

**EXHIBIT 7**

**QUALITY REQUIREMENTS**

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## 1.0 INTRODUCTION

Without limiting the generality and application of the Agreement, Contractor will abide by and ensure Contractor Group abides with the quality requirements set forth in this Agreement.

## 2.0 QUALITY OBJECTIVES

The following quality objectives are required of Contractor:

- a) Work will comply with the quality requirements of the Agreement;
- b) Quality management systems of Contractor Group will ensure early and proactive identification of process or product failure so as to prevent problems before they occur or minimize rework, cost and schedule impacts, and to identify potential failures, opportunities for improvement and best practices;
- c) Engineering design is clearly documented and is consistent with acceptable design standards and meets operational performance requirements
- d) Equipment and materials procured and/or installed by Contractor Group will be compliant with the design which shall be reviewed and accepted by Company
- e) Construction Work will be carried out in accordance with established construction standards and methods;
- f) Completion activities, including static and/or dynamic commissioning will be executed in accordance with the procedures and manuals covering those activities; and;
- g) Documentation of objective evidence of conformance to the requirements will be maintained and recorded during the execution of the Work;
- h) Final completion of the Work meets all drawings, specifications, plans, etc. which have been reviewed and accepted by Company.

## 3.0 DEFINITIONS, TERMS AND ABBREVIATIONS

ISO 9001:2008	Quality Management Systems – Requirements
ISO 9000:2005	Quality Management Systems – Fundamentals and Vocabulary
ISO 10006: 2003	Quality Management Systems – Guidelines for Quality Management in Projects
ITP	Inspection and Test Plan
NCR	Nonconformity Report
PMI	Positive Material Identification
QA/QC	Quality Assurance/Quality Control
QMS	Quality Management System
QP	Quality Plan
SDRL	Supplier Document Requirements List

## 4.0 CONTRACTOR'S RESPONSIBILITIES

- a) Contractor shall comply with and ensure that Contractor Group complies with requirements outlined in this Exhibit 7.
- b) Contractor shall ensure that Contractor Group implements the quality activities described in this Exhibit 7.
- c) Contractor shall demonstrate the implementation of its quality program and the compliance of its Work with the requirements of the Agreement.
- d) Contractor shall provide quality assurance, consisting of all those planned and systematic activities that are necessary to establish quality requirements and to ascertain with confidence that the Work performed by Contractors and Suppliers will conform to established requirements.
- e) Contractor shall provide quality control for the Work of Contractors and Suppliers, consisting of those quality controls, operational techniques, and activities that provide a means of measuring and controlling the characteristics of an item, element, component, product, service or installation to meet the established requirements.
- f) Contractor shall prepare all required control procedures, quality plans and inspection and test plans before start of the corresponding part of the Work and have these documents available for Company review and acceptance and ensure that Subcontractors and Suppliers have and use similar accepted plans and procedures.
- g) Contractor shall ensure qualified inputs, qualified resources (personnel, tools, equipment and materials), and qualified work processes are used by Subcontractors and Suppliers to perform Work in conformance to specifications.
- h) Contractor shall ensure that the degree of quality planning, level of inspection, procurement of materials and equipment and oversight and verification is driven by criticality.
- i) In accordance with the Articles of the Agreement, Contractor shall provide the right of access to Company Group Personnel, to the Worksites to monitor the progress of the Work.
- j) Contractor shall provide acceptable office accommodation, including internet connections for the Company's authorized representatives; the level of involvement of said authorized representatives shall be determined by Company.
- k) Contractor shall ensure that documents requiring a registered professional engineer's seal and signature shall be in accordance with the *Engineers and Geoscientists Act, 2008* of Newfoundland and Labrador and the by-laws of the Professional Engineers and Geoscientists – Newfoundland and Labrador (refer to [www.pegnl.ca](http://www.pegnl.ca)).
- l) Contractor shall ensure that documents requiring an Architect's seal and signature shall be in accordance with the Architect's Act 2008 of Newfoundland and Labrador.

## 5.0 QUALITY MANAGEMENT SYSTEM

Contractor shall have an effectively implemented and maintained QMS for the execution of the Work. The QMS shall, at a minimum, be formally documented and



compliant with the requirements of ISO 9001:2008. The QMS shall emphasize building quality into the Work through the use of documented control processes that incorporate activities necessary to assure quality.

