

Draft – October, 2001

Draft
Certificate of Fitness

Guidelines

October, 2001

PREFACE

These guidelines are made pursuant to Section 151.1(1) of the Canada-Newfoundland Atlantic Accord Implementation Act (AAIA), Section 156(1) of the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act (NSAIA), Section 147(1) of the Canada-Newfoundland Atlantic Accord Implementation Newfoundland Act (AAINA) and Section 148 of the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act (NSAINSA). AAIA and AAINA are mirror legislation and NSAIA and NSAINSA are also mirror legislation. The provisions for certification are similar in AAIA and NSAIA and the regulations promulgated under these acts also mirror each other. Therefore, for simplicity, reference is made only to the AAIA and NSAIA and associated regulations in these guidelines. These guidelines provide interpretation to legislative requirements and are not statutory instruments.

<i>Newfoundland Accord Implementation Act</i>	<i>Nova Scotia Accord Implementation Act</i>
<i>151.1 (1) The Board may issue and publish, in such manner as the Board deems appropriate, guidelines and interpretation notes with respect to the application and administration of sections 45, 138 and 139 or any regulations made under section 149.</i>	<i>156 (1) The Board may issue and publish, in such manner as the Board deems appropriate, guidelines and interpretation notes with respect to the application and administration of sections 45, 142 and 143 and or any regulations made under section 153.</i>
<i>(2) Guidelines and interpretation notes issued pursuant to subsection (1) shall be deemed not to be statutory instruments for the purposes of the <u>Statutory Instruments Act</u>.</i>	<i>(2) Guidelines and interpretation notes issued pursuant to subsection (1) shall be deemed not to be statutory instruments for the purposes of the <u>Statutory Instruments Act</u>.</i>

TABLE OF CONTENTS

1.0	Scope.....	1
2.0	Objectives for Certification.....	1
3.0	Certification Process Summary	1
4.0	Legislation	2
5.0	Certifying Authority Responsibilities.....	3
5.1	Regulatory Requirements.....	3
5.2	Scope of Work.....	4
5.2.1	General.....	4
5.2.2	Certifying Authority Quality System	5
5.2.3	Independent Analysis.....	6
5.2.4	Formal Audits.....	6
5.2.5	Physical boundary of the installations.....	6
5.2.6	Acceptance of past reviews.....	6
5.2.7	QA/QC Review	6
5.2.8	Review of Safety Studies.....	7
5.2.9	Review of Design, Construction, Installation, Commissioning and Maintenance.....	7
5.2.10	Periodic Surveys.....	7
5.2.11	Limitation and Conditions.....	7
5.2.12	Variation to the Approved SOW	7
5.2.13	Certification records	7
5.3	Certification Process	7
5.3.1	Review for Regulatory Compliance.....	7
5.3.2	Review for Fit for Purpose	8
5.3.3	Review of Continued Integrity of the Installation.....	8

TABLE OF CONTENTS – Cont’d

5.3.4	Modifications, Damage, Repair and Temporary Equipment.....	9
5.4	Certificate of Fitness Forms	9
5.5	Certification Records	9
6.2	Regulatory Queries	10
5.7	Conflict of Interest	10
5.8	Competency of Surveyors.....	10
5.9	Certification Contract.....	10
5.10	Change of Certifying Authorities.....	11
6.0	Applicant.....	11
6.1	Applicant for Certificate of Fitness	11
6.2	Applicant for Program Authorization.....	12
7.0	Offshore Boards.....	12
7.1	Scope of Work Approval	12
7.2	Monitor CA activity	12
7.3	Monitoring RQFs	12
7.4	Installation Audits/inspections.....	13
7.5	Audits of the Certifying Authority.....	13
7.6	Incidents/Non conformances related to Installations.....	13
7.7	Validity of Certificate of Fitness	13
Attachment 1 Certification Flow Chart		
Attachment 2 Special Considerations		
Attachment 3 Regulations covered by certification in addition to those referenced in the certificate of fitness regulations		

GLOSSARY

AAIA	Canada-Newfoundland Atlantic Accord Implementation Act
AAINA	Canada-Newfoundland Atlantic Accord Implementation Newfoundland Act
API	American Petroleum Institute
Board	Canada-Newfoundland Offshore Petroleum Board or Canada Nova Scotia Offshore Petroleum Board
CA	Certifying Authority
CCO	Chief Conservation Officer
COF	Certificate of Fitness
CSA	Canadian Standards Association
CSO	Chief Safety Officer
IR	Offshore Petroleum Installations Regulations
ISO	International Standards Organization
MODU	Mobile Offshore Drilling Unit
NSAIA	Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act
NSAINSA	Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act
QA/QC	Quality Assurance/Quality Control
RQF	Regulatory Query Form
SOW	Certifying Authority Scope of Work
TP	Transport Canada Publication (Standard)

1.0 Scope

This document provides guidance to certifying authorities, operators and installation owners/operators on legislative requirements and the Canada-Newfoundland Offshore Petroleum Board and Canada-Nova Scotia Offshore Petroleum Board (Board) practices and expectations for the certification of installations operating in the Newfoundland or the Nova Scotia Offshore area.

The following sections provide guidance on the types of information that the respective Board requires to monitor the certification process and in particular the information required to be included in the Certifying Authority Scope of Work (SOW).

At the start of a certification project, it is advisable for the certifying authority, installation owner and operator to meet with the respective Board and discuss the specific certification project.

2.0 Objectives for Certification

It is the responsibility of the applicant for program authorization to ensure that the program including the facilities comply with the regulations and the program can be conducted safely without polluting the environment.

Certification is to provide an independent third party evaluation on regulatory compliance and fitness for purpose. The intent of certification is to provide assurance that the installation, during the term of the certificate, is fit for purpose and remains in compliance with the regulations without failure of structure or equipment. All systems on the installation must function as intended. The Acts provide that the Board may rely on this certificate for the purposes of issuing an authorization. Therefore, it is critical that the Certificate of Fitness process be conducted in a manner that provides a high level of confidence for the Board.

