SCHEDULE E
QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-2: QEC CONTRACTOR SAFETY ORIENTATION FORM

Forming part of the Contract

QULLIQ ENERGY CORPORATION CONTRACTOR SAFETY ORIENTATION		
Form HS 16-01	**Revision 4**	**Revision Date: 04/22/2020**

POLICIES AND PROCEDURES – check ☑ all that apply

	QEC Health and Safety Policy (*Safety Rule Book, p.1-3*)		Incident Reporting (*p.36*) + Spill Response (*p.35*)
	Safety Rules (*Safety Rule Book, p.6-8*)		First Aid (*p.59*)
	Responsibilities (*Safety Rule Book, p.125-126*)		Emergency Evacuation Procedures
	Workplace Violence Prevention (*p.48-49*)		Powered Mobile Equipment (PME)
	Obligation to Refuse Unsafe Work (*p.4*)		Cranes and Rigging (*p.128 & p.175*)
	Safe Work Practices and Procedures		Confined Space (*p.171, COP 1)*
	Hazard Assessment, Control and Reporting		Fall Protection Program (*p.15-19, COP 2*)
	Tailboards (*p.23*)		Welding, Cutting, & Burning (*p.161*)
	Work Protection Code (*Section II*) & Power Line Safety (*Safety Brochures*)		Fire Fighting Equipment (*p.32-34*)
	Use of Company Equipment/Tools (*list all that are required*)		Renovation & Demolition: *Review QEC Asbestos Management Plan if required*

Trade Certificates, Operator Certificates, Specific Safety Training

_____ All appropriate trade and operator certificates, licences, or letters of competency, along with specific safety training certificates (i.e. fall protection, confined space, WHMIS 2015, etc.) have been provided to QEC.

PERSONAL PROTECTIVE EQUIPMENT – check ☑ all that apply
Contractors are required to provide their own PPE

_____ Safety Glasses
_____ Work Boots (CSA Green Triangle/Omega-Ω)
_____ Hardhats
_____ Hearing Protection
_____ Hand Protection (gloves suitable to the hazard)
_____ High Visibility Vests/Clothing
_____ Respiratory Protective Equipment
_____ Fall Protection Equipment
_____ Flame Resistant (FR) PPE
_____ Arc Rated (AR) PPE
_____ Electrical Protective Equipment (rubber insulating gloves, sleeves, covers, etc.)

Other Information (hazardous products or procedures, comments on work being performed):

_____

_____

Company: _____ Date: _____

Employee Name and Signature: _____

Work Being Done: _____

QEC Representative Name: _____

QEC Representative Signature: _____ Date: _____

QEC HSE Department: _____ Date: _____

One copy to be kept on site and one copy to be forwarded to the HSE Dept.

SCHEDULE E
QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-3: QEC SAFETY RULE BOOK RECEIPT

Forming part of the Contract

*A copy of the **QEC Safety Rule Book**, either digital or hard copy, can be obtained by contacting the QEC Project Manager or the QEC HSE Dept.*

SAFETY RULE BOOK RECEIPT

Date:

Location:

I have received a copy of the QEC Safety Rule Book and will review the Sections pertinent to my position/duties, as identified by QEC below within ten days.

Sections

1 2 3 4 5 6 7 8

Print Name:

Company:

Signature:

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-4: GENERAL TAILBOARD FORM

Forming part of the Contract

QULLIQ ENERGY CORPORATION GENERAL TAILBOARD FORM		
Form HS 7-02	**Revision 0**	**Rev Date: April 25, 2017**

Plant:_____ Project:_____ Date:_____

Person in Charge:_____ Plant Superintendent_____

Emergency Contacts

Plant:_____ Fire:_____ Police:_____

Hospital/Health Center Information:_____

Description of Day's Work

_____

_____

_____

_____

Tools and Equipment

☐ Welder ☐ Cutting Torch ☐ Grinder ☐ Power Tools ☐ Hand Tools ☐ Testers

☐ Pneumatic/ Hydraulic Tools ☐ Heavy Equipment/Loader ☐ Crane/Lifting Equipment

What type of special equipment is required? ☐ N/A *OR* Type:_____

Who owns it? _____ Operator Name:_____

Hazard Assessment

☐ Overhead Lines ☐ Heavy Equipment ☐ Noise ☐ Traffic

☐ Hoisting/Rigging ☐ Public Safety ☐ Uncovered Openings

☐ Ladders/Scaffold ☐ Sparks ☐ Slippery/Uneven Surfaces

☐ Moving Machinery ☐ Flammable/Hazardous Materials

☐ Elevated Platform ☐ Welding Flash ☐Congested Site

☐ Confined Space ☐ Poor Lighting ☐ Energized Equipment

☐ Working Alone

Describe Site Specific Hazards in Space Below

Hazard Control

☐ Work Plan ☐ Warning signs ☐ Barricades

☐ Fall Protection ☐ Radio Communication

☐ Fire Blanket ☐ Fire Watch ☐ Extinguisher

☐ Limits of Approach ☐ Switching Authorization

☐ Ground ☐ Isolation ☐ Shoring/Bracing

☐ Sloped Excavations ☐ Debris Removal

☐ Work Protection Code ☐ Weld/Cut Permit

Describe the observed hazards ------ What is done to eliminate/control hazard?

QULLIQ ENERGY CORPORATION GENERAL TAILBOARD FORM		
Form HS 7-02	**Revision 0**	**Rev Date: April 25, 2017**

Site Supervisory and Workers Tailboard Meeting Sign-off

Site Supervisor must ensure this tailboard is conducted and reviewed by all workers.

Date_____

Only the worker's initial will acknowledge that they have been made aware of the hazards of the site and the work they will perform. I agree to work safely according to this tailboard, wear all PPE and follow QEC safety procedures.

Name	Trade	Company	On Site	Time	Initial
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		
			☐		

Comments Section: ☐ Before work ☐ During Work ☐ After Work Completion

Tailboard conducted by: _____ _____

(Print Name) *(Signature)*

Original must be filed at the Plant Office

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-5: WELDIND, CUTTING, & BURNING PERMIT

Forming part of the Contract

HS 4-01 WELDING, CUTTING, & BURNING PERMIT

APPLICATION	
Name of Welder (Print)	**License / Cert.#**
Name of Contractor (Print)	
Name of Supervisor (Print)	
Name of Fire Watch (Print)	
Name of Fire Monitor (Print)	
Location/Address	
Description of Work	
Fire Extinguishers (minimum one 10lb ABC extinguisher required)	
Permit Expires at end of work day Date Time	
SPECIAL NOTES	
**** Work Area and adjacent area in which sparks and heat might have spread (including floors above and below and on opposite sides of walls) must be inspected for at least 30 minutes after work is completed and found to be fire safe.****	

ISSUANCE This Permit is your authority to work in the area described for the duration of the Permit only.	**SURRENDER** I have completed my work and fire watch and hereby relinquish my Permit.
Welder	**Welder**
Issuer	**Issuer**
In Effect Date Time	**Surrendered** Date Time

GENERAL INSTRUCTIONS – WELDING, CUTTING, & BURNING

Work involving welding, cutting, and burning can increase the fire and breathing hazard on any job, and the following should be considered prior to the start of work.

1. Never start work without proper authorization.

2. Always ensure that adequate ventilation is supplied as hazardous fumes can be created during welding, cutting, or burning.

3. Where other workers may also be exposed to the hazards created by welding, cutting, and burning, they must be alerted to these hazards or protected from them by the use of "screens".

4. Always have fire-fighting or prevention equipment on hand within 9m (27 feet) before starting welding, cutting, or burning.

5. Long and loose hair must be contained or restrained.

6. Proper PPE is required. For welding, this includes:
   - Welding helmet, hand shield, or goggles with appropriate filter shade lens.
     Note: as per Nunavut OHS Regulation 97(4), wearing contact lenses is not permitted when using industrial eye protector or faceshield. Prescription safety eyewear should be worn.
   - Fire resistant head covering under helmet where appropriate.
   - Respirator when adequate ventilation is not available to protect against fumes and oxides.
   - Fire/Flame resistant clothing and aprons (no cuffs, pant legs must be over boots). No exposed skin.
   - Ear muffs when required due to noise and overhead work as sparks or splatters may fall into the ear.
   - Leather welding gloves.
   - All leather CSA Green Triangle/Omega (Ω) 6"/15cm high work boots.

7. Ensure all combustible and/or flammable material is cleared within a 10m (30 foot) radius of where the welding, cutting or burning is taking place, wetting down surrounding area if necessary.

8. A welder, torch operator or cutting tool operator should never work alone. A Fire Watch should be maintained for at least 30 minutes after work is completed to ensure worksite is fire safe. A Fire Monitor is required for three hours after the Fire Watch is done to carry out periodic inspections of the site.

9. All welding gas cylinders (oxygen, acetylene, Blueshield, argon, etc.) must be secured in an upright position.

10. Check cables and hoses to protect them from slag or sparks. Oxy-acetylene hoses must have flashback arrestors.

11. Never weld or cut lines, drums, tanks, etc. that have been in service without making sure that all precautions have been carried out and permits obtained.

12. Never enter, weld, or cut in a Confined Space without a Confined Space Entry Permit, proper gas monitoring tests, adequate ventilation or respiratory PPE, and required safety lockouts.

13. When working overhead, use fire resistant materials (blankets, tarps) to control or contain slag and sparks. Protective ear muffs are also required as sparks or splatters may fall into the ear.
14. Cutting and welding must not be performed where sparks and cutting slag will fall on cylinders (move all cylinders away to one side).
15. Open cylinder valves slowly. The wrench used for opening the cylinder valves should always be kept on the valve spindle when the cylinder is in use.

Note: Only welders holding a valid and current pressure welding licence or certificate may work on pressurized pipes or vessels.

SCHEDULE E
QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-6: FALL PROTECTION

Forming part of the Contract

QULLIQ ENERGY CORPORATION

FALL PREVENTION AND RESCUE PLAN

Form HS 5-02	Revision 1	Rev Date: May 29, 2017

Department	Community	Area

Date		
Supervisor	Print:	Sign:

DETAILS OF WORK AND FALL HAZARDS
_____
_____
_____
_____
_____
_____
_____

TYPE OF FALL PREVENTION THAT WILL BE USED		
☐ Fall Restraint	☐ Fall Arrest	☐ Control Zone

PPE HAS BEEN INSPECTED		BY WHOM	
Harness #	Lanyard ID #	Print Name	Sign
Comments:			

RESCUE EQUIPMENT	
Equipment	Description

RESCUE PROCEDURE
_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Worker Sign-off

I acknowledge that I have reviewed the fall protection requirements and procedures for this site with my supervisor and understand my responsibilities, specifically the requirement to use personal fall protection.

PRINT	SIGN

THIS PLAN MUST BE MADE AVAILABLE AT THE WORKSITE

SCHEDULE E
QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-7: CONFINED SPACE

Forming part of the Contract

CONFINED SPACE ENTRY PERMIT

COMPLETE PRIOR TO ENTRY

WORK INFORMATION

Location of Confined Space:	**Date/Time Issued:** _____ **Date/Time Expire:**
Nature of the Work:	
Entrant:	
Co-entrant:	
Attendant(s):	
Entry Supervisor:	
Rescue Team:	

PRE-ENTRY CHECKLIST

	Yes	No	N/A
GFCI required			
All valves locked out or blanked			
Atmospheric hazards identified			
Purging and/or ventilation of area			
Electrical switches locked out as per WPC			
Attendant instructed and positioned			
Will air test monitoring be done continuously while the space is occupied			
Job procedure in place			
Welding, Cutting & Burning Permit required			

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Respiratory protective equipment

☐ SCBA	☐ supplied air	☐ PAPR	☐ full mask cartridge used:	☐ half mask
☐ coveralls	☐ leather gloves	☐ chemical gloves	☐ goggles	☐ face shield
☐ safety glasses	☐ ear plugs/muffs	☐ hard hat	☐ safety boots	☐ harness

☐ Other: _____

CONFINED SPACE ENTRY PERMIT

COMPLETE PRIOR TO ENTRY

AIR MONITORING

Sampling Equipment Used	Date Calibrated	By Whom

Permissible Levels

Oxygen (O_2)	19.5 - 23%
Flammables	0-10% LEL (Cold Work), 0-1% (Hot Work)
Carbon Monoxide (C0)	0-25 ppm
Hydrogen Sulphide (H_2S)	0-25 ppm

	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Entry Time								

	Time	Result	Time	Result	Time	Result	Time	Result
Oxygen (O_2)								
Flammables								
Carbon Monoxide (CO)								
Hydrogen Sulphide (H_2S)								

I have reviewed the site and the above permit conditions have been met. The confined space is safe to enter.	I understand the instructions, precautions and work to be carried out as outlined on this permit.
Entry Supervisor signature:	Worker signatures:
Rescue Team signatures:	

One copy of this permit is to be posted at the confined space entrance and one copy kept on-site (Control Room or Job Office). A copy is to be scanned and emailed to the HSE Dept.

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-8: CONTRACTOR SAFETY MANAGEMENT PROGRAM (16A)

Forming part of the Contract

SECTION 16A CONTRACTOR SAFETY MANAGEMENT PROGRAM

16.1 Purpose

The Qulliq Energy Corporation (QEC) is committed to establishing and maintaining an effective Contractor Safety Management Program for all Contractors engaged by QEC. The purpose of this section is to provide a framework for Contractor Safety Management at QEC.

16.2 Scope

This section applies to all workers who manage Contractors.

16.3 Definitions

Contract
Any signed agreement between QEC and a Contractor (e.g., contract, service agreement).

Contract Administrator
A QEC employee responsible for the administration and management of contracts and service procurement documents (e.g., tenders, requests for proposals, requests for quotes, sole sourcing).

Contractor
Any person or entity that has been contracted, sub-contracted, or otherwise engaged to provide services to QEC.

Principal Contractor
The party, either QEC or a Contractor, who accepts overall responsibility for the safety of a project.

Project
A non-routine series of tasks planned from beginning to end with defined durations, resources, and results. For the purpose of Project Safety Planning equipment purchases, consultants, studies, and routine operations & maintenance work are not considered projects.

Project Manager
A QEC employee, typically an Engineering or Operations Manager, who is given the overall responsibility and authority for the successful completion of a project.

Project Monitor
A QEC employee that conducts Contractor Progress Review Meetings with the Contractor. The Project Monitor enforces the requirements of the Construction Contract with respect to safety and environmental protection.

Site Supervisor
An employee or Contractor assigned to supervise a worksite. The Site Supervisor may also be the Project Monitor and/or Worksite Monitor, depending on the size of the construction project.

Worksite Monitor
A QEC employee, or Owner's Representative (i.e., a Contractor representing QEC), who is responsible for observing the performance of the project and providing feedback to the Project Manager and Project Monitor (if applicable).

