

Spicer, Roberta (NRCAN/RNCAN)

From: kledez@mun.ca
Sent: 19-Mar-21 12:53 AM
To: Phillips, Kim (NRCAN/RNCAN)
Subject: RE: Draft Offshore Occupational Health and Safety Regulations
Attachments: LeDez Final OHS Regulations Stakeholder Comments 05-Mar-21.docx

Importance: High

Kim:

Please see attached my response to the draft regulations. I hope this is helpful. I have undertaken considerable investigation and consultation is preparing my submission. This has led to clear conclusions on some of the matters that are raised in the draft.

Although I have proposed some significant changes I recognize that a great deal of impressive work has gone into the preparation of the draft and in my view the draft represents major progress that would be a great improvement on the current situation. I think the changes I propose would make the regulations even better in important ways.

Thank you for the opportunity to provide comments.

Ken LeDez

From: Phillips, Kim (NRCAN/RNCAN) [kim.phillips@canada.ca]
Sent: March 5, 2021 3:00 PM
To: Phillips, Kim (NRCAN/RNCAN)
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
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STAKEHOLDER COMMENTS ON DRAFT CANADA- NL OFFSHORE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

Reviewer/Comments From: Dr. Kenneth M. LeDez, Specialist in Diving and Hyperbaric Medicine

#	Section of Draft OHS Regulation	Problem with Insufficient Protection Against the Hazard	Problem Created from Technical or Commercial Perspective	Proposed solution/changes
1.	General Comments	Not applicable	Not applicable	The draft regulations are a very considerable and important improvement from the current situation. These improvements are evident in numerous clauses related to diving operations.
2.	General comments: Conditions precedent for certain regulations, section 7 and subsequent sections, page 6-19 of C-75 Canada NL Atlantic Accord implementation (dealing with the membership, powers and conduct of the CNLOPB)	Not part of the draft OHS regulations but clarifies powers and responsibilities of the CNLOPB Board	Not applicable	The CNLOPB Board and the federal and provincial ministers have sufficient authority related to OHS matters to make arrangements to obtain appropriate medical advice from a diving physician specialist in order to ensure that expert and up to date guidance on medical issues is available and that medical decisions, including related to changes in standards and unforeseen circumstances, are made by appropriately trained physicians
3.	General comments: Occupational health and safety directives, page 25, of C-75 Canada NL Atlantic Accord implementation	Not part of the draft OHS regulations but clarifies powers and responsibilities of the CNLOPB Board	Not applicable	The CNLOPB Board and the federal and provincial ministers have sufficient authority related to OHS matters to make arrangements to obtain appropriate medical advice from a diving physician specialist in order to ensure that expert and up to date guidance on medical issues is available and that medical decisions, including related to changes in standards and unforeseen circumstances, are made by appropriately trained physicians
4.	General comments: Need for ongoing medical advice to the Board	Canada lacks the OHS infrastructure, organization and expertise related to diving that is present in other advanced diving nations, in large measure because of the federal nature of Canada with primary responsibility for OHS and health care under provincial		The draft regulations represent a significant improvement is the present situation but could be much better by recognizing the importance of on-going Canadian medical support and advice in the jurisdictions where the diving is occurring.

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		jurisdiction. This decentralized structure means it is more difficult to have the resources to implement the types of OHS systems that exist when this is an exclusively national responsibility. This is especially true because offshore diving in Canada relates to less populous provinces with smaller regulatory infrastructure.		
5.	General comments: Challenging environments and need for high medical standards	<p>The medical and OHS infrastructure is not comparable to that in other challenging occupations in Canada such as aviation.</p> <p>The environment offshore in Newfoundland and Labrador is considerably harsher than in many other locations where diving takes place. The distances are often greater and the worksites more remote and with less opportunities for early assistance from other nearby installations. These factors will be even more marked when diving operations occur further north such as offshore Labrador. Transport to shore facilities is more difficult and may not be possible. Therefore, considerable attention is needed to OHS and medical preparedness.</p>		<p>Consideration could be given to the organization of medical aspects of aviation as a comparison, including medical assessment of commercial pilots and the oversight of Civil Aviation Medical Examiners under the auspices of Transport Canada. This is possible because Transport Canada is a federal agency and not a shared Federal-Provincial jurisdiction. Transport Canada limits the number of CAME physicians to ensure that each maintains competence by seeing a sufficient number of pilots. It is not possible to have the exact same arrangement related to offshore diving medicine due to the joint jurisdiction arrangements. However, with adequate requirements for the standards of specialist diving physicians it would be possible to achieve a similar degree of medical safety to that seen in aviation. This can only be achieved by recognizing the need for involvement and roles of Canadian diving physician specialists with adequate expertise and the importance of ongoing advice when necessary to the CNLOPB and operators.</p> <p>Because of the harsh and remote environment it is important that medical supports be provided by physicians and medical services that are familiar with and in the region of that environment.</p>
6.	General comments: Infection hazards adequately considered?	The limitations of the current and proposed regulations are somewhat illuminated by the COVID-19 pandemic. It is important that		It is important that the regulations recognize that there are circumstances where the CNLOPB should seek and act upon medical advice and have a mechanism for this purpose. This could be through a committee, advisory panel or