3.0 Certification Process Summary

This section describes the overall certification process. The flow chart for the overall process is given in Attachment 1.

No prescribed installation can be used to support a program in the Newfoundland or the Nova Scotia Offshore area unless it has been issued a Certificate of Fitness (COF) by a recognized Certifying Authority (CA).

The governments of Canada, Newfoundland and Nova Scotia have recognized four organizations to act as certifying authorities for purposes of satisfying the legislative requirements for a Certificate of Fitness for prescribed installations. The four organizations are:

American Bureau of Shipping
Bureau Veritas
Det norske Veritas Classification A/S, and
Lloyd's Register of Shipping

A copy of a Certificate of Fitness, issued by one of these four certifying authorities, for the prescribed installation has to be submitted to the respective Board before the corresponding activity can be authorized.

The person wishing to operate a prescribed installation in the Newfoundland or the Nova Scotia Offshore area contracts a recognized certifying authority to issue a Certificate of Fitness for the installation. The Certifying Authority must submit the certification Scope of Work (SOW) to the respective Chief Safety Officer (CSO) for approval prior to commencing certification activities.

The applicant for a COF is required to provide all required information and assistance to the CA to conduct its certification activities. During the review of the installation by the certifying authority, it may need additional information/assistance and the applicant is required to provide them to the CA. The Board may require the applicant for a COF/ applicant for authorization to provide project details.

The applicant for the COF may require clarification on, equivalency for or exemption from a regulatory requirement. The applicant must submit a Regulatory Query Form (RQF) outlining its proposal to the respective Board for the approval of the Chief Safety Officer or the Chief Conservation Officer (CCO). All regulatory interpretations and exemptions have to be approved by the CSO or the Chief Conservation Officer. If the RQF is in reference to an area that is covered by a COF, the RQF is required to contain concurrence by the CA indicating that the proposed deviation from the regulations provide an equivalent level of safety. The CA shall provide to the respective Board its rationale/ justification for concurring with the RQF proposal.

During initial certification, the certifying authority provides the respective Board with a monthly report of certification activities.

The certifying authority, if it is satisfied that the installation is in compliance with the regulations and is fit for the intended purpose, issues a Certificate of Fitness following its review/survey. The certifying authority provides the respective Board with a report of the initial certification activities.

After the issuance of the Certificate of Fitness, the certifying authority surveys the installation periodically to satisfy itself of the continued validity of the certificate and provides the respective Board with a survey report.

All modifications/repairs to the installation that affects its strength, stability, integrity, operability or safety need to be reviewed and accepted by the certifying authority to keep the certificate valid. The CA provides a copy of the design appraisal and survey reports to the respective Board.

The respective Board monitors certification and may require additional information from the applicant (for authorization or for COF)/CA.

4.0 Legislation

<i>Newfoundland Accord Implementation Act</i>	<i>Nova Scotia Accord Implementation Act</i>
<i>139.2 (1) No authorization under paragraph 138(1)(b) shall be issued with respect to any prescribed equipment or installation, or any equipment or installation of a prescribed class, unless the Board has received, from the applicant for the authorization, a certificate</i>	<i>143.2 (1) No authorization under paragraph 142(1)(b) shall be issued with respect to any prescribed equipment or installation, or any equipment or installation of a prescribed class, unless the Board has received, from the applicant for the authorization, a certificate</i>

issued by a certifying authority in the form fixed by the Board. *issued by a certifying authority in the form fixed by the Board.*

The Acts require a certificate issued by a certifying authority for equipment or installation prescribed in the regulations.

The Certificate of Fitness Regulations identifies four types of installations that require a COF.

Certificate of Fitness Regulations

“installation” means a diving installation, a drilling installation, a production installation or an accommodation installation.

A prescribed installation cannot operate in the Newfoundland or Nova Scotia Offshore area unless it has been issued a COF by a recognized CA. A number of statutory requirements are associated with the issuance of a COF as contained in the Acts and COF Regulations.

5.0 Certifying Authority Responsibilities

The CA provides assurance that the particular installation is in compliance with the regulations, is fit for purpose and can be operated safely without polluting the environment. The CA is contracted by the applicant and its role, responsibility and accountability are included in the legislation and Terms of Recognition as a Certifying Authority.

As part of its certification responsibilities, the CA shall provide independent advice to the Boards on matters relating to the certification activities as requested by the Board. This may include independent meetings without the applicant.

5.1 Regulatory Requirements

According to the Certificate of Fitness regulations, the certifying authority must perform three functions. Before issuing a certificate, the certifying authority must be satisfied that:

- the installation is designed and constructed in accordance with the regulations;
- the installation is fit for the intended purpose and can be safely operated without polluting the environment; and
- the installation will remain fit if it is maintained in accordance with the approved inspection and monitoring, maintenance and weight control programs.

The certifying authority must be familiar with the requirements in the applicable regulations and the guidance provided in guidelines, requirements and information letters. The applicable regulations, guidelines or requirements are:

- Petroleum Production and Conservation Regulations
- Offshore Certificate of Fitness Regulations,
- Offshore Petroleum Drilling Regulations,
- Offshore Petroleum Installations Regulations
- Petroleum Occupation Safety and Health Regulations

- Offshore Area Petroleum Diving Regulations,
- Newfoundland Offshore Area Guidelines for Drilling Equipment
- Guidelines respecting Drilling Programs in the Newfoundland Offshore Area,
- Guidelines Respecting Drilling Programs in the Nova Scotia Offshore Area (January, 2001)
- Nova Scotia Offshore Petroleum Occupational Health and Safety Requirements – December 2000
- Offshore Waste Treatment Guidelines, and
- Geophysical, Geological, Environmental and Geotechnical Program Guidelines.

The certifying authority must be satisfied that the installation can be safely operated without polluting the environment. The certifying authority is not expected to comment upon the efficiency of the installation or its equipment, but rather attest to its safety.

The CA must comply with the terms and conditions of recognition as a CA by the governments.

