personal protective equipment to be provided where hazards cannot be removed or managed in a safe way.

Observations

1. The current THA and SWP for Responding to Marine Animal Incidents does not address specific hazards related to the whale disentangling operations;
2. No risk assessment has been conducted specifically for the whale disentanglement operations;
3. The staff are not aware of all the hazards associated with whale disentanglement operations

Recommendation #2

Due to the specific nature of this type of operation and with the unique hazards that personnel may be exposed to, a safe work procedure and a task hazard analysis, specific to whale disentanglement operations should be developed.

Staff must be instructed and trained in those procedures to ensure that they are aware of the safety precautions to be taken and to ensure that control measures are identified and in place.

c) Training and supervision of the members in relation to whale disentanglement operations.

In regards to responding to similar type of operations, the CLC Part II requires that the employer must provide each employee with the information, instruction, training and supervision necessary to ensure their health and safety at work. This also entails that each employee must be made aware of every known or foreseeable health or safety hazard in the area where the employee works.

Whale disentanglement operations are considered highly hazardous in nature and must be done in a very specific way. The training received by the staff consisted of approaching the whale and setting up a location tracking system on the whale and then retreat to a safe zone.

Observations

1. Training was received by the same instructor by the staff on board the FRC;



2. Training was limited to approaching the whale, setting up a location tracking system and retreat;
3. The staff confirmed that they have not been trained or received prior instructions on the behaviors of each various species;
4. The specific level of training for each of the tasks performed by the staff during the operation was not part of the training they initially received.

Recommendation #3

It is recommended that C&P conducts a risk assessment to determine the level of training required by the staff if they will be involved in similar operations in the future. Due to the nature specific to each species of whale, it is recommended that the training addresses specific type of approach and response to each species.

The training should address the various components of the operations to ensure that all the personnel is aware of their duties and responsibilities as well as being aware of the various hazards each tasks represents.



6. Conclusion

During the investigation and in the review of all the information and the statements received by C&P staff, it is clear that whale disentanglement operations are not a simple task. People who do this type of operation must have the knowledge, the experience and the training necessary to do it safely and often in an uncontrolled environment. Mr. Howlett was qualified to conduct this type of operation and he had conducted similar operations in the past. He had over 15 years' experience in whale disentanglement.

The investigation was able to seek out the details surrounding the events of July 10th, 2017 and to identify the factors that contributed to the death of Mr. Joseph Howlett as well as identify areas of concerns for DFO.

From the onset, DFO staff are not involved directly with whale disentanglement operations. The training they have received is limited to approaching the whale for localisation and to retreat. On the day of the incident they allowed Mr. Howlett and Hamilton on board the FRC to attempt to free the whale as it allowed Mr. Howlett to have a more stable platform closer to the whale.

The process of the operation undertaken that day was typical for the type of response to remove ropes and fishing gear from the entangled whale. No other procedures or actions have been identified that could have prevented the tragic event.

From an operational perspective and given the circumstances surrounding the events, the investigator found no evidence that the department could have prevented the incident. 

However, during the investigation, some gaps were identified in the process for these types of operations as well as other areas of administrative concerns. DFO needs to develop and implement policies and procedures in regards to the granting of access as well as develop a set of detailed safe work procedures for this type of operation. DFO must also ensure that all members are trained in those procedures and that they understand their roles and responsibilities.

End of report.



Daniel St-Onge

Investigator

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