Rev 2 August 2024



# HEALTH, SAFETY AND ENVIRONMENTAL (HSE) REQUIREMENT FOR CONTRACTORS

PETRONAS ENERGY CANADA LTD.

# DOCUMENT AUTHORIZATION

# Approved By:

Name	Joe Leonard	
Position	VP, Health, Safety & Environment	
Date	February 2025	

# **Document Owner:**

Name	Amber Vanderplas		
Position	Manager, Contractor Safety & Systems		
Date	February 2025		

# **Proprietary Information**

This document contains proprietary information which belongs to PETRONAS Energy Canada Ltd. And must not be wholly or partially reproduced nor disclosed without permission from PETRONAS Energy Canada Ltd.

# **Review and Revision Record**

List of Document Revisions

REVISION NUMBER:	DATE LAST REVIEWED:	DATE LAST REVISED:	REVISED BY:	REVISION DETAIL (ADDITIONS, DELETIONS, OR CHANGES):
0		2022	David Merabishvili	Created document
1	16/06/2023	16/06/2023	Stuart Gardner	Added language around contractor competency, Removed Job Coordinator and various small edits to wording
2	07/30/2024	07/30/2024	Amber Vanderplas	Document rework; realignment with new Framework

# **Change Management Process**

If there is a deviation or other comments regarding this document, contact the Document Owner

# **1. Contents**

Review and Revision Record	2
Change Management Process	2
1. Contents	3
2. Summary Statement	6
3. Objectives	6
4. Scope	6
5. PART I - GENERAL HSE REQUIREMENTS	7
5.1 Compliance with Laws/Regulations/PECL Requirements	7
5.2 PETRONAS Cultural beliefs	7
5.3 Health, Safety and Environment Policy	7
5.4 Upstream Process Safety Golden Rules	7
5.5 ZeTo Rules	8
5.6 Workplace Harassment, Bullying & Violence Prevention Policy	9
5.7 Whistleblower Policy	9
5.8 Contractor Prequalification & ISNetworld (ISN)	9
5.8.1 ISNetworld (ISN)	9
5.8.2 Contractor HSE Mitigation Plan	9
5.9 Contractor's HSE Plan	9
5.10 Sub-Contractor Management	.10
5.10.1 Sub-Contractor Approval by PECL	10
5.11 Contractor's Kick off meetings, KPI reporting and Performance reviews	.10
5.11.1 Kick Off meeting	10
5.11.2 KPI Reporting	10
5.11.3 HSE Performance Review	10
5.12 Work stoppage and removal of contractor personnel	11
5.12.1 General	11
5.13 Worker competency requirements	11
5.14 Worker orientation and training requirements	11
5.14.1 Common Safety Orientation (CSO)	11
5.14.2 5.13.2 PECL Contractor Orientation	11
5.14.3 PECL Site Specific Orientation	11
5.14.4 Minimum Training Requirements	11
5.15 Young/New/Inexperienced workers program	12
5.16 Hazard and Risk Management	12
5.16.1 Hazard Identification and Control	12
5.17 Emergency Response Preparedness	12
5.18 Security	12

6. PART	II - SPECIFIC HSE REQUIREMENTS	13
6.1 Rol	les and Responsibilities for "Worksite management"	13
6.1.1	PECL Person in Charge (PIC) and PECL Permit Issuer (PI)	13
6.1.2	Contractor's Permit Receiver	13
6.1.3	All Contractor Workers	14
6.1.4	Visitors	14
6.2 Car	mp Rules	15
6.3 Gei	neral worksite safety rules	15
6.4 Per	rmit to Work (PTW)	15
6.5 Inc	ident and Unsafe Act (UA)/Unsafe Condition (UC) Reporting	16
6.5.1	Definitions	16
6.5.2	Incident reporting	16
6.5.3	Incident Investigation	16
6.6 Per	rsonal Protective Equipment (PPE)	16
6.6.1	PECL respiratory protective equipment (RPE) requirements (for welding activities):	17
6.7 Gro	ound Disturbance	17
6.8 Ene	ergy Isolation	17
6.8.1	Blanking & Blinding	17
6.8.2	Lockout/Tagout (LOTO)	18
6.9 Fire	e prevention and ignition management	18
6.9.1	General	18
6.9.2	Hot Work (Open Flame)	18
6.9.3 l	gnition Sources	18
6.9.3	Control of Ignition Sources from Vehicles	18
6.9.4	Static Electricity	19
6.9.5	Bonding /grounding/Fluid Transfer	19
6.10 Pre	eventative maintenance program and pre-use inspection for equipment, tools and ma	chinery.19
6.10.1	General	19
6.10.2	Rental equipment provided by PECL	19
6.11 Wo	orking Alone	19
6.12 Lift	ing and Hoisting	19
6.12.1	General	20
6.12.2	Certification, inspection and maintenance	20
6.12.3	Critical lifting operations	20
6.12.4	Working near High Voltage	20
6.12.5	Use of Man baskets and Mobile Elevated Work Platform (MEWP)	20
6.12.6	Restricted Lift Practices	21
6.12.7	Open Hook Restriction	21

6.13 Adverse Weather Conditions			
6.13.1	Lightning Safety	21	
6.13.2	Thermal Stress	21	
6.14 Wor System (	kplace Hazardous Materials Information System (WHMIS-2015) / Global Harmonization GHS)	21	
6.15 Exp	osure Control Plan (ECP)	21	
6.16 Driv	ing safety program	22	
6.16.1	Assessment of Site Hazardous Areas:	22	
6.16.2	Safe Loading and Unloading of equipment and machinery	22	
6.16.3	Signaling and directing vehicles	22	
6.16.4	Off Road Vehicle Safety (All Terrain Vehicles, Utility Vehicles and Snowmobiles)	23	
6.17 Res	ource Road Rules	23	
6.18 Gen	eral Recovery Requirements	23	
6.19 Dist	racted Driving	23	
6.20 Trai	nsportation	24	
6.21 Occ	upational health management requirements	24	
6.21.1	Fit for Duty	24	
6.21.2	Drug & Alcohol Policy	24	
6.21.3	Communicable Disease/Pandemic Exposure Control	24	
6.22 Env	ironmental Protection & Management	24	
6.22.1	Water pump offs	24	
6.22.2	Waste	25	
6.22.3	Hazardous waste	25	
6.22.4	The License to Transport	25	
6.22.5	Biodiversity	25	
6.22.6	Archeological	25	
7. Maste	r Glossary	25	

# 2. Summary Statement

"This Health, Safety and Environment (HSE) Requirements for Contractors" document, provides details of PETRONAS Energy Canada Limited (PECL or Company) Health, Safety and Environmental requirements for contractors providing services to PECL.

# 3. Objectives

The intent of the HSE Requirements document is to provide an outline and general health and safety expectations for contractors performing work on behalf of PECL. The HSE Requirements focuses on the minimum required health and safety policies, procedures, and controls to safely undertake work on behalf of PECL and meet minimum regulatory requirements.

**Note:** Contractors are accountable to ensure they have all required processes, policies and controls in place to safely undertake their scopes of work. <u>The absence of direction in this document does not absolve the contractor of their accountabilities for safe work or regulatory compliance.</u>

# 4. Scope

The scope of this document applies to any contractor who conducts work on behalf of PECL. For the purposes of this document the term "contractor" will include:

- Sub-contractors
- Vendors
- Any 3<sup>rd</sup> party non-PECL employees working on behalf of PECL

Additional requirements not outlined within this document may be identified specific to contracted scope of work.

# 5. PART I - GENERAL HSE REQUIREMENTS

# 5.1 Compliance with Laws/Regulations/PECL Requirements

- The Contractor shall comply with all PECL Health, Safety and Environment (HSE) policies and any laws and regulations which are applicable to the PECL worksite where the work is being performed.
- In the event of any conflict between any PECL HSE policies, laws, regulations and industry standards, the most stringent standard shall apply.
- Any noncompliance with PECL HSE policies, laws and regulations shall be reported to the PECL Contract Owner/Contract Administrator (COCA). In the event of serious or repeated noncompliance, an individual or contractor may be removed from the scope of work and their engagement with PECL may be subject to termination.
- The Contractor must immediately report to the PECL COCA, all written or verbal communications from government or regulatory bodies relating to the PECL scope of work.