5.2 Scope of Work

5.2.1 General

The CA reviews/surveys the installation and issues a COF. The COF implies that the installation is in compliance with the regulations and is fit for purpose. To repose confidence on the COF, the Board has to be satisfied with the level of review by the CA. This is determined through the review/approval of the SOW and the respective Board's monitoring of the certification activities.

It is the responsibility of the CA to develop a Scope of Work that meets the requirement for approval set within the COF regulations as outlined in section 5.2. The CA must comply with the SOW approved by the Chief Safety Officer. The scope of work must contain a level of review, and be conducted in a manner, that will ensure an effective independent third party review.

The scope of work submitted by the CA has to be detailed. The SOW should provide adequate detail to determine the level of review/survey proposed to be undertaken by the CA. Details on some aspect of CA review/survey may not be available at the time of submission of SOW. The SOW should identify those items and provide a schedule when they would be submitted.

The environment offshore Atlantic Canada is different from other offshore jurisdictions due to the presence of ice and icebergs, cold temperatures and severe wave spectrum. Special attention should be given to those aspects that are distinct to the Newfoundland or Nova Scotia Offshore area. Attachment 2 provides guidance on other special considerations that must to be addressed in the SOW.

The SOW must be submitted and approved by the respective CSO prior to the CA undertaking certification activities. Sometimes, this may not be practicable for existing units, as the applicant for the COF, to optimize mobilization time, would commence mobilization activities as soon as a project has been identified for the unit. In which case, the schedule for SOW submission must be agreed by the respective Board.

The SOW must include how the assessment of design, construction, transportation, installation/establishment for the review of regulatory compliance will take place. To attest to the integrity of the installation, the certifying authority has to be satisfied that the design is based on

sound principles, the construction has been to design specification and activities such as transportation or previous operation has not adversely affected the integrity of the installation.

To obtain a clear understanding of certification activity, along with ‘what’ is reviewed/surveyed by the CA, an understanding of ‘how’ the CA functions and ‘why’ those activities satisfy the CA that the installation complies with the regulations and is fit for purpose is required. The description of ‘how’ and ‘why’ a CA conducts certification activities may not vary for different installations and this information may be provided separately and referenced in the SOW. The CA normally agrees with the applicant for the COF on the SOW. However, there may be confidential information that the CA may not wish to share with the applicant for the COF but is required by the respective Board. This information may be provided separate from the SOW but referenced in it. In addition, certain details of survey, if shared with the applicant for COF may be counterproductive. Such information may be submitted apart from the SOW and the SOW must reference such documentation.

The SOW should provide an estimate of the man-hours for certification. The SOW should outline the schedule for periodic surveys after the issue of COF. Details on cost of certification should not be included in the SOW.

The purpose of this section is to provide a discussion on some of the types of information that the Chief Safety Officer (CSO) expects to see in a scope of work for certification. The approval by the CSO of a scope of work does not relieve the certifying authority from the responsibilities outlined in the regulations. If the certifying authority determines that additional work needs to be done to satisfy itself according to the requirements in the regulations then the scope of work must be amended suitably. The amendments should be approved by the CSO (section 5.1.12). As a result of Board’s monitoring certification activities, it may request the applicant to direct the CA to undertake activities in addition to those in the approved SOW.

5.2.2 Certifying Authority Quality System

A description of the internal quality system should be provided along with a list of quality documents and a flowchart indicating how the quality documents are linked. The information should include CA administrative, quality and technical documents.

The description should include the standard on which their quality system is based. Information on accreditation, if any, must be provided. The information should include the quality policy and brief description with references to document control/control of quality records and surveyor training. The Board may request the CA to provide copies of its administrative, quality and technical documents.

The scope of work for a particular installation must contain a description of the organization that will be put in place to conduct the surveys/reviews/assessments to issue the certificate. This is to be accompanied by the CV’s of personnel performing design appraisal and of surveyors at the major manufacturing/ fabricating/ construction/ commissioning sites. The SOW must include a description of the process for ensuring that its surveyors are trained and qualified to the current appropriate industry standards, guidance and practices.

The description of the specific project organization should identify the project manager for the particular COF. It is the responsibility of the CA to ensure that the personnel with the appropriate training and qualifications are used to undertake the respective certification activities.

5.2.3 Independent Analysis

The CA as part of its certification activities will conduct analysis apart from that undertaken on behalf of the owner. The SOW shall indicate the independent analysis that is proposed for the project. The criteria for selecting items for independent analysis and the scope of the independent analysis must be provided. Sufficient independent calculations should be carried out to establish beyond reasonable doubt that there are no mathematical, procedural or other errors in the design calculations.

5.2.4 Formal Audits

The CA reviews the analysis, design, construction and installation of the installation. This is typically effected by independent analysis, review of calculations, drawings, procedures, construction and installation. The CA also monitors the audits of the project conducted by the applicant. In addition, the CA may undertake formal quality/technical audits of the project. The SOW should indicate whether or not such audits would be conducted. The criteria for selecting items for audit and the scope of the audit must be provided. If no audits are anticipated, the SOW must provide the rationale why no audits will be done.

5.2.5 Physical boundary of the installation

The scope of work must clearly indicate the physical limits of the installation considered for certification. When another installation is in the vicinity, the SOW must include details on the review of the influence of the other installation related to safety.

5.2.6 Acceptance of past reviews

For existing installations, the analysis, design and construction may already have an independent review done by the CA or another society or organization. The certification review is not intended to duplicate effort and the CA may wish to accept the earlier review of the installation. The SOW should clearly indicate what reviews it proposes to accept. For reviews that the CA proposes to accept, it should clearly indicate what assessments, if any, it proposes to undertake to satisfy itself it can rely on the previous review.

If the review indicates the use of codes and standards other than those referenced in the regulations, an RQF must be generated.

5.2.7 QA/QC Review

The regulations specify quality standards that have to be followed in all phases of an offshore project. ISO 9000 series have replaced the CSA Z299 series as the National Standards of Canada. The respective Board would accept compliance to ISO 9000 series standards as equivalent with CSA Z299 series standards.