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		medical advice is available and considered.		physician advisors that are known to the Board. The Board has such authority but it is better to state this in the regulations and for the Board to use this option when appropriate, instead of having medical and health decisions made without medical input. This is particularly important for medical aspects of offshore diving.
7.	Virtual inspections, infection control measures	The COVID-19 pandemic has created numerous circumstances not anticipated fully in current and proposed regulations. Examples include the need for strict quarantine measures and virtual audits / inspections of offshore dive vessels and installations. Pandemics may become persistent issues for offshore work sites.		Consideration should be given to provisions for quarantines, and virtual audits / inspections. Although this was done to an extent in the summer of 2021 it would be better to recognize that there may be a need to use technologies for this purpose. It would be best if it was clear that the CNLOPB Board had the authority to permit a range of measures in the event of infection hazards, including obtaining and acting upon medical advice.
8.	General comment: COVID-19 pandemic illustrates the need for additional medical input	COVID-19 creates a hazard to divers and other personnel in offshore environments. There are particular medical effects of COVID-19 that could have serious implications for the immediate and long term fitness and safety of divers.	Not applicable	The COVID-19 pandemic and the effects on individual divers, diving operations and the regulator provides a clear demonstration of the need for on-going medical advice to the CNLOPB / regulators, including from a diving physician specialist
9.	General comment: Diving physician specialist	Any representations received by NRCan during this public consultation that suggest the proposed requirement for the Diploma in Diving Medicine is not practical or that it will lead to difficulties are mistaken or misleading. This issue is of concern to some but such concerns are misplaced and this will be explained in detail below in this document.		The Diploma in Diving Medicine from the Royal College of Physicians and Surgeons of Canada is now available and physicians with the necessary training and experience can attain this certification by applying using a simple process. I personally provide virtually all the diving physician specialist services in support of offshore diving in Canada. I will receive the Diploma certification this year and arrangements are in place to ensure that additional physicians will be available in Newfoundland and Labrador through the Practice Eligibility Route of the Royal College. This process requires the submission of the names of referees that are able to confirm the expertise of the physician and an independent review of the application. The Diploma is based on an assessment of competence and does not involve a final

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				<p>examination. As the Chair of the Hyperbaric Medicine Specialty Committee of the Royal College (a voluntary position) I am aware of multiple qualified individuals that will be applying this year for the Diploma. I will be providing references for multiple physicians. In addition, it is planned to establish a training program for the Diving Medicine Diploma, accredited by the Royal College of Physicians and Surgeons of Canada, at Memorial University in St. John's. The application for this program is planned for this year through a new electronic process (CanAMS) that will be available through the Royal College starting in May 2021.</p>
10.	<p>Diving physician specialist (a) page 2 definitions</p> <p>diving physician specialist means a physician who</p> <p>is licenced to practice medicine in Canada</p>	This is an essential provision	Not applicable	<p>This is a very important provision that must be included in the regulations. Canadian physicians are the only ones that will be able to attend to a diving medical emergency in a reasonable time period and be able to effectively interact with medical supports in the region.</p> <p>No need to change this clause</p>
11.	<p>Diving physician specialist (b) page 2 definitions</p> <p>diving physician specialist means a physician who</p> <p>possesses a diploma in hyperbaric medicine with a focus on diving medicine from the Royal College of Physicians and</p>	This is an essential provision	Not applicable	<p>This is a very important provision that must be included in the regulations.</p> <p>Any physician that meets the required competencies and that has the necessary training and experience can obtain the Diploma in Hyperbaric Medicine (Diving Medicine stream) through a relatively simple process of applying to the Royal College. Maintaining the Diploma status requires meeting the Maintenance of Competence requirements which must be documented with the Royal College of Physicians and Surgeons of Canada (for specialist physicians) or the College of Family Physicians of Canada (for family physicians) – note that the Diploma is equally available to specialists and family physicians that meet the</p>

