

# Health, Safety, and Environment Manual (HSE)



**CONSTRUCTION**

**Printed January 2021**

---

Health, Safety, and Environment Manual  
© Copyright November 2007  
PCL CONSTRUCTORS INC.

*The term "PCL" in the following document is used to refer to any one of the independent operating companies in the PCL family of companies.*



## **STANDARDS HSE - TABLE OF CONTENTS**

### **1.0 INTRODUCTION**

6.1 Program Elements.....	4-6
---------------------------	-----

### **2.0 LEADERSHIP AND ADMINISTRATION**

6.1 District Disciplinary Policy.....	36-38
6.2 Enforcement of HSE Rules .....	36-38
6.3 Program Administration .....	37-38

### **3.0 HSE ORIENTATION AND TRAINING**

6.1 Health, Safety, and Environment Orientation – Site Specific .....	4-10
6.2 Education and Training .....	7-10
6.3 Training Records Retention.....	7-10
6.4 Visitor and Short Duration Worker HSE Orientation.....	7-10
6.5 Refresher Training.....	9-10
6.6 Project Deliveries .....	10-10

### **4.0 HSE COMMUNICATION SYSTEMS**

6.1 Communications Systems .....	4-13
6.2 HSE Documents .....	4-13
6.3 Committees & HSE Meetings .....	4-13
6.4 Health, Safety, and Environment User Group (HSEUG) .....	10-13
6.5 Monthly Action Plans/Trends Analysis .....	11-13
6.6 District Strategic HSE Plan.....	12-13
6.7 Resource Information .....	12-13
6.8 HSE Alerts and Bulletins .....	13-13
6.9 Perception Surveys .....	13-13

### **5.0 HAZARD IDENTIFICATION AND CONTROL**

6.1 Hazard Identification Control .....	5-8
6.2 Hazard Assessment Tools.....	5-8
6.3 Purchasing Controls .....	8-8
6.4 Occupational Hygiene, Health and Ergonomics.....	8-8

### **6.0 INSPECTIONS AND AUDITS**

6.1 Informal Inspections .....	4-6
6.2 Formal Inspections .....	4-6



---

6.3 HSE Audits .....	5-6
6.4 Governmental Inspections.....	6-6
<b>7.0 PERSONAL PROTECTIVE EQUIPMENT</b>	
6.1 Basic Personal Protective Equipment .....	3-7
6.2 Project Specific PPE.....	5-7
6.3 Employee Owned PPE .....	7-7
6.4 Defective/Damaged PPE.....	7-7
<b>8.0 EMERGENCY RESPONSE PLAN</b>	
6.1 General Requirements .....	4-8
6.2 Emergency Procedures .....	6-8
6.3 Crisis Communications.....	7-8
<b>9.0 SECURITY</b>	
6.1 Permanent Facilities Security Program .....	3-6
6.2 Project Security Program.....	3-6
6.3 Pre-Job Review of Project Security Plan.....	6-6
<b>10.0 ENVIRONMENTAL MANAGEMENT</b>	
6.1 Program Objectives.....	3-15
6.2 Employee Commitment .....	4-15
6.3 Continuous Improvement .....	4-15
6.4 Supplementary Resources .....	4-15
6.5 Education and Training .....	4-15
6.6 Environmental Scope of Work.....	4-15
6.7 Environmental Action Plan (EAP).....	5-15
6.8 Environmental Incident Reporting .....	12-15
6.9 Environmental Inspections and Audits .....	14-15
6.10 Environmental Records Management .....	15-15
<b>11.0 TRADE CONTRACTOR HSE PROGRAM</b>	
6.1 Trade Contractor HSE Evaluation .....	4-7
6.2 Trade Contractor's Contractual Obligations .....	4-7
6.3 Trade Contractor's Project Specific HSE Plan and Administration of HSE Program .....	4-7
6.4 Personal Protective Equipment .....	5-7
6.5 HSE Reporting .....	5-7
6.6 Incident Investigations.....	5-7



