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2.2 (m) (b)	Add to item (m) (b) as follows: “The management system documentation shall include ... (m) processes and procedures for: ... (b) establishing the conditions under which a person who makes a report will be protected from any reprisal actions including third party personnel and their contractor and subcontractor employers. ”	This whistleblower protection should not be just for the Operator employees.
3.4 (g) to (l)	Comment on “diving operations additional requirements: ...”	For the Accord area the respective Boards have this section covered in the Atlantic Offshore Occupational Health and Safety Initiative dated May 2018. For other offshore areas these criteria are contained in the <i>Canada Oil and Gas Diving Regulations</i> . Hence these items could be removed. See also comment from Yukon Energy, Mines and Resources submitted with their Phase 1 submissions.
5.1	Comment on “The following (offshore – COGOA only) installations and vessels are prescribed for the purposes of section 5.12 [equivalent to s.139.2 C-NL and s.143.2 C-NS] of the <i>Canada Oil and Gas Operations Act</i> each production installation, drilling installation, accommodation installation, as well as any vessel and dive plant used for diving programs to be operated during any activity authorized by the Board. ”	For the Accord area the respective Boards have this section covered in the Atlantic Offshore Occupational Health and Safety Initiative dated May 2018. Hence the stroke through words could be removed. For other offshore areas managed by the National Energy Board these criteria are contained in the <i>Canada Oil and Gas Diving Regulations</i> . See also CAPP in their Phase 3 submission for section 5.1.
5.7	Add to item as follows: “Prior to the submission of the scope of work by the Certifying Authority, the operator (and owner of the installation or vessel, if the operator is not the owner) shall submit a documented certification plan, endorsed by the Certifying Authority, to the Chief Safety Officer that demonstrates how initial and ongoing regulatory compliance ...”	See Lloyd's Registry in their Phase 3 submission for section 5.7.
5.16 (1) and (2)	Comment on “(1) The Certifying Authority shall provide annual reports to the <u>Board (with cc to the Ministers)</u> , that include: ... (2) The Certifying Authority must immediately notify the <u>Ministers (with cc to the Board)</u> of any changes to its organizational structure. ...”	These regulations need to be consistent, so either report to the Board (with cc to Ministers) or the Ministers (with cc to the Board, but FORRI needs to specify which one. FORRI Response – the annual reports need to go to the Board and any changes to the Certifying Authority (CA) need to go to the Minister in case other regulations are affected which would need subsequent updating. FORRI Task Force Response - However such differentiation between the two

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		options may be lost in the minutia of complex offshore operations.
5.16 (1)	Add to item (1) (a) as follows: (1) “ The Certifying Authority shall provide annual reports to the Board (with cc to the Ministers), that include: (a) summary of the activities the Certifying Authority has undertaken within the jurisdiction of that Board related to its responsibilities as a Certifying Authority under all Canadian jurisdictions ; and …”	Each Board only has authority within the defined offshore areas. Thus, a CA annual report should reflect those activities that occurred relevant to installations in that area. Furthermore, outside of that jurisdiction, the organization that is the CA is no longer acting in that capacity, so reporting on those activities is not deemed relevant. See Lloyd’s Registry in their Phase 3 submission for section 5.16 (2) a.
5.16 (2)	Add item to (2) as follows: “(2) The Certifying Authority must immediately notify the Ministers (with cc to the Board) of any relevant changes to its organizational structure that directly affect its execution of its duties (as defined in the Scope of Work) within 30 days of that change becoming effective. ”	Add these clarifications so that minor changes involving other countries need not be reported, such as opening or closing an office in Asia which has no bearing on the delivery of the CA service. See American Bureau of Shipping in their Phase 3 submission point 8. See also Lloyd’s Registry in their Phase 3 submission for section 5.16 (3).