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	<p>Surgeons of Canada; and</p>			<p>competency requirements. This is the only mechanism in Canada for ensuring that a diving medicine specialist meets Continuing Professional Development requirements. This is the only process used by medical licencing authorities in Canada to monitor physician participation in maintenance of competence. Other advanced diving nations such as the UK have specific requirements for continuing education, audits of diving medical assessments, use of standard forms and other measures to ensure standards are enforced. The Royal College is the only process in Canada for these purposes. The diving medicine specialist may need to order hyperbaric treatments. The Diploma requires physicians to have training and experience of such treatments and this is very important to medical coverage of offshore diving in Canada.</p> <p>Lists of “diving physicians” maintained by other organizations have no relevance to offshore diving in Canada. Some of these lists are maintained by non-physicians and do not have any mechanism to confirm that a “diving physician” is a licenced physician or that there is any suitable diving medicine training. The only mechanism to confirm competence in diving medicine in Canada is the Royal College Diploma. Royal College Diplomas are recognized by all Canadian licencing authorities. It is essential that the approved scope of practice for a physician includes diving medicine and that this is recognized and accepted by licencing authorities and medical liability insurers.</p> <p>No need to change this clause</p>
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<p>12.</p>	<p>Diving physician specialist (c) page 2 definitions</p> <p><i>diving physician specialist</i> means a physician who</p> <p>has completed training in saturation diving that is recognized by the Royal College of Physicians and Surgeons of Canada. (médecin de plongée spécialisé)</p>	<p>This is an essential provision</p>		<p>The Royal College Diploma in diving medicine specifically requires training related to saturation diving. This is essential for medical coverage of offshore diving. The Royal College of Surgeons of Canada is world-renowned for high standards. The Diploma is based upon assessment of competence (“competence by design”). The development of the Diploma in Diving Medicine involved extensive development and consultations by expert hyperbaric physicians across Canada and independent reviews by the Royal College. The standards equal or exceed those in other jurisdictions and this is appropriate to the challenging conditions offshore in Atlantic Canada. The rigorous approval process for both the Diploma itself and the assessment of individual physicians incorporates detailed mechanisms to prevent bias or conflicts of interest. The diving medicine experts that developed the Diploma involved physicians experienced in a range of occupational diving activities including inshore, offshore saturation and military diving. Experience of assessing and treating divers is a requirement of the Diploma.</p> <p>No need to change this clause</p>
<p>13.</p>	<p>Diving physician specialist (d) Page 2 definitions</p>	<p>Proposed new provision</p> <p>It is essential that the diving physician specialist is qualified to advise the regulator and diving operators. There is no other mechanism available under current structures to achieve this</p>		<p><i>diving physician specialist</i> means a physician who (d) by virtue of training and experience is able to provide expert diving medical advice to the Board of the CNLOPB and to offshore diving operations</p> <p>Note: the Diploma in Diving Medicine specifically requires competence in providing such advice</p>
<p>14.</p>	<p>Diving physician specialist (e) Page 2 definitions</p>	<p>Proposed new provision</p>		<p><i>diving physician specialist</i> means a physician who (e) by virtue of training and experience is able to provide expert diving medical review and</p>

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				oversight of the medical assessments for fitness for offshore diving performed by other physicians Note: The Diploma in Diving Medicine specifically requires competence in advising other physicians
15.	Diving physician specialist (f) Page 2 definitions	Proposed new provision		diving physician specialist means a physician who (f) by virtue of training and experience is able to provide expert diving medical consultations when a diver is referred for complex medical reasons Note: The Diploma in Diving Medicine specifically requires competence in advising other physicians including in complex situations
16.	Diving physician specialist (g) Page 2 definitions	Proposed new provision		diving physician specialist means a physician who (g) is familiar with national and international diving medicine and fitness standards and with the requirements for medical equipment and supplies (including from DMAC, HSE and IMCA) Note: The Diploma in Diving Medicine specifically requires competence and expertise in such standards
17.	31(1) Page 27 First aid and medical care	It needs to be clear that the physician must be available for transport to the workplace within a medically appropriate time period, meaning the coverage must be provided by a physician licenced and located in Newfoundland in reasonable proximity to helicopter or sea port that is ready for such emergency transport.		The physician must be familiar with onshore hospital and other emergency services. These provisions must make it clear that medical support services must be appropriately located in the jurisdiction and in proximity to transport services.
18.	32(1) b refer to diving physician and diving	Not applicable	Not applicable	Excellent. This important provision to involve the diving physician specialist must be retained.