16.4 References

- NU Safety Act and Regulations
- QEC Health & Safety Manual Section 16B: Project Safety Planning
- QEC Health & Safety Manual Section 16C: Contractor Safety Discipline Process
- QEC Health & Safety Manual Section 2: Hazard Assessment and Control
- QEC Health and Safety Manual Section 7: Training and Communication
- QEC Health and Safety Manual Section 9: Workplace Inspections

16.5 Responsibilities

QEC is responsible to:

- Ensure a process is in place to develop and implement a Contractor Safety Management program.
- Ensure the resources, time, money, and technology are available to support the Contractor Safety Management Program.
- Ensure the performance of management and workers is measured relative to the Contractor Safety Management Program.
- Ensure training is provided to workers on the Contractor Safety Management Program.

Management is responsible to:

- Ensure development, implementation, and use of the Contractor Safety Management Program based on legislation and industry best practice.
- Ensure workers receive training in the Contractor Safety Management Program.
- Seek assistance from the HSE Department as required for the Contractor Safety Management Program.
- Measure the performance of workers relative to the Contractor Safety Management Program.

The HSE Department is responsible to:

- Provide advice and assistance in the development, implementation, and use of the Contractor Safety Management Program.
- Provide interpretation of generalized work processes, industry best practice, and legislation for the development of the Contractor Safety Management Program.
- Monitor applicable legislation and update the Contractor Safety Management Program as required.
- Assist with training workers in the Contractor Safety Management Program as required.

16.6 Process Overview

QEC shall establish, implement, and maintain documented procedures and tools for the management of Contractors. The health & safety responsibilities of all parties shall be clearly outlined.

The components of the Contractor Safety Management process are:

1. Contractor Safety Planning
   - *Project Risk Safety Analysis*

2. Designation of Principal Contractor

3. Contractor Safety Administration
   - Standard health & safety wording is included in service procurement documents and contracts
   - Additional Requirements wording, as per the *Project Risk Safety Analysis*, shall be included in service procurement documents and contracts

4. Contractor Safety Qualification
   - Contractor Safety Requirements shall be provided to Contractors by QEC

- Contractors are to provide requested safety documentation to the QEC Worksite Monitor and the HSE Department

5. Contract Award

6. Project Safety Plan Assessment

7. Contractor Safety Management
   - Assign Worksite Monitor
   - Project Safety Planning Meeting
   - Project Safety Plan review
   - Safety Orientation
   - Site Orientation
   - Tailboard Meetings

8. Contractor Safety Monitoring
   - Worksite Visits
   - Project Safety Inspections/Compliance Audits
   - Monthly Performance Report
   - Contractor Progress Review Meetings

16.7 Contractor Safety Planning

Contractor Safety Planning shall be carried out in accordance with *QEC Health & Safety Manual Section 16B: Project Safety Planning*.

The purpose of the *Project Risk Safety Analysis* is to determine the specific safety requirements including:

- High risk activities.
- Whether Contractors are required and what work they will do.
- Designation of the Principal Contractor.
- Hazard assessment and control:
  - Job steps.
  - Tools & equipment.
  - Major hazards.
  - Required controls.

For all major work projects (costs greater than $750,000 and/or more than five workers) involving Contractors, the Project Manager shall complete Form HS 16-04: *Project Risk Safety Analysis*. This shall form the basis of the safety requirements for the work.

For all minor work projects (costs lesser than $750,000 and/or five or less workers) involving Contractors, the Project Manager/Manager shall complete Form HS 16-04: *Project Risk Safety Analysis* when three or more of the listed hazards apply to the project. This shall form the basis of the safety requirements for the work.

The Project Manager shall submit the *Project Risk Safety Analysis* to the HSE Construction Coordinator for review and comment, allowing a minimum of 5 days to conduct the review.

When Contractors are involved, the HSE Construction Coordinator or HSE Department will:

- Indicate whether Additional Requirements wording is needed; and
- Provide comments and/or Additional Requirements wording.
- Provide the completed *Form HS 16-04: Project Risk Safety Analysis* to the Project Manager.

Following the HSE Department review, the Manager shall review and approve the *Project Risk Safety Analysis*.

Once the *Project Risk Safety Analysis* is approved, the Project Manager shall ensure any Additional Requirements wording (as per the HSE Department's recommendations) is included in the procurement documents and contract.

Where Contractors are to be engaged, the Project Manager shall then submit the form to the Contract Administrator as per *Section 16.9.*

16.8 Designation of Principal Contractor

A Principal Contractor is the party, either QEC or a Contractor, who accepts overall responsibility for the safety of a project.

A Principal Contractor shall be designated for all projects. A project shall have only one Principal Contractor at any specific time.

Where no external organization is designated as Principal Contractor, QEC shall default as the Principal Contractor.

Where QEC is the Principal Contractor, the Project Manager shall act as QEC's representative.

A Contractor shall be designated as Principal Contractor only if they:

- Demonstrate how their Safety Management System will address the responsibilities of Principal Contractor;
- Prepare and implement a Project Safety Plan as outlined in sections 16.11 & 16.12;
- Provide a clear delineation between the site and any other work areas; and
- Will control:
  - Access to the site;
  - Operation of equipment at the site;
  - Materials and substances used and/or stored at the site; and
  - Workers at the site.

A Contractor designated as Principal Contractor shall have full control of the worksite and QEC shall treat the site as the Contractor's workplace.

16.9 Contractor Safety Administration

Service procurement documents (i.e. tenders, requests for proposals, requests for quotes, sole sourcing) contain standard health & safety wording that includes the following:

- Workers' Safety and Compensation Commission (WSCC) requirements:
  - Evidence of registration and good standing with the Nunavut WSCC.
  - If having been issued, copies of any WSCC Inspection Reports from the last three years.

- Insurance
  - Documented proof of contractor liability insurance

- Legislative Requirements:
  - Outlines applicable health & safety legislation.

- Designation of Principal Contractor:
  - General responsibilities of the Principal Contractor.
  - General conditions for the designation of a Principal Contractor.

- Contractor Safety Requirements. Includes the requirement to:
  - Comply with QEC's Contractor Safety Management Program.
  - Review, understand, and comply with QEC's project safety requirements.
  - Include the signed page with their submission.
  - If available, provide Letter of Good Standing from host COR program and/or WSCC Safe Advantage Program.

- Additional Requirements:
  - Additional health & safety considerations based on the scope and nature of the work activities.

The Project Manager shall submit the approved *Project Risk Safety Analysis* to the Contract Administrator.

The Contract Administrator shall ensure the proper service procurement documents (i.e. tenders, requests for proposals, requests for quotes, sole sourcing) and contracts are put in place. They shall include the necessary health & safety wording and associated documents as per the *Project Risk Safety Analysis*.

16.10 Contract Award

The Project Manager shall work with the Contract Administrator for selecting the Contractor.

The Contract Administrator shall notify the successful Contractor of the approval for the specific scope of work.

16.11 External Principal Contractor Project Safety Plan

The Project Safety Plan shall be developed by the Principal Contractor in accordance with the *QEC Health and Safety Manual, Section 16B Project Safety Planning*.

If required, QEC has Project Safety Plan templates available (*Form HS 16-05, Minor Works & Form HS 16-06, Major Works*) for Contractors to use.

The Project Safety Plan shall include a detailed Hazard Assessment & Control section.

This section shall be:

- Arranged into job steps and their associated tools & equipment, major hazards, and required controls.
- Developed and/or reviewed by those responsible to carry out the steps.
- Finalized before work begins.
- Updated when changes to the job steps or tools & equipment occur.

The completed Project Safety Plan shall be submitted to the Project Manager.

The Project Manager shall review the Project Safety Plan and submit it to the HSE Department for assessment, allowing a minimum of 5 days for review.

The HSE Department shall assess the Contractor's Project Safety Plan and provide comments and recommendations to the Project Manager.

The Project Manager shall review the comments and recommendations and take the necessary actions to address the recommendations.

16.12 Contractor Safety Management

Assign Worksite Monitor

- The Project Manager shall assign a Worksite Monitor.
- The Worksite Monitor may be a QEC employee or Owner's Representative (i.e., a Contractor representing QEC). The Project Manager may also act as Worksite Monitor.
- The Worksite Monitor shall report to the Project Manager.
- The Worksite Monitor is responsible for observing the performance and safety of the project and providing feedback to the Project Manager.

Project Safety Planning Meeting

- A Project Safety Planning meeting shall be held by the Project Manager prior to work commencing. The following parties shall participate:
  - Project Manager;
  - Worksite Monitor;
  - Site Supervisor (where possible);
  - Representatives from each Contractor (where applicable); and
  - Construction Health & Safety Coordinator (where possible)
- The meeting shall include a thorough review and update of each element of the Project Safety Plan to ensure all parties are in agreement on the health and safety systems and requirements that will apply during the term of the project.

Project Safety Plan

- The Project Safety Plan shall be reviewed by all workers prior to starting work (e.g. during the opening Tailboard Meeting). It shall include a review of:
  - Project description & timescale;
  - Hazard assessment and control;
  - Project management structure and responsibilities;
  - Communication schedule;
  - Project safety management arrangements;
  - Incident reporting requirements;
  - Emergency response plan;
  - Site specific arrangements; and
  - Audits and inspections.

- The Project Safety Plan shall be updated and kept current during the project.

The most up-to-date version of the Project Safety Plan shall be kept onsite and made available to workers at all times during the project.

Safety Orientation

- The Project Manager shall ensure that every worker, both employees and Contractors, receives a QEC Safety Orientation prior to starting work at the site.
- The Project Manager shall ensure that the External Principal Contractor provides Site Orientations for all workers prior to their starting work at the site.
- Contractors are required to receive the Safety Orientation every new project unless on-site projects overlap.
- The Project Manager or Project Monitor will provide and ensure *Form HS 16-01: Contractor Safety Orientation* is completed and kept on file at the project site office. A copy of this form is to be forwarded to the HSE Department.
- Each contract worker is to receive a copy of the *QEC Safety Rule Book*. They are to review and understand the applicable sections of the *Safety Rule Book*, then complete the *Safety Rule Book Receipt* which is to be kept on file with the *Contractor Safety Orientation* form at the project site office. A copy of this form is to be forwarded to the HSE Department.
- The Project Manager shall obtain copies of all Contractor safety training documentation, including required training certificates (first aid, confined space, fall arrest, etc.) Copies are to be kept on-site during the duration of the project. Scanned copies are to be sent to the HSE Department.

- Refer to *the QEC Health and Safety Manual section 7: Training and Communication.*

Tailboard Meetings

- The Project Manager shall ensure Tailboard Meetings are conducted daily and prior to any work beginning. A new Tailboard Meeting shall be held whenever personnel, scope, or conditions of the work change
- The Project Manager shall ensure the External Principal Contractor conducts Tailboard Meetings in accordance with QEC requirements. Copies of all Tailboard meetings are to be scanned and sent to the HSE Department.
- Refer to the *QEC Health & Safety Manual section 7: Training and Communication*.

16.13 Contractor Safety Monitoring

Monitoring

- The Project Manager shall ensure Contractor Safety Monitoring is conducted to ensure compliance with safety regulations and the safety requirements of the contract.

- The Worksite Monitor shall conduct monitoring of Contractors. This includes:
  - Ensuring compliance with the Project Safety Plan;
  - Ensuring qualified and/or competent workers, as required, are conducting the work (e.g., confined space, fall protection, journeypersons);
  - An Emergency Response Plan is in place; and
  - Ensure non-conformances are documented and reported.

- The Contract Safety Monitoring requirements shall be clearly identified in the Project Safety Plan. The level of monitoring will depend on such factors as:
  - Complexity of tasks.
  - Level of risk.
  - Duration of contract.

- Contractor monitoring records shall be maintained by the Worksite Monitor and may include:
  - Worksite Visits/Inspections.
  - Contractor Compliance Audits.
  - Contractor Progress Review Meetings.
  - Contractor Monthly Safety Performance Report (Major Projects Only).

The Worksite Monitor shall provide scanned copies of all site inspections, audits, meetings and reports to the HSE Department.

Worksite Visits

- The Worksite Monitor and HSE Department shall:
  - Conduct worksite visits to observe and document worker compliance with QEC safety practices and procedures.
  - Record worksite visits on *Form HS 16-02 Contractor Site Inspection*
  - Provide immediate feedback to the Contractor's supervisor of any safety violations and require corrective action.
  - Follow the *QEC Health and Safety Manual, Section 16C Contractor Safety Discipline Process,* if and when Standard Operating

Procedures/Standard Work Practices are not being followed and/or hazards are not adequately controlled.
- o Provide completed Contractor Site Inspection forms to the Project Manager and report on any non-conformances.
- o Refer to *QEC Health & Safety Manual Section 9: Worksite Inspections*.

Project Compliance Audits:

- Project Safety Audits of the Project Safety Plan shall be conducted to assess the implementation of the Project Safety Plan.
- Project Safety Audits shall be recorded on *Form HS 16-03 Contractor Compliance Audit*.
- Refer to QEC *Health & Safety Manual section 16B: Project Safety Planning*.

Monthly Performance Report (Major Projects Only):

- The Project Manager shall ensure that Contractors engaged on long term projects complete *Form HS 16-07: Contractor Monthly Safety Performance Report* each month.
- The report assists in tracking and reviewing Contractor performance and in identifying areas requiring corrective action.
- The Contractor shall submit the completed *Form HS 16-07: Contractor Monthly Safety Performance Report* to the Project Manager.
- The Project Manager shall review the report, identify any recommendations to the Contractor, and provide the completed form to the HSE Department.

Contractor Progress Review Meetings

- The Project Monitor shall conduct Contractor Progress Review Meetings with the Contractor representative.
- Meetings shall include a review of:
  - o Worksite Visits;
  - o Project Safety Audits; and
  - o Contractor Monthly Safety Performance Report where applicable.

16.14 Training

All Project Managers require the following training:

- 2 Day Supervisor Safety Training Program *[as per Nunavut OHS regulation 16(1)(d)]*
- *QEC Contractor Safety Planning Program Orientation*

16.15 Documentation

- *Form HS 7-02: Tailboard Meeting*
- *Form HS 16-01 Contractor Safety Orientation*
- *Form HS 16-02: Contractor Site Inspection*
- *Form HS 16-03:Contractor Compliance Audit*
- *Form HS 16-04: Project Risk Safety Analysis*
- *Form HS 16-05: Project Safety Plan – Minor Works*
- *Form HS 16-06: Project Safety Plan – Major Works*
- *Form HS 16-07: Contractor Monthly Safety Performance Report*
- *Form HS 16-08: Project Safety Plan Assessment*
- *Form HS 16-09: Project Post-Work Safety Evaluation*
- *Form HS 16-10: Project Final Safety Documentation Checklist*

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-9: PROJECT SAFETY MANAGEMENT PLANNING (16B)

Forming part of the Contract

SECTION 16B PROJECT SAFETY MANAGEMENT PLANNING

16.1 Purpose

The Qulliq Energy Corporation (QEC) is committed to establishing and maintaining an effective Project Safety Planning Program for all projects. The purpose of this element is to provide a framework for the management of Project Safety Planning at QEC.

16.2 Scope

This element applies to all workers who manage projects.

16.3 Definitions

Contractor
Any person or entity that has been contracted, sub-contracted, or otherwise engaged to provide services to QEC.