# 5.2 **PETRONAS Cultural beliefs**

Everyone working at PECL worksites is expected to understand and support the PETRONAS Cultural Beliefs (PCBs).



The latest, detailed version of the PETRONAS Cultural Beliefs can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 5.3 Health, Safety and Environment Policy

PECL requires all contractors to adhere to PECL's HSE Policy at all times. The latest version of the HSE Policy can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 5.4 Upstream Process Safety Golden Rules

Contractors are expected to operationalize the PECL Process Safety Golden Rules (PSGR) where applicable to their scope of work.



The latest version with additional details/explanation of the PECL Upstream PSGR can be found on <u>PECL's</u> <u>external website</u> ("Supplier & Contractor Management" section).

# 5.5 ZeTo Rules

Contractors are expected to comply with the PECL Zero Tolerance Rules ("ZeTo Rules").

	<b>ZeTo</b> Rules		<b>ZeTo</b> Rules
PTW	<ol> <li>Work with a valid work permit (PTW) required by the job.</li> </ol>	(þ.	<ol> <li>Use correct personal protective equipment (PPE) when handling hazardous chemicals.</li> </ol>
1111	<ol> <li>Verify energy isolation before starting work.</li> </ol>		<ol> <li>Obtain authorization before excavation or entering a trench.</li> </ol>
Å™=	<ol> <li>Obtain authorization before overriding or disabling safety critical equipment.</li> </ol>		8. Do not position yourself under a suspended load.
<b>۲</b>	<ol> <li>Obtain authorization before entering confined space.</li> </ol>		<ol> <li>Do not smoke outside designated areas or bring potential ignition sources into process areas without authorization.</li> </ol>
*	5. Protect yourself against a fall when working at height.		<ol> <li>Do not use your mobile phone/ walkie-talkie while driving, follow the speed limit and use your seat belt.</li> </ol>

The latest version of the PECL "ZeTo Rules" can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 5.6 Workplace Harassment, Bullying & Violence Prevention Policy

All contractors are expected to adhere to PECL's Workplace Harassment, Bullying & Violence Prevention Policy. The latest/full version of the policy can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 5.7 Whistleblower Policy

This Whistleblower Policy sets forth PECL's requirements for its commitment to ethical business practices and a work environment that fosters mutual respect, open communication and integrity, consistent with the expectations and plans of PECL, and in consideration of PETRONAS Global requirements.

The latest/full version of the policy can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 5.8 Contractor Prequalification & ISNetworld (ISN)

The objective of pre-qualification is to screen potential contractors' suitability to undertake the scope of work. This ensures they have an effective safety program and capability to manage the hazards and risks related to a scope of work.

# 5.8.1 ISNetworld (ISN)

PECL uses ISNetworld (ISN) to evaluate, prequalify, and monitor all contractors working at PECL worksites. Contractors are required to:

• Manage their ISN account to ensure they meet PECL's prequalification requirements.

Contractors must remain approved in ISN to undertake work for PECL or require a Contractor HSE Mitigation Plan.

#### 5.8.2 Contractor HSE Mitigation Plan

If identified that the Contractor is not approved in ISN (**Acceptable Grade**), a Contractor HSE Mitigation Plan must be approved:

- Prior to start of work for new Contractors or
- Within an established timeframe to allow continuation of the existing work scope.

# 5.9 Contractor's HSE Plan

Mode 3 and 4 rated contractors must have an HSE Plan. This requirement will be specified by PECL during the pre-qualification process.

The Contractor's HSE Plan, at the minimum, shall demonstrate the following:

- Scope of work hazards and controls required to mitigate risk and meet any applicable regulatory requirements applicable to the scope of work
- Management of sub-contracted scopes of work (if applicable)
- Emergency response procedures for potential scenarios related to the scope of work
- Training & competencies for each task within the scope of work (these need to meet any applicable legislated requirements)

- Frequency of communications (safety meetings, management tours, leaderships visits)
- Frequency of inspections (equipment, worksite conditions)

HSE plans must address all applicable regulatory requirements and industry standards related to the scope of work, these include but are not limited to:

Activity/Scope of Work	Requirements	
Well Servicing & Completions	Industry Recommended Practices	
Drilling	CAOEC Reccomended Practices	
Operations	BCOGC Requirements	
Pipelines & Construction	BCOGC Requirements	
Transportation & Logistics	National Safety Code and any applicable regulatory requirements	
Excavation and Ground Disturbance	WorkSafe B.C Requirements	
Aviation	Transport Canada Requirements	

Contractors shall submit their HSE Plan to PECL for review by the date requested by the COCA.

# **5.10 Sub-Contractor Management**

#### 5.10.1 Sub-Contractor Approval by PECL

The use of **Sub-Contractors** will be subject to approval by PECL. Contractors must clearly identify if they require the use of Sub-Contractors during the pre-qualification process and get the prior written consent of PECL to use specific subcontractors. Contractors must also identify any intended Sub-Contractors in their SubTracker portal found within their ISNetworld (ISN) profile.

The Contractor must provide at least 48 hours prior written notice to PECL of its proposed use of a Subcontractor. The Contractor shall ensure that Sub-contractors do not further subcontract any portion of the Work without PECL's prior written consent.

# 5.11 Contractor's Kick off meetings, KPI reporting and Performance reviews

#### 5.11.1 Kick Off meeting

Upon request by PECL, the Contractor shall participate in a PECL led Kick off meeting (to assist with onboarding of new Contractors, prior to start of new projects or work scopes etc.).

# 5.11.2 KPI Reporting

PECL requires contractors to submit their (and their subcontractor's) KPI's related to the work activities performed on PECL sites. This will be done through the ISN Monthly Site Tracker. The KPI's will be a combination of leading and lagging indicators.

#### 5.11.3 HSE Performance Review

Upon request by PECL, the Contractor shall participate in PECL's led Contractor HSE performance reviews.

# 5.12 Work stoppage and removal of contractor personnel

#### 5.12.1 General

All visitors, contractors and sub-contractors have the right to refuse and are responsible to report to the onsite PECL representative if there is an on-going activity/task if there is an unsafe act or condition identified that can endanger oneself and/or others or cause adverse impact to property or the environment.

The work stoppage process shall involve the following steps: stop, notify, investigate, correct, resume and follow up approach for the resolution of a perceived unsafe work action or condition. Work stoppages executed by contractor personnel on PECL locations/sites shall be reported to the PECL PIC or designated representative immediately.

The PECL representative or their designated representatives may prohibit commencement of work or to stop any work in progress they deem to be unsafe or in non-compliance with PECL or regulatory requirements.

# **5.13 Worker competency requirements**

Contractor workers and Supervisors shall be trained, competent, qualified and certified to perform the task they have been assigned. A contractor's HSE program shall include details on how worker competence will be assessed including a process to record any competency assessments and training opportunities identified and closed out, with established refresher training intervals.

Contractors are expected to document certification, training, received by their workers and subcontracted workers. Training competency records shall be provided when requested by PECL.

Contractor's Supervisor training and competencies shall align with recognized industry practices for the scope of work.

# **5.14 Worker orientation and training requirements**

The following orientations are the minimum requirement. These orientations will be completed prior to workers commencing work.

#### 5.14.1 Common Safety Orientation (CSO)

All Contractor workers must complete the Common Safety Orientation through Energy Safety Canada prior to reporting to a PECL site to conduct work activities.

#### 5.14.2 5.13.2 PECL Contractor Orientation

All Contractor workers must complete the PECL corporate orientation before arriving at a PECL worksite

#### 5.14.3 PECL Site Specific Orientation

All Contractor workers must receive a "PECL Site Specific Orientation" in accordance with the PECL Worksite Management Framework before commencing work.

