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From: Phillips, Kim (NRCan/RNCan) < kim.phillips@canada.ca>

Sent: March 23, 2021 8:52 AM

To: Spicer, Roberta (NRCAN/RNCAN) < <u>roberta.spicer@canada.ca</u>>

Subject: FW: Draft Offshore Occupational Health and Safety Regulations

From: Bambrick, David < David.Bambrick@dnv.com>

Sent: March 23, 2021 8:49 AM

To: Phillips, Kim (NRCan/RNCan) < <u>kim.phillips@canada.ca</u>>

Subject: RE: Draft Offshore Occupational Health and Safety Regulations

Hello Kim

We got through the Draft OHS and have a few comments related to the Regulations. Sorry we were delayed in responding to the Friday deadline. I will clean up the comments and get them back in your from that you requested.

Best Regards,

David Bambrick P. Eng.

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From: Phillips, Kim (NRCan/RNCan) < kim.phillips@canada.ca>

Sent: Friday, March 5, 2021 3:01 PM

To: Phillips, Kim (NRCan/RNCan) < <u>kim.phillips@canada.ca</u>>

Subject: Draft Offshore Occupational Health and Safety Regulations

Importance: High

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 <u>2 weeks</u> to review and provide comments by <u>March 19, 2021</u>.

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
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#	Section of Draft OHS Regulation	Problem with Insufficient Protection Against the Hazard	Problem Created from Technical or Commercial Perspective	Proposed solution/changes
1.	24 – Emergency Power		Dynamically Positioned offshore units do not typically have 'emergency electrical power supply' i.e. emergency generator/distribution board arrangement. Instead their power management arrangement is designed to have sufficient redundancy should any online generator lose power, another standby generator would automatically start to be able to keep on station. We are not certain if the interpretation of this regulation would allow for such DP vessel power arrangements (of where there have been many RQ's raised in the past for not having an emergency generator or switchboard) to demonstrate compliance.	Every employer must ensure that each workplace under its control that is a marine installation or structure is equipped with an emergency electrical power supply or redundant power supply arrangement that is sufficient to operate the following to the degree necessary to allow for safe occupancy of or egress from the workplace:
2.	25 (1) – Descent Control device for derricks and other elevated parts of the structure		Primarily this regulation was to give another means of escape from the elevated parts of the platform, such as the derrick and Turret areas where there is not a secondary escape route from that area. This would then require a device in every elevated part of the installation even if there is 2 ways to escape from that area. Some Derricks and Drilling towers have stairs or ladders on either side of the structure giving additional egress areas to escape, where a descent device would be used.	Add in a provision that it would not be required if a secondary means of escape is available

3.	26 (2) Fire and explosion - Hazardous Areas	Clarity within the regulation is required	The paragraph should be broken up into 2 or 3 sections. One talking about the identification of Hazardous areas. Then talk about the machinery and electrical equipment to be certified for that area. Finally, that that information should be captured in a Hazardous Area Schedule or Registry.
4.	28 (1) (c) – Fire Team Helmets and Visors	Confirmation that the helmet and Visor are covered in NPFA 1971. The last regulations had an incorrect reference for the helmet and visor and we want to confirm this is the right Standard Reference.	
5.	28 (4) – Minimum Quantity	Clarity within this regulation is required. Hard to read, use of digit numbers and written numbers.	Separation of the requirements for installations and structures and the Construction/Diving/geotechnical vessels so it is a little clearer.
6.	30 (2) (ii) either an annual lifeboat launching drill is conducted to test the integrity and operation of the lifeboats and the launching equipment or additional inspections and testing of all components that would normally be tested by the launching drill are completed in consultation with the lifeboat manufacturer;	The intension is to ensure the integrity and operation of the Lifeboats. Each jurisdiction has a differing approach to this requirement. Consideration shall be made for the different lifeboat arrangements. This requirement is related to davit launched lifeboats. Free fall lifeboats are not launched annually. Recovery of Lifeboats offshore can be a risky operation and is not undertaken in the NL sector for a number of years. The MODU have a requirement of putting the lifeboats in the water when in sheltered waters or every 5 years. And the maintenance and testing is not always dictated by the Manufacturer. Sometimes the maintenance requirement change under new IMO requirements are past.	There are IMO circulars that address the maintenance and launching requirements of the lifeboats and could be referenced in regulations.

