

October 27, 2017

submitted electronically

Kim Phillips
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Offshore Petroleum Management Division
Natural Resources Canada
Atlantic Canada Energy Office
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Dear Ms. Phillips:

Re: CAPP Comments on the Atlantic Offshore Occupational Health and Safety Initiative Proposed Policy Intent for Offshore Diving dated 15 September 2017

The Canadian Association of Petroleum Producers (CAPP) is pleased to have this opportunity to provide comments on the Proposed Policy Intent for Offshore Diving of the Atlantic OHS Regulations and FORRI Framework Regulations dated September 15th, 2017. CAPP members have been operating in the Atlantic offshore region for almost fifty years and are committed to the safe and responsible exploration, development and production of Canada's petroleum resources. Our comments, provided in this letter and in the attached table, are founded upon our collective experience in Canada and around the world.

Achievement of common objectives for regulatory reform will only be possible through the positive collaboration of industry and the regulatory bodies as well as the inclusion of other relevant stakeholders. As we indicated during our FORRI and OHS submissions, CAPP broadly supports these regulatory initiatives.

The following pertains to important subject areas which CAPP believes require further consideration in policy intent and future regulation.

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Classification of Dive Vessel

A classed, Flag state and SOLAS compliant vessel used for temporary diving operations should not be subject to Certificate of Fitness requirements under the Framework Regulations.

Policy Intent requires that a Diving Vessel be classed by a Classification Society as well as meet the requirements under the Framework Regulation. The application of the Framework Regulation will continue to result in the avoidable situation where the arduous Regulatory Query Process must be applied to obtain the required work authorization. It is important that some mechanism is established to permit Offshore Supply Vessel (OSV) to be fitted with a Dive Spread without having to formally apply the Framework Regulations as they will have met their Class requirements and often operate under an existing work authorization. It is recognized that the Diving Equipment installed on an OSV requires certification however; it is unnecessary and unreasonable to apply installation requirements under the Framework Regulation to the vessel.

Classification societies are licensed by flag states to survey and classify vessels and installations and issue certificates on their behalf. They classify and certify marine vessels and structures on the basis of their structure, design and safety standards. A classification society's specialized and technical workforce comprises of ship surveyors, mechanical engineers, material engineers, piping engineers, and electrical engineers. Surveyors employed by a classification society inspect vessels during their construction and operations phases to certify that their design, components, and machinery are developed and maintained in accordance with the standards set for their class.

As the Framework regulations will apply to petroleum operations in areas (i.e., western Newfoundland) where a DSV or OSV may not be necessary as diving operations in near-shore or sheltered waters could be performed utilizing a dive barge. In this case it would be considered unreasonable to apply the Framework Regulations as diving operations utilizing a barge occurs safely and regularly on a global scale.

Similar to Canadian flagged vessels, foreign flagged vessels are governed by comprehensive technical and regulatory regimes that include statutory requirements established under the flag state as well as globally adopted international requirements that include SOLAS, International Maritime Organization, Maritime Labour Convention as well as Class Rules. These stringent and proven requirements should be sufficient to permit the use OSV for diving operation exempt from the Framework Regulations.

Again, operators and the Boards will be faced with a Regulatory Query Process that is unnecessary and should be modified during the consultation process.

Diver Medicals

Under the current policy intent, Dive Physicians will be required to become members of the Canadian Royal College of Physicians and Surgeons of Canada in order to perform dive medicals for offshore divers.

All DSV's entering Canadian waters, for the most part, have foreign divers who have obtained their medicals within other global jurisdictions. Physicians from these other global areas will not have a license to practice medicine in Canada and certainly not have the Royal College qualification. Thus the current policy intent introduces a significant and unnecessary requirement for redundant medical certificates where it has been demonstrated in the United Kingdom and Norwegian jurisdictions that the medical certificate issued in either jurisdiction is deemed acceptable to both. There is no logical reason that divers holding recognized valid certificates from these jurisdictions should be subject reexamination to be permitted to perform temporary diving work in Canada.

Under the proposed policy intent, any foreign diver will likely have to obtain a second medical in order to work in Canadian waters, for what have historically been very short periods of time. In all likelihood they would have to get their second medicals in Canada as no foreign Physicians would qualify under the new standard.

Under the current version of the Atlantic Canada Medical Assessment for Fitness to Work Offshore the determination of equivalency of medical assessments from other jurisdictions or regulatory authorities is left to the discretion of the Operator. CAPP believes this should also apply to diving personnel in that it is the Operators responsibility to validate medical certificates and ensure the fitness of offshore divers.

Subsequently, would it not be more practical and consistent with current practice to accept, as equivalent, other reputable international certification bodies that are responsible for ensuring the qualifications and competence of foreign Physicians currently performing these offshore diver medicals?

This policy intent has the potential to introduce impractical complications and may become an obstacle to bringing DSVs into Canadian waters thus policy intent that requires Physicians to have a license to practice medicine in Canada should be removed.

Diving Guideline Development

As presented in our Phase 1 letter CAPP recommends that for improved efficiency the FORRI Steering Committee and OHS Initiative work with the Boards to implement a plan for concurrent/parallel development of guidelines along with the Diving Regulation development process. It is imperative that guidance be developed in consultation with industry and other stakeholders to minimize the potential for differing interpretations and to improve efficiency of implementation for both industry and the Regulator.

CAPP encourages collaboration and cooperation in the development of guidelines or codes of practice for the provisions of the Diving Regulations. This effective approach has been applied in Atlantic Canada with success by CAPP and the offshore Boards in the development of guidelines and Codes of Practice documents. Industry engagement during the guideline development process is essential to ensure that the entire regulatory renewal initiative will result in the most advanced and effective regime for stewarding Canada's offshore oil and gas industry.

Vague Language

It has been the collective experience of Industry in the application of regulatory guidance that the use of subjective language frequently creates an interpretation dilemma in the process of proving compliance with the intent of regulation or guidance statement.

Terminology in the policy intent document for the Diving Regulations is considered to be overly vague and imprecise and will result in interpretation challenges for both industry and regulatory authorities. Imprecise terms are not suitable for policy intent or regulation and CAPP proposes the use of language that encourages the achievement of a specific goal or objective.

CAPP recommends that policy intent should describe technical and factual statements which articulate clear and precise objectives intended by regulation. To achieve a performance based regime regulation must permit industry to investigate the most suitable method for ensuring compliance with the principal intent of a regulation.

Closing

We look forward to continued engagement with Natural Resources Canada, the Provinces of Newfoundland and Labrador and Nova Scotia and members of the Project Team as they develop the Occupational Health and Safety Regulations.

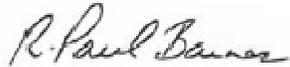
In order to ensure the mandate of the FORRI initiative is fulfilled, we strongly encourage everyone involved in the development of the Diving Regulations to reflect on the intent

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and to take the time necessary to develop the best set of regulations for next generation of offshore workers. Currently, Industry is concerned that the focus is more on meeting the timeline for implementation than developing the best regulation for Canada's offshore oil and gas industry.

If you have any questions please do not hesitate to contact me at 709 724-4200.

Sincerely,

A handwritten signature in cursive script that reads "R. Paul Barnes".

R. Paul Barnes
Director, Atlantic Canada and Arctic

Attachment

	Draft Policy Intent – Offshore Diving	Member Comments
	PART ONE	
	FRAMEWORK REGULATIONS – DRAFT POLICY INTENT	
1.	<p>Diving Vessels</p> <p>1) Diving vessels must be:</p> <ul style="list-style-type: none"> a) classed by a recognized classification society; and, b) Convention vessels as defined in the Canada Shipping Act. <p>2) In addition, diving vessels must:</p> <ul style="list-style-type: none"> a) Be equipped with evacuation systems and ensure equipment sizing and capacity is suitable for the demographics of the workforce in the operating region; and b) Meet the following requirements outlined within the Framework Regulations: <ul style="list-style-type: none"> i. Section 6.3 Innovations; ii. Section 6.4 Physical and Environmental Conditions; iii. Section 6.5 Structural Design, Tests and Analysis; iv. Section 6.10 Materials for Installations and Pipelines; v. Section 6.12 Air Gap and Freeboard; vi. Section 6.13 Motion Response; vii. Section 6.15 Station-keeping; viii. Section 6.17 Ballast and Bilge; ix. Section 6.18 Watertight Integrity of Floating Platforms; x. Section 6.21 General Electrical Standards; xi. Section 6.24 Integrity Management; xii. Section 6.25 Installations Operations; xiii. Section 6.26 Operations Manual; xiv. Section 6.27 Diving Vessels and Dive Plants xv. Section 7.1 Repair, Replacement and Modification on Installations 	<p>In reference to Section 1:</p> <p>Is this specific to purpose built DSV or apply to other platforms from which diving could be conducted?</p>

	Draft Policy Intent – Offshore Diving	Member Comments
	<ul style="list-style-type: none"> xvi. Section 7.2 Facilities for Inspection and Maintenance; xvii. Section 7.3 Piping Systems; xviii. Section 7.4 Mechanical Equipment; xix. Section 7.6 Control Systems; xx. Section 7.7 Integrated Software Dependent Systems; xxi. Section 7.8 Monitoring Systems; xxii. Section 7.9 Communication Systems; xxiii. Section 7.12 Helidecks; xxiv. Section 7.10 General Alarms; xxv. Section 7.13 Cranes and handling devices; xxvi. Section 7.14 Navigation Aids; xxvii. Section 7.34 Temporary and Portable Equipment; xxviii. Section 7.35 Emergency Electrical Power; and xxix. Section 7.36 Escape & Evacuation 	
2.	<p>Dive Systems</p> <p>The selected diving system must be fit for purpose and suitable for the planned activity.</p>	