---

6.7 Statistical Reporting .....	5-7
6.8 Inspections .....	6-7
6.9 HSE Orientation and Training.....	6-7
6.10 HSE Meetings .....	6-7
<b>12.0 PREVENTATIVE MAINTENANCE</b>	
6.1 General Requirements .....	3-4
6.2 Site Requirements .....	4-4
6.3 Motor Vehicles.....	4-4
<b>13.0 INCIDENT INVESTIGATION</b>	
6.1 Objective .....	6-13
6.2 Incident Investigation.....	7-13
6.3 Documenting and Reporting Procedure .....	12-13
<b>14.0 INJURY MANAGEMENT</b>	
6.1 General Requirements .....	4-6
6.2 Medical Aid Injuries .....	5-6
6.3 Modified Work .....	5-6
6.4 Case Coordination.....	6-6
<b>15.0 PROJECT SPECIFIC HSE PLAN</b>	
6.1 Project Specific HSE Plan .....	3-9
<b>16.0 BEHAVIORAL SAFETY OBSERVATIONS</b>	
6.1 Implementation Criteria .....	4-7
6.2 Selection and Assignment of Behavioral Based Observers .....	4-7
6.3 General Observation Card.....	5-7
6.4 Behavioral Safety Observation Training.....	6-7
6.5 Weekly Behavioral Based Observer Meeting.....	7-7
6.6 Safety Management Center (SMC) .....	7-7
<b>17.0 GLOSSARY</b>	

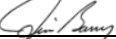
## INTRODUCTION

### *STANDARD HSE-01*

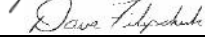
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

#### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Reviewed and no revisions made.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-01 INTRODUCTION**

- 1.0 PURPOSE
- 2.0 SCOPE
- 3.0 RESPONSIBILITY
- 4.0 REFERENCES
- 5.0 DEFINITIONS
- 6.0 STANDARD
- 7.0 ATTACHMENTS





## 1.0 PURPOSE

The purpose of the Health, Safety, and Environment (HSE) Manual is to provide a system of policies, procedures, and practices for continuous improvement in the prevention and elimination of occupational injury and illness, equipment and property damage, and negative environmental impact because of our operations.

## 2.0 SCOPE

This standard applies to all PCL work sites.

## 3.0 RESPONSIBILITY

N/A

## 4.0 REFERENCES

- PCL Health, Safety and Environment policy statements
- Legislative jurisdictional requirements

## 5.0 DEFINITIONS

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### 5.1 District HSE Department (Off-Site)

Throughout each standard of this HSE Manual, the term “district HSE department (off -site)” refers to:

- HSE director, USHO/HSE vice president, NAHQ;
- Regional HSE manager;
- District HSE manager; and
- HSE administrative assistant.

### 5.2 District Management (Off-Site)

Throughout each standard of this HSE Manual, the term “district management (off -site)” refers to:

- Chief operating officer/president;
- Vice president;
- District/general manager;
- Operations manager;
- Senior finance and administration manager;
- Chief estimator;
- Procurement/materials manager;
- District HSE manager;
- Purchasing manager;
- Yard manager; and
- Shop manager.

**5.3 Employee**

Throughout each standard of this HSE Manual, the term “employee” refers to all individuals employed by PCL or a member of the PCL family of independent companies. This person is also considered a worker on PCL worksites.

**5.4 Other Workers**

Workers of other contractors not under direct contractual control of PCL and/or the general public/owners and suppliers.

**5.5 Project HSE Staff**

Throughout each standard of this HSE Manual, the term “project HSE staff” refers to:

- Project HSE manager
- Project HSE supervisors; and
- Project HSE coordinators.

**5.6 Project Management**

Throughout each standard of this HSE Manual, the term “project management” refers to:

- Construction manager and manager, special projects;
- Project manager;
- Project director;
- Field engineer;
- Project coordinator; and
- Project HSE manager/supervisor

**5.7 Project Supervision**

Throughout each standard of this HSE Manual, the term “project supervision” refers to:

- Superintendent;
- District yard supervisors;
- General foreman;
- Foreman; and
- Lead hand.