#### 5.14.4 Minimum Training Requirements

At a minimum, workers must have the following valid tickets on their person, while working on PECL worksite:

WHMIS

- H2S Alive
- First Aid meeting regulatory requirements for the jurisdiction

Contractor workers and sub-contractors must be trained; qualified and certified through a recognized authority to perform the task they have been assigned.

# 5.15 Young/New/Inexperienced workers program

All Contractors are expected to inform the PIC/PECL representative of all new, young, inexperienced and new to PECL workers on PECL locations, including % of such workers on their respective crews.

A contractor's HSE program shall include a New, Young and Inexperienced workers management program that includes:

- Definition of New/Young/Inexperienced worker;
- Defining the length of time a person is considered a New/Young/Inexperienced worker and the process of graduating that worker from the program;
- Identify tasks new workers are allowed to perform
- Expectation on mentoring and effective supervision at the worksite;
- Requirement for workers to be visually identified

# **5.16 Hazard and Risk Management**

#### 5.16.1 Hazard Identification and Control

Contractor shall have a hazard identification process to identify, control, mitigate or eliminate potential or actual hazards. Hazard identification and control will follow the hierarchy of controls to eliminate and/or control hazards. The Contractor's process must include:

- A means to communicate hazards, controls and any changes to workers, subcontractors, PECL, and any other affected worksite parties
- A means to manage hazards related to changes in operations or work

# **5.17 Emergency Response Preparedness**

The contractor must ensure the following is in place specific to their scopes of work, including (but not limited to):

- Emergency response plans (ERP)
- First aid
- Equipment to effectively manage identified emergencies

The contractor must ensure the ERP's adequacy and the competency of workers to undertake emergency response. Any drills or evaluations required industry standards or regulations for specific scopes of work (BOP Drills etc.) must be included in the Contractors process.

# 5.18 Security

Security is everyone's responsibility:

• If you notice or become aware of a security concern, safely "own it." Observe the situation carefully, make some notes, and report it.

#### 5.18.1 Reporting Security Incidents:

Ensure all security incidents are reported to your supervisor and through the PECL 24HR Emergency Line at 1-844-299-2566 (select option #2).

#### 5.18.2 Definition of Security Incident:

A security incident is any event or action that compromises or threatens the safety, security, or integrity of an organization's personnel, property, information, or operations. These incidents can result from intentional acts, accidents, or natural events and often require immediate response to mitigate risks and prevent further damage.

# 6. PART II - SPECIFIC HSE REQUIREMENTS

#### 6.1 Roles and Responsibilities for "Worksite Management"

"Work Site Management" framework outlines the requirements to effectively manage and control all work scopes on PECL worksites.

#### 6.1.1 PECL Person in Charge (PIC) and PECL Permit Issuer (PI)

The PIC and the PI may be the same person, if this is the case, that person must comply with the responsibilities of both roles.

**PECL Person in Charge (PIC) and PECL Permit Issuer (PI)** is always a PECL employee or consultant, acting on behalf of PECL in a supervisory capacity, assigned by PECL Management.

• PECL Person in Charge (PIC)

The PECL Person in Charge (PIC) has the overall responsibility for coordinating HSE during work activities on a PECL worksite unless, responsibility has been formally transferred to another party.

• PECL Permit Issuer (PI)

PECL Permit Issuer (PI) issues a permit to The Contractor's Permit Receiver.

The Person in Charge or Permit Issuer will review all JHA's or (similar documents) based scope of work, assess the identified risk, effectiveness of mitigations, and provide feedback on any deficiencies found within the JHA prior to any work commencing.

#### 6.1.2 Contractor's Permit Receiver

The Contractor Permit Receiver (PR) is directly responsible for Health, Safety, and Environment (HSE) during work activities on a PECL site for their workers and sub-contractors. The Permit Receiver may also serve as the worker for a single-worker activity.

In addition to worker responsibilities, the Contractor's Permit Receiver must:

- Coordinate with the Permit Issuer on the requirements of the Permit to Work (PTW).
- Communicate requirements with workers under their supervision who are involved in the permitted task, outlining the work scope, Job Hazard Analysis (JHA), applicable Standard Operating Procedures (SOPs), site-specific hazards, Emergency Response Plan (ERP), PTW, and all other relevant documents.
- Identify and discuss work activities with the PECL Permit Issuer based on the identified, documented, and approved job scope before creating the JHA.
- Lead and/or develop a JHA for the task.

- Ensure that all SOPs related to the work scope are available and that workers are trained in their requirements before work starts.
- Confirm that all required safety equipment, including Personal Protective Equipment (PPE), is in good working condition and that workers are trained in its use, care, and inspection according to the manufacturer's specifications before starting the job.
- Review the expectations of the JHA and PTW with all workers and sub-contractors involved in the work scope.
- Specify additional PPE as required in the PTW or Exposure Control Plan (ECP).
- Follow all permitting requirements according to the Permit to Work Framework.
- Stop any ongoing activity/task if there is an unsafe act or condition that could endanger anyone or cause adverse impacts on property or the environment.
- If required by the risk assessment, identify a competent and qualified worker to assume the role of Permit Receiver and oversee the work scope before leaving the work site. Notify the Permit Issuer prior to leaving while work is being performed by those under their supervision.
- Coordinate the specific activities to be performed by those under their supervision, according to the PTW.
- Clear the worksite and return it to a safe condition once the work is completed.

#### 6.1.3 All Contractor Workers

All contractor workers, including the Contractor Permit Receiver, must:

- Provide proof of valid safety training tickets identified as required for the work.
- Stop any ongoing activity/task if there is an unsafe act or condition that could endanger anyone or cause adverse impacts on property or the environment.
- Comply with all HSE requirements, conditions of the permit and with applicable regulations.
- Participate in daily pre-job meetings and other related meetings.
- Report all incidents, near misses, unsafe acts (UA), and unsafe conditions (UC) to their supervisor.
- Cooperate with and support or participate in incident investigations as required.
- Understand and follow PECL's and the Contractor's Emergency Response Plan (ERP).
- Wear appropriate Personal Protective Equipment (PPE) for the task at hand.
- Complete equipment inspections, including pre-use inspections where required, as per manufacturer specifications

#### 6.1.4 Visitors

Visitors must always be escorted while on a PECL operations site.

Visitors must:

- Report to the site security office/gate before entry.
- Participate and comply with environmental and safety directives, i.e. a Review of the Visitor's Orientation Checklist.
- Comply with the PECL Contractor HSE Management requirements where applicable.

# 6.2 Camp Rules

PECL has established Camp Rules to ensure a safe, pleasant and comfortable environment for everyone staying in, visiting, and working at a PECL Camp (includes private camps and open camps) where Contractor workers are staying.

Acceptance of these Camp Rules is a condition of access and use of a PECL Camp.

The latest version of the Camp Rules can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 6.3 General worksite safety rules

- No personnel shall enter a PECL Worksite without signing in and acknowledging the Site-Specific Orientation
- All personnel shall be clean-shaven when working on PECL locations
- Site specific postings and rules must be followed
- All PPE must be worn where required by a procedure, rule or site posting
- Hoodies are not permitted to be worn at any time on a PECL worksites;
- Hearing protection is required in any building or area where noise levels are at or above 85 decibels
- PECL building entry practice must be followed when entering buildings.
- Smoking and vaping (this also includes the carrying of lighters, matches and vape pens) is prohibited in all areas except in the designated areas
- All work areas must be kept clean and tidy with work following best housekeeping practices
- All non-intrinsically safe equipment (i.e. cameras, cell phones, tablets, PDA's...etc.) is not permitted in classified areas unless authorized by PIC/PI/PECL Supervisor (through the Worksite Management Framework and Permit to Work Framework processes);
- The possession or use of alcohol, cannabis or illicit drugs on any PECL property is prohibited. No person, while under the influence of drugs or alcohol, is permitted on site.
- Firearms and ammunition will not be permitted on any PECL site without the approval of the PECL PIC;
- All vehicles travelling within a PECL site shall not exceed 15 km/hour or the posted limit, whichever is less;
- All traffic signs, road rules must be adhered to;
- All spills or releases must immediately be reported to the PECL Person in Charge (PIC) or delegate
- Running is considered unsafe, except in cases of emergency;
- Horseplay, or "fooling," or any other act that may distract others is prohibited;
- Conduct such as harassment, gambling, loitering, sleeping, stealing etc. on the job site will not be tolerated.