6.4 (6)	Add new item (6) as follows: “(6) The operator shall also endeavor to follow the guidance provided in the ISO series 35101 to 35106 as amended from time to time and notify the Board where there is any conflict with these regulations and the quoted standards.”	These ISO standards referenced are for arctic and cold regions which is deemed to include both the Arctic and other locations characterized by low ambient temperatures and the presence or possibility of sea ice, icebergs, shelf ice, glaciers, icing conditions, persistent snow cover, frozen surfaces of lakes and rivers, localized and rapidly changing weather systems and/or permafrost. This change is also in line with the CSA Group TCK157 (Technical Committee K157), Phase 3, letter 1a comment [RFM3]. In the FORRI submissions this and other CSA Group entries were labelled TSK157. The suggested amendment with respect to “as amended from time to time” may already be covered off in the <i>Canada Oil and Gas Operations Act</i> section 14 (2).
6.7 (3)	Comment on “139oC” and “180oC” which are 139°C and 180°C.	Correct typos.
6.12	Comment on definitions for “air gap” and “freeboard”.	All definitions should be included in “Annex 1 – Definitions” to avoid any inconsistencies. See updated definitions provided in Annex 1 below.
6.17 (6)	Add new item (6) as follows: “(6) Every column-stabilized mobile offshore platform there will be no port lights or similar	To avoid another <i>Ocean Ranger</i> incident and as suggested by the American Bureau of Shipping in their Phase 3 submission point 14.

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	<i>openings are in the columns of semi-submersible unless such openings are welded shut and are water tight.</i>	
6.26	Comment on “(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 ...”	Use unambiguously.
6.27	Comment on “dive vessels and dive plants”	For the Accord area the respective Boards have this section covered in the Atlantic Offshore Occupational Health and Safety Initiative dated May 2018. For other offshore areas these criteria are contained in the Canada Oil and Gas Diving Regulations. Hence this section could be removed.
7.3	Comment on definitions for “pressure systems” and “authorized inspector”	All definitions should be included in “Annex 1 – Definitions” to avoid any inconsistencies.
7.12 (2)	Comment on “(2) The operator shall ensure that the helicopter deck and associated operations and maintenance on offshore installations shall conform to the requirements of CAP 437 Standards for Offshore Helicopter Landing Areas as published by the UK Civil Aviation Authority.”	The CAP 437 Standards for Offshore Helicopter Landing Areas is relevant to the UK with some applicability to Europe (see Chapter 1, section 4.2 on page 5). Hence, operations in cold weather and ice are not anticipated in the quoted standard. See comment in the CSA Group TSK157 letter 1a comment [RFM16].
7.13	Comment that there is no mention of personnel transfer and subsequent requirements for appropriate cranes in this section which needs to be added.	Not all vessels engaged to conduct geoscience, geotechnical or environmental operations will have a helideck. Consequently, personnel transfer by crane to the installation for emergency and regular crew change purposes should be accommodated. See Lloyd’s Registry in their Phase 3 submission for section 7.13. FORRI Response – These requirements are dealt with in the <i>Oil and Gas Occupational Health and Safety (OHS) Regulations</i> . The regulation enforcement of OHS was transferred to the Boards on 31 December 2014.
7.21 (2)	Comment on “(2) If a completed well is located where permafrost is present in unconsolidated sediments, the operator shall ensure that a subsurface safety valve is installed in the tubing below the base of the permafrost.”	Applies to onshore <i>Canada Oil and Gas Operations Act</i> activities.
7.36 (8) (c)	Add new item (8) (c) as follows: <i>c. designed to provide sufficient heating in arctic and cold regions.</i>	In line with the CSA Group TSK157, Phase 3, letter 1a comment [RFM18].

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7.37 (14)	Add new item (14) as follows: <i>“(14) The operator shall ensure that where TEMSPC’s are provided that they outfitted with towing arrangements and bow thrusters.”</i>	See Lloyd’s Registry in their Phase 3 submission for section 7.37 (8).
7.38	Add new item 7.38 as follows: <i>“7.38 Ice management – The operator shall in ensure sufficient research and analysis as well as quasi real time ice management is provided for any offshore operation in the Arctic and cold regions susceptible to icebergs.”</i>	Ice management is quite important for existing offshore facilities in Canada and for offshore drilling programs on the East coast. In line with the CSA Group TSK157, Phase 3, letter 2, paragraph 4 (last).