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19.	32(1) (c) refer to diving physician and diving	Not applicable	Not applicable	Excellent. This important provision to involve the diving physician specialist must be retained.
20.	32(1) (b) and (c) These sections refer to the role of medics working with the diving physician specialist	Proposed new provision The regulations do not specify any diving related training for the medics. Some other jurisdictions do have training programs and requirements related to the training and certification of medics that work with diving operations. There are no formal training programs or certifications in Canada at the present time for is purpose.	Not applicable	It would be premature to require diving related certification of medics that work with offshore diving operation in Canada since no such program exists at the present time. Consideration could be given to interim provisions here, such as “orientation and training related to the medical aspects of offshore and saturation diving that is acceptable to the diving physician specialist”
21.	32 (b) This section deals with planning for medical emergency response plan including when there are diving operations	These provisions are not mentioned in the sections on diving.	Not applicable	The requirement to involve the diving physician specialist in medical emergency plans is much needed. However, this makes it even more important that the diving physician specialist has appropriate training, experience and certification with the Diploma in diving medicine from the Royal College of Physicians and Surgeons of Canada. The additional responsibilities for the diving physician specialist is the best approach. Consider repeating the wording relevant to diving in the sections on diving, or refer to this section in the diving section. The provisions in this section are excellent.
22.	32 (c) This section deals with medical equipment, supplies and medications in the event that there are diving operations.	These provisions are not mentioned in the sections on diving.	Not applicable	The omission of specific lists of equipment from previous regulations is an important step towards keeping medical equipment and supplies up to date. However, this makes it even more important that the diving physician specialist has appropriate training, experience and certification with the Diploma in diving medicine from the Royal College of Physicians and Surgeons of

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				<p>Canada. The additional responsibilities for the diving physician specialist is the best approach.</p> <p>Offshore Atlantic Canada is a remote and harsh environment. Medical equipment and supplies must meet or exceed international standards (DMAC, IMCA) and the properly qualified diving physician specialist is best able to ensure this.</p> <p>Consider repeating the wording relevant to diving in the sections on diving, or refer to this section in the diving section. The provisions in this section are excellent.</p>
23.	35 Records	The means of the record keeping are not specified so this does not prohibit electronic records. However, all records are going to be electronic and these records must be secured.	Not applicable	There must be provision for electronic records and the secure, confidential and long term storage of these records. This requires adequate backup systems and protections from cyber-attacks.
24.	135 Confined spaces –	Not a specific problem, just a clarification	Not applicable	May not be necessary, but consider whether it should be clarified that this section does not apply to the diving systems – which must be controlled by diving personnel
25.	Part 29 - Compressed gases page 120-121	Not a specific problem, just a clarification	Not applicable	May not be necessary, but consider whether it should be clarified that this section does not apply to diving gases as these are dealt with elsewhere in the regulations
26.	168 (1) (b) Emergency drills and exercises	Drills involving medical emergencies should involve communication with the Diving Physician Specialist. This is necessary to ensure that the drills and the outcomes are effective.	Not applicable	Add words to the effect “including communication with the diving physician specialist”
27.	169 (1) (h) Dive project plan	Not applicable	Not applicable	Excellent! This must remain in the regulations.
28.	169 (1) (n) communication should include dive physician	No mention of communication with the diving physician specialist	Not applicable	Include communication with the diving physician specialist in this section, or alternately refer to this section in the next clause (o) – see below