7. 8.	46 (3) - For greater certainty, for the purposes of subsection 44(1), a person who has ready access to a helicopter transportation suit provided to them in accordance with paragraph 50(3)(a) may wear that suit instead of the immersion suit referred to in paragraph (1)(b) for the purpose of emergency evacuation. 57 (3) (b) are	The issue is that many helicopter suits sometimes do not meet the donning requirements of unassisted donning within 2 minutes which is a requirement for marine immersion suits. The current flight suit does not meet that requirement and therefore cannot be considered a marine immersion suit.	The 150 mm wall requirement is very	If you want to include this in the requirements then the flight suits should meet the marine immersion suit requirements. The suggestion would be to lower the
	watertight, apart from drains, and impervious to moisture on their floors and the lower 150 mm of their walls and partitions;		specific, and in some situations the wall partitions do not meet that height requirement. This could be very costly on owners or operators if they have to raise the partition requirements to 150 mm since they would not have an avenue to accept something lower. We have seen in some tech specs that the wall partition is 100 mm in the washrooms	requirement to the international standard or not have a specific height requirement for this regulation.
9.	62 (1) Sleeping Quarters		IMO MLC/ILO have requirements outlining Sleeping Quarters.	Ensure that the New Regulations are aligned with these requirements in order to accept International Vessels and MODUs.
10.	Smoking Areas 64 (3((c) air transfer into the designated area is maintained at a rate of at least 24 L/s per occupant, regardless of		We are not unaware of any maritime/international requirements for ventilation systems to have design rate of 24L/s per occupant. This is a specific requirement that may require ventilation fans for international ships and MOUs to be changed or upgraded	Suggest to remove the 24 L/s specific requirement

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11.	whether the doors are open or closed, and air is not recirculated.		Clarification required if the intention	
	Inspection and testing 73 (2)(b) tested annually to determine whether each lighting unit provides the intended amount of lighting for the intended period of time, as indicated in the manufacturer's specifications.		regarding the annual testing requirement indicates a functionality/duration test of each emergency lighting unit, or if lux measurements must be taken annually? Annual lux measurements is currently not required in the existing regulations, and typically as CA we would only ask for lux measurements to be taken if there was an area in question that seemed darker than it should or modifications have been made, once an initial lighting survey has been completed. Annual lux readings would be a significant increase in maintenance scope.	
12.	Emergency Lighting Inspection and testing 73 (2)(b) tested annually to determine whether each lighting unit provides the intended amount of lighting for the intended period of time, as indicated in the manufacturer's specifications.		"Indicated by the manufacturers specifications" could potentially require a duration above the existing regulations. Sometimes owners install lighting units that are above the 1 hour capacity requirements because they wish to get longer life out of the fixtures and reduce maintenance. This regulation would penalize them for fitting units that surpass SOLAS/MODU requirements.	Removal of the manufacturers specification reference.

13.	Noise 76 (c) if it is not feasible to reduce sound levels at the workplace to within the threshold limit values, (ii) every employee at the workplace undergoes an audiometric test every two years, or more frequently as recommended by an audiologist or	The Audiologist testing was removed from the most recent CAPP medical.	Reinstate the Audio test requirement back into the offshore medical.
14.	occupational physician. Ventilation 78 (d)	There are minimum volumes and air	
	unless it is installed in an accommodations area, its minimum air volume conforms to American Conference of Governmental Industrial Hygienists (ACGIH) standard Industrial Ventilation: A Manual of Recommended Practice for Design.	changes in Class and IMO rules for hazardous areas, but installations are not designed in accordance with this standard. A gap would have to be performed to determine if the areas on a Drilling and Production platform/installation would typically conform with this land based industrial standard. Potential issue for marine installations that does not conform to this standard, depending on the results of the gap.	
15.	79 If mobile equipment powered by an internal combustion engine is operated indoors or in an enclosed work area, the employer with control over the workplace at	We note this is a new requirement. We have not completed a review of this standard to assess any impacts of conformity to this standard, but this could affect drilling installations and production units that use forklifts or other mobile equipment with internal combustion engines and the enclosed work areas they are used. This could have commercial	