	PART TWO	
	OCCUPATIONAL HEALTH AND SAFETY – DRAFT POLICY INTENT	
	<p>ACRONYMS</p> <p>ACGIH American Conference of Governmental Industrial Hygienists CSA Canadian Standards Association DMAC Diving Medical Advisory Committee DP Dynamic Positioning DSS Dive Safety Specialist HLB Hyperbaric Life Boat HRF Hyperbaric reception facility IMCA International Marine Contractors Association MSW Meter Seawater ROV Remotely Operated Vehicle SCUBA Self-contained Underwater Breathing Apparatus.</p>	<p>General Comment The highlighted acronyms are not used in the document.</p>

<p>DEFINITIONS</p> <p><i>For the purposes of this Part, the term “Dive Contractor” will have the same meaning, duties and responsibilities as the “Employer”, under the Act.</i></p> <p>“Ambient pressure” means the external pressure on the body of a diver.</p> <p>“Competent person” means a person</p> <ul style="list-style-type: none"> a) qualified because of that person's knowledge, training and experience to do the assigned work in a manner that ensures the health and safety of every person in the workplace, and b) knowledgeable about the provisions of the Act and these regulations that apply to the assigned work, and about potential or actual danger to health or safety associated with the assigned work. <p>“Dive physician” means a physician who:</p> <ul style="list-style-type: none"> a) is licensed to practice medicine in Canada; and b) possesses a diploma in Hyperbaric Medicine - Diving from the Royal College of Physicians and Surgeons of Canada. <p>“Decompression table” means a table or set of tables that shows a schedule of rates for safe descent and ascent, decompression stop times, and the appropriate breathing mixture to be used by a diver during a dive.</p> <p>“Diving bell” means a submersible compression chamber designed for transport of personnel between the surface and the work site at atmospheric pressure or under increased pressure.</p> <p>“Dive contractor” means a diving company or firm undertaking petroleum related diving operations for which an authorization has been granted.</p> <p>“Dive team” means all positions involved in the dive activity, including divers, diving supervisors, dive safety specialists, standby divers, diving bell attendants, life support supervisors and technicians, ROV pilots and dive medical technicians who may participate in a dive activity or be required to participate in the dive activity.</p>	<p>Dive Physician</p> <p>The understanding is that Dive Physicians will be required to become members of the Canadian Royal College of Physicians and Surgeons of Canada in order to perform dive medicals for offshore divers. All DSV’s entering Canadian waters, for the most part, have foreign divers who have obtained their medicals within other global jurisdictions.</p> <p>Physicians from these other global areas will not have a license to practice medicine in Canada and certainly not have the Royal College qualification. Where does this leave the Dive Contractors and their dive crews?</p> <p>As a minimum, any foreign diver will likely have to obtain a second medical in order to work in Canadian waters, for what has historically been very short periods of time. In all likelihood they would have to get their second medicals in Canada as no foreign Physicians would qualify under the new standard.</p> <p>Under the current version of the Atlantic Canada Medical Assessment for Fitness to Work Offshore, the determination of equivalency of medical assessments from other jurisdictions or regulatory authorities is left to the discretion of the Operator.</p> <p>Would it not be more practical to accept, as equivalent, other reputable international certification bodies that are responsible for ensuring the qualifications and competence of foreign physicians currently performing these offshore dive medicals? Reference to having license to practice medicine in Canada should be removed.</p> <p>This new rule has the potential to introduce impractical complications and may become an obstacle to bringing DSVs into Canadian waters.</p> <p>Dive team</p> <p>Can lead to confusion, on a Dynamically Positioned vessel the DP officers are ‘involved’ in the diving program. Based on certain positions identified certain requirements within the Policy Intent are not logical.</p> <p>This is a very broad definition of the dive team. The dive team has historically only included the divers, standby diver and supervisor.</p>
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<p>“Dive site” means a site from which the diving operation is performed.</p> <p>“Diving operation” means an activity where the diver is directly exposed to increased ambient pressure.</p> <p>“Hyperbaric chamber” means a pressure vessel and associated equipment designed for the purpose of subjecting humans to greater than atmospheric pressures.</p> <p>“Hyperbaric evacuation unit” means a self-propelled hyperbaric evacuation system capable of providing an escape route for saturation divers living under pressure from a stricken vessel.</p> <p>“Hyperbaric reception facility” means a shore-based hyperbaric facility specifically designed to accept divers from an isolated hyperbaric evacuation unit to a large living complex for safe decompression.</p> <p>“Life Support Package” means a portable, containerized system with enough basic equipment to allow the safe decompression of divers evacuated within a hyperbaric evacuation unit.</p> <p>“Saturation diving” means a technique of diving that equalizes the pressure of inert gas in the body with the ambient pressure and allows extended periods of bottom time without additional decompression time required.</p> <p>“Saturation chamber” means a compression chamber used for a saturation dive that is equipped to permit divers to remain at greater than atmospheric pressure for a limited period of time.</p> <p>“Standby diver” means a diver that shall be prepared and equipped to give immediate assistance to the diver.</p>	<p>Diving Operation Implies no ADS. Also, contradicts the definition under “Diving bell” as atmospheric pressure is referenced whereas only increased ambient pressure is referenced in “Diving operation”.</p> <p>Hyperbaric Evacuation Unit Although defined, term Hyperbaric evacuation unit is not referenced within Policy Intent. If only a Hyperbaric Lifeboat is acceptable as implied with the document then Hyperbaric Lifeboat must be defined.</p> <p>Life Support Package (LSP) A LSP may not be portable/containerized as it may be integrated into a ‘rescue vessel’.</p> <p>Surface Supplied Diving The definition is inconsistent with defined dive site and clarification is required if it is intended for these to be the same.</p> <p>The definition also implies that Nitrox diving is not permitted.</p> <p>Dive Safety Specialist Recommend a definition for DSS be included.</p> <p>Hyperbaric Reception Facility</p> <ul style="list-style-type: none"> • Consider deleting the word “large” from the definition of “Hyperbaric reception facility” as the term is very subjective. • Recommend removing ‘shore-based’ as there are portable facilities that can be mobilized to the offshore.
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<p>“Surface-supplied diving” means a diving technique in which the diver is supplied from the dive location with air by way of an umbilical.</p> <p>“Specialized Dive Physician” means a physician who:</p> <ul style="list-style-type: none">a) is licensed to practice medicine in Canadab) possesses a diploma in Hyperbaric Medicine - Diving from the Royal College of Physicians and Surgeons of Canada; andc) has completed training in saturation diving medicine from a recognized training institution. <p>“Wet bell” means a device with an upper section containing a pocket of breathable gas, and which is used to lower and recover divers to and from work-sites subsea.</p> <p>“Working depth” means the depth from the water surface of the diver at work.</p>	<p>Wet Bell</p> <ul style="list-style-type: none">• Inconsistent use of terminology throughout the document. Breathing mixture, breathable gas, gases, air etc.• Must align to language within Diving bell definition so as to be consistent. <p>Working Depth</p> <p>Means the depth from the water surface of the diver at work. Should be “to the diver”</p>
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	PLANNING REQUIREMENTS	
	Dive Project Plan	
1	<p>1) The Dive Contractor must, in consultation with the Dive Safety Specialists appointed under Section 21, and, where applicable, the dive vessel master, establish, implement and maintain a written Dive Project Plan that outlines, in detail, all operational and safety elements of the proposed dive operation, including:</p> <ul style="list-style-type: none"> a) the nature and description of the work to be performed; b) A list of legislation, regulations (including this one), standards and codes of practice that the dive contractors considers applicable to the Dive Project c) A description of the diving operations; including the diving methods relevant for the scope of work and if relevant, include a description of dynamic positioning operations; d) detailed plan for how the task will be carried out; e) description of the hazards identified and risk assessments conducted as required under Section 2, including the required controls specific to the known hazards or the task to be performed f) the anticipated duration of the work, including number of hours to be worked each day; g) estimated and maximum time to be spent at each depth; h) the appropriate number of dive personnel required to safety carry-out the work; i) the hierarchy of command for the project; j) the name and qualifications of all members of the dive team, as well as any specialized training required to carry out the task; k) a method for communicating the Dive Project Plan to the dive team and any other persons who may be affected by the plan; l) any appropriate protective equipment that is to be used; m) dive system being used, and an assessment and identification of what components require redundancy ; n) a plan for familiarizing and instructing the dive team on the use of equipment to be used in carrying out the task; o) The results of any systematic assessments for identifying potential failure modes, consequences and appropriate mitigating measures; 	<p>In reference to Section 1:</p> <p>Suggest incorporating language around development of a “Safety Case”</p> <p>General Comments:</p> <p>1.1 (j) Recommend that requiring names of the dive team as these detail may not be available at the writing phase of the plan. This information would be available in another document or matrix (training/medical) prior to the work commencing and issuance of the authorization. Also, if personnel are changed then the project plan is no longer valid. The positions and roles intended for the dive team would be useful in the Project Dive Plan.</p>