HSE Construction Coordinator
A QEC employee within the Health and Safety Department that provides advice and assistance in the development, implementation, and use of the Project Safety Planning Program.

Principal Contractor
The party, either QEC or a Contractor, who accepts overall responsibility for the safety of a project.

Project
A non-routine series of tasks planned from beginning to end with defined durations, resources, and results. For the purpose of Project Safety Planning equipment purchases, consultants, studies, and routine operations & maintenance work are not considered projects.

Project Manager
A QEC employee, typically an Engineering or Operations Manager, who is given the overall responsibility and authority for the successful completion of a project.

Project Monitor
A QEC employee, reporting to the Project Manager, that conducts Contractor Progress Review Meetings with the Contractor representative. The Project Monitor enforces the requirements of the Construction Contract with respect to safety and environmental protection.

Site Supervisor
An employee or Contractor assigned to supervise a worksite. The Site Supervisor may also be the Project Monitor and/or Worksite Monitor, depending on the size of the construction project.

Worksite Monitor
A QEC employee, or Owner's Representative (i.e., a Contractor representing QEC), who reports to the Project Manager and is responsible for observing the performance of the project and providing feedback to the Project Manager and Project Monitor (if applicable).

16.4 References

- Nunavut Safety Act and Regulations
- QEC Health & Safety Manual section 2: Hazard Assessment and Analysis
- QEC Health & Safety Manual section 16A: Contractor Safety Management
- QEC Health & Safety Manual section 16C: Contractor Safety Discipline Process
- QEC Health & Safety Manual section 7: Training and Communication
- QEC Health & Safety Manual section 9: Worksite Inspections

16.5 Responsibilities

QEC
QEC is responsible to:

- Ensure a process is in place to develop and implement a Project Safety Planning Program.
- Ensure the resources, time, money, and technology are available to support the
- Project Safety Planning Program.
- Ensure the performance of management and workers is measured relative to the Project Safety Planning Program.
- Ensure training is provided to workers on the Project Safety Planning Program.

Management
Management is responsible to:

- Ensure development, implementation, and use of the Project Safety Planning Program based on legislation and industry best practice.
- Ensure workers receive training in the Project Safety Planning Program.
- Seek assistance from the HSE Department as required for the Project Safety Planning Program.
- Measure the performance of workers relative to the Project Safety Planning Program.

Workers
Workers are responsible to:

- Be trained in the Project Safety Planning Program.
- Comply with the Project Safety Planning Program.

HSE Department
The HSE Department is responsible to:

- Provide advice and assistance in the development, implementation, and use of the Project Safety Planning Program.
- Provide interpretation of generalized work processes, industry best practice, and legislation for the development of the Project Safety Planning Program.
- Monitor applicable legislation and update the Project Safety Planning Program as required.
- Assist with training workers in the Project Safety Planning Program as required.
- Submit Notification of New Operations and High Hazard Work to the WSCC not less than 30 days before work begins.

16.6 Specific Responsibilities

Project Manager
The Project Manager is ultimately responsible for the safety of the project and implementation of the Health & Safety Management Program. They are responsible to:

- Complete the Project Risk Safety Analysis and submit it to the HSE Department for review.
- Designate the Principal Contractor as internal or external.

- Ensure development of Project Safety Plan and have it submitted to the HSE Department for review.
- Conduct Project Safety Planning Meeting.
- Assign the Project Monitor and Worksite Monitor.
- Inform the HSE Department of New Operations and High Hazard Work not less than 35 days before work begins.
- Ensure QEC employees going to the worksite have the appropriate personal protective equipment (PPE) before arriving on-site. Refer to Section 5 of the *QEC Safety Manual* for a list of required PPE.
- Ensure Project Safety Management and Monitoring activities are completed, scanned, and submitted to the HSE Department.
- Ensure the requirements of the Project Safety Plan regarding workplace safety and environmental protection are enforced.

Project Monitor

The Project Monitor is responsible to:

- Conduct Contractor Progress Review Meetings with the Contractor representative.
- Enforce the requirements of the Construction Contract with respect to costs and compliance with engineering drawings, schedules, and specifications.
- Enforce the requirements of the Project Safety Plan regarding workplace safety and environmental protection.

Site Supervisor

The Site Supervisor is responsible to:

- Review, understand, and comply with the Project Safety Plan.
- Coordinate day-to-day activities in accordance with the Project Safety Plan.
- Ensure Tailboard Meetings are held properly and a minimum of once daily.
- Ensure all workers receive Safety Orientation and Site Orientation prior to starting work.
- Ensure workers conducting tasks requiring specific training (confined space, fall protection, WPC, etc.) have the required safety training documentation.
- Ensure incidents and spills are reported immediately to the QEC HSE Department, which will then contact the appropriate regulatory authorities.
- Keep the Project Safety Plan updated.

Worksite Monitor

The Worksite Monitor is responsible to:

- Report to the Project Manager.
- Conduct Project Safety Management:
  - Ensure compliance with the Project Safety Plan regarding workplace safety and environmental protection.
  - Ensure provision of Safety Orientations.
  - Ensure provision of Site Orientations.
  - Ensure completion and quality of Tailboard Meetings
- Conduct Project Safety Monitoring:
  - Contractor Site Inspections.
  - Contractor Compliance Audits.
- Provide project progress reports and feedback to Project Manager.
- Provide scanned copies of all safety documentation (training records, inspections, audits, meeting minutes, tailboards and safety reports) to the HSE Department.
- Provide scanned copies to the HSE Department of all safety training documentation for workers conducting tasks requiring specific training (confined space, fall protection, WPC, etc.).

16.7 Process Overview

The components of the Project Safety Planning process are:

1. Project Risk Safety Analysis (Form HS 16-04):
   - Determining the project safety needs.
   - Determining Principal Contractor requirements.
   - Identifying key activities and associated safety risks.

2. Designation of Principal Contractor:
   - QEC as the Principal Contractor; or
   - External Contractor as the Principal Contractor.

3. Project Safety Plan Development and Approval:
   - Developed by QEC; or
   - Developed by external Principal Contractor.
   - Approval by the HSE Department and Manager/Director.

4. Project Safety Planning (Kick-Off) Meeting:
    - Review of project safety requirements.

5. Project Safety Management:
    - Assign Worksite Monitor
    - Complete Safety Orientations.
    - Complete Site Orientations.
    - Complete Tailboard Meetings.

6. Project Safety Monitoring:
    - Ensure Worksite Visits take place.
    - Ensure Project Safety Audits take place.
    - Ensure Contractor Monthly Safety Performance Reports (Form HS 16-07) are submitted (Major Projects only).

16.8 Project Risk Safety Analysis

The purpose of the Project Risk Safety Analysis is to determine the project-specific safety requirements including:

- High risk activities.
- Whether Contractors are required and what work they will do.
- Designation of the Principal Contractor.
- Hazard assessment and control:
    - Job steps.
    - Tools & equipment.
    - Major hazards.
    - Required controls.

For all major work projects (costs greater than $750,000 and/or more than five workers) involving Contractors, the Project Manager shall complete Form HS 16-04: Project Risk Safety Analysis. This shall form the basis of the safety requirements for the work.

For all minor work projects (costs lesser than $750,000 and/or five or less workers) involving Contractors, the Project Manager shall complete Form HS 16-04: Project Risk Safety Analysis when three or more of the listed hazards apply to the project. This shall form the basis of the safety requirements for the work.

The Project Manager shall submit the Project Risk Safety Analysis to the HSE Construction Coordinator for review and comment, allowing a minimum of 5 days to conduct the review.

When Contractors are involved, the HSE Construction Coordinator or HSE Department will:

- Indicate whether Additional Requirements wording is needed; and
- Provide comments and/or Additional Requirements wording.
- Provide the completed *Form HS 16-04: Project Risk Safety Analysis* to the Project Manager.

Following the HSE Department review, the Manager shall review and approve the Project Risk Safety Analysis.

Once the Project Risk Safety Analysis is approved, the Project Manager shall ensure any Additional Requirements wording (as per the HSE Department's recommendations) is included in the procurement documents and contract.

Where Contractors are to be engaged, the Project Manager shall then submit the form to the Contract Administrator as per the QEC *Contractor Safety Management Program, Section 16.9*.

16.9 Designation of Principal Contractor

A Principal Contractor is the party, either QEC or a Contractor, who accepts overall responsibility for the safety of a project.

A Principal Contractor shall be designated for all projects.

A project shall have only one Principal Contractor at any time.

The Principal Contractor shall be either QEC or an external organization (i.e. a Contractor).

Where no external organization is designated as Principal Contractor, QEC shall default as the Principal Contractor.

Where QEC is the Principal Contractor, the Project Manager shall act as QEC's representative.

A Contractor shall be designated as Principal Contractor only if they:

- Demonstrate how their Safety Management System will address the responsibilities of Principal Contractor;
- Prepare and implement a Project Safety Plan as outlined in Section 16.11 of the *QEC Contractor Safety Management Program*;
- Provide a clear delineation between the site and any other work areas; and
- Will control:
  - Access to the site;
  - Operation of equipment at the site;
  - Materials and substances used and/or stored at the site; and
  - Workers at the site.

A Contractor designated as Principal Contractor shall have full control of the worksite and QEC shall treat the site as the Contractor's workplace.

16.10 Project Safety Plan Development and Approval

A Project Safety Plan is a project-specific plan of action designed to prevent incidents and occupational disease.

The Project Safety Plan shall clearly detail the health & safety systems and requirements that will apply during the term of the project.

A Project Safety Plan shall be developed for all projects:

- A Project Safety Plan for Major Works (*Form HS 16-06: Project Safety Plan – Major Works*) is required when:
  - Project work costs are greater than $750,000;
  - More than one Contractor will be on site;
  - Project duration is expected to be longer than 15 days;
  - Prolonged high risk activities will be undertaken; and/or
  - Directed by the HSE Department.
- A Project Safety Plan for Minor Works (*Form HS 16-05: Project Safety Plan – Minor Works*) is required for all other projects using Contractors.

The Project Safety Plan shall be developed prior to the implementation stage of the project (post contract award) by the Principal Contractor.

- Where QEC is the Principal Contractor, the Project Safety Plan shall be developed:
  - By the Project Manager with input from interested stakeholders as required (e.g., Contractors, Site Supervisor, Worksite Monitor).
- Where an external Contractor is the Principal Contractor:
  - The Project Safety Plan shall be developed by the external Contractor in accordance with section 10.
  - If the Contractor does not have a suitable Project Safety Plan form, they may be provided with a form, either HS 16-05 Minor Works or 16-06 Major Works, to use as a template.

The Project Safety Plan shall include a detailed Hazard Assessment & Control section. This section shall be:

- Arranged into job steps with the associated tools & equipment, major hazards, and required controls.
- Developed and/or reviewed by those responsible to carry out the steps (e.g., Project Manager, Contractor, Site Supervisor).
- Finalized before work begins.
- Updated when changes to the job steps or tools & equipment occur.

Project Safety Plans completed by QEC:

- Shall be submitted by the Project Manager to the HSE Department for review, allowing a minimum of 5 days to conduct the review.
- The review shall be conducted using *Form* HS 16-08 A for Minor Project, HS 16-08B for Major Projects*: Project Safety Plan Assessment*.
- The HSE Department shall complete the review and provide the reviewed *Form* HS 16-08 (A or B)*: Project Safety Plan Assessment* to the Project Manager with comments and recommendations.
- The Project Manager shall review the comments and recommendations provided by the HSE Department, take the necessary actions to address the recommendations, record these on *Form* HS 16-08 (A or B)*: Project Safety Plan Assessment*, and submit the form to the Manager/Director for final approval.

Project Safety Plans completed by the Contractor:

- Shall be submitted to the Project Manager for review.
- The Project Manager shall then submit the Contractor's Project Safety Plan to the HSE Department for review, allowing a minimum of 5 days to conduct the review.
- The review shall be conducted using *Form HS 16-08: Project Safety Plan Assessment*
- The HSE Department shall complete the review and provide the reviewed *Form HS 16-08: Project Safety Plan Assessment* to the Project Manager with comments and recommendations.
- The Project Manager shall review the comments and recommendations provided by the HSE Department, take the necessary actions to address the recommendations, record these on *Form HS 16-08: Project Safety Plan Assessment*, and submit the form to the Manager/Director for final approval.

16.11 Project Safety Planning (Kick-Off) Meeting

A Project Safety Planning meeting shall be held (either in person or by phone) by the Project Manager a minimum of one week prior to work commencing. The following parties shall participate:

- Project Manager;
- Project Monitor;
- Worksite Monitor (where possible);
- Site Supervisor (where possible);
- Representatives from each Contractor (where applicable); and
- HSE Construction Coordinator (or other HSE Department representative).

The meeting shall include a thorough review and update of each element of the Project Safety Plan to ensure all parties are in agreement on the health and safety systems and requirements that will apply during the term of the project.

16.12 Project Safety Management

Worksite Monitor

- The Project Manager shall assign a Worksite Monitor.

- The Worksite Monitor may be a QEC employee or Owner's Representative (i.e., a Contractor representing QEC). The Project Manager may also act as Worksite Monitor.
- The Worksite Monitor shall report to the Project Manager.
- The Worksite Monitor is responsible for observing the performance of the project and providing feedback to the Project Manager.
- The Project Manager and Project Monitor shall determine the amount of onsite Worksite Monitor presence required based on risk, familiarity with the Contractor, etc. and shall document this in the Project Safety Plan.
- A Worksite Monitor may monitor more than one project at a time at the same location.

Project Safety Plan

- The Site Supervisor shall understand and comply with the Project Safety Plan and coordinate day-to-day activities in accordance with the Project Safety Plan.
- The Project Safety Plan shall be reviewed by all workers prior to starting work (e.g., during the opening Tailboard Meeting). It shall include a review of:
  - Project description & timescale;
  - Hazard assessment & control;
  - Project management structure and responsibilities;
  - Communication schedule;
  - All registers;
  - Project safety management arrangements;
  - Incident reporting requirements;
  - Emergency response plan;
  - Site specific arrangements; and
  - Audits and inspections.
- The Project Safety Plan shall be kept updated by the Site Supervisor during the project.
- The most up-to-date version of the Project Safety Plan shall be kept on site and made available to workers at all times during the project.

Safety Orientation

- The Project Manager shall ensure that every worker (both employees and Contractors) receives a QEC Safety Orientation prior to starting work with QEC.
- The Project Manager shall ensure that workers servicing equipment involved in electrical generation and distribution receive Utility Work Protection Code training.
- Refer to *QEC Health and Safety Manual Section 08: Training and Communication*.

Tailboard Meetings

- Tailboard Meetings shall be conducted a minimum of daily and prior to any work beginning.
- A new Tailboard Meeting shall be held whenever personnel, scope, or conditions of the work change.
- Refer to *QEC Health and Safety Manual Section 7: Training and Communication*.