	which it is operated		
	must ensure that the	impact as currently combustion	
	engine is maintained	engines must comply with Tier level	
	to ensure conformity	requirements under CEPA. Potential	
	with the	for an unknown gap until reviewed.	
	requirements of	···· ···· ··· ··· ··· · · · · · · · ·	
	American		
	Conference of		
	Governmental		
	Industrial Hygienists		
	(ACGIH) standard		
	Industrial		
	Ventilation: A		
	Manual of		
	Recommended		
	Practice for Design		
	relating to		
	vehicle exhaust		
	ventilation.		
16.	Pressure Equipment	This regulation does not indicate any	Propose addition of an alternative inspection
	Inspection 81 (c) an	acceptance of alternative inspection	scheme clause that can be approved on a case
	internal inspection at	regimes such as Condition based	by case basis by the CSO.
	least once every five years or more	inspection or Risk Based Inspection	
	frequently if	of pressure vessels as is accepted by	
	recommended under	industry and approved by the C-	
	paragraph	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
	82(c).	NLOPB via RQs currently. Some	
		Pressure Vessels have a greater than	
		5 year internal inspection frequency	
		if in good condition.	
17.	Guard-rails	Specific minimum and Maximum	Suggest this is reworded to include option for
	85 (a) consist of	requirements that do not align with	plural, equally spaced intermediate rails.
	(i) a horizontal top	other international standards. It is	
	rail, cable or chain	quite often we see designs of	Also suggest alignment with NORSOK with
	not less than	guardrails with two intermediate	having a specific minimum standard and not
	900 mm and not	3	stating a max as intermediate rails are installed
	more than 1 100 mm	rails.	to prevent personnel from falling through the
	above the	Further, many installations that	railings.
	working surface,	currently hold a COF are built to	
	(ii) a horizontal	comply with NORSOK C-002 and ISO	
	intermediate rail,	14122. The minimum height of the	
	cable or chain		
		top hand rail in these standards is	

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	spaced midway between the top rail, cable or chain and the working surface, and		1100mm, and there is no maximum. Having a guardrail that is higher is not as much of a safety concern as is having it lower, especially if it is protecting personnel from falling overboard.	
18.	Standards – 94		Many references to conforming to CSA standards. This will create a lot of comparisons to international and ISO or EN standards in order to accept the alternative standard. Hand held remote controls are common for operations of winches/ cranes and other lifting devices	A suggestion of accepting European Equivalent Standards to avoid the additional gap reviews.
19.	(q) if the workplace is a marine installation or structure, all temporary or portable heating equipment that is used in an enclosed area (i) provides complete combustion of the fuel used in it or is equipped with an exhaust system that discharges the products of combustion outside the enclosed area, and	94 (1) q: What about portable electrical heating equipment used in an enclosed area, also wrt hazardous area rating and ignition source prevention? Not all portable heating uses combustion. This is not really addressed in 26 (5) either. Clarification needed.		Portable Heating equipment should also addressed the hazardous area requirements as applicable.
20.	96 (1) Every employer must ensure that each elevator at a workplace under its control is designed, maintained,		International Ships/MOUs would not be in compliance with this code. The DNV Class code would be RULES FOR CERTIFICATION OF LIFTS IN SHIPS, MOBILE OFFSHORE UNITS AND OFFSHORE INSTALLATIONS	There should be acceptance of Class and Flag State design and tested units. Also inspections or inspections carried out on behalf of manufacturers representative