<p>p) A table with drawing providing the safe distance to thrusters on dynamic positioning vessels; q) effect of weather and ocean conditions, including cold water hazards; r) all subsea lifts planned, and include crane operator certification requirement and drawings approved by a professional engineer for every lift; s) schedules for inspecting systems and the names of any persons responsible for carrying out the inspections; t) Communications available at the dive site to support the provision of medical advice and ensure accessibility in an emergency situation; u) emergency response plan, in accordance with Section 5; and v) any other information that is necessary to be able to plan for safe diving operations.</p> <p>2) When developing or revising a Dive Project Plan, a diving contractor must ensure that there is effective consultation with, and participation of, divers and other employees who will or may be working on the project.</p>	<p>1.1 (r) It is not reasonable or practical to mandate that professional engineer approve drawing for every lift. There has to be an allowance for routine lifts to be performed in reasonable manner and that only complex lifts require engineering approval.</p> <p>1.1 (s) In reference to the listing of names this is unnecessary and would cause issues with updating the project plan if there are personnel changes. Inspection schedules are part of the approved maintenance plan which could be discussed and noted in the dive plan. Listing of specific names is not practicable. Identification of positions or roles that have responsibility for inspection or maintenance would be more appropriate.</p> <p>In reference to Section 1:</p> <p>1.2 This policy implies that non diving personnel (as example - planner, scheduler, cost control who are all working on the project) are required to participate. Recommend that only person affected by the change be consulted or advised. Material or significant changes to a Project Plan will subject a management of change process which requires agreement and communication of changes.</p>
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	Project Hazard Identification and Risk Assessment	
2	<p>1) A project hazard identification and risk assessment must be carried out as part of the planning process and must take into account the hazards that may exist, and the hazards that may develop during the course of the work and the actions necessary to control and mitigate any identified hazards.</p> <p>2) The hazard identification and risk assessment must be:</p> <ul style="list-style-type: none"> a) Carried out in consultation with all parties involved in the dive activity and must be documented; b) Reviewed and accepted by both Dive Safety Specialists appointed under subsections 21(1) and 21(2); c) Be communicated and made available to all parties to ensure they are fully aware of the associated risks with the operation, and d) a copy must be readily available in the dive control room. <p>3) The hazard identification and risk assessment shall be amended, as necessary, to address any changes to the initial work scope or unplanned operations that may arise while the diving operation is underway. The activity must not proceed until this is completed and any necessary controls are put in place.</p>	<p>In reference to Section 2:</p> <p>General Comment 2.2 (a) The expectation to include “all parties” is unreasonable. Project HIRA’s are conducted with representatives from pertinent functions and key project personnel to ensure the input to the HIRA and identification of controls and mitigations are effective. All personnel involved in the project have access to the HIRA and it is used in job specific planning as required. The HIRA is always documented.</p> <p>Proposed text: “the Project HIRA must be attended by personnel knowledgeable of the project risks, documented and made available to project personnel.”</p>

	<p>Diving Safe Work Procedures</p>	
<p>3</p>	<p>The Dive Contractor must establish, implement and maintain written diving safe work procedures and instructions that address, at a minimum:</p> <ul style="list-style-type: none"> a) specific tasks to be carried out, as well as the equipment to be used; b) The outputs and findings of the hazard identification and risk assessment required under Section 2; c) diving from a dynamically positioned vessel, as applicable and in accordance with Section 4; d) the treatment of decompression illness; e) responding to hazardous weather or water conditions; f) aborting a dive; g) the provision and calculation of appropriate quantities of gases required for diving, including primary, secondary and therapeutic treatments; h) the maintenance of thermal balance, including the active heating of breathing mixtures; i) the provision and calculation allow for leakages, wastage and contingencies, and any other factor that may result in unplanned depletion of gas; and j) any other matters that may be applicable to the planned dive activity. 	<p>In reference to Section 3:</p> <ul style="list-style-type: none"> c) Recommend removing the reference to “dynamically positioned” and state “a vessel or other platform” d) Recommend replacing text with: “the treatment of decompression illness or unplanned omitted decompression” g) For consistency, recommend replacing gases with “breathing mixture”. h) The policy text implies that all breathing mixtures are to be actively heated, however; this is not required for surface supplied air above certain depth. <p>Proposed Policy Text:</p> <ul style="list-style-type: none"> h) “the maintenance of thermal balance, including, where necessary the active heating of breathing mixtures;

<p>4</p>	<p>1) Where a dive operation is being executed from a dynamically positioned vessel, the dive contractor must establish, implement and maintain written safe work procedures for the vessel that includes:</p> <ul style="list-style-type: none"> a) guidance on the conduct of diving operations as they may be affected by the DP vessel itself; b) actions to be taken in case of changes in station keeping alert status; c) vessel operations in close proximity to other marine installations and structures; d) vessel operations where divers enters areas with physical obstacles; e) precautions to guard against thruster wash or suction effect; f) equipment entanglement; g) vessel repositioning; and h) any other information necessary for the safe execution of the dive operation. <p>2) There shall be frequent communications between the Dive and DP Control Stations, who shall inform each other immediately about any changes in operational circumstances.</p> <p>2) The vessel must be equipped with</p> <ul style="list-style-type: none"> a) an indicator continuously displaying its station keeping status, and b) a visual and audible alarm system warning of station keeping status changes, both of which shall be visible on the bridge and dive control room and other critical areas as appropriate. 	<p>In reference to Section 4.1:</p> <p>4.1 Refer to proposed text for Section 3 (c) “a vessel or platform”. Also remove reference to “DP” under 4.1 (a).</p> <p>4.1 (d) “wheredivers enter areas....”</p> <p>4.1 (g) Suggest including intakes, discharges.</p> <p>In reference to Section 4.2:</p> <p>4.2) Recommended wording change: There shall be “dedicated and open communication” between the Dive and Vessel/Platform Control Stations, who shall inform each other immediately about any changes in operational circumstances.</p> <p>4.2 Incorrectly number – should be 3)</p>
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	Emergency/Contingency Response	
5	<p>1) The Dive Contractor shall develop written contingency and emergency response plans specific to the dive system and dive site to address all foreseeable emergencies identified in the hazard identification and risk assessment required under Section 2, to be followed in the event of an emergency in or near the dive site, on all of the following:</p> <ul style="list-style-type: none"> a) emergency notification protocol; b) the methods for communication and for loss of any communication; c) the rescue of a diver following an incident or emergency at the dive site, including the relocation and recovery of a lost bell; d) identification of the necessary resources to implement a plan under this section; e) a medical contingency plan for emergency medical treatment, including the provision of medical care for a critically injured/sick diver under pressure, in accordance with Section 33; f) plan for emergency hyperbaric evacuation, including recovery and reception of hyperbaric lifeboats, in accordance with Section 56; g) vessel or dive system emergencies that have the potential to jeopardize the safety of a diver; h) in-water diver emergencies including, but not limited to, an injured or unconscious diver; i) chamber system emergencies including, but not limited to, fire, loss of pressure, atmospheric contamination, or failure of life support system; j) regular conduct of emergency response drills and exercises, in accordance with Section 58; k) a method for communicating the emergency response plan to all persons who may be affected by the plans; and l) Any other information necessary for the emergency preparedness and the safe execution of emergency response. <p>2) Detailed emergency procedures covering all emergency scenarios shall be readily available to all members of the dive team.</p>	<p>General Comment: The policy text makes no reference to Twin bell verses single bell operations for saturation diving. CAPP requests clarification on the intention for twin vs. single bell operations.</p> <p>In reference to Section 5:</p> <p>5.1 (f) See comments in Definitions section regarding hyperbaric evacuation unit.</p> <p>5.2 Dive team under definition includes ROV pilot. Is this meant to apply to all members of the dive team? Recommend revision to the definition of "Dive Team" to ensure unnecessary positions are not included.</p>

	OPERATIONAL REQUIREMENTS	
6	SCUBA operations and surface-supplied diving using a helium-oxygen gas mixture are not permitted.	In reference to Section 6: CAPP requests clarification on the intent of the policy as it implies that Nitrox diving is not permitted.
6.17	<p>6.17 BALLAST AND BILGE SYSTEMS</p> <p>(1) The operator shall ensure that every floating platform is equipped with robust ballast and bilge systems to maintain necessary draught, stability and hull strength under all anticipated environmental and operating conditions, with capability to bring the platform to a safe condition from an unintended draught, trim or heel. The systems shall be designed to prevent unintended transfer of fluid within the system, to empty and fill all tanks within the system and to empty watertight spaces in an efficient manner.</p> <p>(2) The operator shall ensure that the ballast and bilge systems of every floating platform are designed and maintained in accordance with the relevant requirements of the International Maritime Organization MODU Code or the Intact Stability Code as amended from time to time.</p> <p>(3) No floating platform shall be considered to comply with this section until the ballast and bilge system has been assessed through a failure modes and effects analysis.</p> <p>4) Every column-stabilized mobile offshore platform shall be equipped with a secondary ballast control station equipped with: (an effective means of communication with other spaces that contain equipment relating to the operation of the ballast system; (b) a ballast pump control and status system; (c) a ballast valve control and status system; (d) a tank level indicating system;</p>	<p>It should be clarified that this does not apply to vessels, per the definition of floating platform. There has been a recent requirement to submit RQFs for vessel not meeting these requirements (ref: C-NLOPB 2017-RQ-0104 – M/V Maersk Detector)</p> <p>International Maritime Organization MODU Code or the Intact Stability Code would not be applicable to all vessel classes.</p> <p>FEMA for the ballast system is not a requirement for all vessel classes.</p>

	<p>(e) emergency lighting; (f) heel and trim indicators; and (g) a permanently mounted ballast schematic diagram.</p> <p>(5) The main and secondary ballast control stations shall be located above the waterline in the final condition of equilibrium after flooding when the platform is in a damaged condition.</p>	
6.18	<p>WATERTIGHT INTEGRITY OF FLOATING PLATFORMS</p> <p>(1) The operator shall ensure that every floating platform is designed, built, equipped, monitored, operated and maintained to ensure its watertight integrity.</p> <p>(2) Every floating platform will be designed with sufficient watertight compartmentation to ensure preservation of reserve buoyancy and damage stability under all foreseeable environmental, operating and accidental conditions.</p> <p>(3) Freeboard, watertight compartmentation, and arrangement and specification of watertight and weathertight appliances shall be determined in accordance with class and relevant requirements of the International Maritime Organization, including the IMO MODU Code, Intact Stability Code and the International Convention on Load Lines, as amended from time to time.</p>	<p>International Maritime Organization MODU Code or the Intact Stability Code would not be applicable to vessels.</p>