8.1 (f)	Add to item (f) as follows: “ (1) An operator conducting a geoscience, geotechnical or environmental operation shall ensure ... (f) where a seismic or electrical energy source is used, all such operations must be completed in a manner <i>that reduces and potential safety risks to divers to as low as reasonably practicable</i> and that minimum distances required to ensure safety of divers have been identified and followed <i>and a radio watch shall be maintained on all vessels in case the divers are affected and a rapid shut down is required;</i> and ...”	To “eliminate all potential safety risks to divers” is not practicable. Whenever there are multiple simultaneous ongoing offshore operations (SIMOPS) where there are offshore divers deployed on at least one of those operations, there will always be some risk that a water temperature inversion or seabed geology may allow source noise to travel farther than expected. Without some practical limitations, diving operations could effective prohibit approved survey operations around an installation for some kilometres which would adversely affect the survey’s cost effectiveness. See also the Atlantic Offshore Occupational Health and Safety Initiative dated May 2018 section 502.
8.5	Revise item 8.5 as follows: <i>“Vessels of opportunity which are temporarily to be used for geoscience, geotechnical and environmental operations shall be</i> inspected by an independent third party that is deemed competent by the Board <i>to ensure the equipment and its installation</i> are fit for purpose.”	The wording needed to be revised as 2D or 3D marine seismic multi-client surveys which may have no operator associated with the survey operations. Should a dedicated geoscience, geotechnical and environmental operations vessel not be available, then the operator would have to resort to using a vessel of opportunity in order to carry out the required work.
9.2 (2)	Revised item (2) as follows: “For a vessel engaged in a diving operation or a geoscience, geotechnical or environmental operation, the safety zone around <i>the vessel operation shall be a moving circle drawn with the vessel at the centre with a radius</i> distance sufficient to ensure risks to safety, the environment and property are minimized.”	Clarified survey related wording.
10.1	Comment on definition for “good oil field practices”.	All definitions should be included in “Annex 1 – Definitions” to avoid any inconsistencies. See updated definition provided in Annex 1 below.

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10.5	Comment on “The operator may conduct a formation flow test on a well drilled on a geological feature if, before conducting that test, the operator (a) submits to the Board a detailed testing program ...”	There should be a standard to be followed related to the “detailed testing program” as suggested by the Department of Economic Development and Transportation, Government of Nunavut in their Phase 2 submission.
11.5 (b)	Revise item (b) as follows: “The operator shall ensure ... (b) that equipment used to calibrate the flow system is calibrated in accordance with <i>industry standards and the manufacturers recommended practices</i> ”	The phrase “good measurement practices” is too broad and the suggested revision allows for better wording as suggested by the Department of Economic Development and Transportation, Government of Nunavut in their Phase 2 submission.
12.5 (d)	Add new item (d) as follows: “No operator shall flare or vent gas unless ... <i>(d) gas flaring shall be carried out in a manner which minimizes bird deaths to as low as reasonably practicable under the operational circumstances.</i> ”	Required to meet environmental concerns and as per the recommendation of Nature Newfoundland and Labrador submitted with the Phase 3 submissions.
13.1 (1) to (3)	Comment on “Suspension or Abandonment of a Well”	None of the offered detailed CAPP suggestions were accepted which is disappointing.
13.2	Add to item as follows: “The operator of a suspended well shall ensure that the well is monitored and inspected to maintain its continued integrity and to prevent pollution <i>with a timeline which is suited to the specific suspended well.</i> ”	To ensure there is a timeline for subsequent monitoring as suggested by the Department of Economic Development and Transportation, Government of Nunavut in their Phase 2 submission.
14.	Comment on definitions provided.	All definitions should be included in “Annex 1 – Definitions” to avoid any inconsistencies such as for “workover” which is different in this section compared to Annex 1 where the word “Christmas” is still used.
14.7 (h)	Revise item (h) as follows: “The operator shall ensure that records are kept of (h) in the case of a floating installation ... (iii) every change in weight or position of weight on the platform that may affect the stability of the <i>floating installation.</i> ”	Clearer wording. Although definition for platform means “a platform associated with an installation”, section 14.7 (h) is specific to floating installations.
14.9	Comment on “incident” definition which should be removed.	All definitions should be included in “Annex 1 – Definitions” to avoid any inconsistencies.