# 6.4 Permit to Work (PTW)

PECL permit requirements are outlined in The Permit to Work (PTW) Framework. No work is to begin or be undertaken until an external permit has been issued.

The latest version of the PECL Permit to Work (PTW) Framework can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 6.5 Incident and Unsafe Act (UA)/Unsafe Condition (UC) Reporting

# 6.5.1 Definitions

Incident	An incident is an event or chain of events that has caused harm to people, damage to property, company reputation or the environment.	
Near Miss ("NM")	A Near Miss is an Incident that could have caused harm to people, damage to property, company reputation or the environment, but did not.	
Unsafe Act ("UA")An unsatisfactory behaviour that has the potential to cause, caused, or contributed to an Incident.		
Unsafe Condition ("UC")	An unsatisfactory physical condition in the workplace that has the potential to cause, has caused or contributed to an Incident.	

The following are the categories of all events/incidents that shall be reported to PECL:

- All incidents, including personnel and process safety events (i.e. injury, LOPC/release, property damage);
- All near misses;
- Unsafe Acts;
- Unsafe Conditions;
- Refusal to work and any discipline;
- Written warnings or terminations resulting from a safety infraction;
- All requests for drug and alcohol testing; and
- ZeTo Rule violations.

# 6.5.2 Incident reporting

Incident Reporting Requirements (to PECL):

Reporting Type	Time Period
Incident notification	Immediately
Initial Report to PECL (Preliminary)	24 Hours
Final Report to PECL	7 Working Days

\* Timeframe extensions maybe be granted by PECL.

# 6.5.3 Incident Investigation

All incidents must be investigated by the Contractor to determine the root-causes and develop appropriate corrective actions to prevent reoccurrence. Contractors <u>MUST</u> provide PECL with a copy of all incident investigations including findings and corrective actions within the timeframes laid out in the above table unless an extension has been previously agreed by PECL. PECL reserves the rights to do its own investigation for all events that occurred on PECL sites. Contractors shall also be responsible for assisting PECL in such investigations.

# 6.6 Personal Protective Equipment (PPE)

A Contractor's HSE program shall include requirements regarding the selection, use, inspection, care, and maintenance of PPE. Contractors shall provide appropriate training regarding the selection, use, inspection, care, and maintenance of personal protective equipment. **As a minimum** all personnel on PECL sites must be equipped with:

- FR rated coveralls or Bibs and Shirts meeting the requirements of CGSB155.20 or NFPA2112 with CSAZ96-15 Class 1 FR Striping;
- CSA Approved Hard Hat;
- CSA Approved Safety Glasses;
- Gloves Applicable to Task
- CSA Approved Safety Boots with ankle protection;
- CSA Approved Hearing Protection;

Contractors are required to ensure employees are capable and fit to utilize any required PPE this includes being **fit tested for respiratory protection**.

6.6.1 PECL respiratory protective equipment (RPE) requirements (for welding activities):

PECL requires specific respiratory protective equipment (RPE) on any worksite where welding is being conducted (see Table 1 below).

#### Table 1 – Minimum Respiratory protective Requirements (RPE)

	Outside	Inside Buildings or within Enclosures	Confined Space
Welding	RPE - Half mask with	RPE - Half mask with	RPE - Powered air purifying
	P100	P100	(PAPR) with P100

# 6.7 Ground Disturbance

Contractors must follow PECL ground disturbance requirements and before conducting any ground disturbance activities.

The latest version of the Ground Disturbance Standard can be reviewed on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 6.8 Energy Isolation

The contractor's health and safety program must include procedures that address energy isolation for their scopes of work.

At a minimum, the program must include:

- Identification of all hazardous energy sources;
- Isolation practices that must be used
- Lockout and Tagout procedures (LOTO) for each potential energy source;
- Procedures for verifying isolation;
- Training and Competency requirement for workers and supervisors.

Contractors must comply with the following PECL energy isolation requirements when working on PECL owned and/or operated process systems, equipment, pipelines, and piping that contain or have the potential to contain hazardous energy. Responsibilities for isolation and determination on which energy isolation procedures are to be followed will be determined and identified **during the permitting process**.

#### 6.8.1 Blanking & Blinding

PECL requires that energy is to be isolated whenever there is work on systems, equipment or devices where an energy source might be released inadvertently, started up or suddenly moved while work is in progress.

All blanking and blinding is to be done as outlined in the **Blanking and Blinding Framework** when completing blanking and blinding work.

# 6.8.2 Lockout/Tagout (LOTO)

PECL requires that equipment Lockout and Tagout be completed for all work being performed on PECL equipment in which potential energy (i.e. kinetic, pneumatic, electrical, hydraulic, mechanical, chemical, thermal) could be unintentionally released resulting in harm to people, property, or the environment. All workers must adhere to the **PECL Lockout Tagout Framework** for any LOTO work being conducted.

The latest version of the Lockout Tagout Framework can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 6.9 Fire prevention and ignition management

#### 6.9.1 General

Fire prevention and ignition management, is the responsibility of those involved in work planning and work activities when planning any permitting of hot work and other similar activities.

#### 6.9.2 Hot Work (Open Flame)

Open flame hot work includes any activity that produces sufficient heat and or sparks. These activities can include open torch, heating, cutting, welding, brazing, grinding, blasting, mobile and or portable internal combustion engines and or similar operations.

**A Hot Work PTW** for these work activities must be issued for the execution of hot work to control ignition sources.

#### 6.9.3 Ignition Sources

Where work is to be conducted that involves potential ignition sources, proper measures must be identified and documented as part of the permitting process to manage or eliminate risk that can include but is not limited to:

- Atmospheric monitoring
- Availability and use of firefighting equipment (i.e. fire extinguisher, fire blanket...etc.);
- Fire Watch/Spark Watch;

# 6.9.3 Control of Ignition Sources from Vehicles

Most vehicles contain a wide range of ignition sources. These include electrical circuits; the inlet and exhaust of any internal combustion engine; electrostatic build up; overheating brakes, and other moving parts. Regardless of fuel types, all vehicles including but not limited to cars, trucks, pickups, tankers, man lifts, forklift and mobile cranes are sources of ignition and their use in hazardous areas shall be controlled using a hot work PTW.

The following requirements for the control of ignition sources from vehicles must be implemented:

• Internal combustion engines must be shut down within the zone defined as a Class 1 Division 2 or higher classification, unless their operation is integral to the work process, and covered by a PTW as per the Permit to Work Framework and the work activity is managed as per the Worksite Management Framework;

- Diesel powered Vehicles must have a Positive Air Shut Off (PASO) or other effective method for engine shut down to operate within the zone as a Class 1 Division 2 or higher classification
- All vehicles and equipment are to have a fire extinguisher

# Vehicles entering or being operated in an identified hazardous area must be controlled via a hot work permit as per the Permit to Work Framework.

#### 6.9.4 Static Electricity

Contractors are to ensure the hazard of static electricity is identified and controlled as it related to their scopes of work.

#### 6.9.5 Bonding /grounding/Fluid Transfer

Contractors are to ensure posted site grounding and bonding procedures are followed when pumping or transferring fluids or other products which could result in static electricity. Where there is no posted or established procedure the grounding and bonding requirements in <u>IRP 8</u> must be followed.

# 6.10 Preventative maintenance program and pre-use inspection for equipment, tools and machinery

A contractor's HSE program shall address the selection, certification, inspection and maintenance for their equipment, tools and machinery.

#### 6.10.1 General

Contractors are to ensure that any tools or equipment used for work on a PECL worksite is:

- Fit for purpose and designed to be used for the job being undertaken
- Certified and maintained as required by any applicable regulations, industry standards (CAOEC, API etc) and original equipment manufacturer (OEM) requirements and that maintenance records and certifications are available for review
- Not altered or modified to bypass any safeguards
- The contractor shall ensure that all equipment and tools meet the requirements of hazardous area classifications.