	<p>(4)The Operator shall ensure that the arrangement and specification of watertight and weathertight appliances includes all necessary safety features to reduce risk to personnel to as low as reasonably practicable.</p> <p>(5) Every floating platform shall be designed with systems and equipment that provide for operating, monitoring and alarm indication, both locally and at the ballast control stations, of the operational position of watertight doors and hatches, as well as detection and alarm indications of water ingress into watertight protected spaces that are not designed to have accumulation of fluid.</p> <p>(6) The operator shall ensure that for every floating installation that is flagged outside Canada, a list of all flag state administration decisions and exemptions from IMO code requirements are identified and that a risk assessment be conducted to identify areas that require mitigating measures to reduce risks to as low as reasonably practicable. The list, analysis and proposed action plan shall be submitted to the Chief Safety Officer prior to an authorization being issued.</p>	
6.25	<p>INSTALLATIONS OPERATION</p> <p>Every operator of an offshore installation shall at all times operate the installation in accordance with limitations imposed by the certificate of fitness and in accordance with the operations manual.</p>	<p>Diving Regulation PID does not require that dive installations require a Certificate of fitness, but this section also reference to operating in accordance with limitations imposed by the certificates of fitness:</p> <p>Suggest rewording as “limitations imposed by the certificate of fitness, if applicable, and in accordance with the operations manual.”</p>

<p>6.26</p>	<p>OPERATIONS MANUAL</p> <p>(1) Subject to subsection (2), every operator shall prepare, adhere to and maintain, in respect of every installation, an operations manual that defines the operational characteristics, procedures, capabilities and limitations of an installation and associated essential [and safety critical] systems, and which contains the following data:</p> <ul style="list-style-type: none"> a) general description and particulars of the installation; b) chain of command and general responsibilities during all normal operations and emergency operations; c) limiting design data for each mode of operation; d) a description of inherent limitations on the operation of the installation and its equipment for each approved mode of operation, including physical and environmental conditions at the site where the installation will be installed and the effect of those conditions on the installation listing of and reference to procedures necessary to ensure safe operations within inherent; e) listing of and reference to procedures necessary to ensure safe operations within inherent limitations; f) criteria and triggers that would require planned precautions and actions to be taken to safeguard personnel, the installation and the environment in the event pre-determined thresholds for safe operation of the installation in all modes of operation are exceeded or forecasted to be exceeded, and a listing of or reference to procedures that detail the precautions and actions to be taken; g) characteristics of foundation and bottom penetration, or anchoring arrangement, and provisions to monitor integrity of foundations, mooring and anchoring arrangements; h) criteria for minimum penetration and/or maximum scour for foundation and anchoring arrangements; i) criteria for weather or oceanographic events that trigger post-event inspections of subsea structural elements (note: this includes anchors) j) for an installation that is a mobile offshore platform, such information and instruction as is necessary to accurately (alternative to accurately: “unambiguously”?) and rapidly determine and manage the loading, ballasting and stability of the platform within approved criteria for intact and damaged stability under varying conditions of service, including: 	<p>It should be clarified that the following sections do not apply to vessels:</p> <ul style="list-style-type: none"> g) characteristics of foundation and bottom penetration, or anchoring arrangement, and provisions to monitor integrity of foundations, mooring and anchoring arrangements; h) criteria for minimum penetration and/or maximum scour for foundation and anchoring arrangements; j) for an installation that is a mobile offshore platform, such information and instruction as is necessary to accurately (alternative to accurately: “unambiguously”?) and rapidly determine and manage the loading, ballasting and stability of the platform within approved criteria for intact and damaged stability under varying conditions of service, including:
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7	<p>1) Surface supplied air diving shall not exceed 50 msw.</p> <p>2) For all surface oriented diving operations a double-lock compression chamber shall be ready for use at the worksite. Diver must be able to reach maximum depth in the chamber within time limits as specified in diving tables, required under Section 14.</p>	<p>In reference to Section 7:</p> <p>7.1 CAPP requests clarification on the intent of the policy as it implies that Nitrox diving is not permitted.</p> <p>7.1 MSW to be consistent with Acronym.</p> <p>7.2 Surface oriented, implies something other than air can be used as breathing mixture. CAPP requests clarification.</p> <p>7.2 As “worksite” is not defined, CAPP requests clarification if the intent is to mean “Dive Site” as defined in policy intent or does the term have a different meaning or application.</p>
	<p>7.12 HELICOPTER FACILITIES AND OPERATIONS</p> <p>(1) The operator shall ensure every helicopter deck that is part of an installation is designed and equipped to prevent incidents or damage from the use of helicopters or aircraft, including: an obstacle-free take-off and approach that is appropriately oriented relative to prevailing winds; ability to withstand the static and dynamic functional loads imposed by helicopters; ability to accommodate expected helicopter sizes; emergency response and fire-fighting equipment so that helicopter emergencies can be responded to safely and effectively; fuel storage tanks located safely and protected against damage, impact and fire; conspicuous markings and signage; suitable lighting for reduced visibility conditions; suitable communication and meteorological equipment to enable safe helicopter operations; and ready and safe access to the helicopter deck and helicopters, notably from the temporary safe refuge and the accommodations.</p> <p>(2) The operator shall ensure that the helicopter deck and associated operations and maintenance shall conform to the requirements of CAP 437 Standards for Offshore Helicopter Landing Areas as published by the UK Civil Aviation Authority.</p>	<p>This should be worded similar to Section 8.4</p> <p>8.4 VESSEL CLASSIFICATION AND HELICOPTER DECK</p> <p>If the geoscience, geotechnical or environmental program is proposing to transfer personal with helicopters, the helicopter deck should meet the requirements of CAP 437 for helicopter deck.</p> <p>Rationale:</p> <p>8.4 The mandatory application of CAP 437 may preclude use of some vessels if helidecks are built to other standards</p> <p>Proposed Policy Text:</p> <p>If the geoscience, geotechnical or environmental or diving/construction program is proposing to transfer personal with helicopters, the helicopter deck should meet the requirements:</p> <p>a) outlined in CAP 437 for helicopter deck; or, b) complies with the classification requirements outlined by the vessels Classification Society.</p>

<p>7.13 CRANES AND HANDLING DEVICES</p> <p>(1) The operator shall ensure every crane or other handling device on an installation is designed, constructed, operated and maintained, to the extent that is reasonably practicable:</p> <ul style="list-style-type: none">with necessary safety devices and features to ensure safe operations;within pre-defined safe operating limits;so that if there is a failure of any part of the material handling equipment, it will not result in loss of control of the equipment, or create a safety or environmental hazard; andbased on the conditions under which it is to be used, including consideration of movements of:<ul style="list-style-type: none">supply vessels relative to the installation; andon a floating platform, the platform itself. <p>(2) The operator shall ensure that cranes or other handling devices are operated, tested, maintained and inspected by competent and trained personnel taking into consideration the recommendations of the original equipment manufacturer and relevant industry standards or best practices.</p> <p>(3) The operator shall ensure that every crane has emergency slewing and lowering capability.</p> <p>(4) The operator shall ensure that every crane and other material handling equipment shall be uniquely identified and marked with sufficient information to permit safe operation and reference to relevant records of design, construction, inspection, testing, maintenance and repair.</p> <p>(5) Before a materials handling equipment is placed in service, a qualified person shall inspect, proof test and certify in writing the rated capacity of a materials handling equipment in accordance with criteria established by the manufacturer or applicable design or safety standard where:</p> <ul style="list-style-type: none">the equipment is new;the rated capacity of the equipment cannot be determined;the continued safe use of the equipment cannot be assured due to its age or history;repairs or modifications have been made to load carrying components;modifications have been made which affect the rated capacity;the materials handling equipment has been in contact with an electric arc or current; orin any case, at a period interval that will ensure continued safe operations.	<p>This section does not differentiate between the different types of crane on vessel (general provision cranes, crash rail cranes etc) that are not intended or used for offshore cargo / personnel lift operations.</p> <p>See general comments in CAPP letter.</p>
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7.36	<p>EVACUATION AND ESCAPE</p> <p>(1) The operator shall ensure that every installation has adequate and effective facilities and best technology practicable for safe and controlled emergency response during accidental events, including:</p> <ul style="list-style-type: none">routes and other necessary equipment and devices which allow personnel to escape from the immediate effects of a hazardous event to a place of temporary refuge;provision of temporary refuge for the time required for incident assessment and controlled evacuation;arrangements to permit the rescue of injured personnel; andarrangements for safe evacuation of all personnel from the installation. <p>(2) The operator shall ensure that safe, direct, protected and unobstructed exits, access, and escape routes are provided from all areas of the offshore installation, that are intended to be regularly occupied by personnel, to temporary refuge, muster areas and embarkation or evacuation points.</p> <p>(3) The operator shall ensure that all areas intended to be regularly occupied by personnel are provided with at least two exits and escape routes, separated as widely as practicable such that at least one exit and the connected escape route will be passable during an accidental event.</p> <p>(4) The operator shall ensure that primary escape routes are provided on both sides of the offshore installation.</p> <p>(5) The operator shall ensure that all escape routes from the accommodation areas and temporary safe refuge to the evacuation and embarkation stations, as well as those stations, are provided with fire protection for sufficient period of time, and suitably marked and illuminated, to allow for the safe evacuation of personnel, and in any case for a minimum of at least two hours.</p> <p>(6) Escape routes shall be of suitable size to enable efficient movement of the maximum number</p>	<p>Vessels do not have designated temporary refuges of the nature described in this section.</p> <p>Vessels are built to class rules and IMO Codes for fire rating and may not necessarily meet all of the prescribed requirements stated in the proposed text.</p>
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8	<p>1) When conducting a saturation dive operation, a means to effectively locate, assist and recover all divers shall always be available in the event of a lost bell.</p> <p>2) A closed bell shall be capable of sustaining the lives of trapped divers for at least 24 hours</p> <p>3) A closed bell shall be equipped with a location device using the International Maritime Organization (IMO) agreement recognized frequency to enable rapid location if the bell is lost.</p> <p>4) The main umbilical system of a diving bell must be fitted with suitable protective devices that will prevent uncontrolled loss of the atmosphere inside the diving bell if any or all of the components in the umbilical are ruptured.</p>	<p>In reference to Section 8:</p> <p>8.1 Applies to any diving operation for any stricken diver no matter the cause.</p> <p>8.2 Closed bell is not defined. Is intent “Diving bell” as per definition?</p> <p>8.3 Closed bell is not defined. Is intent “Diving bell” as per definition?</p> <p>8.4 What is expectation under this section as the policy text implies automatic system.</p>
	<p>Duration of Dives and Periods of Rest</p>	
9	<p>In planning the dive activities, the Dive Contractor must conform to the time limits for saturation exposure limits outlined in <i>CSA Z275.2 Occupational Safety Code for Diving Operations</i></p>	<p>In reference to Section 9:</p> <p>CAPP recommends that the exposure limits outlined in the references standard be reviewed to ensure alignment with rotation and shift schedules for offshore under applicable legislation (i.e. Based on current Labour standards a 28 day saturation dive cannot occur).</p>
10	<p>1) A continuous rest period of at least 12 hours shall be included in any 24 hour period for personnel working under water or under increased ambient pressure and a minimum of six (6) hours of uninterrupted sleeping period must be provided.</p> <p>2) Surface personnel carrying out support functions for the dive operation, and whose work have an influence on safety during the operation, shall have at least 12 hours continuous rest period during the course of a 24 hours period.</p>	<p>In reference to Section 10:</p> <p>10.2 This is not a practical requirement as many marine crew work a 6 hours on and 6 hours off work schedule. Recommend that policy align with standard marine practice.</p> <p>10.2 Reword surface personnel to “Surface Dive Team Personnel”</p>
11	<p>1) Standby divers must have had, except in the event of an emergency, 12 continuous hours off since a previous dive;</p> <p>2) In the case of surface-supplied diving operations, the standby diver must not have any residual inert gas.</p>	<p>In reference to Section 11:</p> <p>11.1 CAPP requests clarification on the intent of this policy text.</p> <p>11.2- Policy text appears to be a duplicate of Section 14.</p> <p>Proposed Text: “Standby divers shall not have any residual inert gas as calculated by the decompression table in use”.</p>

