

Spicer, Roberta (NRCAN/RNCAN)

From: Ian White <diverian68@hotmail.com>
Sent: 19-Mar-21 1:59 PM
To: Phillips, Kim (NRCAN/RNCAN)
Subject: Draft Review of Offshore Occupational Health and Safety Regulations
Attachments: IMCA-Briefing-1385-Diver-training-certificates-IMCA-acceptance-criteria.pdf; Ian White comments OHS Regulations Stakeholder 05-Mar-21.docx

Hello Kim

Thank you for including me in the review of this draft. I have attached a comment sheet and included an IMCA competency & training document (IMCA 07/17) for review.

I hope this is helpful to you.

Kind Regards

Ian

From: Phillips, Kim (NRCAN/RNCAN) <kim.phillips@canada.ca>
Sent: March 5, 2021 3:00 PM
To: Phillips, Kim (NRCAN/RNCAN) <kim.phillips@canada.ca>
Subject: Draft Offshore Occupational Health and Safety Regulations

Hello,

As you are aware, Natural Resources Canada, together with federal and provincial partners and regulators, have been working to develop new Occupational Health and Safety (OHS) regulations for the Canada-Newfoundland and Labrador and Canada-Nova Scotia offshore areas.

You have been identified as a key stakeholder who contributed comments in earlier phases of engagement that took place between 2016 and 2018. We are interested in obtaining your input on the draft regulations now, to ensure we have captured all perspectives ahead of pre-publishing in *Canada Gazette*, Part I, which is anticipated in summer 2021.

To ensure the regulations are completed as quickly as possible, you will have **2 weeks** to review and provide comments by **March 19, 2021**.

Attached is a short paper that provides further detail, a copy of the draft regulations, and a template to be used for submitting your comments.

I am available in the coming weeks if you wish to discuss the regulatory process or the regulations further.

Kind Regards,

Kim Phillips
Senior Regulatory Officer | Agente principale de réglementation
Natural Resources Canada | Ressources naturelles Canada
kim.phillips@canada.ca | +1 (902) 402-0285

STAKEHOLDER COMMENTS ON DRAFT CANADA- NL OFFSHORE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

Reviewer/Comments From: _____ Ian White, Offshore Air Diving Safety Specialist March 19, 2021 _____

#	Section of Draft OHS Regulation	Problem with Insufficient Protection Against the Hazard	Problem Created from Technical or Commercial Perspective	Proposed solution/changes
1.	Prohibitions 164 (b)		Technical wording Wording change to capture all surface-supplied mixed gas diving mixtures and techniques.	Proposed solution Wording change (b) surface-supplied diving using a helium-oxygen breathing mixture. (b) using surface-supplied mixed gas diving techniques.
2.	Dive safety specialists 166 (1) (a)		Unfortunately, this qualification title “Dive safety specialists” has been copied that may create confusion. CSA’s Inshore Dive Safety Specialist has no offshore qualifications or experience required.	Proposed solution Wording change; Dive safety specialists to; Offshore Dive Safety Specialists.
3.	Dive safety specialists 166 (1) (a)	Insufficient Protection Referencing CSA Z275.2 will require continuous government oversight and input from offshore subject matter expertise.		Proposed solution Allow the Chief Safety Officer some control. Add; and acceptable to the chief safety officer
4.	167 (1)(a)	Insufficient Protection Emergency planning must include vessel and diving teams to work together.		Proposed solution Wording change “(a) set out procedures for responding to all vessel or dive system emergencies that have the potential to compromise divers’ safety;” (a) set out procedures for responding to all vessel and dive system emergencies that have the potential to compromise divers’ safety;
5.	Emergency response plan 167 (c)	Insufficient Protection Any loss in communication the dive should be terminated		Proposed solution Wording change (c) set out procedures to be followed in the case of total loss of communication; Proposed change;

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				(c) set out procedures to be followed in the case of any loss of communication;
6.	Dive project plan 169 (1) (a) (iv)	Insufficient Protection Referencing CSA Z275.2 will require continuous government oversight.		<p>Proposed solution Reference to CSA Z275.2 not required as only duration times are needed. Recommend simply developing the wording.</p> <p>Example (iv) the expected duration of the dive which must, in the case of a saturation dive, conform to the time limits for saturation set out in CSA Group standard Z275.2, Occupational Safety Code for Diving Operations, Proposed new wording (iv) the expected duration of bell runs. All bell runs shall does not exceed 8 hours. Two-person bells The lock-out time of divers is up to a maximum of 4 hours. Three-person bells Two divers may 'lock-out' together. The third person performing the duties of a bellman and should remain dry unless called upon to 'lock-out' in an emergency. Each diver shall lock-out up to a maximum of 6 hours with a refreshment break taken within 4 hours of the start of the 'lock-out'. The intention of the refreshment break is to ensure adequate hydration and to reduce fatigue.</p>
7.	Dive contractor obligations 170 (1) (a)	Insufficient Protections Dated guidance		<p>Proposed solution Remove; Maritime Organization Resolution A.831(19) of 23 November 1995, Code of Safety for Diving Systems, 1995;</p> <p>Replace or include a requirement to conform to "IMCA D 014 international code of practice for offshore diving". A description below of what IMCA D014 guidance provides;</p>