#### 6.10.2 Rental equipment provided by PECL

- Any Equipment provided by PECL to a Contractor for the benefit of the Contractor or its subcontractors is provided on an "as is/where is" basis with no warranty of performance and at the sole risk and liability of Contractor to ensure that such Equipment is fit for the use intended and in proper working order;
- Contractor will ensure any equipment provided by PECL is inspected and will notify PECL of all defects prior to use. In the event Contractor notifies PECL of any defects, PECL shall use commercially reasonable efforts to fix all defects, other than latent defects, if any, in a timely manner.

# 6.11 Working Alone

Contractors are required to develop and implement a working alone program meeting the requirements of B.C. Occupational health and safety regulations Part 4.

# 6.12 Lifting and Hoisting

A contractor's HSE program shall address the certification, inspection, maintenance, storage and transport of contractor provided rigging, lifting and hoisting equipment and other related equipment. Contractors

that perform lifting and hoisting activities on PECL worksites shall at minimum meet the following requirements:

#### 6.12.1 General

- Ensure all WorkSafe BC regulations, policies and guidelines in regard to lifting/rigging are followed on PECL worksites;
- Ensure OEM standards followed when operating any crane or lifting equipment including parameters around inclement weather *(wind and extreme cold)*

#### 6.12.2 Certification, inspection and maintenance

- Ensure a mobile crane or boom truck has current documentation and an inspection decal/sticker affixed to it showing that the inspection is current;
- Ensure that combination units (i.e. where the end user supplies the carrier and a crane is mounted to it) there is a stability test with the crane or boom truck available for viewing;
- Ensure that integral units (manufacturer designs and supplies the entire unit) are not required to supply a stability test. However, a COC or Certificate of Compliance shall be available for viewing;
- Ensure all slings, shackles, eye bolts, spreader bars and other various below the hook lifting devices have a WLL (working load limit) that is legible.

#### 6.12.3 Critical lifting operations

- Critical lifting operations (using cranes or other lifting equipment) must be executed under a Critical Lift Plan;
- Prior to any critical lifting operation commencing, a review of the approved Critical Lift Plan must be conducted. An ongoing review of the Critical Lift Plan must be carried out to ensure that no critical factors have changed.

Critical lifts can include one or more of the following and is not limited to:

- Lifting of a load over or between energized high voltage electrical conductors, process equipment or facilities;
- A lift by a mobile crane or boom truck that exceeds 90% of its rated capacity while it is lifting the load at a load radius of more than 50% of its maximum permitted load radius, taking into account its position and configuration during the lift;
- A lift in which the center of gravity of the load changes during the lift;
- A lift in which the length of one or more sling legs changes during a lift;
- Lifting operation at location less than the specified safe distance from live overhead power line as defined in regulations;
- A tandem lift involving the simultaneous use of two or more cranes, hoists or other pieces of powered lifting equipment;
- A lift of a person in a work platform suspended from or attached to a crane or hoist; and
- A lift of a submerged load.

# 6.12.4 Working near High Voltage

A crane or hoist must be operated in a manner that prevents any part of the crane or hoist, load line, rigging or load from coming within the minimum distance of energized high voltage electrical conductors or equipment (Crane Operators must follow WorkSafe BC's limits of approach).

#### 6.12.5 Use of Man baskets and Mobile Elevated Work Platform (MEWP)

• Contractors must utilize fall protection when in the basket.

#### 6.12.6 Restricted Lift Practices

- A Worker must not ride on a load, sling, hook or any other rigging equipment
- No use of synthetic lifting slings on abrasive or sharp loads
- Using devices not designed or intended for vertical lifting as per the OEM;
- Lifting devices must be either commercially manufactured or certified by a professional engineer;
- At no time is lifting equipment and/or applicable appliances to be used as a permanent support or suspension device for equipment or structure.

#### 6.12.7 Open Hook Restriction

- A hook must have a safety latch or other means that will retain slings, chains, or other similar parts, under slack conditions; and
- A hook used in an application where manipulation of a safety latch or other retaining means may cause a hazard to a worker or where there is no hazard to a worker if the load becomes dislodged is exempt from the requirement noted above.

# **6.13 Adverse Weather Conditions**

#### 6.13.1 Lightning Safety

The decision to suspend work or to re-start work will be through communication with PECL PIC/Representative.

When thunder and lightning activity is near the facility and in the absence of lightning detection equipment Contractor shall follow the 30/30 Rule recommended by the National Lightning Safety Institute.

- The first "30" represents 30 seconds;
- If the time between when you see the flash and hear the thunder is 30 seconds or less, the lightning is close enough to affect operations;
- Work can restart 30 minutes after hearing the last sound of thunder or seeing the last lightning.

All lifting activities, work with flare stacks and rig work is to cease in the above conditions. All outside vessels including those extruding through the roofs of buildings are also required to be evacuated.

#### 6.13.2 Thermal Stress

Contractors are to have a process which meets any applicable regulatory standards to manage thermal stress hazards specific to the scope of work. This includes both hot and cold temperature hazards.

# 6.14 Workplace Hazardous Materials Information System (WHMIS-2015) / Global Harmonization System (GHS)

Contractor shall ensure they have a Workplace Hazardous Materials Information System (WHMIS) 2015 program meeting the applicable regulations.

# 6.15 Exposure Control Plan (ECP)

Health and safety hazardous exposures must be identified assessed and controlled to reduce the risk of injury, illness or incidents, and meet applicable occupational health and safety laws and regulations.

An exposure control plan (ECP) is required when the following conditions are present:

- The results of exposure monitoring indicate that a worker is or may be exposed to an air contaminant at levels greater than 50% of its exposure limit;
- Measurement is not possible at 50% of the applicable exposure limit;
- An ECP is required by another section of the Regulation.

ECP's must be available on site and followed by all workers. Contractors must ensure workers are trained and competent in the use and application of their own ECP for the specific occupational hazard their workers are exposed to. Contractor's ECP must meet or exceed the PECL Exposure Control Plans.

# 6.16 Driving safety program

Contractor's HSE program must include a driving safety program that addresses the following responsibilities and expectations (where applicable to their scopes of work):

- Driver Responsibilities;
- Carrying Passengers;
- Driving and Working Hour Limits ;
- Vehicle maintenance and pre-trip inspections ;
- Distracted Driving;
- Journey Management & Working Alone Program;
- Winter Driving;
- Travel on Resource Roads;
- Signaling and directing vehicles;
- Parking of a Vehicle;
- Use of Off Road Vehicles (All Terrain Vehicles, Utility Vehicles and Snowmobiles);
- Recovery and Towing;
- Transportation of personnel(e.g. use of crew busses);
- Transporting of Dangerous Goods;
- Cargo securement;
- Vehicle operations in fire and explosion hazard areas;
- Safe Loading and Unloading (Liquids);
- Refueling Safety Requirements.

#### 6.16.1 Assessment of Site Hazardous Areas:

The use of Vehicles in hazardous areas must comply with the site hazardous area classification zones and the requirements of PECL Fire Prevention and Ignition Management Technical Standard. In addition to the hazardous area classification zones, before entering a site, Vehicle drivers must:

- Ensure that Vehicle entry requirements are defined on the Permit to Work (PTW) as per the Work Site Management Framework;
- Know the safe limits of approach and follow the directions of a spotter when operating a Vehicle near overhead power lines or near other Workers and, Vehicles or mobile equipment; and
- Ensure that if operating in an enclosed building or boarded area, the building or area must be equipped to vent the exhaust outside.

#### 6.16.2 Safe Loading and Unloading of equipment and machinery

Contractors must have established loading and unloading procedures to for all equipment, materials and machinery. This includes safe operation of equipment while loading and load securement procedures meeting <u>NSC Standard 10</u>

#### 6.16.3 Signaling and directing vehicles

Requirements for Vehicle signalers and swampers are as follows:

• Be formally trained and competent when guiding vehicles;

• Use standard hand signals to communicate with the driver as per IRP (Industry Recommended Practice) 12 Workers' Guide to Hand Signals for directing vehicles.