19.13 Project Safety Monitoring

Worksite Visits

- Worksite Visits shall be conducted to observe and document worker compliance with QEC safety practices and procedures.
- Worksite Visits shall be conducted by supervisors (e.g., management, lead hands, Plant Superintendents/Operators, Worksite Monitors) and the HSE Department.
- Worksite Visits shall be conducted as per the frequency established by the Project Manager in the Project Safety Plan.
- Worksite Visits shall be recorded on *Form HS 16-02 Contractor Site Inspection*.
- Completed forms shall be provided to the Project Manager.
- Follow the *QEC Health and Safety Manual, Section 16C Contractor Safety Discipline Process,* if and when Standard Operating Procedures/Standard Work Practices are not being followed and/or hazards are not adequately controlled.
- Refer to *QEC Health and Safety Manual Section 9: Health & Safety Inspections*.

Project Safety Audits

- Project Safety Audits shall be conducted to assess the implementation of the Project Safety Plan.
- Project Safety Audits shall be conducted as per the frequency established by the Project Manager in the Project Safety Plan.
- Project Safety Audits shall be recorded on *Form HS 16-03 Contractor Compliance Audit*.

Contractor Progress Review Meetings

- Shall be conducted as per *QEC Health and Safety Manual, Section 16.13: Contractor Safety Management Program*.

19.14 Project Safety Performance Evaluation

At the completion of a major work project, the Project Manager shall evaluate the overall safety performance of the project using *Form HS 16-09: Project Post-Work Safety Evaluation*. This shall include a review of:

- Incidents reported & investigations conducted.
- Worksite Visits and key issues.
- Safety rule non-compliance, WSCC orders.
- Project Safety Plan compliance (Project Safety Audits).
- Major safety challenges and how they were handled.
- Outstanding safety issues.
- Overall project safety performance.
- Recommendations for improvements in future projects.

The Project Manager shall identify a list of corrective actions. Accountability shall be assigned for each corrective action (i.e., responsible party and required date).

It is the responsibility of the Project Manager to follow up and ensure all action items are completed as assigned.

Completed *Project Post-Work Safety Evaluation* forms shall be submitted to the HSE Department for review, and then to the Manager/Director for approval.

The Manager/Director shall provide appropriate feedback to all parties based on the outcome of the *Project Post-Work Safety Evaluation*.

Response and feedback to Contractors shall be provided in accordance with the requirements outlined in *QEC Health and Safety Manual, Section 16A: Contractor Safety Management***.**

19.15 Training

All Project Managers require the following training:

- 2 Day Supervisor Safety Training Program *[as per Nunavut OHS regulation 16(1)(d)]*
- *QEC Contractor Safety Planning Program Orientation*

All Worksite Monitors and Site Supervisors require the following training:

- 2 Day Supervisor Safety Training Program *[as per Nunavut OHS regulation 16(1)(d)]*

19.16 Documentation

- *Form HS 7-02: Tailboard Meeting*
- *Form HS 16-01 Contractor Safety Orientation*
- *Form HS 16-02: Contractor Site Inspection*
- *Form HS 16-03:Contractor Compliance Audit*
- *Form HS 16-04: Project Risk Safety Analysis*
- *Form HS 16-05: Project Safety Plan – Minor Works*
- *Form HS 16-06: Project Safety Plan – Major Works*
- *Form HS 16-07: Contractor Monthly Safety Performance Report*
- *Form HS 16-08: Project Safety Plan Assessment*
- *Form HS 16-09: Project Post-Work Safety Evaluation*
- *Form HS 16-10: Project Final Safety Documentation Checklist*

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-10: CONTRACTOR SAFETY DISCIPLINE PROCESS (16C)

Forming part of the Contract

SECTION 16C CONTRACTOR SAFETY DISCIPLINE PROCESS

16.1 Purpose
To provide a discipline process for the Qulliq Energy Corporation (QEC) to follow as part of the Contractor Safety Management Program (Section 16A).

16.2 Scope:
This section applies to all QEC employees responsible for enforcing Contractor workplace safety.

16.3 Definitions

Contract
Any signed agreement between QEC and a contractor (e.g., contract, service agreement).

Contract Administrator
A QEC employee responsible for the administration and management of contracts and service procurement documents (e.g., tenders, requests for proposals, requests for quotes, sole sourcing).

Contractor
Any person or entity that has been contracted, sub-contracted, or otherwise engaged to provide services to QEC.

HSE Construction Coordinator
A QEC employee within the HSE Department that provides advice and assistance in the development, implementation, and use of the Project Safety Planning program.

Principal Contractor
The party, either QEC or a contractor, who accepts overall responsibility for the safety of a project.

Project
A non-routine series of tasks planned from beginning to end with defined durations, resources, and results. For the purpose of Project Safety Planning equipment purchases, consultants, studies, and routine operations & maintenance work are not considered projects.

Project Manager
A QEC employee, typically an Engineering or Operations Manager, who is given the overall responsibility and authority for the successful completion of a project.

Project Monitor
A QEC employee that conducts Contractor Progress Review Meetings with the Contractor representative. The Project Monitor enforces the requirements of the Construction Contract with respect to safety and environmental protection.

Site Supervisor
An employee or contractor assigned to supervise a worksite. The Site Supervisor may also be the Project Monitor and/or Worksite Monitor, depending on the size of the construction project.

Worksite Monitor
A QEC employee, or Owner's Representative (i.e., a Contractor representing QEC), who is responsible for observing the performance of the project and providing feedback to the Project Manager and Project Monitor (if applicable).

16.4 Process Overview

Verbal Warning

The Project Manager, Worksite Monitor, and the QEC HSE Department have the authority to issue a verbal warning to a Contractor or sub-contractor whose safety performance and activities do not conform with the Nunavut OHS Regulations, QEC Safety Rules, the Project Safety Plan or otherwise to the terms of the Contract.

This warning must give specific details, stating:

- the nature of the safety issue or deficiency;
- dates and times that the safety issue or deficiency was observed;
- the safety issue that is not being complied with;
- the expected resolution; and
- a timeline for resolution.

The verbal warning can be done by phone or in the form of a formal meeting with the Contractor and Prime Contractor. However, there should always be a written note or email regarding the verbal warning submitted to the Project Manager, Worksite Monitor and the HSE Construction Coordinator.

Written Warning

The Project Manager, Worksite Monitor, and the QEC HSE Department have the authority to issue a written warning to a Contractor and Prime Contractor whose safety performance and activities do not conform with the Nunavut OHS Regulations, QEC Safety Rules, the Project Safety Plan or otherwise to the terms of the Contract. This will often be the second step, after a verbal warning has been issued.

This written warning must give specific details, stating:

- the specifics of any previous warning, verbal or written
- the nature of the safety issue or deficiency, or recurrence of same;
- dates and times that the deficiency was observed or the recurrence was observed;
- the safety issue that is not being complied with;
- the expected resolution; and
- a timeline for resolution.

A copy of the written warning must be emailed to the Project Manager, Project Monitor, Worksite Monitor, HSE Construction Coordinator, and the Contract Administrator.

Stop Work

The Project Manager, Worksite Monitor, and any member of the QEC HSE Department have the authority to issue a stop work order when:

- there is a source of imminent danger to the health or safety of workers;
- there is an ongoing failure to comply with health and safety regulations, QEC safety rules, or project safety requirements as laid out in the Project Safety Plan;
- there is a failure to maintain and keep all other necessary licenses and permits; or
- workers do not have the required safety training.

A stop work order will first be issued verbally to Contractor and Prime Contractor, to be followed up with the Contractor and Prime Contractor in writing. A copy of the written stop work order must be emailed to the Project Manager, Project Monitor, Worksite Monitor, HSE Construction Coordinator, and the Contract Administrator.

The stop work order must give specific details, stating:

- the nature of the safety issue or deficiency;

- date(s) and time(s) that the safety issue or deficiency was observed;
- the safety issue that is not being complied with;
- the expected resolution; and
- a timeline for resolution.

Work is only to resume when the safety issue is resolved to the satisfaction of the QEC HSE Department.

WSCC Safety Officers have the authority to issue stop work orders as well. Conditions for complying with the Safety Officer's directions will be included in their inspection report. Copies of all WSCC stop work orders are to be provided to the Project Manager, Project Monitor, Worksite Monitor, and HSE Construction Coordinator.

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-11: QEC CONTRACTOR MONTHLY SAFETY PERFORMANCE REPORT

Forming part of the Contract

Qulliq Energy Corporation	**CONTRACTOR MONTHLY SAFETY PERFORMANCE REPORT**		**RELATED DOCUMENT**
	Revision: 0	Date: 1 June 2017	QEC Safety Policy Manual, Section 16B – Project Safety Planning

* Mandatory reporting fields *Month of: Year:

***Business Area :**	☐ Property Management ☐ Engineering/Construction ☐ Energy Services ☐ Other:	
Operation / Project:		
*CONTRACT COMPANY: Prime Contractor? ☐Yes ☐ No		
SUB – CONTRACTOR COMPANIES:		
Contacts:	Name	Contact Number
Contractor Manager		
Contractor Health & Safety		
Contractor Environment		
QEC Project Manager:		
QEC Worksite Monitor:		
***QEC HSE Contact:**		

MONTHLY HSE PERFORMANCE

LAGGING INDICATORS By Business Area	**Monthly Total**	**Year to Date**	**LEADING INDICATORS By Business Area**	**Monthly Total**	**Year to Date**
*Accidents causing serious bodily injury (#)					
*Dangerous Occurrences (#)			Toolbox Talks		
*Environmental Incidents (#)			Safety Meetings		
*Near Misses (#)			Orientations		
*First Aids (#)			Powered Mobile Equipment (PME) Pre-use Inspections		
*Medical Treatments (#)			Safety Inspections / Observations		
*Lost Time (#)			Corrective Actions completed		
*Other Recordable (#)			Other:		
*Lost Work Days					
*Restricted / Modified Work Days			**Please attach or provide Incident date and details here:**		
*Hours Worked (Regular)					
***Hours Worked (Overtime)**					
***Total Exposure Hours**					
Total Recordable Injury Frequency					

REGULATORY ACTIONS OR INSPECTIONS

*Did your company experience any regulatory actions or inspections this month? ☐ Yes ☐ No
*If yes, provide regulatory agency and description of action(s) taken:

Report Completion Instructions

Contract companies providing services to QEC are required to complete this form on a monthly basis. This reporting requirement applies to companies that provide maintenance, services (i.e.: janitorial, landscaping, snow removal, security, onsite engineering services, onsite IT services, etc.) or construction **in excess of 100 hours per month** (including sub-contractor hours). Reporting is not required for consultants, visitors, off site manufacturing, off site design, or servicing office equipment such as photo copiers/phones.

Each injury/illness should be recorded only once and categorized using the hierarchy on the following page. For example, a Lost-Time Injury that involves Medical Treatment and subsequent Restricted Work shall be categorized as a Lost-Time Injury. The Total Recordable Injury Frequency (TRIF) rate is to be calculated using the formula on the following page.

Reports are to be submitted to the QEC Project Manager and copied to the QEC HSE Contact on **5th business day of the month**.

Injury Statistic Definitions

Accident causing serious bodily injury – an accident at a work site that causes or could reasonably be expected to cause the death of an individual, or requires an individual to be admitted to a hospital as an in-patient for a period of 24 hours or more.

Dangerous Occurrence -- means an occurrence that does not result in, but could have resulted in an accident causing serious bodily injury. Such examples include: structural failure or collapse of a structure, scaffold, temporary falsework or concrete formwork, tunnel, caisson, coffer dam, trench, excavated shaft or excavation; failure of a crane or hoist or the overturning of a crane or powered mobile equipment; accidental contact with an energized conductor; Work Protection Code failure; bursting of a grinding wheel; uncontrolled spill or escape of a toxic, corrosive or explosive substance; premature or accidental detonation of explosives, failure of a scaffold or any elevated or suspended work platform; failure of an atmosphere-supplying respirator; striking a power pole with powered mobile equipment.

Environmental Incident - Environmental Incidents include, but are not limited to, any incident that results in a release of a substance into the environment that could cause adverse effects, or is a contravention of the terms and conditions of an approval, code of practice or permit and which may result in a public complaint. This includes all spills that must be reported to the regulator.

Near Miss – An incident that could have, but did not, result in unintended harm or damage.

First Aid Injury – An Occupational Injury/Illness that requires first aid treatment only and does not result in loss of time from work or Restricted Work.

Injury -- includes any disease and any impairment of the physical or mental condition of an individual

Medical Treatment – A classification of Occupational Injury/Illness for Medical Treatment beyond First Aid Injury where there has been no Lost Days. The following are not considered Medical Treatment Injuries:

a) Visit(s) to a health care provider limited to observation or counseling or prescribed Restricted Work;
b) Diagnostic procedures (e.g., X-rays, blood tests), including the use of prescription medications solely for diagnostic purposes (e.g., eye drops to dilate pupils).

Lost-Time Injury – An injury/illness resulting in Lost Days beyond the date of injury as a direct result of an Occupational Injury/Illness incident.

Other Recordable Injury/Illness

Restricted Work – When an employee, due to a work-related injury/illness, is medically determined to be unable to perform one or more routine functions or unable to work the normal time period of their pre-injury/illness work day, they are working in a "restricted" capacity. Routine functions are the work activities that employee regularly performs at least once a week.

Significant Occupational Injury/Illness – Any injury/illness, that is not recorded as a Fatality, Lost-Time Injury, Medical Treatment Injury or Restricted Work case, but has been medically diagnosed and determined to be work-related and the cause is a verified trauma or workplace exposure that has extended to be within the current reporting period. Injury examples include: punctured eardrums and fractured or cracked bones. Illness examples might be hearing loss or respiratory disease.

Loss of Consciousness – Is a work-related, altered state of consciousness that can vary from disorientation to time, place or person, to coma. For reporting purposes, the Loss of Consciousness must be witnessed or medically substantiated as related to a work activity or exposure.

Recordable Injury – Any Occupational Injury/Illness that results in an employee experiencing:

a) Fatality;
b) Lost-Time Injury;
c) Medical Treatment Injury; or
d) Other Recordable injury/illness (not captured above), which has:
   i) Restricted Work; or
   ii) Significant Occupational Injury./Illness; or
   iii) Loss of Consciousness.

Lost Work Days – The number of calendar days that the employee is unable to work beyond the day of injury/illness recommended by a physician or other health care professional. Lost time ends as of the date that the employee is deemed fit to work either full or Restricted Work or to a maximum of 180 calendar days for any individual case. For cases where the disability will continue beyond the closing date, Lost Days and Restricted Days shall be estimated on the basis of medical opinion as to probable ultimate disability and included in the data submission. Lost Days are only recorded for the period that the injured person is in the employ of the company.

Restricted Days – The number of calendar days to a maximum of 180 days during which the employee is subject to Restricted Work, based on the recommendation of a physician or licensed health care professional, for an individual case. For cases where the disability will continue beyond the closing date, Lost Days and Restricted Days shall be estimated on the basis of medical opinion as to probable ultimate disability and included in the data submission. Restricted Days are only recorded for the period that the injured person is in the employ of the company.