**5.8 Safety**

Safety is the process of reducing or eliminating behaviors and/or conditions that have the potential for causing an incident.

**5.9 Shall, Must and Will**

“Shall”, “must” and “will” indicated in a standard, practice or procedure is mandatory.



### **5.10 Visitor**

A visitor is an individual (i.e. employee, worker, or other) who is not assigned to the worksite, office, or permanent facility.

### **5.11 Worker**

Throughout each standard of this HSE Manual, the term “worker” refers to all individuals working on a PCL work site (includes, without limitation, employees and individuals who work for trade contractors, suppliers, consultants, and other third parties).

### **5.12 Work Site**

A location where PCL engages in construction activities and is responsible for care and control of the physical space.

## **6.0 STANDARD**

### **6.1 Program Elements**

#### **6.1.1 Standard 2.0: Leadership and Administration**

The purpose of the Leadership and Administration Standard is to:

- Define the responsibilities of PCL employees, as well as third party companies or individuals, who perform contract work for PCL relating to the PCL HSE program;
- Outline the general framework for enforcement of the PCL HSE rules; and
- Outline certain processes for the administration of the HSE program.

#### **6.1.2 Standard 3.0: HSE Orientation and Training**

The purpose of the HSE Orientation and Training Standard is to provide all workers with health, safety, and environment information, education, and training which is appropriate for their duties while working at a PCL work site.

#### **6.1.3 Standard 4.0: HSE Communication Systems**

The purpose of this standard is to outline the HSE communication structure that includes this exchange of information and ideas.

#### **6.1.4 Standard 5.0: Hazard Identification and Control**

Hazard assessment is the basis for the prevention of incidents in the work place. The purpose of the Hazard Identification and Control Standard is to create a process that facilitates identification, assessment, monitoring, and control of hazards at work sites.

6.1.5 Standard 6.0: Inspections and Audits

The purpose of an inspection is to identify conditions and hazards in the workplace that can lead to an incident and identify positive conditions, behaviors, and observations.

The purpose of an audit is to evaluate the implementation of this HSE Manual against the requirements set out in this manual.

The purpose of the Inspections and Audits Standard is to identify conditions and hazards in the workplace that can lead to an incident and evaluate the implementation of this HSE Manual.

6.1.6 Standard 7.0: Personal Protective Equipment (PPE)

The purpose of personal protective equipment (PPE) is to provide an effective barrier between a worker and potentially dangerous objects, substances, and processes. The Personal Protective Equipment Standard establishes mandatory rules regarding the use of PPE on PCL project sites.

6.1.7 Standard 8.0: Emergency Response Plan (ERP)

The purpose of the Emergency Response Plan Standard is to mandate the development of Emergency Response Plans (ERPs) that provide guidelines for the response required in the event of an injury, fire, or any other emergency at a work site.

6.1.8 Standard 9.0: Security

The purpose of the Security Standard is to establish guidelines for developing and implementing permanent facility, project site, and office security plans that reduce the risk of losses caused by violence or other criminal activities.

6.1.9 Standard 10.0: Environmental Management

The purpose of the Environmental Management Standard is to create a framework that facilitates identification and management of environmental issues on PCL projects and PCL permanent facilities.

6.1.10 Standard 11.0: Trade Contractor HSE Program

The purposes of the Trade Contractor HSE Program Standard are to:

- (1) Establish a system to direct PCL's selection and management of trade contractors based upon HSE considerations; and
- (2) Set rules that apply to trade contractors on PCL project sites.



#### 6.1.11 Standard 12.0: Preventative Maintenance

The purpose of the Preventative Maintenance Standard is to verify that the tools and equipment provided to workers are properly maintained.

#### 6.1.12 Standard 13.0: Incident Investigation

The purpose of the Incident Investigation Standard is to conduct a methodical examination of the facts of an incident that resulted or could have resulted in injury, illness, loss, property damage or liability to identify contributing and root causes, as well as recommendations for corrective action.