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29.	169 (1) (o) communication should include dive physician	No mention of loss of primary means of communication or power and use of secondary / backup methods of communication with the specialist diving physician (for example satellite phone, text messaging, email, VHF relay etc. according to circumstances)	Not applicable	Either include the provisions in section 169 (1) (n) or refer to 169 (1) (n) in this clause and state that those provisions also apply to this clause - 169 (1) (o) . Consideration needs to be given to backup means of communication with the diving physician specialist since interruptions in primary means are commonplace.
30.	170 (1) (d)	<ul style="list-style-type: none"> • There are circumstances where it may be necessary to medically reassess a diver in less than 12 months and the diving physician must have this authority • There are circumstances where it may be reasonable, appropriate and necessary to extend the period of validity of a diver fitness approval, for example this was necessary due to the COVID-19 pandemic. Such extensions should not be for more than 3 months at a time and must be based upon medical review • The diving physician must have access to prior diving medical assessments as is required in other advanced diving nations 		<p>Existing wording:</p> <p>(d) each diver has been certified within the last 12 months as being medically fit to dive by one of the following, and has confirmed that their medical condition has not changed since their most recent certification:</p> <p>Proposed new wording:</p> <p><u>(d) each diver has been certified within the last 12 months as being medically fit to dive, or such shorter period as may be required by the diving physician; or in special circumstances the medical approval may be extended by the diving physician for not more than 3 months at a time after review of medical records. The medical certification of fitness for offshore diving must be done by one of the following, having access to the preceding diving medical assessment, and it must be confirmed that the medical condition of the diver has not changed since their most recent certification:</u></p>
31.	170 (1) (d) (i) diving medicals	No mention of diving physician specialist performing medical fitness to dive examinations. This is a serious omission as the diving physician specialist, with the Diploma in Diving Medicine, is the best qualified and the only physician	<p>It is important for industry and the regulator to understand the context.</p> <p>The best available information is that there were only about 6 offshore saturation diver medicals</p>	<p>New wording for this section:</p> <p>(i) A diving physician specialist with the Diploma in Diving Medicine from the Royal College of Physicians and Surgeons of Canada, or</p>