#### 6.16.4 Off Road Vehicle Safety (All Terrain Vehicles, Utility Vehicles and Snowmobiles)

Off Road Vehicle Safety (All Terrain Vehicles, Utility Vehicles and Snowmobiles) requirements for the use of Off Road Vehicles are as follow:

- Wear appropriate PPE including approved headgear as per the Personal Protective Equipment Technical Standard.
- Conduct a pre-trip inspection before use
- Ensure that the Off Road Vehicles are properly maintained, in safe condition and include a first aid kit;
- Must carry equipment for communication
- Ensure that passengers are not carried in or on off road vehicles unless the vehicle is designed for that purpose (Side by side);
- Seat belts must be used when fitted by manufacturer (e.g. on "side by side" vehicles).

# 6.17 Resource Road Rules

Contractors are responsible to ensure that their drivers review and understand the requirements before they drive on any Resource Roads. Drivers are responsible to:

• Read and understand the "Resource Road Safety Requirements and Radio Calling Protocol".

The latest version of the PECL's "Resource Road Safety Requirements and Radio Calling Protocol" can be found on <u>PECL's external website</u> ("Supplier & Contractor Management" section).

# 6.18 General Recovery Requirements

Before towing or recovering a vehicle on a PECL owned or maintained road the PECL representative or PIC must be contracted, a hazard assessment conducted and traffic control put in place.

Requirements for recovering a vehicle must follow the recommendations in the Energy Safety Canada <u>Vehicle Recovery Guideline</u>

# 6.19 Distracted Driving

Drivers are prohibited from using a cell phone, other mobile communication devices, hands free devices (e.g. blue-tooth), pagers, laptops or other electronic devices except, when the vehicle is pulled over and is properly parked in a rest area, designated parking area, or other safe location. This includes placing or receiving calls, text messages or emails; The only exemption for the hands-free system requirement, would be in the event of an emergency.

This does not prohibit the use of Two- Way Radios where required for resource road use or, having the electronic device turned on and operational while operating a vehicle. Voice activated navigation systems are permitted to be used while traveling but, they must be programmed prior to operating the vehicle.

Note: These limited exceptions shall not supersede local laws regarding use of cell phones and other electronic devices.

# 6.20 Transportation

The Contractor is obliged to follow applicable laws and regulations as well as PECL and established industry guidelines for the safe transport of personnel and equipment.

# **6.21** Occupational health management requirements

### 6.21.1 Fit for Duty

Contractors are to establish, implement, and maintain a Fit for Duty program which includes fatigue management. PECL contractors are required to provide workers who are fit-for-work and are in a condition to carry out their day-to-day job duties safely. Workers who are unfit for work due to injury or illness are required to be managed under the contractor company's occupational disability management program. Information on injury management for each case is to be reported using the monthly site tracker on ISN.

#### 6.21.2 Drug & Alcohol Policy

The Vendor's Drug & Alcohol Policy is required to meet the most recent version of <u>"Canadian Model for</u> <u>Providing a Safe Workplace"</u>.

#### 6.21.3 Communicable Disease/Pandemic Exposure Control

In the event that the risk of a communicable disease and/or pandemic escalates, the Company will communicate to Contractors the applicable requirements outlined by the local authorities (Public Health), following our Communicable Disease Control Plan.

# 6.22 Environmental Protection & Management

Contractor's HSE program must include Environmental Protection & Management program that details the practices, procedures and control measures for effective management of environmental aspects (e.g.: use of resources, waste management, emissions and discharges management). Contractors shall identify all controls required to manage the environmental hazards related to the scope of work, including any environmental controls identified by PECL. All spills or releases must be reported to PECL immediately.

#### 6.22.1 Water pump offs

Contractor shall ensure that the following requirements are met when dealing with surface water that needs to be released" off" site:

- ALL Water Being Released Off-site Must Be Tested Prior to Release.
- Please contact PECL PIC and request the "water test" prior to release (test results will be documented on PECL's "Surface Water Sampling Form" and retained with onsite/project documentation for five years);
- After receiving confirmation from PECL representative that water is "safe" to be released, proceed with water pump off, meeting following requirements for Discharge Area:
  - No Surface Water Bodies Nearby (creeks, streams ponds);
  - No Pooling or Accumulation of Water Being Released Off-site (if occurs, move discharge hose regularly);
  - No Erosion Occurring (must use something to dissipate energy from end of hose);
  - Landowner Approval (only if working on private land, crown is okay). PECL PIC will obtain landowner permission.

#### 6.22.2 Waste

- Contractor shall provide all information required to execute any manifests or forms required in connection with the transportation, storage, or disposal of solid and liquid wastes;
- All waste will be contained and disposed of in accordance with all applicable government regulations.

#### 6.22.3 Hazardous waste

 PECL along with all Contractors will communicate all products brought on to the site or exist on site that may be encountered during a work activity. Product SDS sheets will be provided and or issued to PECL, so that response can be initiated where required in accordance with the SDS sheet(s);

#### 6.22.4 The License to Transport

The License to Transport section applies to all transportation vendors that will be hauling hazardous waste or products from a PECL worksite. Contractors are required to ensure the License to Transport is current and carried with the transporter and that a manifest is completed prior to leaving the site.

#### 6.22.5 Biodiversity

Contractors shall ensure they exercise the necessary care to protect and preserve the environment, including Flora, Fauna, and other natural resources or assets. This includes mitigating potential adverse impacts to the environment related to the scope of work. Contractors shall ensure that there is no disturbance of wildlife. If an incident involving wildlife occurs the contractor will report immediately to the PECL PIC/Site representative.

#### 6.22.6 Archeological

The Contractor shall ensure that any potential archeological finds or fossils found at work sites are protected from damage or disturbance. The contractor shall immediately stop work and report to the PECL site representative. Work will remain suspended pending further instructions from Company.

# 7. Master Glossary

- **Administrative Control**: Administrative controls (or work practice controls) are changes in work procedures such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazardous chemicals or situations.
- **ALARP:** ALARP stands for "as low as reasonably practicable", and is a term often used in the regulation and management of safety-critical and safety-involved systems. The ALARP principle is that the residual risk shall be reduced as far as reasonably practicable.
- **Camp**: A safe, secure and productive work environment and accommodations for individuals working or visiting Company worksites
- **Canadian Model:** The most recent version of the Canadian Model released by the Construction Owners Association of Alberta (COAA). The Canadian Model provides industry with recommendations for Drug and Alcohol Testing procedures tailored specifically for heavy industrial worksites.
- **Company**: PETRONAS Energy Canada Ltd (PECL) and its affiliates and subsidiaries.