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				<p>From IMCA’s website “While national regulations take precedence over the code, it is a strong and recognised source of good practice. This code provides advice on ways in which diving operations can be carried out safely and efficiently. It outlines minimum requirements, creating a safe ‘level playing field’ for all diving contractors. It also recommends how clients and contractors may analyse the safety implications of commercial requirements.”</p>
<p>8.</p>	<p>Dive contractor obligations 170 (1) (b)</p>	<p>Insufficient protection</p> <p>Risk; Offshore diving competencies not achieved or maintained. A concern CSA Z275.4 will not ensure competencies are met and maintained to an adequate international level. Continuous government oversight and input from offshore subject matter experts will be needed to ensure competencies meet an acceptable level. For some time, CSA has identified that support for Z275.5 training standard will end. Z275.5 provides learning objectives that are Specific, Measurable, Achievable, Relevant, and Time-bound. It establishes the responsibilities and requirements of not only Canadian diver training institutions but also certification bodies and is the training path to achieve Z275.4 competency. The loss of Z275.5 may affect Canada’s international recognition. Reference to “IMCA D 07/17 Diver Training Certificates – IMCA Acceptance Criteria” is needed to fill the training gap left behind by the loss of Z275.5 and to ensure offshore competencies are achieved.</p>		<p>Proposed solution Reference the following international Offshore guidance “IMCA D 07/17 Diver Training Certificates – IMCA Acceptance Criteria”. This guidance addresses competencies of diving personnel at all levels including IDRCF Closed bell diver training guidance ensuring international minimums are met and maintained. This guidance is suitable to replace CSA Z275.4, but as a minimum IMCA D 07/17 requires referencing to ensure adequate training levels are maintained into the future that address the needs of the Canadian offshore diving industry. Propose changes;</p> <p><u>and/or “IMCA D 07/17 Diver Training Certificates – IMCA Acceptance Criteria.”</u></p> <p>To ensure regulators have the authority to address specific training needs into the future also include;</p> <p><u>and</u> acceptable to the Chief Safety Officer.</p>

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9.	170 (1) (f)	Insufficient protection Lack of redundant communication with the diving physician.		Proposed solution Wording change: (f) any person performing first aid on a diver has unimpeded redundant access to a means of communicating with the diving physician specialist;
10.	170 (1) (p), (i) Regarding DP Vessel & diving Ops	Insufficient protection. Diving incidents in the offshore diving industry involve DP operations highlight the need for safe guidance.		Proposed solution reference the following guidance; Conform to, "IMCA D 010 Diving Operations from Vessels Operating in Dynamically Positioned Mode"
11.	170 (1) (k) (k) breathing mixtures are supplied to divers at a rate appropriate to the depth and circumstances of the dive but no less than 62.5 L per minute;		Technical wording require greater detail More wording needed. 62.5 litre/minute if applied to a diver's bailout may require a change in the type of emergency bailout system for example a rebreather system. Consumption rates are also used to calculation the maximum distance from the bell a diver may work.	Proposed solution Identify Working diver's consumption rate (e.g., 35l/min). Diver's emergency consumption rate (e.g., 43.5l/min).
12.	170 (1) (r)		"(r) every diver's location in the water is continuously monitored for the duration of each dive; " Does this statement refer to diver electronic location systems (transponder beacon) for both surface supplied and closed bell diving?	Proposed solution Wording change; (r) every closed bell diver's location in the water is continuously monitored for the duration of each dive lock-out ; New section proposed wording (x) every diver's depth is continuously monitored by means of an electronic depth monitoring system for the duration of each dive;
13.	170 (1) (u)		Technical wording; Possible missing word	Proposed solution Wording change: (u) decompression is carried out only in accordance with the applicable decompression table identified in the dive project plan , except in extenuating circumstances and in consultation with a diving physician specialist;

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14.	170 Surface-supplied diving (2)	<p>Insufficient Protection Canada relies on the services of foreign companies supplying equipment & vessels. The environment and standards some companies may work to are often not suitable for diving operations in Canada. Canada's offshore oil and gas fields operate in extreme weather conditions and over great distances. This requires equipment to meet adequate levels.</p>		<p>Proposed solution reference the following guidance to ensure adequate equipment is in place to a safe workplace;</p> <p>Conform to, "IMCA D 023 Diving Equipment Systems Inspection Guidance Note (DESIGN) for surface orientated (air) diving systems"</p>
15.	170 (2) (a)	<p>Insufficient Protection Only one Diver Medical Technician would require the diver not to used for diving operations remaining available to response to diving an emergency.</p>		<p>Proposed solution Increase the number of Diver Medics in the dive team. Wording change; (a) at least one member two members of the dive team at the dive site at all times holds a valid diving medical technician certificate;</p>
16.	170 (2) (e)	<p>Insufficient Protection Minimum acceptable size of chamber offshore not identified. 60" (150mm) chambers are capable of providing two treatment beds suitable for two working divers in the water. No mention a medical lock equipped with an interlock system.</p>		<p>Proposed solution Wording change (e) sufficient 60" (150mm) double-lock deck compression chambers equipped with a medical lock and interlock system that allow for decompression in accordance with the applicable decompression table identified in the dive project plan are available at the workplace to accommodate all divers who need to undergo decompression at any one time as well as all other persons needing to be in the chamber with the divers to carry out the decompression procedures or provide medical care to them; and</p>
17.	170 Saturation diving (3)	<p>Insufficient Protection Canada relies on the services of foreign companies supplying equipment & vessels. The environment and standards some companies may work to are often not suitable for diving operations in Canada.</p>		<p>Proposed solution Reference the following guidance to ensure adequate equipment is in place providing a safe workplace;</p> <p>Conform to, "IMCA D 024 DESIGN for saturation (bell) diving systems"</p>