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		<p>in Canada that is certified as competent to assess diver fitness.</p> <p>The Diploma in Diving Medicine from the Royal College of Physicians and Surgeons of Canada meets or exceeds the standards in many other advanced diving nations. For this reason, there is a realistic prospect of a medical assessment of fitness performed by a diving physician specialist being accepted in international jurisdictions in the future.</p> <p>It is important to understand the international context and expected diving standards.</p> <p>In the UK the HSE (Health and Safety Executive) limits the number of AMEDs (Approved Medical Examiners of Divers) to ensure that physicians are only approved where there is a need. The HSE conducts audits of medicals. If an AMED does not conduct a minimum of 5 offshore saturation diver medicals in a year they are removed from the list of approved AMEDs. It should be noted that 5 such medicals is the bare minimum and scarcely sufficient. It is important, to maintain familiarity, standards and efficiency, that the diving physician is actually seeing saturation divers.</p> <p>Within the coming months, (and before the end of 2021 when transitional regulations may expire) there will be enough diving physicians with the Diploma and in</p>	<p>performed in Canada in the past 1 year.</p> <p>These medicals would have been done in Canada because of particular circumstances with the individual divers. Some are divers that have been followed for many years at the same occupational health facility.</p> <p>There are more Canadian saturation divers but they most get their medicals done overseas, especially in the UK for the simple reason that Canadian medicals are not accepted.</p> <p>With so little saturation diving done in Canada recently these divers spend most of their time working elsewhere. The Canadian medicals are not accepted in other jurisdictions because they do not meet the required standards with respect to: training; verification of on-going continuing professional development; experience; familiarity with saturation diving and divers; oversight of physician standards and the medical evaluations.</p> <p>The Diploma in Diving Medicine meets or exceeds the standards in other nations and there is a realistic prospect, over time, that medicals by diving physician specialists with the Diploma will have their medicals accepted even in Europe. The Diploma adds some very important aspects that are absent from European requirements - the</p>	<p>Renummer subsequent sections of 170 (1) (d) if required – not required if deletion proposed below is accepted</p>
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		<p>the right places where they are needed to undertake medicals in a much larger number of divers than live in Canada. And because of the high standards assured by the Royal College, industry will not need to be concerned about medical aspects of diving.</p>	<p>physicians must demonstrate competence in quality assurance, undertake academic and educational activities and very importantly, have experience of assessing and treating divers with decompression illness.</p> <p>This means that the Diploma physician ("Diplomate") is able to adequately cope with offshore diving emergencies. This translates into potential savings of millions of dollars by either avoiding unnecessary interruptions to operations in a short weather window, or effective treatment that prevents worse downtime or long term costly injuries.</p> <p>It is likely less costly and more efficient for Canadian divers to have their medicals in Canada, with less risk of not being available when needed because of expired medicals.</p> <p>Industry can be confident of achieving best practices with diving physician specialists with the Diploma from the Royal College. Diving medicine standards are expected to exceed those in multiple other advanced diving nations. This will be achieved at no cost to industry. These high standards will economically benefit industry.</p>	
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<p>32.</p>	<p>170 (1) (d) (ii)</p> <p>diving medicals by a physician that is not a diving physician specialist – renumbered if required from above</p>	<p>It must be understood that:</p> <p><u>The CSA:</u></p> <ul style="list-style-type: none"> • Does not approve or accredit diving medical courses • Does not certify diving physician training or competence • Does not have a mechanism to confirm that an individual is a physician that has any diving medicine training • Does not have any mechanism to confirm that any physician meets maintenance of competence requirements • Is not a medical agency <p><u>Continuing professional development courses, even those accredited by the Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada:</u></p> <ul style="list-style-type: none"> • Are not an assurance or certification of diving physician competence • Even if approved by the UHMS or DMAC are not a certification of competence and do not meet the competency training standards of the Royal College Diploma • Do not have any mechanism for ensuring experience of diving medicine or performance of diving medical assessments 	<ul style="list-style-type: none"> • It is important to understand that under prevailing circumstances, no Canadian diver could financially support themselves or a family with earnings from work in Canadian offshore diving. • For this reason, Canadian divers that choose a career path in offshore saturation diving will spend much of the year diving in other international jurisdictions where a Canadian diving medical assessment as described in this clause as Level 1 CSA will not be accepted, especially in European jurisdictions. • For this reason the divers will go overseas for their medical fitness assessment unless it expires just before they are about to begin a saturation dive in Atlantic Canada and they are already back in Canada • Because of this, while perhaps well intentioned, provisions for medicals by CSA Level 1 physicians are not very useful for saturation divers • Nevertheless, the CSA Level 1 physician is accepted by some provincial regulators for inshore non-saturation divers and these greatly outnumber saturation divers so these physicians still 	<p>Changes</p> <p>Existing wording:</p> <p>(i) a physician who is licensed to practise medicine in Canada and meets the competencies of a Level 1 Physician laid out in CSA Group standard Z275.4, Competency standard for diving, hyperbaric chamber, and remotely operated vehicle operations, or</p> <p>Proposed change:</p> <p>Delete the existing wording, and any mention of CSA Level 1 Physician. Saturation divers must be examined by a diving medicine specialist with the Diploma in Diving Medicine from the Royal College of Physicians and Surgeons of Canada</p> <p>Notes:</p> <p>1) Given the small number of saturation diving medical assessments there are insufficient to maintain physician competence with these divers if they are dispersed among physicians lacking certification in diving medicine</p> <p>2) The number of saturation diver medicals performed in Canada is likely to gradually increase as the Diploma certification becomes recognized internationally, and this</p>
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		<p><u>The offshore Boards (CNLOPB, CNSOPB)</u></p> <ul style="list-style-type: none"> • Have no mechanism in the current or proposed draft regulations to obtain medical advice (I have proposed a solution to this) • Have no mechanism to certify, approve or recognize the competence (or incompetence) of diving physicians – and should not have this responsibility <p><u>The DCBC (Diver Certification Board of Canada)</u></p> <ul style="list-style-type: none"> • Is not a medical certification agency • Keeps a “list” of self-declared diving physicians that lacks medical oversight or legitimacy • Does not certify or claim to certify or approve diving physician competency and would face serious legal consequences if it made such a claim • Does not wish to continue maintaining this list <p><u>There are serious problems with the draft regulations in this section:</u></p> <ul style="list-style-type: none"> • The “qualification” proposed in the draft regulation for 	<p>have an important role in Canada</p> <p>Note:</p> <p>Detailed consideration was given to the possible option of a physician with the informal designation of CSA Level 1 (this is informal because it is not a verifiable qualification) performing a diving medical assessment and then having this verified by a diving physician specialist but this would only result in more inconvenience and potentially greater costs. This option was therefore rejected.</p>	<p>3) will help sustain a sufficient number of diving physician specialists There will be a number of diving physician specialists with the Diploma from the Royal College in different areas of Canada as they have roles in providing medical coverage for other types of diving operations and will also be available to undertake saturation diving medicals (a number of such physicians are preparing to apply for the Diploma)</p> <p>4) These proposals do not have any effect upon the medical requirements for inshore diving, which come under provincial jurisdiction. The CSA Level 1 physician can be accepted by provincial Workers Compensation Commissions, OHS departments and Departments of Labour</p>
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		<p>performing offshore diving medical fitness assessments amounts to nothing more than a self-declaration by a physician who may or may not have successfully completed a diving medicine course</p> <ul style="list-style-type: none"> • The CSA Levels are intended as a guide only, not a certification of competence • The dive medicals proposed in this section are not and will not be accepted or respected for offshore diving medicals in international jurisdictions, particularly in advanced diving nations such as Europe <p><u>The Diving Medicine Diploma from the Royal College of Physicians and Surgeons of Canada</u></p> <ul style="list-style-type: none"> • Is available and the application process for physicians with the necessary training, experience and competence is now simple and easy • Will be obtained by multiple physicians during 2021 • Is the only certification of competence in Diving Medicine for diving physician specialists in Canada • Requires and verifies ongoing maintenance of competence – the only such process in Canada 		
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		<ul style="list-style-type: none"> • Is available to specialist and family physicians • Has undergone a very rigorous development and independent review process and is continuously reviewed and improved through the Hyperbaric Medicine Specialty Committee of the Royal College that is accountable to multiple high level committees of the Royal College • Has robust conflicts of interest rules, procedures and safeguards to ensure the integrity of this medical certification • Meets or exceeds the standards of diving medicine training and certification is other advanced diving nations including those in Europe • Is the only certification and process in Canada that is capable of the same standards and safeguards of competence that are required by the UK Health and Safety Executive • Is a transparent process and divers, diving operators and the public are easily able to determine whether a physician has the Diploma • Is recognized by all medical licencing authorities in Canada • Must be declared by the physician to medical 		
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		licencing authorities in Canada as part of licence renewal every year and for approval of the physician's scope of practice		
33.	170 (1) (d) (ii) diving medicals – renumbered as required from above	May be some practical issues with the review of medicals outside of Canada. New wording may assist. The intention is for the diving physician specialist to decide what is appropriate and safe.	Not applicable	Existing wording: (ii) a diving physician specialist, based on their re-view of a medical fitness certification issued in a jurisdiction outside of Canada within the last 12 months; Proposed new wording (ii) a diving physician specialist, based on their re-view, <u>either remotely or directly as appropriate</u> , of a medical fitness certification issued in a jurisdiction outside of Canada within the last 12 months; <u>and</u>
34.	170 (1) (d) (iii) diving medicals – renumbered as required from above	<ul style="list-style-type: none"> Some divers have complex medical issues that require considerable experience and expertise to determine fitness for diving. Instead of simply disqualifying all these divers the medical should be undertaken by the diving physician specialist in order to ensure fairness to the diver. In addition, return to diving after significant illness or after treatment for 	Not applicable	Proposed new wording: (iii) <u>in the circumstance where a diver has complex medical considerations, or after significant illness, or after treatment for decompression illness the medical assessment of diving fitness must be undertaken or reviewed and approved by a diving physician specialist either remotely or directly as appropriate, and</u>