The QMS shall be supported by an established quality organization with qualified resources, and formally documented control procedures to effectively administer and implement the requirements.

Prior to subcontracting any Work, Contractor shall demonstrate to Company that the selected Subcontractor has a quality management system that complies with the provisions of ISO 9001:2008. Contractor shall not subcontract any part of the Work to a Person that does not meet the standards established by ISO 9001:2008. These requirements also apply to Work to be performed by Subcontractors' subcontractors of every tier.

## 6.0 QUALITY ORGANIZATION

Contractor shall appoint a quality representative, empowered by management with freedom and authority to:

- a) oversee the management of quality for the Work;
- b) manage quality issues and their resolution;
- c) correct nonconformities and/or adverse quality trends; and
- d) ensure compliance with the Agreement.

Contractor shall provide details of the QA/QC organization it intends to employ for Company review and acceptance. Such details shall include resumes of key personnel as well as clearly defined roles and responsibilities of each position within the quality organization. Contractor shall appoint sufficient qualified Personnel to ensure that the quality management system, specifically the quality assurance, quality control and inspection activities, including those pertaining to any part of the Work, are achieved.

Contractor shall ensure the following activities are clearly defined and appropriately staffed:

- a) Quality Assurance Coordinator(s) for design, procurement, construction and completions phases are engaged to ensure adherence to Quality Plans, ITPs and control procedures;
- b) Quality auditor(s), qualified to conduct audits are engaged to conduct formal internal and external audits throughout the applicable phases of the execution of the Work;
- c) Inspection supervisors are engaged to oversee the daily inspection and testing activities associated with procurement, construction and completions and the daily supervision of qualified field discipline inspectors;
- d) Inspection coordinator(s) for procurement and construction phases including completions are engaged to oversee and implement inspection processes for

Contractor and Supplier materials and equipment.

## 7.0 QUALITY DOCUMENTS

The SDRL identifies specific quality documentation required from Contractor and defines the required submission dates and form of submission. The instructions for Contractor document requirements are contained in document number LCP-PT-MD-0000-IM-PR-0015-01, Supplier/Contractor Document Requirements located in Exhibit 11 – Company Supplied Documents. Contractor shall ensure that it meets all quality documentation requirements outlined in the Agreement.

## 8.0 QUALITY PLAN

### 8.1 GENERAL REQUIREMENTS

Contractor shall submit a QP, prepared in accordance with this Exhibit 7, to the Company for review and Acceptance. The QP shall include all aspects of the Work. All QP revisions are subject to review and acceptance by Company prior to being implemented. Contractor shall:

- a) Develop and maintain a QP stating the procedures, processes, resources and sequence of quality activities related to the Work;
- b) Mandate one person to be responsible for development, approval and follow up of the QP;
- c) Ensure QP review and revisions by Contractor's Personnel comprising representatives of all affected disciplines; and
- d) Upon request, provide Company with the procedures and instructions to which the QP refers for review and acceptance.

### 8.2 QUALITY PLAN CONTENT

The QP shall:

- a) Accurately reflect the planning implemented by Contractor to comply with the Agreement;
- b) Apply the guidelines of ISO 10006:2003 - Quality Management Systems – Guidelines for Quality Management in Projects;
- c) Document any non-applicable requirement or any provision in the QP that does not comply with quality system requirements;
- d) Identify each of the main stages of execution for each of the deliverable elements of the Work;
- e) At a minimum, contain the following:
  - i. Scope;
  - ii. Quality objectives;
  - iii. Definitions, terms and abbreviations;