#### 6.1.13 Standard 14.0: Injury Management

The purposes of the Injury Management Standard are to emphasize a proactive approach to managing injuries, to maintain a safe and healthy working environment and to facilitate compliance with workers compensation/insurer requirements.

#### 6.1.14 Standard 15.0: Project Specific HSE Plan

The PCL Project Specific HSE Plan integrates local HSE regulations, owner/client HSE requirements, and PCL HSE standards into a single document that can be easily referenced by project management, line supervision, trade contractors and workers. The purpose of the Project Specific HSE Plan Standard is to set out the requirements for a Project Specific HSE Plan.

#### 6.1.15 Standard 16.0: Behavioral Safety Observations

The purposes of the Behavioral Safety Observations Standard are to specify the minimum requirements for the conduct of behavioral based observations, the coaching of workers by observers, the procedures for documentation and recordkeeping of observation data and directions for the use of trending data gleaned from behavioral safety observations.

#### 6.1.16 Standard 17.0: Glossary

The purpose of the Glossary is to serve as a quick reference for those looking for definitions and acronyms used throughout this manual.

## 7.0 ATTACHMENTS

N/A

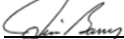


**LEADERSHIP AND ADMINISTRATION**  
***STANDARD HSE-02***

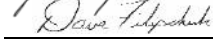
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

**REVISION LOG**

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-02 LEADERSHIP AND ADMINISTRATION**

### **1.0 PURPOSE**

### **2.0 SCOPE**

### **3.0 RESPONSIBILITY**

- 3.1 Employee
- 3.2 Board of Directors
- 3.3 Chief Executive Officer
- 3.4 Chief Operating Officer
- 3.5 Presidents / Regional Vice Presidents
- 3.6 General Counsel
- 3.7 HSE Vice President, NAHQ
- 3.8 HSE Director, USHO
- 3.9 District Manager / General Manager
- 3.10 Operations Manager / District Construction Manager
- 3.11 Construction Manager / Manager, Special Projects / Project Director
- 3.12 Project Manager
- 3.13 Chief Estimator
- 3.14 Regional HSE Manager
- 3.15 District HSE Manager
- 3.16 Project Superintendent
- 3.17 District Construction Engineer
- 3.18 Field Engineer / Project Coordinator
- 3.19 Quality Assurance / Quality Control Personnel
- 3.20 Procurement / Materials Manager
- 3.21 Project HSE Manager / Supervisor / Coordinator
- 3.22 Foreman / Supervisor / Lead Hand
- 3.23 Trade Contractors
- 3.24 Visitors / Suppliers / Consultants
- 3.25 Workers

### **4.0 REFERENCES**

### **5.0 DEFINITIONS**

### **6.0 STANDARD**

- 6.1 District Disciplinary Policy
- 6.2 Enforcement of HSE rules
- 6.3 Program administration

### **7.0 ATTACHMENTS**

## **1.0 PURPOSE**

The purpose of this Standard is to:

- Define the responsibilities of PCL employees, as well as third party companies or individuals who perform contract work for PCL relating to the PCL HSE program;
- Outline the general framework for enforcement of the PCL HSE rules; and
- Outline certain processes for the administration of the HSE program.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

Sections 3.1 through 3.25 outline the responsibilities of PCL employees, as well as third party companies or individuals, who perform contract work for PCL. Section 3.1 outlines responsibilities that apply to all PCL employees. Sections 3.2 through 3.22 outline additional responsibilities of PCL employees in specific positions. Section 3.23 and 3.24 address the responsibilities of trade contractors, visitors, suppliers, and consultants. Section 3.25 addresses the responsibilities of workers.

### **3.1 Employee**

All employees are responsible for safeguarding the health, safety, and the environment of fellow employees.