The CA review must ensure that an appropriate quality system is effectively implemented for the project. The SOW must indicate that the CA will review the adequacy of the QA/QC in design, construction, installation, commissioning and maintenance of the facilities included in certification. For work done on existing installations, the CA must satisfy itself that an effective QA/QC system is in place or ensure that the quality of the design, construction, installation, commissioning and maintenance of the work is equivalent to that if a QA/QC system in accordance with ISO 9000 is in place.

5.2.8 Review of Safety Studies

The CA must ensure that all hazards have been considered in the safety studies. The SOW must indicate that the CA will review (has reviewed) safety studies associated with the installation. The CA must ensure that the safety study recommendations have been closed out and all risk mitigative measures are in place.

5.2.9 Review of Design, Construction, Installation, Commissioning and Maintenance

The SOW must indicate that the CA will review the design, construction, installation, commissioning and maintenance of the installation. The SOW must include or reference what will be done, the methodology for the review/survey and why the methodology has been adopted. The SOW must include or reference the methodology for the review of the inspection and monitoring, maintenance and weight control program.

5.2.10 Periodic Surveys

The SOW must include details of the CA's planned ongoing certification activities. The SOW must include a schedule for such activities. For mobile units, the CA activity when the installation is moved from one location to another must be included.

5.2.11 Limitation and Conditions

The SOW must describe or reference the criteria for attaching limitations, conditions, qualifications etc. to the COF. It must describe the selection of the geographic region of validity of the COF. The procedure for imposing and deleting limitations, conditions, qualifications etc. must be included/referenced. All outstanding items on certification must be identified by reference on the COF.

5.2.12 Variation to the Approved SOW

During certification, the CA, based on its review, may wish to change the approved scope of work to fulfill its responsibility as outlined in the regulations. The SOW should indicate that the CA has the ability to request changes to the SOW. The Chief Safety Officer must authorize all variations to the approved SOW. Where additional effort by the CA is required to fulfill the intent of the approved scope of work, the CSO need not approve the amendment but must be informed of the additional work (section 5.9).

5.2.13 Certification Records

The SOW should indicate what records will be provided and retained consistent with the requirements in Section 5.5

5.3 Certification Process

5.3.1 Review for Regulatory Compliance

Prior to issuing the COF, the CA must be satisfied that the installation complies with the regulatory requirements. A description of how the CA satisfies itself should be provided in the SOW. The description must include why the proposed CA activities will satisfy the CA that regulatory compliance is effected. The criteria for selecting items for review/survey and for

conducting independent analysis and auditing should be included. As there are variations in the types of installations and associated activities, the CA to satisfy itself that regulatory compliance is satisfied may use more than one methodology. For each installation, the specific methodology must be referenced.

The schedule to the Offshore Certificate of Fitness regulations lists specific sections of the regulations that must form part of certification review. However, there are a number of facility related regulatory sections that are not part of that schedule. The installation must comply with all the regulatory provisions. The SOW must specifically indicate that the CA review will include verification for compliance with those sections of the regulations that are facility related that are not identified in the schedule to the Offshore Certificate of Fitness regulations (attachment 3).

5.3.2 Review for Fit for Purpose

In addition to reviewing compliance with regulatory requirements, and when no specific regulatory requirement exists, the certifying authority is required to satisfy itself that the installation and its components are Fit for Purpose and can be operated safely without polluting the environment.

The regulations provide requirements for design, construction and maintenance on some elements of the installation. For some elements of the installation, no specific guidance is provided in the regulations. The information on ‘how’ and ‘why’ the CA reviews fitness for purpose should be provided. It is anticipated that the CA may use its own rules, requirements in other jurisdictions, industry practice and experience to assess fitness for purpose. The rationale the CA adopts for selecting references when adequate guidance is not provided by the regulations should be included.

The expectation of the Boards is that Fit for Purpose assessment includes confirmation that the installations reflect good practice for offshore installations in comparable harsh environments and that all risks have been assessed and measures have been implemented to make them As Low as Reasonably Practicable (ALARP).

5.3.3 Review of Continued Integrity of the Installation

An important aspect of certification review is the CA approval of:

- inspection and monitoring program,
- maintenance program, and
- weight control program.

The CA in approving the above programs is satisfied that compliance with these programs will maintain validity of the COF. Implementation of these programs provides reasonable assurance that the installation will remain in compliance with the regulations and fit for purpose. The CA conducts periodic reviews to ensure that the programs are implemented effectively and are sufficient to ensure continued fitness for purpose.

The COF is issued for a maximum period of five years. To be satisfied that the installation will remain fit during the period of validity of the COF, the CA approves the inspection/maintenance program and surveys the installation periodically.

The information submitted must include the methodology and the resources the CA uses to approve the inspection/maintenance program. The CA may have in-house guidelines to assist it in its review and must be referenced in the SOW. The CA shall provide these guidelines, or parts thereof, if requested by the respective Board.

5.3.4 Modifications, Damage, Repair and Temporary Equipment

The CA must be aware of changes to the installation due to modifications, damage or temporary equipment brought on board. The procedure for notification of such changes must be agreed with the applicant for COF. All temporary equipment is part of certification. The CA must ensure that at all times the installation is fit for purpose. Depending on the severity of the changes, the CA may impose additional limitations etc. on the COF.

The CA must investigate every damage and equipment malfunction to determine whether there is any deficiency in the initial design premise and whether the proposed level of monitoring and surveys require modification. These actions must be recorded and submitted to the respective Board with the respective survey reports.

The respective Board conducts periodic audits on board the installation. The CA will be provided a copy of these audit reports. The CA must follow up on findings that are related to certification. However, close-out of Board audit findings is the responsibility of the Board safety officers. No action/ approval by the respective Board/ staff diminishes in any way the responsibility of the CA to determine compliance with the regulations and fitness for purpose.

