# APPENDIX G – ENVIRONMENT SAFETY AND SOCIAL RESPONSIBILITY (ES&SR) AND QUALITY ASSURANCE

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## PETRO-CANADA CONTRACT QUALITY REQUIREMENTS

### 1. Company's Quality Management System

Company has designed and implemented a Quality Management System with the objective being to help effectively manage its East Coast activities. The system is designed to provide the appropriate level of quality management, assurance and control for both operational and project development applications. The system is consistent with the principles of ISO 9001:2000.

### 2. Contractor's Quality Management System

Contractor shall have an effectively implemented Quality Management System. Recognizing the value of the internationally accepted ISO standards, the system shall, as a minimum, be compliant with the requirements of ISO 9001:2000 (preferred option), or ISO 9001:1994.

### 3. Contractor's Quality Management System Representative

Contractor's management shall appoint a member of management who, irrespective of other responsibilities, shall have responsibility and authority that includes;

- ensuring that processes needed for the quality management system are established, implemented and maintained,
- b) reporting to top management on the performance of the quality management system and any need for improvement, and
- c) ensuring the promotion of awareness of customer requirements throughout the organization.

#### 4. Workscope Plan

Should Contractor be unable to demonstrate an implemented Quality Management System described in Part 3, then Company will require Contractor to submit a Workscope Plan (see definition). The Workscope Plan will identify the activities (including verification activities to be performed by Contractor) and key interfaces with Company from Effective Date of the Contract through to delivery of equipment/services to Company. The Workscope Plan shall include Contractor activities, as well as critical activities that are performed by Suppliers and/or Sub-Contractors. The Workscope Plan shall be subject to review and acceptance by Company. Any modifications to the Workscope Plan, as the Work progresses, shall be communicated to and agreed with Company.

Company will use the accepted Workscope Plan to identify which activities Company will participate in with Contractor. Typically, Company will participate in verification activities including design review(s), planning activities, final assembly / acceptance tests, preservation/storage inspections and on-site surveillance.

Workscope Plan (definition): A high level description of Contractor's engineering, manufacturing, fabrication, installation, and/or service delivery process(es) which includes Contractor's verification activities for the product or service being offered. Company uses this document to assist in defining and planning requirements for participation in or execution of verification activities. Workscope Plan includes all process activities from a defined start point to a defined end point, and encompasses all activities within the Work.

#### 5. Contractor's Quality Audits, Management Reviews and Surveillance of Suppliers / Sub-contractors

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Contractor shall provide annually a schedule of internal quality audits and Quality Management System reviews. Progress shall be reported in the Quality Activity Report described in this Exhibit. Contractor shall report progress on implementing any actions that arise from the audits or management reviews.

Contractor shall also identify planned verification activities to be used to assess and manage critical Sub-contractors or Suppliers to ensure compliance with requirements. The anticipated verification activities and the results shall be recorded in the Quality Activity Report. The Quality Activity Report shall be tabled for review and discussion at regularly scheduled Contractor/Company Review meetings.

#### 6. Nonconformance Reporting

Contractor shall report, with respect to the Work, any nonconformances (problem description and disposition) generated in the engineering, manufacturing, fabrication, installation, and/or service delivery process(es). A nonconformance is defined as the failure of any process or product to meet a specified requirement. Nonconformances shall be reported upon occurrence, and shall be submitted electronically or by fax using Contractor's standard form. If Company input to disposition the nonconformance is required, then Contractor shall notify Company that a Nonconformance has been filed and that input is required. Nonconformances by Supplier's or Sub-Contractors that affect the Work being executed for Company shall also be reported

### 7. Company's Surveillance, Verification, and Quality Assessment / Audit Rights

Company shall have the right to perform surveillance and to use other verification tools to verify the performance of Contractor and of Contractor's critical Suppliers or Sub-contractors to ensure compliance with relevant requirements in all areas during the execution of the Work. Contractor shall facilitate these requirements in a manner to be agreed subsequent to Effective Date of the Contract. Contractor shall provide Company with adequate written notice, to be mutually agreed upon, in instances where Company has indicated it will participate in discrete activities (e.g. "hold" and "witness" notifications points). Quality assessments / audits may also be performed by Company during the course of the Work.

### 8. Quality Records

Contractor shall retain complete records that demonstrate the products and/or services provided meet all the specified requirements and that the Quality Management System is effective.

Quality records may include, but are not limited to:

- Inspection and test records,
- As-Built Drawings,
- As-Built Specifications
- As-Built Bills of Material
- Material Test Reports and Certificates (material, pressure test, etc.)
- Preservation Records
- Identification documentation
- Traceability documentation (where required)
- Internal and 3<sup>rd</sup> party audit reports and/or inspection reports
- Nonconformance reports
- Corrective and Preventive Action
- Supplier/Sub-Contractor Performance and Analysis Records
- Quality Management System Data Analysis and subsequent actions taken.

Quality Records required to be retained by Contractor shall be legible and shall be retained in an environment that will prevent deterioration for a minimum of 6 years following the activity that generated the record. Company shall have access to the Quality Records for verification and/or Quality Audit at

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anytime during and up to one year after Contract completion. Company to be advised 6 months in advance of intent to destroy records to provide opportunity for Company to obtain copies.

## 9. Quality Management System Reporting (Quality Activity Report)

Contractor shall submit, on a periodic basis determined by Company, a Quality Activity Report. The report shall include the overall Quality Management System activity for Contractor and any identified Suppliers or Sub-Contractors. The report shall be tabled for review and discussion during the regularly scheduled Contractor/Company Review meetings. Details to include:

- a. Details on Internal Assessments or Internal Quality Audits conducted during the period. Contractor shall include details on the area(s) audited, and the number of noncompliances/corrective actions raised.
- b. Details on surveillance activities conducted on Suppliers and/or Sub-contractors during the period. Where audits were performed, Contractor shall include details on the area(s) audited, and the number of noncompliances/corrective actions raised.
- c. Details on any audits conducted by others on Contractor during the period.
- d. Summary of all Contractor nonconformances/corrective actions raised and closed during the period.
- e. Brief description of any nonconformances/corrective actions raised involving Company Scope of Work.
- A copy of any management reviews of the Contractor's Quality Management System conducted during the period.
- g. Details of and changes of personnel that may affect the delivery of services or equipment to Company.
- h. Details of any Quality Improvement Initiatives undertaken during the period or suggestions on how the working relationship between Company and Contractor may be improved.

### 10. Progress Meetings - Quality Management Focus

Quality Management will be a discrete topic in regularly scheduled Contractor/Company Review meetings. The Quality Activity Report shall be tabled for review and discussion. Relevant Contractor and Company personnel shall be in attendance to address issues identified or arising from the review and discussion.