14.9	No definition of “near-miss” is provided in these regulations.	All definitions should be included in “Annex 1 – Definitions” to avoid any inconsistencies. See definition provided in Annex 1 below.
14.10	Revise (b) as follows: “The operator shall ensure that ... b) the investigation report, identifying the causal factor(s), root cause(s), corrective and preventative action(s), and other	Each operator will have its own procedures and forms to follow with regard to incident and near-miss investigations. Hence to generate the required report “in the form and

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	information <i>in the form and manner prescribed by the Board,</i> must be submitted to the Board within 21 days following the incident.	manner prescribed by the Board” would take extra time, when time is of the essence. Investigating a serious incident or near-miss can be a lengthy process hence the time limit should be increased from 14 to 21 days as proposed in the original FORRI Phase 2 documentation.
14.15 and 14.16	Comment on section numbering.	The section numbering was possibly inappropriately updated at a page break.
14.19	Comment on “Well Costs”.	CAPP has provided detailed explanations why this section should be removed and removing or revising the sections seems reasonable. FORRI Response – Boards need to be aware of the economic viability of each project as part of the Board’s mandate.
14.27	Revise as follows: “A <i>contractor</i> who has conducted a non-exclusive <i>or a multi-client seismic</i> survey need not submit an interpretation report required by sub-section 14.26 (3) <i>but shall be required to release paper copies of TIFF images of the seismic data acquired, not final processed data, at the expiry of a 10-year confidentiality period,</i> provided the data from <i>the surveys</i> are available for purchase or lease by the public.”	A seismic contract would be responsible for conducting a non-exclusive or a multi-client seismic survey. Conforms to current seismic industry practices and as per the recommendation of International Association of Geophysical Contractors and the Canadian Association of Geophysical Contractors submitted with their Phase 2 submissions.
14.29 (2)	Comment on Chief Conservation Officer power to request information.	The instruction “in a form and manner determined by the Chief Conservation Officer” is too broad and needs to be more prescriptive or removed in line with the suggestion of the International Association of Geophysical Contractors and the Canadian Association of Geophysical Contractors in their Phase 2 submission.
14.29 (1) (d)	Add new item (1) (d) as follows: “Following completion of any geoscience, geotechnical or environmental program, the operator shall ensure the following information and materials are retained in Canada ... <i>(d) For multi-client surveys the field and final processed data does not have to be retained in Canada.</i> ”	Conforms to current seismic industry practices and as per the recommendation of International Association of Geophysical Contractors and the Canadian Association of Geophysical Contractors submitted with their Phase 2 submissions.
Annex 1	Revise item <i>“air gap – when in service the vertical distance of the Mobile Offshore Drilling Unit jack-up between the lowest exposed part of the hull not designed to withstand</i>	The definition provided in these regulations includes “during extreme environmental conditions” which is not required as that is part of section 6.12.

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	wave or ice impingement and the mean water or mean ice surface”	
Annex 1	Add item “as low as reasonable practicable (ALARP) - The ALARP principle is that the residual risk shall be reduced as far as reasonably practicable. For a risk to be ALARP, it must be possible to demonstrate that the cost involved in reducing the risk further would be grossly disproportionate to the benefit gained. The ALARP principle arises from the fact that infinite time, effort and money could be spent in the attempt of reducing a risk to zero.”	Term is used in these regulations but not defined. Used definition from Wikipedia.
Annex 1	Add item “commingled production - means production of oil and gas from more than one pool or zone through a common well-bore or flow line without separate measurement of the production from each pool or zone”	Term is used in these regulations but not defined. Used definitions in current <i>Canada Oil and Gas Drilling and Production Regulation</i> section (1).
Annex 1	Add item “field – an area with a number of oil and gas wells where full exploitation entails multiple wells scattered across the area. In addition, there may be exploratory wells probing the edges, pipelines to transport the oil elsewhere, and support facilities.”	Term is used in these regulations but not defined. Updated definition from Wikipedia.
Annex 1	Add item “fit for purpose - appropriate, and of a necessary standard, for its intended use”	Term is used in these regulations but not defined. Used definition from Wiktionary.
Annex 1	Add item “fluid - means gas, liquid or a combination of the two”	Term is used in these regulations but not defined. Used definitions in current <i>Canada Oil and Gas Drilling and Production Regulation</i> section (1).