Exposure Hours – Exposure to injuries shall be measured by the total number of hours of employment (i.e., the actual worked hours) of all employees for each contractor and sub-contractor companies for the reporting period.

$$\text{Total Recordable Injury Frequency Rate} = \frac{\text{Number of Recordable Injuries X 200,000}}{\text{Total Exposure Hours}}$$

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-12: PURCHASED, LEASED OR CONTRACTOR SUPPLIED EQUIPMENT (15)

Forming part of the Contract

SECTION 15 PURCHASED, LEASED OR CONTRACTOR SUPPLIED EQUIPMENT

15.1 PURCHASED, LEASED OR CONTRACTOR SUPPLIED EQUIPMENT

Qulliq Energy Corporation (QEC) is committed to providing a healthy and safe work environment for its employees, contractors, and customers. In order to ensure that QEC is in compliance with the *Nunavut Safety Act* and Regulations, all equipment that is used in the course of service will meet all applicable QEC standards, and Government and industrial regulations, codes and standards.

Under no circumstances is any worker to knowingly utilize faulty equipment or equipment that has been modified without certification of a professional engineer in the course of performing their duties. All leased and contractor owned equipment must be operated in accordance with manufacturers specifications.

15.2 PURPOSE

To assure QEC that all purchased, rented or contractor owned/leased equipment utilized on any QEC work site has been properly maintained and is in compliance with the Nunavut Safety Act and Regulations.

15.3 SCOPE

This document refers to all purchased, rented or contractor owned/leased equipment utilized on any QEC work site.

15.4 PROCEDURE

15.4.1 Any QEC Project Manager involved with the purchase, hire or lease of equipment must ensure that all considerations, including legislative requirements, have been considered prior to the purchase of or arranging a lease of any equipment.

15.4.2 Consideration is to be given when purchases could impact on any of the following elements:

- ergonomics

- emissions
- maintenance service
- manual handling
- noise
- training requirements
- waste management

15.4.3 This list is not meant to be exhaustive given the diverse range of activities undertaken at QEC, but they highlight the key areas for consideration during the procurement process.

15.4.4 Potential hazards associated with the purchase, hire or lease of equipment are to be identified, evaluated and documented as part of the hazard evaluation process prior to purchase, hire or lease.

15.4.5 The following hierarchy of controls and their principles should be applied when considering the purchase, hire or lease of equipment:

- Eliminate: if the equipment is identified as a risk and is not necessary, do not purchase or lease. This removes the hazard completely.
- Substitute: replace with a less hazardous option.
- Isolation: restrict access to the equipment and lock away under strict control.
- Engineer: modify or apply another suitable engineering control.
- Administration: change work procedures to reduce exposure to the hazard.
- Personal Protective Equipment (PPE): use gloves, safety glasses, fall protection or other PPE when appropriate.

15.4.6 Purchase orders or design specifications are to include requirements of legislation, the *Nunavut Safety Act* and Regulations and Codes of Practice relevant to the equipment along with any special health and safety requirements identified during the hazard evaluation process.

15.4.7 The procedure for ensuring health and safety requirements in specifications for services, tendering processes, contract documents and contractors' health and safety records are incorporated in the QEC Contractor Safety Management Program and the QEC Service Agreement.

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-13: QEC INCIDENT INVESTIGATION FORM

Forming part of the Contract

QULLIQ ENERGY CORPORATION INCIDENT INVESTIGATION FORM		
Form HS 13-01	**Revision 3**	**Rev Date: 02/11/15**

SECTION 1 INCIDENT CLASSIFICATION

☐ Near Miss ☐ Injury ☐ Vehicle ☐ Environment ☐ Property Damage ☐ Incident
☐ QEC ☐ Public ☐ Contractor (Identify):

Incident Number	Location	Date of Occurrence	Time	Date Reported

SECTION 2 INCIDENT DESCRIPTION (Attach additional pages/pictures if necessary)

SECTION 3 INJURY INFORMATION (If no injuries or illness occurred, skip this section)

☐ First Aid ☐ Medical Aid ☐ Lost Time ☐ Fatality

Was transportation provided for medical attention? ☐ Yes ☐ No

Name and contact info:
Body Part Injured:
Type of Injury:
Name of Medical Practitioner:
Treatment Provided:

*** FOR ALL INJURIES ATTACH COPIES OF APPLICABLE WSCC FORMS**

SECTION 4 VEHICLE/PROPERTY DAMAGE/ENVIRONMENTAL INCIDENT (Include driver information for vehicle incidents involving the public)

Vehicle/Property Damaged:
Description of Damage:
Driver Information:

SECTION 5 ROOT CAUSE ANALYSIS

Check all the direct and indirect causes which may have contributed to the incident		
Unsafe Acts	**Unsafe Conditions**	**Management System deficiencies**
☐ Improper Work Technique	☐ Poor Workstation Design	☐ Lack of Written SOPs
☐ PPE	☐ Fire/Explosion Hazard	☐ Safety Rules Not Enforced
☐ Safety Rule Violation	☐ Congested Work Area	☐ Hazards Not Identified
☐ Operating Without Authorization	☐ Hazardous Substances	☐ PPE Unavailable
☐ Failure to Warn or Secure	☐ Inadequate Ventilation	☐ Insufficient Worker Training
☐ Operating at Improper Speed	☐ Improper Material Storage	☐ Insufficient Supervisor Training
☐ By-passing Safety Devices	☐ Improper Tools/Equipment	☐ Improper Maintenance
☐ Guarding Not Used	☐ Insufficient Job Knowledge	☐ Inadequate Supervision
☐ Improper Loading or Placement	☐ Slippery Conditions	☐ Insufficient Job Planning
☐ Improper Lifting	☐ Poor Housekeeping	☐ Inadequate Hiring Practice
☐ Not Following WPC	☐ Excessive Noise	☐ Poor Process Design
☐ Horseplay	☐ Inadequate Hazard Control	☐ Inadequate Workplace Inspection
☐ Drug or Alcohol Use	☐ Defective Tools/Equipment	☐ Inadequate Equipment
☐ Unsafe Acts of Others	☐ Insufficient Lighting	☐ Unsafe Design or Construction
☐ Unnecessary Haste	☐ Inadequate Fall Protection	☐ Unrealistic Scheduling
☐ Other:	☐ Other:	☐ Other:

List Immediate Corrective Action Taken:

Recommendations to Prevent a Reoccurrence:

SECTION 6 AGENGIES NOTIFIED

☐ WSCC ☐ GN DoE ☐ RCMP ☐ Fire Department

Name of Individual Notified	Date Notified

SECTION 7 SIGNATURES

	Print	Sign	Date
Investigator			
Supervisor			
HSE			
Sr. Management			

SECTION 8 CORRECTIVE ACTIONS TRACKING – TO BE COMPLETED BY HSE

List actions that have been taken to prevent a reoccurrence	Assigned to Whom	Scheduled Completion Date	Actual Completion Date	Follow-up Date

Additional notes, updates and references

SCHEDULE E
QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-14: WSCC FORMS

Forming part of the Contract

WSCC Workers' Safety & Compensation Commission

Call a Safety Officer at **1-800-661-0792** and complete this form.

NEW OPERATIONS AND HIGH HAZARD WORK

NOTICE TO THE CHIEF SAFETY OFFICER

OHS Regulations: Part 2 Reporting; Section 7 (1-4)

Date (dd/mm/yyyy):

Employer name:	Phone number:	Ext.:	Fax number:
WSCC employer number:	Employer mailing address:		
Contact person name:	Position:		
Contact person mailing address *(if different from employer mailing address)*	Contact person phone number:		

Please indicate best contact method: ☐ email ☐ fax ☐ mail — email or fax:

Location of intended worksite:	Number of workers at the intended site:

Type of Activity:

☐ Site where 20 or more workers are to work for six months or more	☐ Digging more than 5m deep, and that a worker is required or permitted to enter		☐ High Hazard Work ☐ notice less than 30 days from estimated start date (explain in Notes) See *Schedule C - Activities that Constitute High Hazard Work*.
Type of Site ☐ Construction Site ☐ Manufacturing plant ☐ Processing plant	Type of Digging ☐ Excavation ☐ Trench ☐ Excavated shaft	☐ Tunnel that a worker is required or permitted to enter	

Notes:

Estimated Start Date (dd/mm/yyyy):	Expected duration of this activity (days, months, years):

Submit completed form to the **Chief Safety Officer** with a subject line **Notice of New Operations and High Hazard Work:**

Northwest Territories

E-mail: **noticetoCSO@wscc.nt.ca**

Toll Free Fax: 1 (866) 277-3677

Mail: Box 8888, Yellowknife, NT X1A 2R3

Drop-off: Yellowknife: Centre Square Mall, 5th Floor, 5022 49 Street
Inuvik: Mack Travel Building, 3rd Floor, 151 Mackenzie Road

OFFICE USE ONLY

Date *Notice* received by the Chief Safety Officer: (dd/mm/yyyy)	Chief Safety Officer signature :	WSCC Tracking Number:
CSO Receipt of Notice Sent (dd/mm/yyyy):	Sent by: ☐ email ☐ fax ☐ mail	

NORTHWEST TERRITORIES

OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

PART 1

PRELIMINARY MATTERS

Giving Notice to Chief Safety Officer

3. (1) Where these regulations require a notice to be given to the Chief Safety Officer, the notice must be in a form approved by the Chief Safety Officer

(2) Notice is deemed to have been given under subsection (1) when the notice is actually received by the Chief Safety Officer.

(3) In the case of a notice required by subsection 7(1) or (2), an employer shall give notice by telephoning a safety officer and, in addition, give notice in the manner set out in subsection (1).

PART 2

REPORTING

New Operations

7.(1) An employer shall, as soon as is reasonably possible, give notice to the Chief Safety Officer of an intention to

(a) begin work at a construction site or a manufacturing or processing plant where 20 or more workers are to work for six months or more;

(b) dig an excavation, a trench or an excavated shaft

(i) more than 5 m deep, and

(ii) that a worker will be required or permitted to enter; or

(c) dig a tunnel that a worker will be required or permitted to enter.

(2) Subject to subsection (3), an employer shall,not less than 30 days before high hazard work begins, give notice to the Chief Safety Officer of an intention to begin that work

(3) If an employer cannot give the notice in the time required under subsection (2), the employer shall, as soon as is reasonably possible,

(a) give notice to the Chief Safety Officer of an intention to begin that work; and

(b) provide an explanation to the Chief Safety Officer why the notice was not given in the time required under subsection (2).

(4) A notice required by subsection (1) or (2) or paragraph

(3) (a) must include:

(a) the name of the employer;

(b) the mailing address of the employer;

(c) the telephone number and facsimile number of the employer;

(d) the location of the intended work site;

(e) the nature of the activity to be undertaken at the intended work site;

(f) the number of workers that are going to work at the intended work site; and

(g) the estimated starting date and expected duration of the activity.

SCHEDULE C (Section 1)

Activities that Constitute High Hazard Work

1. Building construction
2. Power line construction and maintenance
3. Quarrying and crushing of rocks
4. Local and territorial hauling and trucking
5. Road construction, earth working, tunnelling, trenching and excavating
6. Iron and steel processing and fabrication
7. Logging
8. Manufacturing of concrete block, brick, artificial stone and other clay and cement products
9. Swilling

WSCC Workers' Safety & Compensation Commission

Asbestos Project Notification Form

THE WSCC REQUIRES **FIVE BUSINESS DAYS,** FOLLOWING RECEIPT OF ALL SUPPORTING DOCUMENTATION, TO REVIEW ASBESTOS PROJECT SUBMISSIONS

SUBMIT THIS FORM INCLUDING ALL SUPPORTING DOCUMENTS TO **projectnotifications@wscc.nt.ca** OR **projectnotifications@wscc.nu.ca** OR FAX **1 866 277-3677**, CLEARLY INDICATING **ASBESTOS PROJECT NOTICE** IN THE SUBJECT LINE

Supporting documents:

- ☐ Work procedures
- ☐ Air monitoring and analysis
- ☐ Waste disposal method
- ☐ Worker training certificates
- ☐ Analytical results or survey documents
- ☐ Emergency procedures

THE NORTHWEST TERRITORIES AND NUNAVUT **ASBESTOS ABATEMENT CODE OF PRACTICE** DETAILS THE REQUIREMENTS FOR

Worksite address:			Date of submission (dd/mm/yyyy):
Building owner:		Phone number:	Email:
Prime contractor:		Mailing address:	
WSCC employer number:	Contact person:	Phone number:	Email:
Asbestos abatement subcontractor(s):		Mailing address:	
WSCC employer number:	Contact person:	Phone number:	Email:
Description of work activities:			

Exact location of work area(s):		Number of workers: ☐1-9 ☐ 10-19 ☐ 20+
Site supervisor:	Phone number:	Email:
Abatement risk level: ☐Low ☐Moderate ☐High	Start date (dd/mm/yyyy):	End date (dd/mm/yyyy):

Building material(s) confirmed to contain asbestos (include quantity and location):	Asbestos type and percent (%):
1. ______	1. ☐Chrysotile ☐Crocidolite ☐Amosite ☐Other ______%
2. ______	2. ☐Chrysotile ☐Crocidolite ☐Amosite ☐Other ______%
3. ______	3. ☐Chrysotile ☐Crocidolite ☐Amosite ☐Other ______%
4. ______	4. ☐Chrysotile ☐Crocidolite ☐Amosite ☐Other ______%
5. ______	5. ☐Chrysotile ☐Crocidolite ☐Amosite ☐Other ______%

OFFICE USE ONLY

Date notice received (dd/mm/yyyy):	Received by: ☐ Email ☐ Fax	APN number:
Receipt notice sent (dd/mm/yyyy):	Date APN accepted (dd/mm/yyyy):	Processing Safety Officer:

WSCC Workers' Safety & Compensation Commission | ᐃᖅᑲᐃᔭᕐᑎᓄᑦ ᐊᑦᑕᓇᖅᑐᓄᒃ ᐊᒻᒪ ᓇᓪᓕᒃᑯᓐᓂᒃ ᖃᐅᔨᓴᖅᑏᑦ

To report a dangerous occurrence call the 24-hour Incident Reporting Line at **1-800-661-0792** and complete this form.

DANGEROUS OCCURRENCE

NOTICE TO THE CHIEF SAFETY OFFICER

OHS Regulations: Part 2 Reporting - Section 9 (1-3)	Date (dd/mm/yyyy):		
Employer name:	Phone number:	Ext.:	Fax number:
WSCC employer number:	Employer mailing address:		

Contact person name:	Position:
Contact person mailing address *(if different from employer mailing address)*	Contact person phone number:

Please indicate best contact method:	☐ email	☐ fax	☐ mail	email or fax:

Name of each employer, principal contractor, and owner at the worksite

Nature of the Dangerous Occurrence

Date (dd/mm/yyyy):	Time:	Time zone:	Location:

Clearly describe the circumstances. (*Attach additional pages if required):*

☐ Submit a copy of this report **without the names of the workers involved** to your Joint OHS committee or OHS representatives.