5.4 Certificate of Fitness Forms

The CA must discuss the COF form with the respective Board. The discussion must include attachments and disclosures on the certificate. The certificate must specifically state that the installation may be operated safely without posing a threat to persons or to the environment.

5.5 Certification Records

A monthly summary of certification activities shall be provided to the respective Board during the initial certification phase until a COF is issued. The intent is not to generate new documentation. A copy of information generated during normal course of certification for installation owner, designer, fabricator, etc. would be adequate. The documentation should provide an understanding of the elements and extent of certification review completed in the month. A certification report must be provided along with the COF.

The certification report, submitted with the COF, must summarize past reviews/surveys and reviews/surveys for other jurisdictions that were accepted for certification. The report must list the reports that were generated for those reviews/surveys. A description of the various surveys that comprehensively cover certification must be included to establish that no element was missed in the interface between reviews/surveys.

A compliance matrix must be included in the certification report that lists the regulatory sections, when, where and by whom the compliance was verified, whether credit was given to a survey for another jurisdiction and surveyor's comments. The compliance matrix must include a list of additional requirements (including source) that were adopted to ensure fitness for purpose. These may include regulations not included in the schedule to the Offshore Certificate of Fitness regulations, class rules, codes, industry standards, etc.

The rationale for the issue of limitations, qualifications, conditions etc. for the COF must be provided. All information required for the certification report may not be available when the COF is issued. However, the certification report must include a schedule when such information would be provided.

A copy of the reports of periodic surveys conducted during the validity of the COF must be provided or referenced if they were provided earlier.

The CA is required to maintain a copy of all records associated with its certification activities in Canada. The CA must inform the respective Board where and how it intends to store the certification documents.

5.6 Regulatory Queries

The CA must satisfy itself that the design, construction and installation comply with the regulations. The use of requirements other than those referenced in the regulations must be approved by the respective CSO/ CCO through the use of the Regulatory Query process.

For facility related regulatory queries, the CA is responsible to undertake a review of the request to use alternate measures and provide a recommendation to the Board that it concurs with the proposal. In addition to the formal recommendation on the RQF form, the CA shall provide a summary of the analysis it has undertaken and the rationale for its recommendation.

Often, the approval of an RQF will have conditions attached to it. The CA must verify closeout of RQF conditions.

5.7 Conflict of Interest

Certification review provides an independent review of design and construction. In order to maintain the status of independent review, the CA must avoid conflict of interest. The CA must not have authored or perceived to have authored a calculation, report or any other aspect of the installation that it has to review as part of certification.

5.8 Competency of Surveyors

The CA must ensure that the surveyors conducting appraisal/surveys have appropriate qualification and training. If the CA does not have suitable surveyors available and sources external specialists, the CA must ensure that they have the appropriate competency.

The CA must keep the respective Board and the applicant of the COF informed (who will inform the applicant for the program) of the qualification and training of the surveyors and external specialists it uses on the project.

5.9 Certification Contract

The contract that the CA has with the applicant for COF must not constrain the CA from performing its duties as outlined in the regulations, these guidelines and the terms and conditions of recognition as a certifying authority. The contract must be flexible to allow the CA to conduct work, as needed, in addition to that identified in the initial SOW. The Chief Safety Officer must approve deviations from the SOW. The SOW must include such a provision to do additional work if needed (section 5.2.12).

It is the responsibility of the CA to assure its independence is maintained throughout the process.

5.10 Change of Certifying Authorities

The review conducted by the certifying authority provides the certifying authority knowledge of the installation for effective periodic surveys and response to modifications and repairs. If a new certifying authority is selected, the previous certifying authority shall provide all certification documents that would be required by the new certifying authority to familiarize itself with the installation and effectively conduct periodic surveys and respond to requests for modifications/repairs.

6.0 Applicant

The person applying for a Program Authorization has to submit a valid Certificate of Fitness. In general, for production installations, the operator is the applicant for a Certificate for Fitness. However, in the case of mobile offshore drilling units (MODU), diving installations and accommodation installations, the owner/operator of the installation may be the applicant for a Certificate of Fitness as the installation may be used by more than one operator. Therefore, in these guidelines, the responsibilities of the applicants for Certificate of Fitness and program authorizations are discussed separately.

6.1 Applicant for Certificate of Fitness

The applicant for the Certificate of Fitness should provide all information required by the certifying authority and assist the certifying authority in carrying out its activities. The certifying authority acts as an independent third party reviewer of the documentation supplied. Therefore, calculations, reports, drawings and test results required for certification review have to be provided to the certifying authority. The applicant for the Certificate of Fitness must discuss with the certifying authority to determine the information required for review.

The person applying for the certificate is also responsible for providing the facilities the surveyor needs to perform a survey. These include the provision of safe scaffolding or cradles, stripping or dismantling of machinery, opening of vessels and the operating and testing of equipment and safety systems. In addition, competent specialist services such as underwater inspection by divers or remotely operated vehicles must be provided, as required by the certifying authority. The certifying authority must have complete access to these results. The applicant for the COF must coordinate with the applicant for the authorization to make the necessary arrangements for the CA. It must ensure that the CA surveyors involved in executing the SOW have appropriate qualification and training.

The Certificate of Fitness is issued with the understanding that the installation will be maintained to an approved maintenance program. The applicant should conduct:

- the inspection and monitoring program,
- the maintenance program, and
- the weight control program,

and comply with the requirements in these programs. Records of such activity have to be maintained and would be verified by the certifying authority during the periodic surveys. The applicant is required to submit the above programs for CA approval.

6.2 Applicant for Program Authorization

The responsibilities of the applicant for a program as it relates to the certification of the installation are described in this section.

The person primarily responsible for safety is the applicant for the program. A COF for the installation indicates that there is reasonable assurance that the installation is in compliance with the regulations and is fit for the intended purpose. The applicant for the program should ensure that the COF is valid during the term of the program.

The applicant for the Program should provide the CA access to the installation to carry out surveys that the CA deems necessary for its assessment of the installation.