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		<p>decompression illness requires expert assessment</p> <ul style="list-style-type: none"> For example, after COVID-19 infection with hospitalization, coronary stent, cancer treatment 		
35.	<p>170 (1) (d) (iv)</p> <p>diving medicals</p> <p>– renumbered as required from above</p>	<ul style="list-style-type: none"> There is no mention of medical tests and investigations which may be required by medical standards. This is an important omission. However, previous regulations had arbitrary lists of tests that were not supported by scientific evidence and that involved additional delays, costs and potential risks 	Not applicable	<p>New provision and wording</p> <p>(iv) <u>The diving medical assessment must include such medical tests and investigations as required by a diving physician specialist, based on their expert opinion, national and international diving medicine standards, and the medical considerations for individual divers, with such tests and investigations being undertaken at such times and intervals as determined by the diving physician specialist; and</u></p>
36.	<p>170 (1) (d) (v)</p> <p>diving medicals</p> <p>– renumbered as required from above</p>	<ul style="list-style-type: none"> No mention of any appeal process or reconsideration of temporary or permanent medical restrictions or prohibition of diving. Other advanced diving nations have an appeal process and Canada needs to have one also. 	Not applicable	<p>New provision and wording:</p> <p>(v) <u>In the circumstances where another physician is uncertain about fitness of a diver or when a diver requests an appeal or reconsideration of temporary or permanent medical restrictions or prohibition of diving, the further medical assessment must be by an experienced diving physician specialist</u></p>
37.	<p>170 (1) e</p> <p>Availability of diving physician specialist</p>	Not applicable	Not applicable	<p>Excellent, an important provision that must remain in the regulations</p>