- Company Sites (Worksite/Site): Includes, but is not limited to, all land, facilities, operations, camps, vehicles, equipment and property used for the purpose of performing the business of The Company (owned, occupied, leased or controlled by the Company). Worksites include any work location to which Workers have been assigned, including any offsite work location at which work is being performed.
- **Confidential**: This classification applies to all Information and Records that, for internal Company use, require confidentiality, integrity and restricted access controls on a need-to-know basis. This includes both proprietary and personal Information.
- **Confined Space**: Confined Space", except as otherwise determined by the Board, means an area, other than an underground working, that
  - is enclosed or partially enclosed,
  - is not designed or intended for continuous human occupancy,
  - has limited or restricted means for entry or exit that may complicate the provision of first aid, evacuation, rescue or other emergency response service, and
  - $\circ$  is large enough and so configured that a worker could enter to perform assigned work.
- Confined Space Entry (CSE): Confined Space Entry involves the physical breaking of a plane or surface by a worker for the means of gaining access and entering into a space to perform a work activity.
  - A confined space is an enclosed or partially enclosed area that is big enough for a worker to enter. The space may be enclosed on all sides (for example, a bin or tank), or as few as two sides (for example, an enclosed conveyor). Confined spaces are not designed for someone to work in regularly. They are places where entry may be needed from time to time for inspection, cleaning, maintenance, or repair.
- **Consultant**: Third-party resources engaged primarily to support office functions. Typically hired to provide professional services and are usually temporary, short term, and/or project based.
- **Contract Owner:** Is the person within the Company who is responsible for managing all aspects of the Contract, from the planning phase till contract close-out.
- **Contractor (Vendor/Supplier)**: Third-party resources engaged primarily to support field functions.
- **Corrective Action**: An action taken to eliminate the causes of an existing nonconformity, or other undesirable situation, in order to prevent recurrence.
- Drug or Drugs: Includes any substance, chemical or agent the use or possession of which is unlawful in Canada or requires a personal prescription or authorization from a licensed treating physician, or the use of which is regulated by legislation such as marijuana/ cannabis, or any other psychoactive substance, and any non-prescription medication lawfully sold in Canada, and drug paraphernalia. **Embedded Contractors:** Contractor personnel who are working under direct supervision of PECL (e.g.- "contract" Operators, mechanics etc. working for operation teams) and /or Consultant acting on the behalf of PECL (example -Drilling, Completion & Construction Supervisors).
- **Emergency**: An adverse situation that has an impact on people, environment, asset and reputation and requires the activation of emergency team.
- **Emergency Response Plan (ERP)**: A plan of action for the efficient deployment and coordination of services, agencies and personnel to provide the earliest possible response to an emergency. Refer to the Health, Safety, Regulatory, and Environment Policy.

- **Engineering Control**: Engineering controls are methods that are built into the design of a plant, equipment or process to minimize the hazard. Engineering controls are a very reliable way to control worker exposures as long as the controls are designed, used and maintained properly.
- **Equipment**: Includes all vehicles and machinery which are owned, leased or otherwise controlled by the Company. This also includes Company provided transportation.
- **ERP**: Emergency Response Plan.
- **Field Security Coordinators**: Company security coordinators in the field who focus on protecting the Company's people, assets/facilities, environment and reputation. They also enforce the Company's Rules of Work Procedure, as delegates of the Company's Manager of Corporate Security.
- **Fit-for-Duty**: The status of Workers who are mentally and physically able to perform the duties of their position, as required. Additionally, being able to safely and acceptably perform assigned duties and any task under the given working conditions without any limitations due to the use, misuse or after-effects of Alcohol, Drugs or Medications.
- **Ground Disturbance**: A ground disturbance refers to any work, operation or activity that results in the penetration of the ground, whether using mechanical excavation or hand tools, including excavation, digging, trenching, plowing, pipe or cable drilling, vertical and horizontal auguring, tunneling or boring, ditch shaping, grading, topsoil stripping, land levelling, tree planting, blasting, Vibroseis, pipe pushing, rock picking, subsoil aeration, and driving bars, posts, or anchors.
- Harassment: Any unwanted physical or verbal behavior that offends or humiliates an individual.
- **Hazard**: Any source of potential damage, harm or adverse health effects.
- Health, Safety, Security, and Environment (HSE) Management System: The Company structure, roles and responsibilities, policies, practices, procedures, processes, and resources for implementing health, safety, security, and environment management, including compliance with regulatory requirements.
- Health, Safety and Environment (HSE) Regulatory Requirements: Requirements and/or conditions imposed by municipal, provincial, or federal regulatory agencies.
- Hearing Protection Equipment: Hearing Protection Equipment refers to devices used to protect the ear, either externally from elements such as cold, intrusion by water and other environmental conditions, debris, or specifically from noise. High levels of exposure to noise may result in noise-induced hearing loss. Measures to protect the ear are referred to as hearing protection. In the context of work, adequate hearing protection is that which reduces noise exposure to below 85 dBA over the course of an average work shift of eight hours.
- **HSE Coordinator**: Health, Safety and Environment Coordinator (HSE) is a discipline and specialty that studies and implements practical aspects of environmental protection and safety at work.
  - From a health & safety standpoint, the HSE Coordinator is involved in creating organized efforts and procedures for identifying workplace hazards and reducing accidents and exposure to harmful situations and substances. This also includes training of personnel in accident prevention, accident response, emergency preparedness, and use of protective clothing and equipment.
  - From an environmental standpoint, the HSE Coordinator is involved in creating a systematic approach to complying with environmental regulations, such as managing waste or air emissions all the way to helping sites reduce the company's carbon footprint.
- **Immediately Dangerous to Life or Health**: The National Institute of Occupational Safety and Health (NIOSH) defines an immediately dangerous to life or health condition as a situation" that

poses a threat of exposure to airborne contaminants when that exposure is likely to cause death or immediate or delayed permanent adverse health effects or prevent escape from such an environment." The IDLH limit represents the concentration of a chemical in the air to which healthy adult workers could be exposed (if their respirators fail) without suffering permanent or escapeimpairing health effects.

- **Incident**: An abnormal or unplanned event that affects people, environment, asset and reputation, requires attention and has the potential to precipitate an emergency, crisis and/or business disruption.
- Job Hazard Assessment (JHA): A job hazard assessment (JHA) is a procedure which helps integrate accepted safety and health principles and practices into a particular task or job operation. In a JSA, each basic step of the job is to identify potential hazards and to recommend the safest way to do the job. Other terms used to describe this procedure are job safety analysis (JSA) and job hazard breakdown.
- **Key Performance Indicator (KPI):** A measurable value that demonstrates how effectively the Company is achieving key business objectives.
- Lockout-Tagout (LOTO): A safety procedure which is used in industry and research settings to ensure that dangerous machines are properly shut off and not able to be started up again prior to the completion of maintenance or servicing work. It requires that hazardous energy sources be "isolated and rendered inoperative" before work is started on the equipment in question.
- **Management of Change (MOC)**: A systematic approach to preparing and supporting individuals, teams, and organizations in making change.
- **Mobile Devices**: Any mobile hardware device (and related software) capable of storing data and connecting to a Company network including but not limited to:
  - Smartphones;
  - Other mobile/cellular phones;
  - Tablet computers;
  - E-readers; and
  - Portable media devices.
- **Naturally Occurring Radioactive Material (NORMS):** Naturally occurring radioactive material (NORM) is material found in the environment that contains radioactive elements of natural origin. NORM primarily contains uranium and thorium (elements that also release radium and radon gas once they begin to decay) and potassium. These elements are naturally decaying and are considered a primary contributor to an individual's yearly background radiation dose.
- **Near Miss ("NM")**: A Near Miss is an event that could have caused harm to people, damage to property, Company reputation or the environment, but which did not.
- **Off Road Vehicles:** Runs on 4 or more wheels or is self-propelled by means of 2 or more endless belts driven in contact with the ground;
  - At the time the Vehicle was manufactured, was not designed to conform to the standards prescribed under the Motor Vehicle Safety Act (Canada) for motor Vehicles designed for use on a highway, but does not include an agricultural or industrial Vehicle; and
  - $\circ \quad \text{Include snowmobiles.}$
- **OGC:** The BC Oil and Gas Commission (OGC) is an independent regulatory agency with responsibility for overseeing the oil and gas operations in British Columbia. This includes exploration, development, pipeline transportation and reclamation activities.