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- iv. Organization chart and quality related roles and responsibilities associated with all phases of the Work;
  - v. Management review of Subcontracts;
  - vi. Documentation and records management; and
  - vii. Listing of all control procedures required to perform the Work (current and to be developed); and
- f) Provide detailed descriptions of:
- i. Responsibilities of Contractor's management related to QA/QC activities;
  - ii. The systems and procedures Contractor will use to ensure that quality is an intrinsic part of all aspects of the Work;
  - iii. Reviews, approvals required and checks and inspections to be conducted, including responsibilities and the timing of the required checks and inspections in the Work sequence;
  - iv. How procurement documents will be prepared to properly establish quality requirements with Subcontractors (and Subcontractors' subcontractors of every tier). Contractor shall require that Contractor Group prepare a product specific or service specific quality plan for of the Work of such Subcontractors and subcontractors;
  - v. How Persons, to whom Contractor proposes to Subcontract any part of the Work, will be evaluated and selected to ensure they have the requisite resources, tools, procedures, and quality capabilities to meet established requirements (this requirement also applies to proposed subcontractors of Subcontractors of every tier;
  - vi. How ITPs will be prepared. Each ITP shall include a list of the specifications that must be met, describe the tests that will be performed to ensure compliance, and identify who will perform the tests. Each plan shall identify inspections and QA/QC steps that will be taken by Contractor Group;
  - vii. How records will be maintained to demonstrate that all design, materials, equipment and construction conforms to established requirements and how and in what form the records will be submitted to the Company for review and acceptance;
  - viii. How nonconformities, concessions and waivers shall be controlled and resolved including the process that will be used, the Personnel responsible for administering the process and the information flow through Contractor's organization for resolution;
  - ix. How all instruments used for testing and inspection will be properly certified, including PMI devices, equipment for calibrating instrumentation and hydrostatic test gauges;
  - x. The auditing, appraising, sampling techniques, reviews and reporting Contractor intends to carry out for the Work to confirm the effectiveness of the QA/QC activities, and that the QMSs are indeed delivering the quality required;
  - xi. How Contractor plans to meet requirements for PMI, source inspection and field quality control, including the frequency of testing, the locations where the testing will be conducted (e.g., Worksites, upon receipt at Worksites, following

- installation), and the type(s) of testing equipment to be used;
- xii. Control procedures that adequately address the controls required for quality activities; and
  - xiii. Acceptance and rejection criteria applicable to the activity and approval requirements.

### 8.3 QUALITY AUDITS AND MANAGEMENT REVIEWS

Contractor shall provide a schedule of quality audits (both internal and external) and quality management system reviews to be performed during execution of the Work. The schedule of quality audits shall identify those planned audits of Contractor Group which ensure periodic verification of compliance with approved and/or accepted Quality Plans, ITPs, and associated control procedures, including those of Subcontractors and Suppliers

Contractor shall make available to Company all Quality Audit Reports, including Audit Reports of Subcontractors and Suppliers.

Contractor shall develop and implement corrective and preventive actions to resolve quality issues and concerns for all phases of the project, resolve all nonconformances resulting from audits; detect, report and control nonconforming processes and items, including Subcontractor and Supplier activities.

Contractor shall address and resolve to Company's satisfaction, issues identified during Company reviews, audits, surveillance, and inspection and third party reviews and inspections performed on behalf of the Company

The schedule of audits shall be provided to Company on the later of four (4) weeks before start of the Work or two (2) weeks after the Effective Date.

Contractor shall report progress, on a monthly basis, on implementing any actions that arise from the audits or management system reviews.

### 8.4 SURVEILLANCE OF SUBSUPPLIERS AND SUBCONTRACTORS

Contractor shall perform surveillance and inspection of Contractor Group as well as review and approve dossiers provided by the Contractor Group to ensure that the requirements of the Agreement have been met.

Contractor shall identify planned verification activities used to assess and manage Contractor Group to ensure compliance with requirements of this Agreement.

The verification activities shall be documented in the QP and reported monthly together with the progress on audits and management reviews.

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Contractor shall prepare detailed Quality Surveillance Plans as applicable to the criticality of materials and equipment; said plans shall be submitted to Company for review and acceptance and provide assurance that:

- a) inspection and testing activities are conducted in accordance with Contractors' and Suppliers' Quality manuals, relevant codes, standards and ITPs;
- b) inspection coverage levels are defined according to the criticality determined for each procurement package for materials and equipment;
- c) ITPs, as far as practical, follow the normal sequencing of the Work; ITPs shall identify the stages requiring approval, inspection and testing hold and witness points;
- d) Contractor and Supplier source inspection and field inspection is in accordance with Contractor's control procedures;
- e) Pre-production/pre-inspection meetings are conducted as applicable to the Work for Contractors and Suppliers providing critical services, materials and equipment;
- f) In-process inspection during fabrication, construction, installation and completions is conducted and covers all disciplines required to complete critical items;

## 9.0 INSPECTION AND TEST PLANS

### 9.1 GENERAL REQUIREMENTS

Contractor shall develop and submit its inspection and test plan (ITP), which shall include those of its Subcontractors (and Subcontractors' subcontractors of every tier), for review and acceptance by Company on the later of four (4) weeks before start of the Work or two (2) weeks after the Effective Date. In no case shall work commence prior to the review and acceptance of the ITP by Company.