The applicant for the program should submit a copy of the COF to the respective Board.

A COF may have limitations, conditions, qualifications etc. attached to it. In addition, a number of RQFs may have been approved during certification of the installation. The applicant for the program must confirm that it will abide by the limitations, conditions, qualifications etc. attached to the COF and will comply with the conditions of approval of the RQFs.

The applicant for the program (in cooperation with the applicant for the COF) must ensure that the CA complies with the SOW. It must ensure that the CA surveyors involved in executing the SOW have appropriate qualification and training.

7.0 Offshore Boards

The Accord Acts provide that the Boards is not liable to any person by reason only of having issued an authorization in reliance on a certificate of fitness.

Notwithstanding this legal protection against liability, the Board is required to do its due diligence to satisfy itself that the certificate of fitness is valid. This will be accomplished by undertaking the following as appropriate.

7.1 Scope of Work Approval

The Certificate of Fitness Regulations require that the Scope of Work for the CA be authorized by the CSO. The CSO will review the scope of work for conformance to these guidelines prior to granting an authorization.

7.2 Monitor CA activity

As noted in these guidelines, the CA is required to provide reports during the certification process. The Board will monitor the CA activity through these reports, and meet periodically with the CA.

7.3 Monitoring RQFs

RQFs provide an insight into the review and process undertaken by a CA in providing its recommendation. The Board will monitor this process in its review of the RQFs.

7.4 Installation Audits/inspections

Compliance and/or technical audits may be undertaken by the respective Board on any aspect of the development including audits of design, construction, installation, commissioning, operation, decommissioning, and abandonment. If applicable, a copy of the Board audit report will be made available to the CA for information. No action/ approval by the Board takes away from the responsibilities of the CA outlined in the regulations.

7.5 Audits of the Certifying Authority

The Board may undertake audits of the certifying authority directly. These audits could address:
conformance to the approved scope of work,
the CA's quality system,
technical audits of a particular review undertaken by the CA, or
other matters relevant to the certification process

7.6 Incidents/Non conformances related to Installations

The operator is responsible to advise the Board and the CA of incidents / non-conformances related to an installation. The CSO and CA must approve repair and modification to the installation.

7.7 Validity of Certificate of Fitness

9. *(1) Subject to subsections (2) and (3), a Certificate of Fitness ceases to be valid where*
- (a) the certifying authority or the Chief determines*
 - (i) that any of the information submitted pursuant to subsection 4(8) was incorrect and that the Certificate of Fitness would not have been issued if that information had been correct,*
 - (ii) that the installation no longer meets the requirements of paragraph 4(1)(a), (3)(a), (4)(a) or (5)(a), or*
 - (iii) that the installation has not been inspected, monitored and maintained in accordance with any limitation endorsed on the Certificate of Fitness; or*
 - (b) the Chief determines that the certifying authority has failed to carry out the scope of work relating to the installation in respect of which the certificate of fitness was issued.*
- (2) At least 30 days before a determination is made pursuant to subsection (1), notice, in writing, that a determination is going to be made shall be given*

(a) in the case of a determination by the certifying authority, by the certifying authority to the Chief and the person to whom the Certificate of Fitness in respect of which the determination is to be made has been issued;
...
(3) Before making a determination pursuant to subsection (1), the certifying authority or the Chief, as the case may be, shall consider any information in relation to that determination that is provided by any person notified pursuant to subsection (2).

The COF Regulations contain the above provisions to determine a COF to be invalid.

If such a determination is made, the authorization, or the aspect of it, on which reliance on the certificate was made, would also not be valid.

The CA has an equal responsibility, as the CSO, with respect to making a determination that a COF is not valid.

For matters that may not be critical to the validity of the COF, but do constitute non conformance, the CA or the CSO may elect to address in a process outside this formal notice.

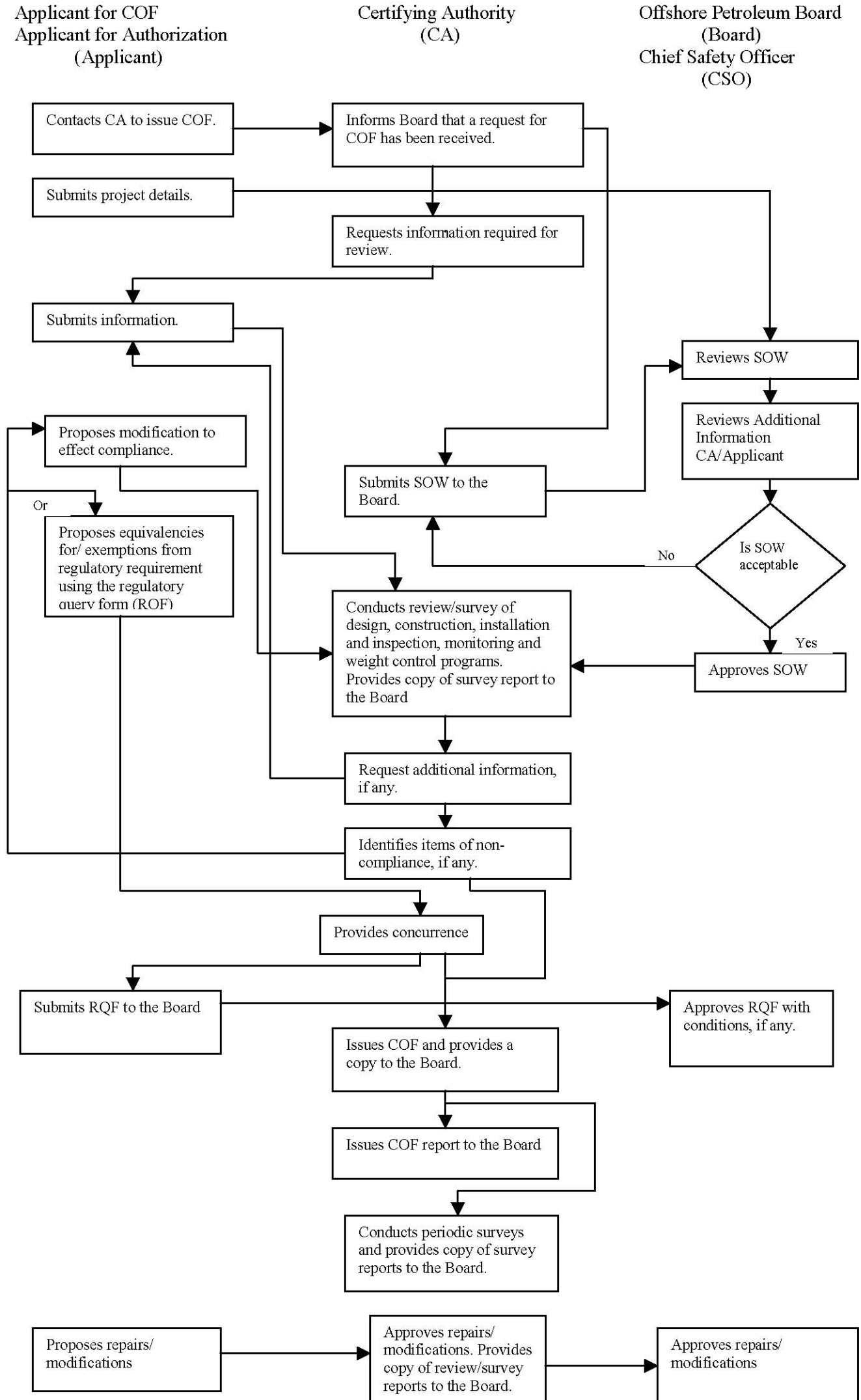
Notwithstanding this less formal process, if at any time, the CA or the CSO become aware of a matter that in their opinion justifies consideration of determining the COF to be invalid, the formal process as outlined in the regulations shall be initiated.