Submit completed form to the **Chief Safety Officer** with subject line **Notice of Dangerous Occurrence**:

Northwest Territories
E-mail: **noticetoCSO@wscc.nt.ca**
Toll Free Fax: 1 (866) 277-3677
Mail: WSCC - Chief Safety Officer Box 8888, Yellowknife, NT X1A 2R3
Drop-off: Yellowknife: Centre Square Mall, 5th Floor, 5022 49 Street
Inuvik: Blackstone Building, Unit 87, 85 Kingmingya Road

Nunavut
E-mail: **noticetoCSO@wscc.nt.ca**
Fax: 1 (866) 277-3677
Mail: WSCC - Chief Safety Officer
630 Queen Elizabeth Way, Box 669, Iqaluit, NU X0A 0H0
Drop-off: Qamutiq Building, 2nd Floor

OFFICE USE ONLY

Date *Notice* received by the Chief Safety Officer (dd/mm/yyyy):	Confirmation of *Receipt of Notice* sent by: ☐ email ☐ fax ☐ mail	WSCC Tracking Number:
Chief Safety Officer signature:	Sent (dd/mm/yyyy):	

NORTHWEST TERRITORIES AND NUNAVUT
SAFETY ACT
OCCUPATIONAL HEALTH AND SAFETY REGULATIONS
INTERPRETATION

1. In these regulations,

"dangerous occurrence" means an occurrence that does not result in, but could have resulted in an accident causing serious bodily injury, such as

(a) structural failure or collapse of
  (i) a structure, scaffold, temporary falsework or concrete formwork, or
  (ii) a tunnel, caisson, coffer dam, trench, excavated shaft or excavation,
(b) failure of a crane or hoist or the overturning of a crane or powered mobile equipment,
(c) accidental contact with an energized conductor,
(d) bursting of a grinding wheel,
(e) uncontrolled spill or escape of a toxic, corrosive or explosive substance,
(f) premature or accidental detonation of explosives,
(g) failure of an elevated or suspended platform, or
(h) failure of an atmosphere-supplying respirator; (événement dangereux)

PART 1
PRELIMINARY MATTERS
Giving Notice to Chief Safety Officer

3. (1) Where these regulations require a notice to be given to the Chief Safety Officer, the notice must be in a form approved by the Chief Safety Officer

(2) Notice is deemed to have been given under subsection (1) when the notice is actually received by the Chief Safety Officer.

(3) In the case of a notice required by subsection 7(1) or (2), an employer shall give notice by telephoning a safety officer and, in addition, give notice in the manner set out in subsection (1).

PART 2
Dangerous Occurrences

9. (1) An employer shall, as soon as is reasonably possible, give notice to the Chief Safety Officer of a dangerous occurrence that takes place at a work site, whether or not a worker sustains injury.

(2) The notice given under subsection (1) must include
  (a) the name of each employer, principal contractor and owner at the work site;
  (b) the date, time and location of the dangerous occurrence;
  (c) the circumstances related to the dangerous occurrence; and
  (d) the name, telephone number and facsimile number of the employer or a person designated by the employer to be contacted for additional information.

(3) An employer shall provide a copy of the notice required by subsection (1), without the names of the workers involved, to the Committee or representative.

PART 3
GENERAL DUTIES
Investigation of Certain Accidents

28. (1) Subject to section 29, an employer shall ensure that an accident causing serious bodily injury or a dangerous occurrence is investigated as soon as is reasonably possible
  (a) by the Committee and employer or by the representative and the employer; or
  (b) if no Committee or representative is available, by the employer.

(2) After the investigation of an accident causing serious bodily injury or a dangerous occurrence, an employer shall, in consultation with the Committee or representative or, if no Committee or representative is available, the workers, prepare a written report that includes
  (a) a description of the accident or occurrence;
  (b) graphics, photographs, video or other evidence that could assist in determining the causes of the accident or occurrence;
  (c) identification of unsafe conditions, acts, omissions or procedures that contributed to the accident or occurrence;
  (d) an explanation of the causes of the accident or occurrence;
  (e) a description of the immediate corrective action taken; and
  (f) a description of long-term actions that will be taken to prevent the happening of a similar accident or dangerous occurrence, or the reasons for not taking action.

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-15: NUNAVUT SPILL REPORT FORM

Forming part of the Contract

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER ____-_____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME		

C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS

F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION	
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION	
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS		

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

SCHEDULE E

QEC CORPORATE SAFETY PROGRAM AND PROCEDURES

SCHEDULE E-16: NUNAVUT APPLICATION FOR EXTENDED HOURS PERMIT

Forming part of the Contract

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Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

ᓄᓇᕗᑦ
Nunavut

ᒪᓕᒐᓕᕆᔨᒃᑯᑦ
Department of Justice
Maligaliqiyikkut
Ministère de la Justice

APPLICATION – PERMIT FOR EXTENDED HOURS

Employer's Name:	Contact:
Address (Mailing):	Phone Number: Email Address:
Project Name:	General Contractor's Name:
Location of Project:	Name of Closest Community:
Give dates for Length of time of Permit: (dd/mm/yyyy) From: To:	
Classifications of labour to be affected by this Application: (Specify: Job Titles, description of duties and list all equipment/machines to be used)	

Number of Employees Affected by this Application:	Number of Hours Worked: Per Day	Number of Hours Worked: Per Week
Details of any scheme the employer may have for rotation of staff:		

Number of Rest Breaks Given per Day:	Type of Rest Break:	Minutes per Break:	Type of Rest Break:	Minutes per Break:	Other Rest Breaks: (specify type of break and minutes)
	☐ Breakfast		☐ Breakfast		
	☐ Coffee		☐ Coffee		
	☐ Lunch		☐ Lunch		

Authorized By: (please print name)	Authorized By: (signature)	Date: dd/mm/yyyy

*** NOTE ***	**Submit Completed Application to:**	***Office Use Only ***
This Application does not change the necessity of paying overtime. Overtime must be paid for all time worked in excess of eight (8) hours per day and forty (40) hours per week.	Labour Standards Compliance Office PO Box 1000 Stn 590 Iqaluit, NU X0A 0H0 Phone: 867 975 7293 Fax: 867 975 7294	

Labour Standards Compliance Office
Phone: (867) 975-6322 LabourServices@gov.nu.ca
Fax: (867) 975-6367 http://nu-lsco.ca

P.O. Box 1000, Stn. 590
Iqaluit, Nunavut X0A 0H0
Toll Free: 1 877 806 8402 (Nunavut only)

C.P. Box 1000, Succursale 590
Iqaluit, Nunavut X0A 0H0

OVERTIME AVERAGING PERMIT APPLICATION

FIRM NAME:

ADDRESS: POSTAL CODE:

TYPE OF BUSINESS:

TOTAL NUMBER OF EMPLOYEES:	CLASSIFICATION OF EMPLOYEES:

PROJECT NAME : NUNAVUT LOCATION :

Are your employees represented by a Trades Union?	Does the request for re-scheduling of hours coincide with the collective agreement?
☐ YES: If you checked box fill next area ☐ NO	☐ YES ☐ NO

<u>SPECIAL CONDITIONS</u> *<u>(Ref: Part 1 – Subsection 7. (1) of the Nunavut Labour Standards Act)</u>*

Employees could be required to work shifts of irregular lengths, or on a regular basis of more than eight (8) hours in a day, without payment of overtime, as long as the identified number of hours of work are not exceeded within a specified period. *Consent of the majority of the employees affected is required.*

<u>NATURE OF WORK ARRANGEMENT</u>- The work rotation ***<u>cannot exceed 8 weeks</u>*** (weeks of work followed by weeks free from work away from the work site at a population centre) *(a week is defined as 7 consecutive days)*

Consecutive weeks on : __________ Followed by Consecutive week (s) free from work _________

Hours of work in a day: ___________ Hours of work in a week: _________

Please specify the length of Permit requested – the maximum allowable is one year (12 months) with requirement to request for renewal. *(Where there is a collective agreement, the duration of any permit granted must correspond with the expiry date of the agreement)*

START DATE: _________________ **END DATE: ___________________**

<u>EMPLOYEE'S CONSENT</u>: ***The consent of a majority of the employees affected is required.*** *(A majority of employees is 50% plus one)*

<u>NOTE</u>: <u>Not applicable if employees are represented by a trade union</u>

We, the employees of the above employer, hereby consent to our employer being issued a permit under the *Labour Standards Act*, subject to the above conditions. We acknowledge that our employer has explained these conditions to us and we understand that our employer must not pressure us to give our consent. We further understand that if any pressure has been put on us to give our consent, we may register a complaint with the Labour Standards Officer at the Labour Standards Compliance Office, Department of Justice, PO Box 1000 Station 590, Iqaluit, Nunavut X0A 0H0 or phone (867) 975-7293. A permit may be revoked at any time prior to the expiration date thereof by notification in writing from the Labour Standards Officer.

<u>LIST ALL EMPLOYEES ON BACK OF THIS FORM, COMPLETE LIST ON OTHER COPIES OF LIST PAGE AS REQUIRED</u>

WHERE EMPLOYEES ARE REPRESENTED BY A TRADE UNION, THE FOLLOWING INFORMATION IS REQUIRED

NAME OF UNION:	BUSINESS AGENT:	
PRESIDENT OF LOCAL:		SIGNATURE:
UNION ADDRESS:		POSTAL CODE:

OVERTIME AVERAGING APPLICATION PART 2

NOTE: 1

MAJORITY OF EMPLOYEES *(50% PLUS ONE)* IS THE MINIMUM REQUIREMENT FOR THE APPLICATION TO BE ACCEPTED FOR CONSIDERATION BY THE LABOUR STANDARDS OFFICER.

NOTE: 2

ALL PRESENT & FUTURE EMPLOYEES OF THE WORK PROJECT WILL BE MADE AWARE THAT THEY FALL UNDER THE RULES AS STATED IN THE OVERTIME AVERAGING PERMIT UNTIL THE TERMINATION DATE.

NOTE: 3

ALL PRESENT EMPLOYEES & FUTURE EMPLOYEES OF THE WORK PROJECT WILL BE MADE AWARE OF WHEN *OVERTIME PAY* WILL OCCUR AS A RESULT OF THE OVERTIME AVERAGING PERMIT. A COPY OF THE PERMIT ISSUED BY THE LABOUR STANDARDS OFFICER WILL BE POSTED AT THE WORKSITE AND MADE AVAILABLE FOR READING BY ALL AFFECTED EMPLOYEES.

NAME (PRINT OR TYPE)	SIGNATURE	NAME (PRINT OR TYPE)	SIGNATURE
Date	Signature of Employer	Title of Employer	

USE ADDITIONAL PAGES IF REQUIRED FOR EMPLOYEES SIGNATURES

SCHEDULE E

QEC CORPORATE SAFETY POLICIES AND PROCEDURES

SCHEDULE E-17:

STANDARD SPECIFICATION FOR SURFACE PREPARATION AND PAINTING

Forming part of the Contract

Contents: SOP-041 --
Standard Specification for Surface Preparation and Painting

1.0 INTRODUCTION

1.1 Scope

This specification summarizes the minimum requirements for surface preparation, and application of protective coatings on the external and internal surfaces of piping, equipment and equipment supports. It describes surface preparation, external and internal paint application and inspection requirements together with various paint systems and colour scheme as applied to shop and field painting of tanks, equipment supports, piping, and equipment for this project.

Painting of buildings is not addressed by this specification.

1.2 Definitions

The following terms are defined as stated unless otherwise specified:

a) "Owner" - Qulliq Energy Corporation

b) "Engineer"- Contract Engineer

c) "Supplier" -means the entity, manufacturer, vendor, erector, fabricator, contractor or supplier that supplies the materials or services, including all Sub-suppliers.

d) "Local Authorities" - means the Governmental Regulatory Authority controlling Laws, Codes, Rules or Regulations for the design, fabrication and installation of systems/equipment in Nunavut.

2.0 RELEVANT CODES AND STANDARDS

2.1 Codes, Standards and Regulations

The following codes and standards form an integral part of this specification. Notify any conflict between this specification, or referenced standard or code to the attention of the Engineer/ Client for resolution prior to proceeding. All referenced codes and standards are to be of the latest edition or revision. The Supplier is responsible to obtain all referenced Codes and Standards listed below:

ASTM D4285	Standard Test Method for Indicating Oil or Water in Compressed Air
ASTM D160	Evaluating Degree of Rusting on Painted Steel Surfaces
ASTM D2200	Standard Pictorial Surface Preparation Standard for Painting
ASTM D3359	Standard Test Method for Measuring Adhesion by Tape Test
ASTM D4417	Field Measurement of Surface Profile of Blast Cleaned Steel
ASTM E337	Standard Test Method for Temperature, Relative Humidity and Dew Point

CPCA	Canadian Painting Contractors Association
CAN/CGSB-1.38	Interior Undercoater
CAN/CGSB-1.40	Anticorrosive Structural Steel Alkyd Primer
CAN/CGSB-1.57	Interior Alkyd Semigloss Enamel
CAN/CGSB-1.59	Alkyd Exterior Gloss Enamel
CAN/CGSB-1.140	Oil-Alkyl Type Red, Iron Oxide Primer
CAN/CGSB-1.60	Interior Alkyd Gloss Enamel
CGSB 85-GP-14M	Painting Steel Surfaces Exposed to Normally Dry Weather

Nunavut Safety Act, Nunavut Occupation Health and Safety Regulations
Government of Canada-T 382, Standards Obstruction Marking, Air-Transport Canada
National Association of Corrosion Engineers (NACE International) Recommended Practice RP0287 - Field Measurement of Surface Profile of Abrasive Blast Cleaned Steel Surfaces using Replica Tape

2.1.1 Paint Application Specifications

SSPC-PA 1	Shop, Field and Maintenance Painting
SSPC-PA 2	Measurement of Dry Paint Thickness with Magnetic Gauges
SSPC-PA 3	Guide to Safety in Paint Application
Steel Structures Painting Manual Volume I and II, Good Painting Practice latest edition as published by Steel Structures Painting Council	

2.1.2 Surface Preparation Specifications

Society for Protective Coating (Formally Steel Structures Painting Council-SSPC)

SSPC-SP1	Solvent Cleaning
SSPC-SP2	Hand Tool Cleaning
SSPC-SP3	Power Tool Cleaning
SSPC-SPS	White Metal Blast Cleaning
SSPC-SP6	Commercial Blast Cleaning
SSPC-SP7	Brush-Off Blast Cleaning
SSPC-SPB	Pickling
SSPC-SP10	Near White Blast Cleaning
SSPC-SP11	Power Tool Cleaning to Bare Metal

SSPC-SP12	Surface Preparation by high Pressure Water Jetting
SSPC-SP20	Zinc Rich Primers (Type I, Inorganic and Type II, Organic)
SSPC-AB1	Abrasive Specification No. 1, Mineral and Slag Abrasive
SSPC-VIS1-02	Visual Standard for Abrasive Blast Cleaned Steel
SSPC-VIS3	Visual Standard for Power and Hand Tool Cleaned Steel

2.1.3 ASTM Standards for galvanizing

A-93	Steel Sheets
A-120	Pipe - Welded and Seamless
A-123	Structural Steel
A-153	Hardware, Bolts, Nuts, etc.
A-386	Fabricated Items

2.1.4 CPCA Manual

The Engineer is to ensure that the Contractor(s) comply with the requirements of the Canadian Painting Contractors Association (CPCA) Manual.