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	tested, inspected and used in conformity with CSA Group standard B44/American Society of Mechanical Engineers (ASME) standard A17.1, Safety Code for Elevators and Escalators and that each manlift at a workplace under its control is designed, installed, maintained, tested, inspected and used in conformity with CSA Group standard CAN/CSA-B311, Safety Code for Manlifts.	This would require a gap analysis in order to determine conformity. Also some flags states have own requirements for inspection and testing for example LOLER Requirements for UK flag. These may be different than CSA or ASME. This is usually part of an RQ for every Rig and MODU and Dive Vessel that comes to our area. What if you did a gap and there were differences	
21.	104 (1) Every employer must ensure that any fixed ladder installed at a workplace under its control, other than one installed as part of a scaffold, (a) is installed vertically; (b) is securely held in place at the top and bottom and at intervals of not more than 3 m;	104 1 b: Mobile cranes often have fixed vertical access ladders for inspection or access to operator position and due to crane movement, ladders are not able to be secured at the bottom/ground. Instead they are secured at the top and along the pedestal or gantry as low as is reasonably possible. There is currently no provision for such an arrangement in the regulations, and this should be considered.	Could include verbiage such as where reasonably possible, etc to allow for when ladders cannot be fixed at one end due to equipment movement.
22.	Rated capacity 121 Every employer must ensure that a competent person	The industry standard on some equipment is that the Manufacturer can certifies some types of manual	Removal of the Manufacturer for certain size/type Manual Handling Equipment aligned with the CAPP SLP.

Reviewer/Comments From: _DNV Canada Ltd.

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who is independent
of the operator,
employer and
manufacturer
certifies in writing,
on the basis of an
inspection
and proof testing of
the equipment, the
rated capacity
of all materials
handling equipment
that is to be
used at a workplace
under the employer's
control if
(a) the equipment is
to be used at the
workplace for
the first time;
(b) repairs or
modifications have
been made to the
equipment's load
carrying
components;
(c) the equipment has
been in contact with
an electric
arc or current; or
(d) there is any other
reason to doubt that
the rated
capacity of the
equipment that was
most recently
certified
under this section
continues to be
accurate, including
as a result of damage
sustained by the
equipment,
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handling equipment, typically lower rated items. This regulation does not define specific types of equipment that must be certified by the CA, but blankets all materials handling equipment. From CAPP, materials handling equipment includes offshore pedestal cranes, Offshore Containers, drilling hoisting equipment, loose gear, and other lifting devices. For certain types of loose gear for example (spreader beams, hooks below the crane hook), a rating of 10 tonnes and over must be independently certified by the CA, but under 10 T we would accept Manufacturer's Certificate of Compliance with material certificates for load bearing materials in accordance with EN 10204, type 3.1. Other items are also listed with Manufacturer's certification of compliance.

This will create a gap with the current safe lifting practise.

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23.	modifications made to it, its age or its history. 122(I) if the equipment is regularly used outdoors and the	Many types of outdoor/exposed material handling equipment on marine installations and structures	Definition of Material handling equipment should be clear to identify which types should meet this requirement. Else reword such that materials
	person operating it would otherwise be exposed to an environmental condition that could be hazardous to their health or safety, it is fitted with a roof or other structure that will protect the person from that environmental condition and is constructed from noncombustible or fire-resistant material;	such as tugger winches and provision cranes do not have roofs or structures surrounding the operator position, or a fixed operator position is not provided and instead the equipment is capable of being remotely operated. Only the offshore cranes and larger type cranes such as riser handling cranes, some drill pipe handling cranes, etc. are usually fitted with an operator crane cab/roof.	handling equipment that is fitted with a roof to be constructed of non-combustible or fire resistant material.
24.	Testing Analyses (2) The employer must ensure that a competent person conducts atmospheric testing — and records the results — at intervals appropriate to the hazards in the atmosphere, including (a) every time the confined space goes from unoccupied to occupied;	This would be very cumbersome for respite breaks for personnel and inspectors. It is not encouraging personnel to come out of the confined spaces for small periods of rest and could induce fatigue. Completion of Atmospheric gas testing every time the confined space goes from unoccupied to occupied could mean upwards of 4 times in a 12 hour shift. This was not prescribed in the regulations previously.	Consideration for rewording around unoccupied and occupied to maybe attended and unattended.