Draft – October, 2001

Attachment 1

Certification Flow Chart

CERTIFICATE OF FITNESS (COF) PROCESS



*** The respective Board monitors certification and may require additional information from the CA/Applicant.**

Draft – October, 2001

Attachment 2

Special Considerations

A.2.1 Introduction and Scope

The certifying authority (CA) issues a certificate of fitness (COF) when it determines, along with other items, that the installation complies with the regulations unless a deviation from the regulations was approved by the Chief Safety Officer through the regulatory query form (RQF) process. There are a number of unique features in the regulations and some of them are discussed below.

A.2.2 Codes and Standards

The regulations reference a number of codes and standards. Subsection 2(3) of the Petroleum Installations Regulations (IR) states:

A reference to a standard or specification shall be considered to be a reference to that standard or specification as amended from time to time.

The CA must verify that the applicant for the COF has a procedure to ensure that the installation complies with the amendments to the codes and standards referenced in the regulations. The procedure must be referenced in the certification report. As part of periodic surveys, the CA must verify that the procedure is effectively administered.

A.2.3 Temperature

Offshore Newfoundland and Nova Scotia are some of the colder regions of offshore operations. Paragraph 37(1)(c) of IR states:

Every installation and every component of an installation shall be designed in accordance with good engineering practice, taking into account

(c) operating and ambient temperatures;

Materials used in the installation must be suitable for the design temperature. For existing installations, the CA must verify that the temperature used for the design is suitable.

Materials used for modifications and in temporary equipment brought on board must be suitable for the design temperature. Containers along with the sling sets brought on board must comply with the following guideline:

Control and Handling of Containers in the Newfoundland Offshore Area – A CAPP Guide, July 2001.

Paragraph 11(2)(b) of IR states:

Electrical wiring on an installation shall be

(b) tested for impact at –35°C and bending at -40°C in accordance with Canadian Standards Association Standard C22.2 No. 0.3-M1985, Test Methods for Electrical wires and Cables.

This requirement reduces the risk of damage during installation and maintenance in cold weather. Cables in existing installations may not be tested to these criteria and must be identified in a regulatory query form (RQF). The CA must verify that the cables were installed in warm weather and show no indication of damage. All replacement cables must satisfy the above criteria.

A.2.4 Cranes

Section 16 of IR requires the cranes to comply with API Spec 2C – *Specification for Offshore Cranes* and API RP 2D – *Recommended Practice for Operation and Maintenance of Offshore Cranes*. The cranes will be used for transferring personnel and the CA must verify that the cranes are certified for personnel transfer.

A.2.5 Helicopter Deck

Section 5 of IR requires the helicopter deck to conform to TP 4414 – *Guidelines Respecting Helicopter Facilities on Ships*. Any deviation from this requirement must be identified in a regulatory query form (RQF). All deviations must also obtain concurrence of Transport Canada (Aviation). In addition, the helicopter contractor should provide documentation indicating that they are satisfied with the facilities. The operations manual of mobile installations should include it as one of the items required prior to establishing at a new location.

A.2.6 Survival Craft Evacuation Stations

Paragraph 19(j) of IR states:

the survival craft evacuation stations located adjacent to the accommodation areas and the associated escape routes from the accommodation areas shall provide fire protection for a period of at least two hours

The CA must verify that this requirement is satisfied. Any deviation from this requirement or the provision of equivalent systems must be identified in a regulatory query form (RQF).

A.2.7 Lifesaving Equipment

Paragraph 22(3)(c) of IR states:

The launching devices for the totally enclosed survival craft, the rescue boat and the inflatable lifeboats provided on an installation shall be

(c) situated so as to permit each survival craft, rescue boat or

liferaft to be launched clear of any obstruction resulting from damage of the extent described in the Code referred to in subsection 56 (9).

The CA must verify compliance with this requirement and reference its review in the certification report.

The best practicable evacuation technology must be used on the installations.

A.2.8 Quality System

Subsection 4(1) of IR states:

Every new installation shall be designed, constructed, installed and commissioned in accordance with a quality assurance program that complies with subsection (2) and that is selected in accordance with Canadian Standards Association CAN3-Z299.0-86, *Guide for Selecting and Implementing the CSA Z299-85 Quality Program Standards*.