2.1.5 Samples

Submit duplicate 300 x 200 mm sample panels to the Owner of each paint. Colours to be selected from full line of manufacturers' standard samples.

2.2 Language and Measurement System

All drawings and documents will be in English language only. All units will be in accordance with the SI-Metric System.

3.0 OPERATING ENVIRONMENT

For the detailed site climatic data, refer to Geographic, Climatic and Seismic Data.

3.1 Safety and Environmental Protection

Comply with safety and permit requirements of the Engineer / Owner and the SSPC - PA 3, Guide to Safety in Paint Application.

Comply with the safety and environmental protection regulations of federal, territorial and municipal departments or any other agency having jurisdiction including those of worker safety and environmental protection. The Engineer / Owner safety rules and regulations must be adhered to at all times. A Project Risk Safety Analysis (QEC Form HS 16-04) and a Project Safety Plan must be completed before work begins.

Wear air respiratory equipment or air-purifying respirators as approved when the vapors in a confined space may approach or exceed the limits as set forth in "Threshold Limit Values" (TLVs) for solvent vapors adapted at the meeting of the American Conference of Government Industrial Hygienists (ACGIH). Limits as set out in Schedule O of the ***Nunavut Health and Safety Regulations*** apply where more stringent.

Ground abrasive blasting hoses and nozzles to dissipate static electrical charges. Airless spray machines must also be grounded.

Use safety shields, helmets or hard hats, goggles, respirators, hearing protection, protective fire retardant clothing and safety footwear may all be required. Refer to the project safety plan and the Safety Data Sheets (SDSs) for the chemical materials being used. All PPE must meet the Engineer / Owner safety standards during the cleaning, blasting or coating operations.

Only manufacturer approved thinners, solvents and cleaners are permitted. Use solvents only for cleaning. Do not use solvents such as chlorinated hydrocarbons, gasoline, benzene, benzene (Sensel), etc. because of their toxicity and/or flammability. Approval of the Engineer / Owner is required before any chemical products are brought on site. Provide the Safety Data Sheet (SDS) for such approval.

Do not dispose any paint, solvent, new or used blasting abrasive, or any other industrial waste material on the Owner's property. Organize the work area in such a way that accidental spills of paint or solvents cannot escape into the environment. At all times, handle all materials in a manner complying with the Engineer / Owner, federal, territorial and local environmental regulations as well as manufacturer's instructions.

3.2 Lead Paint

Use of paint that contains lead, chromium and other heavy metals is prohibited. All volatile organic compound (VOC) content of all materials shall meet federal, territorial and local regulatory requirements.

Painting materials, including thinners, brought on site require correct WHMIS 2015 labeling. Current SDSs to accompany each shipment of painting materials. SDS to include batch number, date of manufacturer and shelf life.

All surface preparation requires the removal of any lead-based paint. If not already completed, an on-site hazard assessment and paint sampling is required to determine the level of lead contamination. The lead paint removal procedure is to be submitted to Engineer / Owner for approval prior to starting work. A *Lead Project Notification Form* for lead paint removal must be submitted to the Workers' Safety and Compensation Commission (WSCC) for approval if lead levels in the paint exceed Contamination Limits of 100mg/kg (100 ppm). Refer to Sections 313-315 of the ***Nunavut Health and Safety Regulations,*** along with Schedule O and Schedule R of the regulations.

Sampling procedures, debris clean–ups, and repairs must be coordinated to conform with applicable health and safety procedures to prevent contaminating nearby areas. The recognized Time Weighted Average (TWA) exposure limit for airborne lead is 0.05 mg/m^3. TWAs are based on 8 hours/day, 5 day work weeks.

3.3 Confined Space

Any work inside a confined area must conform to QEC's *Confined Space Code of Practice*, which includes a permit system, air sampling, and written rescue plan. Move blowers or exhaust fans to confined areas.

4.0 GENERAL

4.1 Equipment, Labor and Services

All pressure containing vessels to comply with applicable federal, territorial, and municipal codes.

4.2 Co-ordination

Co-ordinate work specified with all other work to ensure correct colour coding.

4.3 Supervision

Deploy an experienced personnel authorized to act continually in charge of the work. Any authorized personnel who, in the judgment of Engineer / Owner, are negligent or incompetent will NOT be allowed to continue work at site and must be immediately replaced with qualified staff.

4.4 Refuse

Keep the work area clean at all times, consistent with the type of work being performed.

4.5 Environmental Requirements

Do not apply paint finish in areas where dust is being generated.

4.6 Access

Provide free and safe access to the work area at all times for Engineer's / Owner's inspector.

4.7 Compressed Air

Provide compressed air supplies clean and free of oil or moisture. Install suitable filters and traps on the air compressor.

4.8 Exceptions

No departure from these specifications is allowed unless directed by Engineer / Owner who has the right during the performance of this work to make alterations, providing such alterations are instituted before the particular work requiring change is commenced, and also providing such alterations will not increase the cost. Any exceptions required by the Supplier must be presented in writing to Engineer / Owner as part of the tender documents or scope of work.

5.0 TECHNICAL REQUIREMENTS

5.1 Surface Preparation

5.1.1 Metal Surface Preparations

Prepare all metal surfaces free of gouges, handling marks, deep scratches, weld spatter, slivered steel, laminations, or other surface flaws. Repair such flaws before proceeding with the surface preparation.

Grind all sharp edges to a smooth radius of at least 3 mm.

5.1.2 Abrasive Blasting

Remove all oil or greasy contamination according to the requirements of SSPC-SP1, Solvent Cleaning, prior to blast cleaning.

Blast clean all steel surfaces in accordance with the requirements of the SSPC surface preparation specification indicated in the painting schedule.

Use a clean, dry blasting abrasive to produce a surface profile conforming to the range specified in this Standard for the applicable coating system.

Avoid use of reclaimed abrasive for any final blast cleaning operations, except in the case where an automated blasting machine with an abrasive recovery system is used.

Discontinue blast cleaning operations for final surface preparation if steel temperatures are less than 3°C above the dew point, or if the relative humidity exceeds 80%.

Use a vacuum operation or clean, dry compressed air blow down for Final Cleaning of surfaces.

Ensure the required degree of surface preparation specified as the appropriate coat of material is being applied. The ambient conditions to dictate the maximum time interval between blasting and painting to a maximum of four hours.

Continue into previously applied coatings with a minimum of one inch (2.54cm) overlap when continuing with new work blasting.

5.1.3 Other Surface Preparation Methods

Abrasive blasting is the best method of surface preparation. Where this is not possible for safety or economic reasons, use other methods, such as hydro blasting or abrasive-injected hydro blasting, depending on the type of surface preparation required and with the approval of Engineer / Owner.

Where hand or power tool cleaning is specified, follow the surface preparation specifications SSPC-SP2, Hand Tool Cleaning, SSPC-SP3, Power Tool Cleaning, and SSPC-SP11, Power Tool Cleaning to Bare Metal. The requirements of Section 6.5, the instructions on the coating manufacturer's published data sheets and the severity of the service intended to dictate which specification to follow.

Provide paint on the job in new, unopened containers. Materials older than the shelf life of the product will not be accepted. Damaged or previously opened containers will not be accepted.

Store, mix, thin, apply and cure print materials in accordance with the manufacturer's recommendations. The manufacturer's recommendations to take precedence over this standard, where applicable and approved by Engineer / Owner.

All paint to be power mixed. Mixing to be in accordance with the manufacturer's instruction. Component systems to be mixed in the proper ratios and allowed to set-up for the proper time prior to use, when a curing agent / activator has been added.

Outdoor storage of painting materials and solvent is unacceptable. Protect painting materials from moisture, temperature extremes, contamination and damage.

Supply each paint material in the applied system from the same manufacturer and from the same batch number except where on site painting involves application over existing paints.

Suppliers not using the paint system defined by this specification must submit paint system(s) and applicable SSPC-SP surface cleaning specification(s) for Engineer / Owner approval prior to application.

The following minimum requirements to be complied with:

(a) Ensure that the paint system offered provides the same degree of corrosion protection as the Engineer / Owner specified system for the service location.

(b) Ensure that the manufacturer's system provide at least six years of protection with less than one percentage failure, for the specified service and installed operating conditions.

5.2 Paint Application

5.2.1 General

In general, paint application to comply with specified standards. All prepared surfaces for coating to be primer coated before visible rusting occurs, or within four hours, whichever is sooner.

Spray tip selection to be based on the paint manufacturer's recommendation for their product.

No shop paint may be applied within 50 mm of welds prior to shop leak or pressure testing. Do not coat welded joints of field fabricated equipment and piping until after completion of field pressure testing.

Surface preparation and paint application to be carried out by qualified and competent craft persons. Preference to be given to firms employing crafts persons who are certified through a recognized comprehensive training program.

All coatings to be applied by spray according to the manufacturer's published instructions unless prohibited. Where spray is prohibited, or is acceptable but would be ineffective due to the configuration of the surface, roller application or brushing will be accepted, but only for the area that cannot be sprayed. Welds, rivets and other surface irregularities to be stripe coated using a brush.

A blasted, un-coated strip having a minimum width of 100 mm to be left between primed and un-blasted surfaces at the end of a workday.

Do not apply paint when the ambient temperature, substrate temperature or paint material temperature is outside the range recommended by the paint manufacturer. No coating with exception of inorganic zinc to be applied when relative humidity exceeds 80%, or if temperature of surface to be painted is less than 3ºC above the dew point temperature. Likewise do not apply paints under adverse conditions or when such conditions are likely to occur before the paint has dried. Follow the coating manufacturer's recommendation when determining the acceptability of the conditions for the application of any coating.

Strictly follow the manufacturer's published curing schedule and surface temperatures, rather than ambient conditions. Allow each coating to cure sufficiently prior to application of a succeeding coat. The degree of cure to be determined using either a solvent wipe test or film hardness test.

To minimize inter-coat contamination, succeeding coats of paint to be applied with a minimum elapsed time between coats as recommended by the coating manufacturer. When unavoidable contamination does occur, contaminants must be sufficiently removed to ensure adequate inter-coat adhesion.

All coatings to be uniformly applied without sags, runs, or other defects. When such irregularity does exist it shall be removed and the area repainted.

Surfaces to be visually examined for contaminated or defectively applied areas and Dry Film Thickness to confirm compliance with this standard before application of the next coat. Loosely adhering or defectively applied paint shall be removed. The surface to be prepared to the original requirement and repainted using the same paint system. Edges to be feathered so that the new paint coating ties smoothly into the existing coating.

Edges, comers, crevices, welds and other complex shapes, which are particularly prone to rust attack, require careful attention to ensure they are properly prepared and coated. Evaluate the suitability to spraying these areas; stripe coating may be preferred over spraying.

5.2.2 Preparation of Substrates

Prepare substrates in accordance with requirements of Chapter 3, Surface Preparation, of the CPCA Manual.

5.2.3 Protection

1) Protect adjacent surfaces, equipment, piping and structures from dripping, splattering or spills. Use adequate drop cloths or masking to cover other surfaces in area of painting.

2) Immediately clean up any paint that has dripped or splattered onto other surfaces.

5.2.4 Coating and painting of new equipment & Engine Generator Sets

The painting of new equipment and Engine Generator Sets will be performed as per vendor standard, unless otherwise specified by the Client in the RFP. The vendor is required to submit their applicable painting system and procedure for Client's review and approval prior to start painting work.

5.2.5 Coating and painting of piping, steel structure, hanger and supports

Paint and colour code all new uninsulated pipes, pipe hangers, hanger rods, metal straps, brackets, steel structure and other exposed metal surfaces in the Power Plant and on site.

Paint surfaces in their entirety using applicable 3-coat finish system:

1) 1st coat - Red Oxide metal primer;

2) 2nd and 3rd coats - Industrial semi-gloss Enamel.

3) Paint exterior surfaces when outside temperature is greater than +7ºC.

4) Touch-up any areas or surfaces damaged during construction to match existing, adjacent colours and sheen.

5) Do not paint over existing manufacturers name plates, equipment identification labels, direction arrows or warning labels.

6) Paint all pipes which will be covered by insulation with 2 coats Red Oxide Primer only.

5.2.6 Repair work and Recoating of Damaged surfaces

Prior to re-coating, repair all damage to the previous coat with the compatible coating. The completed coating must be free of defects.

5.2.7 Metal Finishes

- **Interior-Formula 1** for primed ferrous metal surfaces apply:
  - One coat spot priming CAN/CGSB-1.40
  - One coat enamel undercoat CAN/CGSB-1.38
  - Two coats semi-gloss enamel CAN/CGS-B1.57

- **Exterior-Formula 2** for primed ferrous metal surfaces apply:
  - One coat spot priming CAN/CGSB-1.40
  - One coat enamel undercoat CAN/CGSB-1.14
  - Two coats semi-gloss enamel CAN/CGSB-1.59

The following paint materials to be supplied by the Contractor for repair and touch-up work:
- Red Oxide Primer
- Industrial semi-gloss enamel in the required colours for metal surfaces

Any primers or paint for touch-up or repainting of damaged surfaces must match the original paint sheen and type, and is to be supplied by the Contractor.

Qualified products: only paint materials listed on the *CGSB Qualified Products List* are acceptable for this project.

Paint materials: to CGSB Standards listed in Finishing Formulae.

Paint materials for each coating formulae to be products of a single manufacturer.

5.2.8 Exclusions of painting surfaces

All piping, equipment and equipment supports to be painted in accordance with Section 5.3 of this document, except where otherwise indicated.

Do not paint the following surfaces, unless otherwise indicated:

a) Finished machine surfaces of equipment and components

b) Any identification label, tag, sign, manufactures' name, data plates and gasket surfaces

c) Brick, tile, concrete block, concrete foundation (unless exposed to chemical attack)

d) Stainless steel (SS), copper, brass or aluminum and other nonferrous metal

e) Galvanized metal and exterior surfaces of fireproofed structures and equipment

f) Valve stems, seal glands, and control valve positioners

g) Sprinkler heads and fusible links

h) Aluminum or stainless steel sheathing over insulation

i) Lining surfaces, fiberglass, PVC pipe, plastic and plastic coated materials

j) Items which for various reasons may have special finishes applied by the manufacturer

k) Internal surfaces of pipes are not painted unless otherwise specified

l) Heating tubes and portions with heat resistant treatment of furnaces; boilers etc. are not be painted

m) Insulated piping and equipment with operating temperature higher than 150°C (300°F)

n) Underside of steel column base plates supported on concrete foundations

o) Steel surfaces embedded in or bonded to concrete

p) Stud welded shear connectors

r) Traffic surface of crane rails

5.2.9 Shop Painting

Paint all skid mounted package type units, rotary machinery and it's auxiliary equipment units, special machinery, misc. equipment, instrument and electrical equipment at manufacturer's shop with primer and finish painting system which is compatible with the operating conditions where the units or equipment are to be used. The manufacturer's standard can be applied, subject to approval by Engineer / Owner.