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38.	<p>170 (1) (f)</p> <p>Communicating with the diving physician specialist</p>	Not applicable	Not applicable	Excellent, an important provision that must remain in the regulations
39.	<p>170 (1) (g)</p> <p>Appropriate equipment is available at the workplace to permit the diving physician specialist, from a remote location, to</p>	Not applicable	Not applicable	This clause and the sub-clauses are excellent and necessary and must be retained.
40.	<p>170 (1) (g)</p> <p>Appropriate equipment is available at the workplace to permit the diving physician specialist, from a remote location, to</p>	Medical equipment and supplies not mentioned.	Not applicable	<p>Consider either inserting a new clause that uses wording similar to that in section 32 (c) or simply refer to section 32 (c) for medical equipment, supplies and medications. This may enhance understanding of the diving part of the regulation.</p> <p>The omission of specific lists of equipment from previous regulations is an important step towards keeping medical equipment and supplies up to date. However, this makes it even more important that the diving physician specialist has appropriate training, experience and certification with the Diploma in diving medicine from the Royal College of Physicians and Surgeons of Canada. The additional responsibilities for the diving physician specialist is the best approach.</p> <p>Offshore Atlantic Canada is a remote and harsh environment. Medical equipment and supplies must meet or exceed international standards (DMAC, IMCA) and the properly qualified diving physician specialist is best able to ensure this.</p>
41.	<p>170 (1) (h)</p>	Not applicable	Not applicable	This is an excellent provision in the regulations and must be retained.

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<p>42.</p>	<p>170 (1) (t) loss of thermal balance or control: cannot return to surface unless surface supplied</p>	<p>This section states that divers must return to bell or surface if there is a loss of thermal control, but return to surface would be lethal for a saturation diver</p>	<p>The wording is poor as 170 (1) applies to both saturation diving and surface supplied diving. The correct actions must be clearer.</p>	<p>There are two possible approaches to correcting this serious issue: 1) specify return to bell (saturation diving) or to the surface (surface supply diving). Alternately, 2) specify the correct actions to take if there is a loss of thermal control in 170 (2) Surface supply – return to surface; and 170 (3) Saturation diving – return to bell – note that the bell may likely also have lost thermal control and therefore must return to the saturation chamber on the dive support vessel, unless the problem can be corrected by the divers in the bell (unlikely). If there is loss of thermal control to divers the divers cannot work anyway so the bell must return to the DSV chamber system. The dive team of course knows the correct actions but this should be reflected in the regulations.</p>
<p>43.</p>	<p>170 (1) (v) No diver travels by air within 24 hours after a dive or while suffering from decompression sickness, unless approved by a diving physician specialist</p>	<p>Access to saturation chambers is very limited in Canada. The risks are not limited to travel by air.</p>	<p>Not applicable</p>	<p>For saturation diving the diver must remain accessible to the Dive Support Vessel chambers or an alternate saturation chamber for a minimum of 24 hours after reaching surface pressure. Consider adding such a requirement to this clause or in a new clause in the regulations, and also adding “ unless approved by a diving physician specialist”</p>
<p>44.</p>	<p>170 (1) (v) No diver travels by air within 24 hours after a dive or while suffering from decompression sickness, unless approved by a diving physician specialist</p>	<p>This clause is more restrictive than the provisions in DMAC 07. This is not necessarily a problem provided the physician is knowledgeable on the issues involved.</p>	<p>Not applicable</p>	<p>DMAC 07 distinguishes between different types and durations of dives and flights. In general, this clause is good as is, providing that the regulations maintain the requirement for properly trained and certified diving physician specialists with the Royal College Diploma as these physicians will be familiar with the issues related to flying after diving.</p>

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45.	170 (1) (w) availability of medical records to diving medical technician and diving physician specialist	Not applicable	Not applicable	This is a hugely important and significant provision that will greatly improve the medical support and care of offshore divers. It is essential that this provision be maintained in the regulations.
46.	170 (1) (w) Electronic medical records	This provision is a major step forward. It would be even better if it mentioned electronic access to the medical records. When an emergency occurs it is not possible to predict the exact location of the diving physician specialist or access to printed records. There are also practical issues of access to printed records depending on when the diver joins the Dive Support Vessel and when or whether the dive physician undertakes an onsite visit to the vessel. These records need to be electronic.	Not applicable	It would be best to include in this clause that there must be a means of secure and confidential electronic access to the medical records by the diving physician specialist. This would greatly enhance and speed up such access. Everything is going to be electronic in the future. In addition, there must be consideration of the secure, confidential and long term storage of electronic medical records. This requires adequate backup systems and protections from cyber-attacks.