CSA Z299 standards have been superseded by ISO 9000 standards. The CA must ensure that quality records are retained for future reference. The information on the QA/QC documents for lifesaving appliances must be referenced in the certification report. This regulation does not apply to existing installations. However, all modifications must be to the requirements in the ISO 9000 standards. For existing units, the CA must verify the QA/QC of lifesaving appliances and the QA/QC documents for lifesaving appliances must be referenced in the certification report.

A.2.9 Elevating Devices

Paragraph 4.2(2)(a) of the Petroleum Occupational Safety and Health regulations states:

The applicable standard for elevators, dumbwaiters and escalators is CSA Standard CAN3-B44-M85, Safety Code for Elevators, as amended from time to time, other than clause 9.1.4

CAN3-B44 requires an inspector appointed by the regulator to inspect new and modified elevators. The CA must demonstrate to the respective Board that it has appropriately qualified personnel to undertake the inspection. If it does so the respective Board will appoint the CA as the inspector. The CA must post a certificate in each elevator.

For existing units that have a valid certificate from another recognized organization, it will be a requirement that the CA satisfy itself that the certification is valid.

4.2.10 Firewater Systems

The IR refers to several National Fire Protection Association (NFPA) Standards for firewater systems. These standards refer to the Authority Having Jurisdiction

(AHJ). In law, the AHJ is the respective Board. However, the Board may delegate this responsibility to the CA provided the CA demonstrates to the respective Board that it has appropriately qualified and experienced personnel to fulfill the function of the AHJ. For NFPA reporting requirements, such as impairment, reports shall be made directly to the respective Board. Reports shall also be made to the CA. (Also refer to para 67.(4) of the IR for reporting requirement).

Section 27(11)(b) of the IR requires sprinkler systems be tested and maintained in accordance with National Fire Protection Association (NFPA) 13A, “Recommended Practice for the Inspection, Testing and Maintenance of Sprinkler Systems”. NFPA 13A has been superseded by NFPA 25 “Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems”. NFPA 25 now governs sprinkler systems as well as related systems, including supply piping, fire pumps, storage tanks, water spray systems, and foam-water sprinkler systems. The inspection, testing and maintenance of water-based systems shall include the provisions of NFPA25, as applicable.

Advancements have been made by the North Sea industry and the regulators in defining requirements for Firewater Systems on offshore installations. Requirements and guidance reflecting “good practice” for firewater systems is provided in the following:

ISO 13702 “Petroleum and Natural Gas Industries – Control and Mitigation of Fires and Explosions on Offshore Production Installations – Requirements and Guidelines”

Steel Construction Institute, “Interim Guidance Notes for the Design and Protection of Topsides Structures against Explosion and Fires”, UK.

Norsok Standard S-001 “Technical Safety”

Draft – October, 2001

Attachment 3

Regulations covered by certification

In addition to those referenced in the COF regulations

Note: The review by the CA is limited to the equipment/facilities and associated procedures and not the operations.

Provisions of the Oil and Gas Occupational Safety and Health Regulations, not listed in the schedule of Part II of the Fitness Regulations

Part II	Sections 2.2, 2.13, 2.14, 2.15
Part III	Sections 3.3 through 3.17
Part IV	Sections 4.3 through 4.8
Part V	Sections 5.3, 5.4 and 5.6 through 5.13
Part VII	Section 7.2 through 7.8
Part VIII	Section 8.2 through 8.5, 8.7 through 8.10, 8.13, 8.15, 8.16
Part IX	Section 9.2 through 9.5, 9.6(2) through 9.8, 9.12, 9.13, 9.17, 9.19 through 9.23, 9.26, 9.28 through 9.34, 9.38(2), 9.38(3)
Part X	10.3 through 10.7, 10.9, 10.11 through 10.43
Part XI	Inclusive
Part XII	12.1 through 12.10, 12.12 through 12.14, 12.16(2) through 12.22
Part XIII	13.2 through 13.13, 13.15 through 13.19, 13.21, 13.22
Part XIV	14.2, 14.6, 14.7, 14.8, 14.12, 14.14 through 14.20, 14.23 through 14.43, 14.45, 14.46, 14.47(3), 14.48, 14.49(1), 14.51 through 14.55
Part XV	Inclusive
Part XVI	16.2 through 16.12, 16.14(a), 16.14(d), 16.14(e), 16.14(f)(ii) through 16.16
Part XVII	17.3 through 17.5, 17.9 through 17.21
Part XVIII	Inclusive

Provisions in the Newfoundland Offshore Petroleum Installations Regulations not listed in section 4 of the Newfoundland Offshore Certificate of Fitness Regulations

Sections 2(2), 2(3)

Part IV	Sections 63, 64, 66 to 68
---------	---------------------------

Provisions in the Newfoundland Offshore Area Petroleum Production and Conservation Regulations not listed in Part I of the schedule to the Newfoundland Offshore Certificate of Fitness Regulations.

Section 2(2)

Part V Section 27, 28

Part VI 35(1), 37 to 44

Part VII 45 to 48

Part VIII 53, 54, 58 (2), 59

Provisions in the Newfoundland Offshore Petroleum Drilling Regulations not listed in Part III of the Schedule to the Newfoundland Offshore Certificate of Fitness Regulations.

Part I 13 to 15, 23, 25, 26(2), 27, 28, 31, 45 to 47, 60, 61(2), 61(3), 62, 63, 64(3)

Part III 76, 77, 83, 87(2), 87(3), 88(1), 106 to 108, 111 to 114, 119, 120

Provisions in the Newfoundland Offshore Area Petroleum Diving Regulations not listed in Part IV of the schedule to the Newfoundland Offshore Certificate of Fitness Regulations.

Part III 9(5)(k), 9(5)(l), 11, 12(2)(a) to (c), 12(2)(e), 12(2)(f), 12(2)(h), 12(2)(j)