	Decompression	
12	Decompression must be carried out in accordance with proven decompression tables appropriate for the type and depth of diving, developed to minimize potential decompression sickness, and approved by the Specialized Dive Physician.	<p>In reference to Section 12:</p> <p>12) CAPP requests clarification on the intention for “proven decompression tables”.</p> <p>What is expectation in terms of approval of the Specialized Dive Physician?</p> <p>CAPP has provided additional comment in the attached letter.</p>
13	The Dive Contactor must have a program and procedures in place, and training provided, for decompression that will minimize any illness or adverse effects on the diver, and it must consider repetitive factor of an air dive and residual inert gases of any diver.	
14	Standby divers shall not have any residual inert gas.	<p>In reference to Section 14:</p> <p>14) Refer to comment for Section 11.2 as this appears to be a duplicate clause.</p> <p>14) CAPP requests clarification on the means for establishing residual inert gas.</p> <p>CAPP proposes the following text:</p> <p>“Standby divers shall not have any residual inert gas as calculated by the decompression table in use”.</p>
15	Accelerated decompression must only be used in extenuating, emergency circumstances.	
16	Notwithstanding Section 57, in the event of an emergency, the Dive Contractor shall ensure that life support for divers is maintained for 24 hours.	<p>In reference to Section 16:</p> <p>The intended meaning of the statement is not clear. Some additional wording would be helpful.</p>

17	<p>1) A diver who has undertaken a surface-supplied dive must not fly in an aircraft for 18 hours after a dive, unless the inert gas load remaining does not create a risk to the diver.</p> <p>2) A diver who has undertaken a saturation dive must not fly in a fixed-wing aircraft for 12 hours following the dive or helicopter above 300 m altitude.</p> <p>3) Notwithstanding the above, where the diver has suffered decompression sickness, air travel must be approved by the Specialized Dive Physician, regardless of the time that has elapsed.</p>	<p>In reference to Section 17:</p> <p>17.1 Industry standard practice typically restricts flying for 24hrs post-decompression or return to surface. As there is obviously difficulty in determining the remaining inert gas load of a diver it would probably be more reasonable to clearly define the no fly period for which 24 hours is the accepted international standard.</p>
18	<p>Decompression facilities must be suitable to accommodate the entire number of divers completing their decompression, as well as any other people needed to carry out decompression.</p>	<p>In reference to Section 18:</p> <p>Section 18 implies that the decompression facilities need to be suitable to accommodate all the divers and those persons responsible for carrying out the decompression. Industry practice is for decompression to be conducted by the Life Support Technicians (LSTs) who are located outside the chambers and positioned at the life support panel.</p> <p>Recommend removing the reference to any other people as it not applicable.</p>
19	<p>A Surface compression chamber must:</p> <ul style="list-style-type: none"> a) be designed and constructed to be fit for the purpose and to ensure safety; b) provide a suitable environment for its occupants, including amenities appropriate to the type, depth and duration of the diving operation; c) contain sufficient space in at least one of its compartments to enable at least two occupants to lie down comfortably in the compartment and, if a person will be in the surface compression chamber for a period of eight consecutive hours or less, have an internal vertical diameter of at least 1.5 m; d) be equipped with a medical lock; e) be fitted with adequate equipment, including facilities for <ul style="list-style-type: none"> i. supplying to and maintaining for its occupants an appropriate breathing mixture, ii. lighting and heating the compression chamber, and iii. removing carbon dioxide. 	<p>In reference to Section 19:</p> <p>19 Request confirmation that the “surface compression chamber” is referring to a Hyperbaric chamber as defined within the Policy Intent?</p> <p>19 (c) Recommend removing the text “or less” and leave the time requirement at 8 hours or longer.</p> <p>19 (e)(iii) Recommend adding a requirement to include “communications”</p>

	PERSONNEL AND QUALIFICATIONS	
20	<p>Dive Team Size and Composition</p> <p>1) The Dive Team must be appropriately sized, taking into consideration the hazard and risk assessment required under Section 2, with sufficient qualified personnel available to operate and maintain all the equipment and to provide support functions to the diving team.</p> <p>2) Notwithstanding the above, a minimum of two dive supervisors must be in attendance at all times during active diving activities.</p>	<p>In reference to Section 20:</p> <p>20.2) If two supervisors are to be attendance at all times during a diving activity how are meal and bathroom breaks to be accounted for. Will this require the presence a third dive supervisor? Will this also be the case for Surface Supplied Air Diving operations? The reason for the two supervisors is unclear.</p> <p>20.2) What is expectation of “in attendance at all times”? As per CSA guideline?</p>

<p>21</p>	<p>Dive Safety Specialists</p> <p>1) The Operator shall designate, in writing, a Dive Safety Specialist who</p> <ul style="list-style-type: none"> a) Must be available <ul style="list-style-type: none"> i. During the planning phase prior to the commencement of the dive program, and ii. at all times at the dive site during the execution of the diving program to advise on any matter related to the safety of the diving program; b) Is independent of any dive contractor involved in the diving program, and c) Is not the same person who has been appointed by a dive contractor as the Dive Safety Specialist under subsection (2); d) Has overriding authority to make decisions with respect to the safety of divers. <p>2) If all or part of a dive program is carried out by a dive contractor on behalf of the Operator, the dive contractor must appoint, in writing, a Dive Safety Specialist who</p> <ul style="list-style-type: none"> a) Must be available <ul style="list-style-type: none"> i. During the planning phase prior to the commencement of the dive program, and ii. at all times at the dive site during the execution diving program, to advise on any matter related to the safety of the diving program, or those portions of it, carried on by the contractor on behalf of the operator; b) Is independent of Operator, and c) Is not the same person who has been appointed by the Operator as the Dive Safety Specialist under subsection (1). <p>3) A DSS must not have any other role assigned to them for the period of time that the dive activity takes place.</p>	<p>In reference to Section 21:</p> <p>21.1 (d) CAPP believes the policy text conflicts with the authority of Diving Supervisor. It needs to be understood the DSS cannot override the authority of the Dive Supervisor during a dive. The policy text implies the Operator Diving Safety Specialist can override the Diving Supervisor on the panel which is inappropriate.</p> <p>21.2 CAPP requests clarification as the policy text implies that the dive contractor can obtain an authorization to dive offshore without an Operator?</p> <p>21.2 (a) (ii) Missing – “of the diving program”.</p> <p>21.3 CAPP propose that the role of the DSS be at the discretion of the Operator and recommend the follow text: “A DSS must not have any other roles assigned to them for the period of time that the dive activity takes place if any of those roles interferes with the DSS’s primary function”.</p>
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22	<p>Specialized Dive Physician</p> <p>A Specialized Dive Physician must be</p> <ul style="list-style-type: none"> a) Capable of providing medical advice and assistance for all reasonably foreseeable events that the dive program may encounter b) readily available on a 24 hour basis for medical advice and for transportation to the dive site to provide medical treatment c) capable of advising and administering medical treatment to a diver in compression. 	
	<p>Qualifications, Training and Competency</p>	
23	<p>During execution of the work, the Operator must monitor the continued competence of the dive contractor</p>	<p>In reference to Section 23:</p> <p>The policy text is potentially contradictory to 21.2 as it would be dependent on who was awarded the authorization. There should be text clarifying a case where a Dive Contractor has been issued the authorization and is accountable for the competency of the personnel involved in the dive operation.</p>
24	<p>All members of the dive team must be competent to carry out their respective roles.</p>	
25	<p>Each position in the dive team, and any ROV pilot, where pilots are deployed in the diving operation, must conform to the competencies outlined in CSA Z274.4 <i>Competency Standard for Diving, Hyperbaric Chambers and Remotely Operated Vehicle Operations</i>.</p>	<p>In reference to Section 25:</p> <p>Recommend adding “as amended from time to time” or remove the version reference.</p> <p>Positions defined under Dive team within the Policy Intent do not use the same titles as described in the CSA standard. Recommend that the titles be consistent to avoid confusion or misunderstanding.</p> <p>Incorrect reference- the standard referenced should be Z275.4.</p>
26	<p>All members of the dive team, other than the specialized diving physician, shall hold valid certificates issued by a certifying body acceptable to the Chief Safety Officer.</p>	<p>In reference to Section 26:</p> <p>The Dive team needs to be more clearly defined. As per the Policy Intent definitions, the specialized diving physician does not form part of the dive team.</p>