All employees shall:

- Account to management/supervision;
- Promptly report the following to management / supervision:
  - unsafe acts and conditions;
  - occurrence of any HSE incident;
- Never proceed with work that creates an unusually dangerous risk that is beyond the risks that are typically expected in your occupation. Employees have the right to refuse to perform work and to have the concerns investigated in these circumstances. This right is fully supported by all managers and supervisors in PCL;
- Report personal injuries, no matter how minor, and obtain medical attention as required; (HSE-14)
- Familiarize and comply with all applicable SWPs, HSEOPs, JHAs, and other applicable HSE rules;
- Familiarize and comply with the applicable project specific/permanent facility HSE plan; (HSE-15)
- Participate in required HSE meetings and other related meetings; (HSE-04)
- Maintain good housekeeping in their work area(s); (HSE-03)
- Cooperate with, or participate in, HSE incident investigations as required; (HSE-13)
- Attend on-site HSE orientation meetings; (HSE-03)

- Participate in the PSI program; (HSE-05)
- Fulfill any additional responsibilities applicable to their position as set out in sections 3.2 through 3.22 of this standard;
- Demonstrate commitment to the PCL HSE policies and goal for zero incidents; and
- Verify that the MSDS is received for a product if the employee purchases or receives materials (HSE-05).

### **3.2 Board of Directors**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the Board of Directors shall:

- Receive reports regarding the effectiveness of the PCL HSE program; and
- Verify adequate resources (both financial and time) so that the HSE systems/programs in place properly identify risks and institute proper protective measures.

### **3.3 Chief Executive Officer**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the chief executive officer shall:

- Account to the Board of Directors;
- Receive regular reports from chief operating officers (COO) regarding:
  - the effectiveness of district HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Receive recommendations from COO's on revisions and updates to policies and programs;
- Report to the Board of Directors regarding:
  - the effectiveness of district HSE programs;
  - the occurrence of any significant HSE incident;
  - implementation of corrective or remedial actions arising out of significant incidents; and
  - revisions and updates to policies and programs
- Review effectiveness of HSE vice president, NAHQ performance;
- Chair the HSE User Group committee (HSEUG);
- Conduct random PSI audits;
- On behalf of the HSEUG, make recommendations to the Corporate Services Executive Committee (CSEC) relating to HSE policies within CSEC's mandate;
- Exercise authority to maintain compliance with regulatory and company requirements; and
- Receive and review recommendations from COO's and HSE vice president, NAHQ, as to Bob Tarr Safety Award recipients.

### **3.4 Chief Operating Officer**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the chief operating officers shall:

- Account to the chief executive officer;
- Receive regular reports from presidents, regional vice presidents/vice presidents, district managers, and general managers (as applicable) regarding:
  - the effectiveness of district HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents within any district under their responsibility;
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs;
- Report to chief executive officer regarding:
  - the effectiveness of district HSE programs;
  - the occurrence of any significant HSE incident within any district under their responsibility; and
  - implementation of corrective or remedial actions arising out of significant incidents within any district under their responsibility;
- Make recommendations to chief executive officer for revising and/or updating of policies and programs;
- Verify corporate programs and policies are regularly reviewed and updated as required;
- Review effectiveness of HSE director, USHO (president & COO, PCL Const. Enterprises, Inc. only) performance;
- Verify that districts under their responsibility devote adequate resources (both financial and time) so that the systems/programs in place properly identify risks and institute proper protective measures;
- Conduct random PSI audits;
- Receive and review audit reports;
- Verify audit recommendations are considered and implemented;
- Exercise authority to maintain compliance with regulatory and company requirements; and
- Verify districts under their responsibility have culture that emphasizes excellence in HSE matters.