Annex 1	Add item “formation flow test - an operation as follows: (a) to induce the flow of formation fluids to the surface of a well to procure reservoir fluid samples and determine reservoir flow characteristics; or (b) to inject fluids into a formation to evaluate injectivity.”	Term is used in these regulations but not defined. Used definitions in current <i>Canada Oil and Gas Drilling and Production Regulation</i> section (1).
Annex 1	Revise item “freeboard – when floating or in transit the vertical distance of a Gravity Based Structure (GBS) or Mobile Offshore Drilling Unit (MODU) between the deck and the waterline as defined by the vessel class International Convention on Load Lines. The same definition will apply when the GBS or MODU is in service except when the GBS	The definition provided in these regulations does not sufficiently differentiate clearly for a GSB or MODU between ice and green water conditions.

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	or MODU is or will become fixed in ice then the vertical distance between the deck and the mean ice surface.”	
Annex 1	Add item “ <i>good oil field practices - those practices, methods, and acts, including the application of standards and procedures, engaged in by prudent, diligent and skilled professional and experienced producers of oil and natural gas exploration, development, production and decommissioning operations that would be expected to accomplish the desired result in a manner consistent with law, regulation, reliability, safety, environmental protection, and business economics</i> ”.	Term is used in these regulations but a final definition has still to be agreed. This definition combines the version provided in these regulations, the version CAPP provided in their Phase 2 submission along with updates from HSCIL. In addition, this definition provides further clarification requested in the Department of Economic Development and Transportation, Government of Nunavut in their Phase 2 submission.
Annex 1	Comments on “incidents”	For pollution and leak of hazardous substance, what quantities would generate an incident? Focusing on “minor” amounts can lead to paper filing fatigue and lack of reporting.
Annex 1	Add item “ <i>injectivity - injection rate divided by pressure drop from the wellbore into the formation</i> ”	Term is used in these regulations but not defined.
Annex 1	Add item “ <i>near-miss - an unplanned event that has the potential to cause, but does not actually result in human injury, environmental or equipment damage, or an interruption to normal operation</i> ”	Term is used in these regulations but not defined. Suggested definition would meet international standards. Updating the <i>Canada Oil and Gas Drilling and Production Regulation</i> definition wording would be “near-miss means an event that would likely cause an event set out in the definition of incident , but does not due to particular circumstances”, but the definition provided is better.
Annex 1	Add item “ <i>multi-client surveys – 2D or 3D seismic surveys acquired by the geophysical company for its own use and are generally collected over large acreage. The geophysical company owns the data which it then markets and licenses to as many clients as possible, making the survey less expensive on a per-unit-area basis than proprietary data and driving interest in the potential leasing acreage. Generally the geophysical company initiates and conducts projects of general industry interest at its own financial risk although some multi-client surveys can already be pre-paid.</i> ”	Term is suggested to be used in these regulations. Definition from the International Association of Geophysical Contractors along with updates from HSCIL.
Annex 1	Add item “ <i>pool - an oil field can consist of one or more oil pools or distinct reservoirs within a single large trap</i> ”	Term is used in these regulations but not defined. Updated definition from Schlumberger Oilfield Glossary.

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Annex 1	Add item “ <i>production control system - the system provided to control the operation of, and monitor the status of, equipment for the production of oil and gas, and includes the installation and workover control system</i> ”	Term is used in these regulations but not defined. Used definitions in current <i>Canada Oil and Gas Drilling and Production Regulation</i> section (1).
Annex 1	Add item “ <i>rig release date - the date on which a rig last conducted well operations</i> ”	Term is suggested to be used in these regulations. Used definitions in current <i>Canada Oil and Gas Drilling and Production Regulation</i> section (1).
Annex 1	Add item “ <i>serious injury - those types of injuries that are usually more harmful such as burn or scald, concussion, fracture, internal injury, multiple injuries</i> ”	Term should be used in these regulations but not defined. Used definition from Statistics Canada.
Annex 1	Add item “target level of safety – synonymous with “risk criteria”, “risk acceptance criteria”, “acceptability criteria”, or “tolerability limits”.	Term is used in these regulations but not defined.