27	Certificates of competency shall be issued based on completion of formal training from an accredited institution.	<p>In reference to Section 27:</p> <p>Recommend that the policy text be more specific in terms of who is required to possess the certificates of competence.</p>
28	<p>1) All members of the dive team shall hold current certification in standard first aid, as well as first aid oxygen administration.</p> <p>2) On every dive team, one member excluding the supervisors and the divers underwater shall have diver medical technician certificate of competence.</p>	<p>In reference to Section 28:</p> <p>28.1) According to the Dive Team definition the ROV pilot is a member of the team. It is unclear why this person would need to have training in first aid oxygen administration? CAPP recommends that the definition be revised to remove positions not directly involved on the dive team.</p> <p>28.2) CAPP recommends having at least two divers with diver medical technician certification in the event the injured diver happens to be the diver medic.</p>
29	Personnel certification and qualifications documentation shall be readily available.	

	HEALTH, SAFETY AND WORKING ENVIRONMENT REQUIREMENTS	
	HEALTH	
	Fitness to Work	
30	All divers must be certified as physically and medically fit to dive by a Dive Physician within 12 months immediately before the diver performs their duties in the dive program and the diver must attest that there has not been a change in their medical fitness since their last assessment.	<p>In reference to Section 30:</p> <p>CAPP recommends that the text be revised as the current text could potentially permit a divers medical certificate to expire while a diver is in saturation. The validity must remain current for the full duration of the work period. Also CAPP believes that a “Specialized Dive Physician” should be permitted to certify the medical fitness of divers.</p> <p>Also, the statement “the diver must attest that there has not been a change in their medical fitness since their last assessment” implies that the diver has to attest there has not been a change in their medical fitness since their last assessment – even though there may have indeed been a change.</p> <p>Proposed Text:</p> <p>All divers must be certified as physically and medically fit to dive by a dive physician or specialized dive physician when performing their duties in a dive program, with medicals issued within the past 12 month period and remain valid for the duration of the work period; and, divers must disclose any change to their medical condition since their last assessment.</p>
31	Pre- and post-dive medical checks, in accordance with procedures approved by the Specialized Dive Physician, shall be conducted routinely for all divers. For saturation divers these checks shall be performed upon entering and surfacing from saturation dives, and for air divers prior to and after completion of work periods.	<p>In reference to Section 31:</p> <p>CAPP requests clarification as it is unclear:</p> <ul style="list-style-type: none"> • who is permitted to conduct the medical checks; • what is intended by “work period”; and • when these checks are to be conducted (i.e., prior to compression and at end of decompression).

<p>32</p>	<p>First Aid & Medical Supplies and Equipment</p> <p>The Dive Contractor, in consultation with the Specialized Dive Physician, shall ensure sufficient supply of first aid and medical supplies, equipment and medications are available at the dive site, for all reasonably expected injuries and illnesses that could occur and that were identified in the Hazard and Risk Assessment, and at minimum, must conform to DMAC 15 <i>Medical Equipment to be Held at the Site of an Offshore Diving Operation</i>.</p>	<p>In reference to Section 32:</p> <p>CAPP believes that the reference to DMAC 15 as a standard for medical equipment is prescriptive and out dated.</p> <p>CAPP proposes that the requirements for medical equipment be consistent with the OHS regulation supplemented with additional equipment required for diving operations as determined by the Specialized Dive Physician. All offshore vessels maintain first aid and medical equipment and facilities which only need to be augmented for diving operations.</p>
<p>33</p>	<p>Medical Contingencies</p> <p>1) The Dive Contractor shall establish a system for handling medical contingencies in connection with the planned dive operations. The medical contingency plan shall address</p> <ul style="list-style-type: none"> a) handling of all acute medical problems in diving operations b) plan for hyperbaric evacuation, in accordance with section 56, c) how to return personnel to surface pressure and give required medical treatment during decompression period, d) how qualified medical treatment can be given to personnel under pressure, e) how drills are to be carried out in order to handle an incident or a hazardous situation. <p>2) Training shall be provided on the drills identified in 33(1)(e)</p>	<p>In reference to Section 33:</p> <p>33.1 (b) Should be revised as the text implies hyperbaric evacuation is required for Surface supplied diving.</p> <p>33.1 (d) Recommend the removal of “qualified” as treatment provided by a medical professional is inherently understood to be qualified treatment.</p> <p>33.1 (e) Recommend wording change: “the type of drills and how they are to be carried out in order to handle an incident or a hazardous situation.</p> <p>33.2 Consider rewording (2) to “All personnel shall be made aware of the medical contingency plans required in 33(1) and drills on these plans shall be conducted regularly”</p>

34	<p>Medical Monitoring and Communications</p> <p>1) The Dive Contractor shall ensure that the specialized diving physician:</p> <ul style="list-style-type: none"> a) is able to communicate directly with a diver inside the saturation chamber or diving bell, b) has visual and auditory aids to observe and examine the divers when needed, and c) has remote access to monitoring or clinical assessment technologies, as technology permits. <p>2) The person performing advanced first aid shall have priority and unimpeded access to suitable communication devices with the specialized diving physician, or any other competent personnel as may be required.</p> <p>3) Internet bandwidth (data transfer rate/communication access and speed) must be sufficient to provide chamber monitoring that allows the results of ongoing medical testing, such as electrocardiograms, to be transferred to the Specialized Dive Physician</p>	<p>In reference to Section 34:</p> <p>34.1 (a) The general opinion is that it's not necessary to have that direct communication to the diving bell.</p> <p>Consider rewording to "a suitable means of relaying information between the person administering first aid and the Specialized Dive Physician"</p>
	<p>DIVER SAFETY</p>	
35	<p>Diver Locator</p> <p>The Dive Contractor shall ensure a means exists that permits a diver's location to be constantly known.</p>	<p>In reference to Section 35:</p> <p>CAPP requests clarification as the policy text is extremely broad and appears to be applicable to both surface supplied and saturation?</p>
36	<p>Hazardous Substances</p> <p>The Dive Contractor shall document a system to ensure that all materials utilized in chambers, bells and breathing circuits etc., do not contain or produce gases or vapors that may be harmful to the divers during normal operational conditions.</p>	

37	Standby Diver Equipment Standby divers shall be equipped with the same diving equipment as the primary diver.	In reference to Section 37: The standby diver normally uses certain different equipment from the regular diver to permit execution of the standby diver duties. The text as stated may also create a delayed response to the stricken diver. Proposed Text: Standby divers shall be equipped with suitable diving equipment appropriate to the standby function.
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	WORKING ENVIRONMENT	
38	<p>Thermal and Humidity Exposure</p> <p>1) The Dive Contractor must ensure:</p> <ul style="list-style-type: none"> a) all dive team members are made fully aware of the hazards of cold water on a diver; b) Thermal control systems for divers in water, in hyperbaric chambers, bells, habitats (and in ADS systems) shall have the capacity and the accuracy to ensure thermal balance and comfort for the divers/occupants during all phases of a normal dive c) Redundancy in heating systems for all breathing mixtures; <p>2) In the event of loss of thermal balance in diver, equipment or gas, or in the event there is any loss of hot water, even if the loss is expected to be temporary, the dive is to be suspended immediately and divers are to return to the diving bell/basket.</p> <p>3) Life support systems for living chambers shall have the capacity to control the relative humidity to between 40% and 60% at operational depth of the system and with a full complement of divers in the chambers.</p>	<p>In reference to Section 38:</p> <p>38.1(a) As stated previously the definition of dive team include an ROV pilot to whom the requirements under 33.1 (a) are not applicable.</p> <p>38.1(b) As habitats and ADS systems have not been discussed previously in this document, CAPP requests clarification on what is intended for their inclusion under section 38.</p> <p>Also it is understood which of the previous section of the policy text apply to ADS and habitats. There is no explanation of the acronym ADS or definition for either habitat or ADS.</p> <p>38.1(c) This may not always be possible. Requires input from the diving specialists to clarify this point. Not applicable to ADS.</p> <p>38.2 Basket not defined.</p> <p>38.2 Clarification is requested if using a Wet bell verses a Diving bell? CAPP believes these needs to be consistency in definitions.</p> <p>38.2 CAPP requests confirmation that the purpose of returning is to have the dive terminated?</p> <p>38.3 CAPP recommends that the percentage stated for relative humidity are prescriptive and recommend replacing with “.... control the relative humidity to levels acceptable for occupancy in the chamber and which will not result in any adverse health effect.....”</p>