### **3.5 Presidents/Regional Vice Presidents**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the presidents/regional vice presidents shall:

- Account to the applicable chief operating officer;
- Receive regular reports from district managers, and general managers (as applicable) regarding:
  - the effectiveness of district HSE programs and operations;
  - the occurrence of any significant HSE incident within any district under their responsibility; and
  - implementation of corrective or remedial actions arising out of significant incidents within any district under their responsibility;
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs;
- Report to chief operating officer regarding:
  - the effectiveness of district HSE programs;
  - the occurrence of any significant HSE incident within any district under their responsibility; and
  - implementation of corrective or remedial actions arising out of significant incidents within any district under their responsibility;
- Make recommendations to the chief operating officer for revising and/or updating policies and programs;
- Verify corporate programs and policies are regularly reviewed and updated as required;
- Verify districts devote adequate resources (both financial and time) so that the systems/programs in place properly identify risks and institute proper protective measures;
- Receive and review audit reports;
- Verify audit recommendations are considered and implemented if appropriate;
- Exercise authority to maintain compliance with regulatory and company requirements;
- Conduct random PSI audits; (HSE-05)
- Conduct one formal HSE inspection quarterly; (HSE-06)
- Verify districts under their responsibility have culture that emphasizes excellence in HSE matters; and
- Review and approve District Strategic HSE Plans (HSE-04).

### **3.6 General Counsel (or delegated member of the PCL Legal Department)**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, general counsel shall:

- Work with HSE director, USHO/HSE vice president, NAHQ to verify programs and policies are reviewed regularly for compliance with applicable laws and updated as required;
- Make recommendations to the HSE director, USHO/HSE vice president, NAHQ regarding revisions to HSE policies and programs;
- Work with district management and HSE director, USHO/HSE vice president, NAHQ to respond to legal issues involving HSE programs and initiatives;
- Work with district management and HSE director, USHO/HSE vice president, NAHQ to manage outside counsel regarding investigations and defenses of any regulatory processes involving HSE matters; and
- Report to the HSEUG committee on significant investigations and defenses of regulatory processes involving HSE matters.

### **3.7 HSE Vice President, NAHQ**

The HSE Vice President, NAHQ is responsible for the development and operation of the company-wide HSE program.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the HSE vice president, NAHQ shall:

- Account to the chief executive officer;
- Receive regular reports from presidents/regional vice presidents, district managers, general managers, and HSE professionals (as applicable) regarding:
  - the effectiveness of district HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents;
- Make recommendations to presidents/regional vice presidents, district managers, general managers, and HSE professionals (as applicable) regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs;
- Report to chief executive officer regarding:
  - the effectiveness of district HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents;
- Report to executive management on current HSE legislation, information, and issues;
- Update company-wide HSE policies as required;
- Prepare HSE reports for board meetings;

- Draft and recommend HSE practices and procedures to executive management;
- Assist district on HSE related issues;
- Research legislation and information applicable to all operations;
- Liaise and coordinate efforts with HSE director, USHO regarding legislation and information appropriate for US operations;
- Assist executive management/district management in evaluating HSE performance and exercising authority to maintain compliance with regulatory and company requirements;
- Perform one formal work site inspection per month, at a minimum; (HSE-06)
- Monitor and assess the performance of regional HSE managers in liaison with regional vice presidents/presidents;
- Review Canadian and US legislation and information to facilitate development of company-wide policies, procedures, and programs where appropriate;
- Recommend HSE performance standards for company-wide operations to executive management;
- Monitor compliance with company and legislated standards by performing audits and inspections as directed by executive management;
- Advise project management and project supervision on company-wide HSE audit results and industry trends which could impact company operations;
- Assist the district managers/general managers and regional HSE managers with the recruitment and development of qualified HSE managers for placement within district locations;
- Develop education and training programs for the company; (HSE-03)
- Develop and review HSEOPs and SWPs;
- Review and provide feedback on District Strategic HSE Plan; (HSE-04)
- Investigate (or assist with) significant HSE incidents; (HSE-13)
- Develop and maintain a written HSE inspection and auditing program; (HSE-06)
- Conduct PSI audits; (HSE-05)
- Participate in HSE associations; and
- Recommend HSE consultants when requested.