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		Canada’s offshore oil and gas fields operate in extreme weather conditions and over great distances. This requires equipment to meet adequate levels		
18.	170 Saturation diving (3) (b)	Insufficient Protection It is not the Diver Medical technician that preforms medicals before Saturation, by an assigned “Offshore Dive Medic” qualified to a minimum of a recognized Paramedic training/licensure (National Registry)		Proposed solution (b) medical checks are carried out by a member of the dive team who holds a diving medical technician certificate on each diver immediately before they enter the compression chamber and immediately after they exit it after decompression; Proposed wording change; (b) medical checks are carried out by a qualified Offshore Dive Medic on each diver immediately before they enter the compression chamber and immediately after they exit it after decompression;
19.	Review Comment	Closing comment The offshore diving industry works in higher risk environments, doing higher risk tasks requiring complex life support systems to complete those tasks. Conducting projects offshore diving relies upon detailed procedures in a highly regulated industry to complete work efficiently and safely. A regulatory approach using general nondescriptive guidance places a greater burden of decision making and planning onto the operators and diving contractors. This approach can be more vulnerable to human factors like inexperience and poor judgement or economic pressures effecting decision making that can negatively impact health & safety. The referencing IMCA documents is way provide limit the possible		

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		<p>negative effect of the human factor and ensure minimums are in place. IMCA guidance is industry developed from close to a thousand industry members and is updated every 5 year providing a measure future proofing.</p> <p>Equipment; “IMCA D 023 Diving Equipment Systems Inspection Guidance Note (DESIGN) for surface orientated (air) diving systems” “IMCA D 024 DESIGN for saturation (bell) diving systems”</p> <p>Project planning health and safety. “IMCA D 014 international code of practice for offshore diving”. “IMCA D 010 Diving Operations from Vessels Operating in Dynamically Positioned Mode” “IMCA D 07/17 Diver Training Certificates – IMCA Acceptance Criteria.”</p>		
20.				
21.				

Diver Training Certificates – IMCA Acceptance Criteria

Acceptance criteria for diver certificates to be recognised by the International Marine Contractors Association (IMCA) for offshore diving under [IMCA D 014 – IMCA international code of practice for offshore diving](#):

1. There must be credible government or government appointed oversight of the training regime for the qualification with a single point of contact.
2. The government or government appointed bodies must undertake regular inspections/audits of all training sites and facilities delivering recognised training. The inspections/audits must also cover the schools' emergency response plans together with the planned maintenance of diving plant and equipment used for diver training.
3. There must be a robust health and safety regime operating at all training sites and facilities delivering recognised training.
4. The qualification must be issued by the national government or government appointed agency, not the training facility.
5. For surface supplied diver training, the training must cover the minimum training requirements as laid out by IMCA (see information note [IMCA D 08/17 – IMCA minimum criteria for surface supplied diver training](#)).
6. For saturation diver training, the training must cover the minimum course requirements contained in the International Diving Regulators and Certifiers Forum (IDRCF) document entitled *Closed bell diver training*.
7. The certifying organisation must be a part of either the IDRCF, the European Diving Technology Committee (EDTC) or another recognised international commercial diver training standards organisation.

Note: IMCA has made some special diver certification arrangements for unregulated areas of the world (see information note [IMCA D 16/16 – Diver and diving supervisor certification](#)).

Revocation of IMCA recognition

Should it be the case that a qualification is no longer deemed suitable, then IMCA recognition will be revoked and the single point of contact will be informed. Examples of reasons to revoke IMCA recognition of a diver training certificate include, but are not limited to:

- ◆ Changes to a training regime that in IMCA's opinion make the training/qualification unsuitable.
- ◆ Evidence that divers are being issued with IMCA recognised certificates, but have not been trained/assessed to the agreed level required.
- ◆ Evidence of inconsistent standards of training between schools training and assessing that qualification which could affect safety of diving.
- ◆ Failure of the government appointed bodies to undertake regular inspections/audits of training sites and facilities delivering training

The qualification will be reconsidered for approval if it can be demonstrated that appropriate remedial action has been taken.