<p>39</p>	<p>Seismic Activities near the Dive Site</p> <p>1) Where seismic activity is planned within the vicinity of a dive site:</p> <ul style="list-style-type: none"> a) The diving vessel and seismic vessels must be in regular contact so that both are aware of each other's work program b) a risk assessment must be conducted to assess the risk to the divers health prior to the commencement of the seismic operation , if the seismic activity is to occur within 10km of the dive site; <p>2) No dive activity shall proceed if the risk assessment has determined that the divers may be exposed to noise levels beyond maximum allowable levels prescribed by ACGIH</p>	<p>In reference to Section 39:</p> <p>General Comment: There should be a mechanism established to alert DSVs that there are seismic activities occurring. Perhaps this is a function the regulator could take responsibility for as they are aware of all the offshore activities occurring at any given time. Regulator involvement required-at 10km multiple unrelated licenses are likely involved.</p> <p>39.1 The use of "vicinity" is subjective. CAPP proposes that the policy state that where seismic activity is planned to be conducted within 10km of a dive site or that may adversely affects a dive site:"</p> <p>39.1 (a) CAPP proposes that that if it is determined through risk assessment that there is no risk is to the divers there should not be any requirement to maintain regular contacts unless there is a change of scope.</p> <p>39.1 (a) Consideration should be given for seismic activities from MODUs (i.e. Vertical Seismic Profile). Consider rewording to 'other installations conducting seismic activities'"</p> <p>39.1 (b) Recommend stating "....occur within 10km of the dive site or that may adversely affects a dive site:"</p> <p>39.1 (b) Recommend replacing the reference to "seismic" with "diving". The potential is for impact to divers and may be more appropriate if seismic was removed and diving inserted. Seismic operations may start days, weeks or months ahead of diving operations.</p> <p>39.1 (b) It may be difficult to quantify the risk from a seismic operation occurring within the 10 Km range. There are factors of seismic gun intensity, water depth and sea floor characteristics, etc. that will impact this risk. Require further feedback from the diving specialists.</p> <p>39 The use of near in the section title is subjective and recommends just stating "Seismic Activity".</p>
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40	<p>Contaminated Working Environment</p> <p>When diving in locations where the seabed or seawater may be contaminated, the dive activity shall conform to the requirements related to diving in contaminated waters laid out in CSA Z275.2 <i>Occupational Safety Code for Diving Operations</i>.</p>	<p>General Comments:</p> <p>40 CSA code should be reviewed further for levels of protection required based on level of contamination (i.e.: drill mud, produce water on surface, etc).</p> <p>40 CAPP requests clarification as there was a concern expressed at the October 2nd St. John's meeting that the standard only addresses inshore diving activity. Is this the case?</p>
	<p>TECHNICAL REQUIREMENTS</p>	
41	<p>System for Failure Detection</p> <ol style="list-style-type: none"> 1) A system for active monitoring of critical components and equipment of the diving system that provides indications in the dive control room of the health of the system. 2) Registration/notification and correction of 3) Equipment failures detected during routine, pre-dive checks (documented in checklists/logs) must be registered as equipment failures. 	<p>In reference to Section 41:</p> <p>41.2- The expectation for 41.2 is unclear as stated. Recommend stating "A system for recording and tracking dive system and diver equipment failures must be established, implemented and maintained".</p> <p>41.3 Suggest adding the wording "in the computerized maintenance management system" to the highlighted text to avoid misinterpretation that this would be synonymous with SCE Impairment reporting required under the Framework Regulations.</p> <p>Proposed text:</p> <p>41.3 Equipment failures detected during routine, pre-dive checks (documented in checklists/logs) must be registered as equipment failures in the computerized maintenance management system.</p> <p>Note that this system would be typically be inherent in the maintenance management system for the diving equipment.</p>
	<p>Communications</p>	

42	All dive team members, including the emergency response team both offshore and on shore, must be able to effectively communicate with one another at all times in order to safely execute the activity and obtain medical attention, if needed.	<p>In reference to Section 42:</p> <p>The wording needs to be revisited if the intention is that the emergency response team both offshore and onshore are considered to be part of the dive team.</p>
43	<p>For communications between the supervisor and any diver involved in the diving operation, a primary communication system must be used that</p> <ul style="list-style-type: none"> a) is dedicated; b) has sound quality adequate to enable breathing to be clearly heard and oral communications to be clearly heard and understandable; c) is equipped with a voice descrambler in the event that a breathing mixture contains a substance that distorts voice transmissions; d) a recording device that continuously records all oral communications while a dive is in progress. 	<p>In reference to Section 43:</p> <p>Recommend adding the following:</p> <p>“.....For communications between the dive supervisor and any diver.....”</p>
44	There shall be communication system redundancy such that the supervisor and the divers are able to continue to communicate orally in the event of a failure of the primary communication system.	<p>In reference to Section 44:</p> <p>CAPP requests clarification as to which supervisor is being referenced and the intent for this requirement to apply to surface supplied diving?</p>
45	The diving supervisor shall have two-way audible / voice communications with the bridge and other relevant operational activity personnel.	<p>In reference to Section 45:</p> <p>Proposed text: The diving supervisor shall have dedicated and open two- way audible / voice communications with the bridge and other relevant operational activity personnel.</p>
46	If an ROV is in use in conjunction with diving operations, there shall be a dedicated communications link between the diving supervisor and the ROV operator and the diving supervisor shall have a monitor in dive control room displaying the same picture as the ROV operator.	<p>In reference to Section 46:</p> <p>As stated in for section 45, recommend adding “dedicated and open” to be referenced.</p> <p>It is not uncommon for the ROV operator to have multiple (as many as 4-6) video displays form the ROV. Requires clarification.</p>
	Monitoring	

47	<p>The Dive Contractor shall ensure that:</p> <ul style="list-style-type: none"> a) the breathing patterns of divers are monitored at all times; b) verbal reports from divers can be received by those tasked with monitoring them ; and, c) visual monitors are employed. 	<p>In reference to Section 47:</p> <p>47 (a) Should be more specific as to what should be monitored. Suggest wording such as “Visual monitors are employed to oversee the activity of the divers and concurrent activities in the vicinity of the dive operations (i.e.: ROV dive operations)”</p> <p>47 (c) The intended meaning is not clear; would it be more appropriate to state “Monitors are employed that permit the dive supervisor to observe the divers activities”.</p> <p>Section 47 appears to duplicate much of Section 43 and may result in confusion. CAPP recommends that each section be reviewed to ensure they are not contradictory.</p>
48	<ul style="list-style-type: none"> 1) The internal atmosphere of a bell must be continuously monitored to ensure low level contaminants do not exceed levels that may become toxic at depth. 2) The dive contractor shall ensure that there is redundancy in place within the bell and dive control that will ensure internal bell monitoring by ensuring that multiple devices are utilized. 3) Diving bell oxygen and carbon dioxide levels must be constantly analyzed and recorded hourly as a minimum. 	<p>In reference to Section 48:</p> <p>48.1 Recommend removing reference to “low level”.</p> <p>48.1 Suggest aligning nomenclature within Policy Intent. (i.e., “Diving bell” if that is intent).</p> <p>48.2 Consider rewording as “The dive contractor shall ensure that there is redundancy in place for the internal monitoring of the dive bell”.</p>
	<p>Breathing Mixtures</p>	
49	<p>The dive contractor must ensure an adequate quantity of breathing mixture is available at any time during the diving operation, including sufficient quantity to ensure the complete diving operation, a reasonable quantity of reserve supply and an additional supply for use in the event of an emergency</p>	<p>In reference to Section 49:</p> <p>CAPP propose the following text:</p> <p>The dive contractor must ensure that breathing mixture is available at any time during the diving operation to complete diving operation including sufficient backup and emergency reserves for use in the event of an emergency.</p>
50	<p>A breathing mixture supply system used for a dive must be appropriate for the depth and circumstances of the dives, but at minimum, any calculations for gas consumption shall be set no lower than 42.5L per minute.</p>	<p>In reference to Section 50:</p> <p>Consider rewording as “diver gas consumption”.</p>

51	Compressed breathing air mixtures, reserve supply quantities and the analysis of the air shall conform to CSA Z275.2 <i>Operational Safety Code for Diving Operations, Appendices A-D</i> .	<p>In reference to Section 51:</p> <p>In Section 49, reserve supply quantities is noted as reasonable whereas Section 51. CSA Z275.2 (A-D) does not reference reserve supply. What applies for 'saturation diving'?</p>
52	<p>1) The Dive Contractor shall ensure that each diver's breathing gas shall be of the correct composition, quality, temperature and flow for all foreseeable situations including independent primary and secondary supplies. Gas supplies shall be arranged so that interruption of supply to one diver will not affect other divers' supply.</p> <p>2) Any gas mixture containing more than 25% oxygen by volume should be handled as if it were pure oxygen.</p> <p>3) A competent member of the dive team analyzes, at a minimum, the oxygen content of gas mixes upon delivery of the gas and immediately prior to use;</p> <p>4) Diving shall be halted if the gas quantities fall below acceptable minimums for safety.</p>	<p>In reference to Section 52:</p> <p>52.1 Recommend using consistent terminology throughout Section to avoid confusion (i.e. breathing mixture).</p> <p>52 (2) recommended wording change – Any gas mixture containing more than 25% oxygen shall be handled as if it were pure oxygen.</p> <p>52.3 CAPP requests clarification as the policy is unclear as stated.</p> <p>52.4- Recommend replacing “halted” with “terminated”.</p>
53	<p>Gas Cylinders and Storage</p> <p>1) Gas cylinders must be suitable in design, fit for purpose and safe for use. Each cylinder should be tested and have appropriate certification issued by a competent person.</p> <p>2) All gas storage units must comply with Canadian or international standards of colour-coding and marking of gas storage cylinders, quads and banks. Whatever standard is employed it shall be consistent for the project and readily identifiable. Where appropriate, pipe work shall also be colour-coded.</p> <p>3) Adequate fire protection shall be provided for gas storage areas to control and extinguish or control fires as appropriate and to minimize any danger to safety that results or may be reasonably expected to result from the exposure of stored gases to fire.</p>	<p>In reference to Section 53:</p> <p>53.1 Recommend replacing “should” with “shall” if the intent is a mandatory requirement.</p> <p>53 (3) Recommended wording correction – Adequate fire protection shall be provided for gas storage areas to control and extinguish or control fires as appropriate...</p>