- **Orientation Session**: A meeting conducted by The Company's representative for the purpose of providing general Site safety information and that all Workers and Contractors accessing the Site are required to attend.
- **PECL**: PETRONAS Energy Canada Ltd.
- **Permit Issuer**: Trained and competent individual authorized by the Company to approve and issue the PTW as detailed in the Work Site Management Procedure.
- **Permit Receiver**: Trained and competent individual authorized by the Company to conduct JHA, develop appropriate work plans and conduct the activities as specified by the PTW as detailed in the Work Site Management Procedure.
- **Permit to Work (PTW)**: Permit to Work (PTW) refers to management systems used to ensure that work is done safely and efficiently. These are used in hazardous industries and involve procedures to request, review, authorize, document and most importantly, de-conflict tasks to be carried out by frontline workers. A permit to work system is a formal system stating exactly what work is to be done, where, and when. Permits are effectively a means of communication between site management, plant supervisors and operators, and those who carry out the work.
- **Personal Harassment:** Behavior which is demeaning or embarrassing towards an individual or group of individuals, although it is not unlawfully sexual or discriminatory in nature.
- **Personal Information:** Any information about an identifiable individual or that permits an individual to be identified, such as name, date of birth, marital status, dependents, beneficiaries, home or mailing address, personal telephone numbers, personal email addresses, emergency contact information, social insurance number, bank account numbers, other ID numbers, income, employment or education history, credit records, loan records, medical records, and financial history. It does not include an individual's business contact information (i.e., name, title, business telephone number, address, e-mail address or fax number) when that information is used to contact an individual in relation to his/her business responsibilities.
- **Personal Mobile Device**: Mobile device that is not issued by the Company but with which a User may also access the Company's Computing Environment for business purposes.
- **Personal Protective Equipment (PPE)**: Personal protective equipment (PPE) refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter.
- **Policy**: A documented statement, set of broad goals, rules or principles issued document by management outlining the mandatory boundaries within which Employees must act, and what must be done to affect control over the Company and its business activities. This document effectively states what the Company's expected behaviors and guiding principles are that all Employees must adhere to.
- **Preventative Control**: A barrier that prevents a Cause from becoming a Risk Event (i.e., reduces likelihood of a Risk).
- **Prime Contractor**: Prime contractor is the chief contractor who has a contract with the owner of a project or job, and has full responsibility for its completion (while operating within its own HSE-MS separate from the Company). A prime contractor undertakes to perform a complete contract, and may employ (and manage) one or more subcontractors to carry out specific parts of the contract. PECL will transfer the ownership under the regulations.
- **Pressure Safety Valve (PSV**): is a type of valve used to quickly release gases from equipment in order to avoid over pressurization and potential process safety incidents.

- **Regulatory Bodies:** An organization authorized to create policy or make decisions on applications, monitoring for compliance assurance and enforcement of legislation for all aspects of energy resource activities. This includes provincial and federal organizations including but not limited to the BC Oil and Gas Commission, Alberta Energy Regulator, Provincial Ministries of Environment, Natural Gas, and Forestry and Environment Canada.
- **Regulatory Compliance:** Meeting the specifications and requirements in order to adhere to a rule, policy, law or standard set by regulatory bodies.
  - Actual or potential violations relating to accounting, internal financial controls, accurate books and records, or auditing matters;
  - Actual or potential violations of applicable laws, rules or regulations including securities laws; and
  - Actions materially inconsistent with any Company Policy.
- **Process Safety:** It is a disciplined framework for managing the integrity of hazardous operating systems and processes by applying good design principles of engineering and operating practices.
- **Representative**: An Employee, duly appointed agent, professional advisor, Consultant, or independent Contractor assigned to represent the department.
- **Respiratory Protection Equipment**: RPE (respirators and breathing apparatus) is used to protect workers when working with hazardous substances, such as gases, solvents, powdered chemicals and sprays. RPE comes with various forms of face-piece, such as helmets, visors, hoods or masks.
- **Risk**: The uncertainty that affects the achievement of objectives.
- **Risk Action Plan**: A task or set of steps to bring a specific risk in line with its stated Risk Target.
- **Risk Assessment**: Overall process of risk identification, risk analysis and risk evaluation, including a study of vulnerabilities, threats, likelihood, loss and impact.
- **Risk Identification**: Risk identification is the process of discovering, defining, describing, documenting and communicating potential risks that may adversely affect the business or operation of the company.
- **Risk Impact**: Result or effect of a risk occurring. There are various impact types and each type has a range of impact ratings. Descriptions are provided for each rating.
- **Risk Likelihood**: Possibility that a risk will occur. Likelihood ratings are assigned based upon descriptions for each rating.
- Scope of Work (Task/Service): A document that specifies all the criteria and details needed for the provision of Materials and/or Services. This includes any deliverables, requirements, standards to abide by, milestones, etc.
- **Sexual Harassment**: Any conduct, comment, gesture, or contact of a sexual nature that is likely to cause offense or humiliation to any Employee; or that might, on reasonable grounds, be perceived by that Employee as placing a condition of a sexual nature on employment or on any opportunity for training or promotion.
- **Safe Operating Procedure (SOP):** Document that is used to identify hazards and document risk controls for certain work activities.
- **Subcontractor:** Any additional contractor brought to site by a PECL employed Contractor, during the execution of an agreed work scope, this includes maintenance personnel and companies delivering materials or equipment to site not directly contracted by PECL.
- **Supplier**: An organization that provides specific good(s) and/or service(s) to the Company.

- **Supply Chain Management (SCM):** The department and function within the company managing supply chain activities.
- **Tailgate Safety Meeting**: A tailgate meeting is an informal safety meeting, which is generally conducted at the job site prior to the commencement of a job or work-shift. Job supervisors can draw attention to hazards, processes, equipment, tools, environment and materials to inform all workers of the risks in their surroundings.
- **TDG**: Transportation of Dangerous Goods (TDG) Regulations is to promote public safety when dangerous goods are being handled, offered for transport or transported by road, rail, air or water (marine).
- **Unsafe Act (UA)**: An unsatisfactory behavior that has the potential to cause, has caused or contributed to an Incident.
- **Unsafe Condition (UC)**: An unsatisfactory physical condition in the workplace that has the potential to cause, has caused or contributed to an Incident.
- **Vehicle**: Includes but not limited to ATV, mobile crane, UTV, snowmobile, car, truck, semi-trailer, mobile man lift, forklift, construction Vehicles (dozers, etc.).
- **Visitor**: An individual who visits a Site on a temporary basis. Visitors are not permitted to perform "hands-on" work, and must be under the supervision of a Company-authorized Host. For the purposes of this definition "hands-on" work includes any work performed with the use of tools, equipment, or other implements involving manual labor, or as otherwise determined on a case-by-case basis by a Company Safety Officer, or a member of the Company field management team.
- **Work**: All the Work that Contractor is required to carry out in accordance with the terms of the Contract, including services and the provision, delivery, use, inspection, repair, storage and transport of all goods and equipment, at, on, under, above, in or through a Company Worksite. For further certainty, this excludes the providers and suppliers of goods and equipment who do not enter a Worksite.
- **Work Order**: A document used to order work, which records the Scope of Work, responsibilities, and activities undertaken to complete the work from initiation to completion.
- Work Plan: A work plan is an outline of a set of goals and processes by which a team and/or person can accomplish those goals, and offering the worker(s) a better understanding of the scope of the project. Work plans help worker(s) stay organized while working on projects. Through work plans, you break down a process into small, achievable tasks and identify the things you want to accomplish.
- **Worker**: Any Employee, Contractor or Consultant.
- **Worker Representative**: A Worker who represents and defends the interests of his or her fellow Workers.
- Worker's Compensation Board (WCB): Form of insurance providing wage replacement and medical benefits to employees injured in the course of employment in exchange for mandatory relinquishment of the employee's right to sue his or her employer for the tort of negligence.
- Workplace Hazardous Materials Information System (WHMIS): The Workplace Hazardous Materials Information System (WHMIS) is Canada's national hazard communication standard. The key elements of the system are hazard classification, cautionary labelling of containers, the provision of (material) safety data sheets (M)SDSs) and worker education and training programs.
- Workplace Violence: Any acts or threats of violence within the workplace.
- **WorkSafeBC**: The Workers' Compensation Board of British Columbia, operating as WorkSafeBC, is a statutory agency that came into existence in 1917, after the provincial legislature put into force legislation passed in 1902.[2] This legislation is known as the Workers Compensation Act.[3]

WorkSafeBC's mandate includes prevention of occupational injury and occupational disease, which WorkSafeBC accomplishes through education, consultation, and enforcement. It carries out workplace inspections and investigates serious incidents such as fatalities. The Workers Compensation Act [4] assigns the authority to make the Occupational Health and Safety Regulation of British Columbia.

• Zeto Rules: PECL's Zero Tolerance Rules.