Supply all "off-the-shelf' or "stock" equipment items, such as pumps, valves, gauges , generators, electric motors, electrical and instrument components and gauges with the manufacturer's standard painting system at shop which is compatible with the operating conditions where the units or equipment items are to be used. The proposed system is to be submitted to Engineer / Owner for approval.

5.3 Coating Systems

Various paint manufacturer's products shown are considered to be generally equivalent and suitable for the intended service, it is recognized that differences do exist, and that the particular manufacturer's recommendations regarding a specific product should be carefully followed.

When requirements specified in the individual coating system are more stringent than those specified in the coating manufacturer's data sheets (e.g., surface preparation, anchor profile, etc.), the requirements specified herein govern.

Shop repair of damaged or noncompliant coatings by re-blasting and re-application of the correct coating.

Unless otherwise indicated in the coating system notes, field repair of damaged or noncompliant coatings to be in accordance with Section 6.6 of this document.

The following coatings are acceptable for use at Qulliq Energy Corporation (QEC) facilities.

5.4 Piping

Locations:

- On long straight runs in open areas in boiler rooms, galleries, and tunnels so that at least one is clearly visible from any one viewpoint in operating areas or walking aisles and not

at more than 17m intervals

- Adjacent to all changes in direction
- At least one in each small room through which piping passes
- On both sides of visual obstruction or where run is difficult to follow
- On both sides of any separation such as walls, floors, and partitions
- Where piping is concealed in pipe-chase, ceiling space, gallery or confined space, at entry or leaving points and adjacent to each access opening
- At beginning and end points of each run and at each piece of equipment in-run
- At point immediately upstream of major manually operated or automatically controlled valves. Where this is not possible, place identification as close to valve as possible, preferably on upstream side

Provide easily and accurately readable legend from usual operating areas and all readily accessible points.

Provide plane of legend approximately at right angles to most convenient line of sight with consideration of operating positions, lighting conditions, reduced visibility of colour or legends caused by dust and dirt and risk of physical damage.

PIPE IDENTIFICATION COLOURS				
Colour	**Paint (Primary Colour)**			**Tape (Secondary)**
	CGSB[2] No.	**Rustoleum No.**	**Description**	**Vinyl Tape No. 471**
White	513-101	995	Federal Safety White[1]	White
		2766	High Gloss White	
Black	512-101	978	Federal Safety Black[1]	Black
		634	High Gloss Black	
Grey	501-108	906	Silver Grey	
Red	509-102	964	Federal Safety Red[1]	Red
Orange	508-103	956	Federal Safety Orange[1]	Orange
Yellow	505-110	944	Federal Safety Yellow[1]	Yellow
Green	503-126	933	Federal Safety Green[1]	Green
Blue	502-105	925	Federal Safety Blue[1]	Blue
Purple	511-102	924	Federal Safety Purple[1]	Purple
Brown	504-103	977	Chestnut Brown	Brown

Aluminum	515-101	470	Aluminum	
		473	Heavy Duty Aluminum	
		4315	High Temperature Aluminum	
				Red-Orange[3]

1) Safety colours developed to meet ANSI/ASME A13.1 Pipe Marking Standard and OSHA specifications for colour coding

2) Canadian General Standards Board

3) Used to identify pipe anchor points only

PRIMARY COLOUR BAND SIZES	
O.D. of Pipe or Covering	**Length of Band**
Up to and including 50 mm	300 mm
63 mm to 175 mm	460 mm
180 mm to 250 mm	610 mm
Over 250 mm	810 mm

PIPELINE IDENTIFICATION SCHEDULE		
SYSTEM	**PRIMARY COLOUR**	**SECONDARY COLOUR**
***WATER* SYSTEMS**		
Domestic Water (Potable) ***Identified by Labelling***	Blue	
Raw Water (Rain, River, Sea Water)	Green	
Ethylene Glycol/Water (Engine Jacket Water)	Purple	
Propylene Glycol/Water (Secondary Systems, i.e. Waste Heat Recovery Systems)	Purple	Yellow (1 Band)
Ethylene Glycol	Purple	
Treated Water (Boiler feed, Engine cooling where Glycol not used but inhibitors are added)	Blue	
High Temperature Water (over 150°C)	Orange	
STEAM SYSTEMS		
Steam	Orange	
AIR SYSTEMS		
Compressed Air-Oto 100 kPa (0 to 15 psi)	White	
Compressed Air- 100 kPa to 2.07 MPa (15 to 300 psi)	White	Orange (1 Band)
Compressed Air- 2.07 MPa to 6.90 MPa (300 to 1000 psi)	White	Orange (2 Bands)
FUEL SYSTEMS		
Diesel Fuel	Yellow	
Bunker Fuel	Yellow	Black (1 Band)
Natural gas	Yellow	Orange
Gasoline	Yellow	Red
OIL SYSTEMS		
Lube Oil (Clean)	Brown	
Lube Oil (Dirty)	Brown	Red (1 Band)
Hydraulic Pressure Actuating Oil 0 to 6.09 MPa (0 to 1000 psi)	Brown	Orange (1 Band)

Hydraulic Pressure Actuating Oil 6.09 to 21 MPa (1000 to 3000 psi)	Brown	Orange (2 Bands)
Transformer Cooling Oil	Brown	Blue (1 Band)
MISCELLANEOUS ENGINE SYSTEMS		
Air Intake Ducting	Aluminum	
Cooling Air Ducting (Plenum systems)	Aluminum	
Exhaust	none	
Crankcase Ventilation	Aluminum	
FIRE PROTECTION SYSTEMS		
Water	Red	
Steam	Red	Orange (1 Band)
Carbon Dioxide	Red	Blue (1 Band)
Halon	Red	Blue (1 Band)

ELECTRICAL CONDUIT		
Fire Protection	Aluminum	Red (1 Band)

6.0 QUALITY ASSURANCE (QA)

6.1 QA Requirements

A Daily Inspection Report (see Section 6.5) is attached for documenting that specified requirements have been met. The Daily Inspection Report to be completed for each work shift. The Supplier's forms may be used with prior approval from Engineer / Owner. A log to be maintained by the Supplier of all reports, inspections, and tests (including date, time, and results of instrument calibrations).

As a minimum, the following inspection functions are to be performed and documented for review by Engineer / Owner. The following documentation, in accordance with Section 6.2, must be available to Engineer / Owner at all times:

6.1.1 Paint Materials

a) Upon receipt, paint materials to be inspected for damage and compliance with the requirement of Engineer / Owner.

b) Painting materials to be safely stored within the environmental conditions specified by manufacturer.

c) Batch number to be recorded and shelf life expiration date to be confirmed.

6.1.2 Surface Preparation

a) Inspect the prepared surfaces to ensure that the required cleanliness and surface profile has been achieved. If cleanliness is in question, SSPC or ISO visual comparators are to be used to check cleanliness.

b) Prepare substances in accordance with requirements of surface preparation of the CPCA Manual.

c) No painting may start until all faulty conditions, defects, improper material, workmanship or other conditions, which in the opinion of Engineer / Owner will affect the satisfactory performance of the Supplier's work are resolved.

6.1.3 Temperatures

a) Record ambient and substrate temperatures at the start of work and at regular intervals.

b) Paint exterior surfaces when outside temperature is greater than +7°C.

6.1.4 Air Supply

a) Frequent checks for oil and moisture in blast cleaning air supply

6.1.5 Application

a) Commence application as soon as possible after surface preparation. Brush off and blast clean surfaces that show indications of rust bloom or contamination.
b) Follow mixing, mixing ratios and induction time (if applicable).
c) Evaluate atmospheric conditions. Do not apply paint when adverse weather conditions are likely to occur before the paint has dried.
d) Do not exceed the "pot life" of the paint.
e) Inspect the application technique for dry spray, over spray, under spray, runs, sags, and other defects. All prime, intermediate and finish coats to be inspected prior to the application of subsequent coats.
f) After each coat, inspect the surfaces for runs, drips, sags, foreign inclusions, misses, appearance and dry film thickness. Protect adjacent surfaces from dripping and splattering.

6.1.6 Curing

a) Monitor the wet film thickness of each coat to ensure that the final OFT will be as per the specification.

b) Measure dry Film Thickness (OFT) of each coat and of the total system using the procedure of SSPC-PA 2 and a properly calibrated magnetic gauge or eddy current gauge.

6.1.7 Repairs

a) Inspect all repairs to ensure that they have been satisfactorily made.

6.1.8 Defective Work

Rectify and repair any defective work which results from poor workmanship, use of defective materials, damage through carelessness or any other cause resulting from the Supplier's actions or omissions, found to exist prior to final acceptance of the work immediately when advised by the Engineer / Owner.

After shop or site clean-up, the surfaces to be inspected for damage.

The Supplier is responsible for making his own inspections after the completion of each work stage. Also measure and record the air temperature, relative humidity, surface temperature, dew point and other work area conditions that directly affect the application of coatings, immediately prior to the commencement of and during each coating application. Measurements that are not specifically in the work area are not acceptable.

6.2 Supplier Records

Maintain a record of his inspections and submit this to Engineer / Owner, or their appointed coatings consultants, upon completion of the work.

This record to include the following:

a) air temperature

b) relative humidity

c) steel temperature

d) dew point in the work area during the application of each coat of the lining or exterior coating

e) type of paint used for each coat, with the batch numbers of each different lot of paint used

f) dry film thickness measurements, and

g) Any other information relevant to the application of the lining or exterior coating.

All material furnished and work done is subject to thorough inspection by Engineer / Owner or their appointed coatings consultants. Do not proceed beyond the stage requiring inspection until the Engineer / Owner has made or waived inspection. Provide the Inspector with a schedule detailing each work stage with at least 48 hours' notice during the course of the project when unscheduled inspections are required.

Inspection of Engineer / Owner does not relieve the Supplier of the responsibility for furnishing the qualified resources necessary to meet the requirements of the specification, or for making the required inspections. Present a copy of inspection records for review at the time of each inspection by Engineer / Owner or their appointed coatings consultants.

6.3 Inspection Hold Points

Prior to commencement of blast operations, inspect the surfaces for the presence of oil, grease, or other contaminants that would not be adequately removed by abrasive blasting.

After blasting and before any coating is applied, inspect the surfaces to verify the quality of surface preparation.

After each coat, inspect the surfaces for runs, drips, sags, foreign inclusions, misses, appearance and dry film thickness.

After site cleanup, inspect the surfaces for any damage.

6.4 Inspection Instruments

Measure metal temperature with a surface thermometer, in intimate contact with the surface.

Measure Relative Humidity with a sling psychrometer. Note that this instrument can also be used for measuring the air temperature.

Measure Wet Film Thickness with a Nordson Wet Film thickness gauge or an equivalent instrument approved by the Engineer / Client.

Measure Dry Film Thickness with a Mikrotest magnetic pull-off gauge or an equivalent instrument approved by the Engineer / Client. Note that these instruments need to be calibrated for the film thickness to be measured and require frequent monitoring to check for drift from the calibration setting.

6.5 Daily Inspection Report

Complete the Daily Inspection Report form attached in Appendix I for each work shift to verify compliance with this standard.

Record unsatisfactory work, conditions, causing unsatisfactory work, and corrective action.

Attach copies of all replica tape readings taken.

Attach additional sheets, notes of meetings, or reports as necessary for back up.

Submit a copy of all forms and back-up documents to Engineer / Client.

6.6 Field touch-up and repair procedures

6.6.1 Field Weld Areas and Damaged Coatings Exposing Bare Metal or Rust

Field weld areas and damaged coatings showing bare metal or rust to be solvent cleaned, followed by power tool cleaning to restore steel to the required degree of cleanliness. All loose, cracked and damaged coating to be removed. The prepared surface to be free of loose or blistered coating

After surface preparation is complete, provide touch-up as follows:

(a) Touch-up for surfaces which consist of a primer and finish coating to be with the application of two or more coats (as required to achieve the required overall coating thickness) of the finish coating that was used in the original coating system.

(b) Touch-up for surfaces that were only primed with inorganic zinc to be done with the application of surface tolerant heat resistant modified silicone zinc.

The finish colour and gloss to match, as close as practical, to the adjacent surfaces. However, differences in colour and gloss will be noticeable and are considered acceptable.

6.6.2 Damaged Coatings Not Exposing Bare Metal or Rust

Damage to coatings not exposing bare metal to be solvent cleaned per SSPC-SP 1, followed by hand or power tool cleaning per SSPC-SP 2 or 3. All gloss shall be removed and the surface abraded without removing the primer.

After surface preparation is complete, apply one or more touch-up coats (as required to achieve the required overall coating thickness) to achieve the finish coating that was used in the original coating system.

Match the finish colour and gloss, as close as practical, the adjacent surfaces. However, differences in colour and gloss will be noticeable and are considered acceptable.

6.7 Performance Criteria and Performance Guarantee

Provide the minimum warranty period of six years from the date of application. Where superior coatings are used the warranty period may be extended through negotiation with the paint supplier and applicator. Provide written warranty including the following:

a) The coating applicator warrants that the surface preparation and coating system application shall follow the specifications and/or manufacturers' instructions as set forth in the manufacturers' data sheets.

b) The manufacturer warrants that the coating system be free from deterioration due to peeling, blistering, uneven fading or colour change, excessive surface erosion or weathering or other forms of coating failure which can be directly attributed to a coating system breakdown, for the warranty period.

c) Inspection to be made jointly by representatives of Engineer / Client, the paint manufacturer and coating applicator at the end of the first year, or at a time or times mutually agreeable to all parties, depending on the length of the warranty period. Final inspection will be carried out at the end of the warranty period. Areas of coating requiring repair to be carried out in a manner mutually agreed upon, and at a time convenient to Engineer / Owner.

HSM- Section 4 **SOP-041** **Standard Specification for Surface Preparation and Painting**	**Prepared by: W. Iglinski & N. Naqi (SNC Lavalin)** **Spec No. 506651-0000-45EG-0008** **Revised by: Derek Allerton (QEC)**	***Issue Date: 8 Sept 2011*** ***Rev Date: 5 Feb 2019***
Administrative Hazard Controls	***Approved by: Jackie Zhou (QEC)***	***Rev. # 1***

APPENDIX I – DAILY INSPECTION FORM

Supplier:	Date:	Page of
Item No.:	Material Coated:	Other:

Condition	Start Blasting	Start Painting	Mid-Point of Painting	End of Painting
Time				
Ambient Temperature (ºC)				
Relative Humidity (%)				
Dew Point Temperature (ºC)				
Substrate Temperature (ºC)				
Weather Conditions				

Surface Preparation:		
Condition of Surface Prior to Blasting:		
Method of Removing Contamination Prior to Blasting:		
Method of Blasting:	Abrasive Type:	Grade:
Degree of Cleanliness Obtained:		
Anchor Profile (mm):	Method of Measuring Anchor Profile:	
Application Information:		
Method of Spraying:		
DFT Gage Type and Model:	Date Calibrated:	

Coatings	Coating Applied	Batch No.	Coating Colour	Thinner No./Type Used	OFT Specified (micron)	OFT Obtained (micron)	Actual Overcoat Interval (hrs.)
Primer							
Intermediate							
Finish							

Comments:
Supplier's Signature:
Engineer / Client Signature:

DOCUMENT END