The ITPs shall cover all aspects of the Work to be executed by Contractor Group. Contractor shall implement and maintain all quality activities described therein.

Contractor will notify Company of all hold and witness points ten (10) Business Days prior to the scheduled date of such activity. Contractor will reconfirm the scheduled date of such activity seventy-two (72) hours prior to commencement. The Contractor shall identify upcoming hold and witness points for the next six (6) months in the Monthly Progress Report (as referenced in Exhibit 3 - Coordination Procedures).

### 9.2 INSPECTION AND TEST PLAN CONTENT

Contractor is required to follow all of the instructions below in preparing the ITPs, and acknowledges that the Company review will be based on these instructions.

- a) Identification
  - Code the ITP, identify the revision and date;
  - Identify the Company, project and sector;
  - Identify the Agreement, as well as the component, discipline or system to which the ITP applies; and



- Identify the Personnel responsible for quality, at all Worksites.
- b) Work Items and Steps
  - These are normally copied from the elements of the Contractor' Group's detailed Work schedule. Complimentary or specific details may be required; and
  - Contractor shall ensure ITPs, as far as practical, follow the normal sequencing of the Work. ITPs shall identify the stages requiring approval, inspection and testing hold and witness points.
- c) Control Activities
  - The control points, including their summary description (inspection, verification, tests) shall be inserted in the detailed Work schedule.
- d) Responsibilities
  - Identify Contractor's Personnel responsible for control activities.
- e) Frequency
  - Specify the percentage, frequency or sampling rate applicable to the control points.
- f) Reference to Specifications
  - Control activities shall refer to applicable drawings, specification sections and/or specifications/codes;
  - Identify parameters and characteristics that will be mainly considered in the controls; and
  - For each control, identify and note down the criteria and/or tolerances for approval.
- g) Procedures Used
  - Identify the procedures or instructions developed by Contractor or Subcontractors (or Subcontractors' subcontractors of every tier) to perform control and testing.
- h) Control Equipment
  - Describe and identify the equipment to be used for quality control. Users shall provide evidence of the calibration status.
- i) Checklists
  - The information identified above can be recorded in a checklist prepared by Contractor. The checklists shall be appended.
- j) Forms
  - Identify the forms to be used to record the control point results and append them to the ITP. The recorded results will constitute an inspection or testing report.
- k) Company's Control Points
  - The type of control points, namely: witness, hold or documentation review will be identified during ITP review by the Company.
- l) Quality Records
  - Identify the types of records to be included in the quality records, to be submitted to the Company, and include the applicable standard table of contents.

## m) Remarks

- Include all other relevant information that may be useful in carrying out the ITP.

**10.0 NONCONFORMITY REPORTING**

Contractor shall submit, to Company for review and Acceptance, its nonconformity, corrective action, preventive action procedure(s) and resolution reporting form.

Contractor will ensure that all nonconformities, which shall take on the definition of noncompliance with a requirement, as defined in ISO 9000:2005 Quality Management Systems – Fundamentals and Vocabulary, are recorded, investigated and resolved to Company's satisfaction.

All of Contractor's Personnel shall have a responsibility to identify apparent nonconformities arising from the execution of the Work.

Contractor shall maintain a register of all applicable and open nonconformity reports. The status of all NCRs shall be reported in the Monthly Progress Report (as referenced in Exhibit 3 - Coordination Procedures).

Contractor's NCR form may be used but, at a minimum, it shall contain the following:

- a) Project number;
- b) NCR number;
- c) Contractor;
- d) Project name/location;
- e) Purchase order/contract number;
- f) Product description (including part #, serial # and tag #);
- g) Date opened;
- h) Date closed;
- i) NCR description;
- j) Action by;
- k) Status;
- l) Root cause analysis;
- m) Resolution proposed; and
- n) Resolution Implemented.

Contractor shall identify Personnel responsible for verifying and resolving NCRs.