<p>54</p>	<p>Diver Access – Surface Supplied Diving</p> <p>1) When diving from a marine installation or structure where the freeboard is less than 2 metres, a risk assessment should be carried out to establish whether there are any hazards to the Divers from obstructions that could be dangerous when the diver enters or exits the water.</p> <p>2) If no hazards are identified and where the freeboard is less than 2 metres then one or the other then one of the following can be used to deploy a diver:</p> <p>a) A wet bell or basket system with a secondary system for deploying the standby diver, b) a secured ladder that extends at least 2 metres into the water, or c) An alternate means that affords equivalent or better protection than (a) or (b)</p> <p>3) Where the risk assessment identifies potential obstructions that could be hazardous to the diver, or where the freeboard is more than 2 metres then one of the following shall be used for deploying divers:</p> <p>a) A wet bell with a secondary system for deploying the standby diver, b) a divers basket with a secondary basket for deploying the standby diver, or d) An alternate means that affords an equivalent or better protection than (a) or (b)</p>	<p>In reference to Section 54:</p> <p>54.1 Marine installation or structure is not defined-what is relationship to a Diving Vessel as noted in Part One Section 1?</p> <p>54.1 Recommend replacing “should” with “shall” if this is a mandatory requirement.</p> <p>54.1 Recommend simply stating: “.....shall ensure that a safe means of entry and egress is provided”.</p> <p>54.2 Recommended wording correction – If no hazards are identified and where the freeboard is less than 2 meters then one or the other then one of the following...</p> <p>54.3 (b) What is the difference between a ‘divers basket’ and a ‘basket system’?</p>
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	EMERGENCY PREPAREDNESS REQUIREMENTS	
	Hyperbaric Evacuation	
55	<p>1) A Hyperbaric Reception Facility must be available and on standby for the entirety dive project;</p> <p>2) Dive contractor must have the capability to transfer the hyperbaric life boat to the hyperbaric reception facility within 72 hours in moderate sea states.</p> <p>3) Prior to diving operations commencing a trial fit of the hyperbaric life boat to the hyperbaric reception facility transfer trunking shall be completed to test and verify the compatibility of the hyperbaric life boat and the hyperbaric reception facility.</p>	<p>In reference to Section 55:</p> <p>55 (1) Proposed text: “A Hyperbaric Reception Facility must be available and on standby for the entire saturation dive project and the post decompression bend watch period”.</p> <p>In addition, as 55 (1) is currently written it would appear to require a Hyperbaric Reception Facility be available for a surface supplied (air) dive, obviously not needed.</p> <p>55.2 recommend rewording as “boat(s)”</p> <p>55.2 Recommend deleting “in moderate sea states”</p> <p>55.2 CAPP recommends that policy not be specific to the Dive Contractor and should state “Operator” as required under the Authorization.</p> <p>55.3 “A trial fit of the hyperbaric life boat to the hyperbaric reception facility transfer trunking shall be completed to test and verify the compatibility of the hyperbaric life boat and the hyperbaric reception facility:</p> <ul style="list-style-type: none"> (a) Prior to commencing dive operations with the particular life boat(s) and reception facility. (b) Following any modification to the reception facility or life boat(s) that could affect the fit and/or compatibility. <p>55.3 There needs to be alignment on expectation. Twin bell, twin hyperbaric lifeboat?</p> <p>55.3 Needs to be consistent with definition “Hyperbaric evacuation unit”. If the Policy Intent is that only a hyperbaric lift boat is acceptable then that must be stated. Otherwise, only reference Hyperbaric evacuation unit.</p>

56	<p>1) The Dive Contractor must :</p> <ul style="list-style-type: none"> a. conduct a risk assessment covering the launch, stabilization, recovery and normalization phases of an evacuation; and b. develop, based on the risk assessment, a detailed plan for hyperbaric evacuation of divers, specific to the dive installation and must include, at minimum: <ul style="list-style-type: none"> i. all relevant procedures including those related to the recovery and transport of the hyperbaric life boats to the reception facility; and ii. emergency contact information. <p>2) Training on the plan must be provided, and the plan must be readily accessible, to:</p> <ul style="list-style-type: none"> a) all dive team members b) the Dive Control room c) on the bridge of the vessel, and d) at the hyperbaric reception facility 	<p>In reference to Section 56:</p> <p>56.1 (b) Recommend inclusion of a definition for “Dive installation”.</p> <p>56.1 (b) (i) Implies twin bell is mandatory. Is that the intent of the Policy?</p> <p>56 (2) Recommend adding the following subsections:</p> <ul style="list-style-type: none"> e) in the operator emergency response center: f) on board primary rescue vessel (s); and, f) at the Joint Rescue Co-ordination Centre (JRCC), and <p>56.2 (a) Recommend clarification on the member of the “dive team as ROV pilot does not require this training.</p>
57	<p>1) A Life Support Package must be on standby at a suitable location and ready for deployment in the event of a hyperbaric evacuation in the hyperbaric life boat.</p> <p>2) The Life Support Package must be designed to extend the life support capabilities of the hyperbaric life boat beyond the time needed to ensure all divers are able to be fully decompressed.</p>	<p>In reference to Section 57:</p> <p>General Comment:</p> <p>57.2 CAPP requests clarification if it is an expectation that if a twin bell system with twin hyperbaric life boats that two Life Support Packages are required in the context of this section?</p>

<p>58</p>	<p>Emergency Drills and Exercises</p> <p>1) The Dive Contractor shall establish and implement a program for routine training, exercises and drills with respect to all reasonable foreseeable dive emergencies ensure a high level of emergency preparedness, which shall include, at minimum:</p> <ul style="list-style-type: none"> a) Diver evacuation drill shall be conducted prior to, or shortly after, commencement of operations and on a monthly basis thereafter if the duration of the dive program is longer than a month. b) Hyperbaric lifeboats shall be launched and maneuvered in the water at intervals not exceeding 12 months. c) Each diver shall practice boarding a hyperbaric lifeboat at intervals not exceeding 12 months. d) Drills involving location and recovery of a lost bell drill shall be carried out prior to, or shortly after, commencement of operations and on a quarterly basis thereafter if the duration of the dive is longer than 3 months. e) The dive team shall practice the procedures for dealing with a diver who has suffered injury or decompression sickness, on a monthly basis. f) Loss of position drills shall be completed on the diving vessel on a monthly basis, covering different scenarios such as fire, flooding, and loss of dynamic positioning capability. <p>2) Emergency drills and exercises shall be carried out at planned intervals to train personnel in, and test the adequacy of, the emergency response equipment, procedures and arrangements for any additional emergency scenarios identified in the hazard identification and risk assessment.</p>	<p>In reference to Section 58:</p> <p>58.1 Insert “.....emergencies to ensure....</p> <p>58.1 (d) Delete drill.</p> <p>58.1(e) As previously stated this is not necessary for all positions as defined under dive team.</p> <p>58 (1) (f) Recommend the following change: Loss of position Drills shall be completed on the diving vessel on a monthly basis, covering different scenarios such as fire, flooding, and loss of dynamic positioning capability.</p> <p>58.1 (f) Recommend to blend e and f if both have the same monthly requirement.</p> <p>58.1 Is clause (1)(f) required if drills and exercises requirements are stated in subsection (2)?</p> <p>58.2 Consider rewording subsection 2 as: “Emergency drills and exercises shall be carried out at planned intervals to train personnel in, and test the adequacy of, the emergency response equipment, procedures and arrangements for any additional emergency scenarios identified in the hazard identification and risk assessment, but no less than on a monthly basis”</p>
	<p>RECORDS AND REPORTING REQUIREMENTS</p>	

59	<p>1) Every diver engaged in a diving activity shall maintain a dive logbook.</p> <p>2) All relevant records and dive logbooks must</p> <ul style="list-style-type: none"> a. contain the details of each task and the diving program and are signed immediately after each entry, and b. record the names and job titles of the persons responsible for the various aspects of the dive program. <p>3) Records and logbooks must be retained in accordance with Section XX (record retention schedule –to be included in Phase 3)</p>	<p>In reference to Section 59:</p> <p>59.1 CAPP requests clarification as there are diver logbooks (personal) and there are dive log books (running record of diving operation).</p> <p>59.2 and 59.3 Recommend clearly stating which logbooks are being referred to and who is responsible for retention.</p> <p>Should this section include a requirement for accessibility of diver medical history record to the specialized dive physicians?</p>
60	<p>All audio and visual communications must be recorded and all recordings must be kept for at least 48 hours after the diver has returned to the surface or the saturation living chamber.</p>	<p>In reference to Section 60:</p> <p>Recommend that the policy be stated more explicitly as it is unclear which functions are intended to be recorded (Bridge, crane, ROV, deck, other? Diver/dive supervisor).</p>
61	<p>Notwithstanding the above (Section 60), where an incident has occurred during a dive program, communications records including all audio and visual recordings must be retained indefinitely.</p>	<p>In reference to Section 61:</p> <p>Recommend identifying who is responsible for retaining these records? Consider rewording to include “by the Operator and Employer”.</p>