**11.0 QUALITY RECORDS**

Contractor's quality records shall include, as a minimum, the following documents:

- a) Inspector qualifications (quality control);
- b) Welder's qualifications ;

- c) Checklists;
- d) Relevant inspection and testing reports;
- e) Materials analysis certificates, when required;
- f) Steel works certificates;
- g) Paint specification sheet, when required;
- h) Identification and traceability documentation;
- i) Company Approved deviations;
- j) Closed out nonconformity reports, corrective and preventive actions;
- k) Completed test packages;
- l) Preservation records;
- m) Declarations to Authorities, when required;
- n) As-built drawings;
- o) As-built specifications;
- p) As-built bills of material;
- q) Various required manuals;
- r) Shipping authorization.

Quality records shall be retained until the later of (a) seven (7) years after the satisfaction of all of the obligations of Contractor pursuant to this Agreement, (b) seven (7) years after expiration or any termination of this Agreement, or (c) such longer period as may be required under Applicable Laws. During this period, the quality records shall be available to Company for inspection and audit.

## 12.0 COMPANY'S ACTIVITIES

12.1 Company shall be entitled, at its sole discretion, to perform certain QA/QC activities, the performance of which shall not relieve Contractor of its responsibilities under this Agreement or its overall responsibility for quality of the Work. These QA/QC activities may include:

- a) Audit of Contractor's QA/QC program and include any or all of the following:
  - Review of Contractor's documented QA/QC plans and procedures;
  - Random review of Contractor's procurement documents for inspection and specification content;
  - Review of Contractor's specific equipment inspection and test plans in relation to specification requirements;
  - Review of inspector's surveillance and non-conformance reports, Contractor's deviation log, procedure approval logs;
  - Receipt of inspection discrepancy reports and field inspection reports;
  - Review of activities undertaken by Contractor Group;

Independent source inspections. Results of Company source inspections will be made available to Contractor and Contractor shall address and resolve any issues arising from these inspections;

- b) Review and assessment of Contractor Group quality plans and ITPs;

- c) Review and assessment of Contractor's control procedures and audit schedule, monitoring compliance and monitoring resolution of any issues raised;
- d) Participation in selected pre-inspection and pre-production meetings;
- e) Conducting oversight of Contractor's quality activities including Contractor Group inspection activities, field inspection and surveillance activities, along with participation in inspection and test stages outlined in Accepted ITPs;
- f) Review and Acceptance of NCRs where proposed dispositions do not result in meeting specifications; and
- g) Other activities as deemed appropriate by Company.

## 12.2 CONTRACTOR'S ACTIVITIES

The following QA/QC requirements shall be fulfilled by Contractor during engineering:

- a) Preparing design review plan and design verification plan; conducting design reviews and verification, including independent reviews, to ensure that design requirements are met;
- b) Performing design control, including establishing design requirements, reviewing design inputs, and reviewing and approving design outputs; developing design review and approval matrix identifying Company and Contractor participation;
- c) Maintain design change log and conduct reviews by Quality representative for compliance with Quality requirements;
- d) Ensuring sufficient Quality resources are engaged to monitor and measure process activities;
- e) Ensuring Subcontractors and Suppliers have approved Quality Plans and control procedures.

The following QA/QC requirements shall be fulfilled by Contractor during procurement:

- a) Ensuring Subcontractors and Suppliers selected to execute elements of the Work scope are approved by Contractor prior to commitment;
- b) Ensuring that applicable Contractor Quality requirements are communicated to Subcontractor and Supplier and that requirements are implemented;
- c) Conducting reviews of procurement documents by Quality personnel for compliance with Quality requirements;
- d) Ensuring that the extent of Quality activities related to procured materials and equipment is based on a criticality system which defines equipment criticality ratings and provide criticality matrix for procured items. Criticality ratings are to be determined by Contractor, in conjunction with Company, prior to commitment;
- e) Approving manufacturing procedures for major Procured Goods. Include review by Quality personnel for compliance with Quality requirements.

The following QA/QC requirements shall be fulfilled by Contractor during construction:

- a) Assigning a construction quality manager responsible for supervising and monitoring the QA/QC activities of all Contractors and Suppliers on site;
- b) Ensuring Contractors and Suppliers QA/QC plans for construction and installation are prepared and approved;
- c) Ensuring compliance and consistency with the specifications across all construction Work;
- d) Ensuring that construction and installation activities are adequately planned and performed by qualified trained personnel equipped with suitable tools and procedures;
- e) Ensuring that construction and installation activities are conducted in accordance with drawings, specifications and, if required, special supplier installation procedures;
- f) Verifying and documenting the acceptability of construction and installation activities as per the project completions documentation requirements.

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