### **3.8 HSE Director, USHO**

The HSE director, US Operations is responsible for assisting with the development of the HSE program for US operations.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the HSE director, USHO shall:

- Account to the COO, US operations/HSE vice president, NAHQ;
- Receive regular reports from presidents/regional vice presidents, district managers, general managers, and HSE professionals (as applicable) regarding:
  - the effectiveness of district HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Make recommendations to presidents/regional vice presidents, district managers, general managers, and HSE professionals (as applicable) regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs.
- Report to COO, US operations/HSE vice president, NAHQ regarding:
  - the effectiveness of district HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Report to and advise executive management on current HSE legislation, information, and issues;
- Prepare HSE Board Report for US operations;
- Liaise and coordinate efforts with HSE vice president, NAHQ regarding legislation and information to facilitate development of company-wide policies, procedures, and programs where appropriate and requested;
- Assist executive management/district management in evaluating HSE performance and exercising authority to maintain compliance with regulatory and company requirements;
- Perform one formal work site inspection per month, at a minimum; (HSE-06)
- Provide information to HSE vice president, NAHQ regarding HSE incidents; (HSE-13)
- Update US company environment directives as required; (HSE-10)
- Research legislation and information applicable to US operations;
- Recommend HSE performance standards for US operations to executive management;
- Monitor compliance with company and legislated standards by performing audits and inspections as directed by executive management;
- Assist the district managers/general managers and regional HSE managers with the recruitment and development of qualified HSE managers for placement within district locations;



- Develop HSE education and training programs for the company; (HSE-03)
- Develop and review HSEOPs and SWPs;
- Investigate (or assist with) significant HSE incidents; (HSE-13)
- Assist district on HSE related issues;
- Advise on US HSE audit results and industry trends which could impact operations;
- Conduct PSI audits; (HSE-05) and
- Participate in HSE associations.

### **3.9 District Manager/General Manager**

The district manager/general manager is responsible for the overall district HSE program.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the district managers / general managers shall:

- Account to regional vice presidents/president/chief operating officer;
- Receive regular reports from district management (offsite) and/or project management (site) and/or district HSE department regarding:
  - the effectiveness of district and project HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ and/or district HSE department regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs.
- Report to regional vice presidents/president/chief operating officer regarding:
  - the effectiveness of district and project HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Work with district HSE managers to verify district HSE policies and programs and Project Specific HSE Plans comply with local laws and regulations;
- Implement a zero-tolerance program in accordance with section 6.1 of this HSE-02;
- Conduct PSI audits; (HSE-05)
- Provide reporting as requested by HSE director, USHO/HSE vice president, NAHQ;
- Establish a standard for employee recognition and evaluation of HSE performance;
- Approve goals and objectives for employee training; (HSE-03)
- Participate in training as required; (HSE-03)
- Provide resources necessary to carry out training goals and objectives; (HSE-03)

- Develop a District Strategic HSE Plan and monitor progress at the District HSE Committee; (HSE-04)
- Verify a system is in place for:
  - development of District HSE Trend Analysis; and
  - development of action plans arising from the District HSE Trend Analysis. (HSE-04)
- Exercise authority to maintain compliance with regulatory and company requirements;
- Chair the District HSE Committee meetings; (HSE-04)
- Verify that HSE policy statements are signed and posted at all job locations; (HSE-02)
- Verify that the hazard assessment process is followed within the district; (HSE-05)
- Verify a Project Specific HSE Plan is developed for each project; (HSE-05, HSE-15)
- Verify that projects are following the Project Specific HSE Plan standards through auditing and observation; (HSE-05, HSE-15)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Conduct monthly formal inspections of projects, in conjunction with project management, a minimum of one project per month; (HSE-06)
- Verify that quarterly formal inspections of all permanent facilities are conducted; (HSE-06)
- Set an appropriate example for employees under their direction; (HSE-07)
- Verify that PPE standards outlined in this manual are in place and approve any other that exceed this manual; (HSE-07)
- Verify that sufficient resources including materials, equipment, and training to effectively deal with potential emergencies at the workplace; (HSE-08)
- Verify that projects are following the Environmental Action Plan standards through auditing and observation; (HSE-10)
- Verify that a PCL trade contractors' screening and approval process is in place; (HSE-11)
- Provide support and resources for the inspection, maintenance, and repair of equipment and tools; (HSE-12)
- Participate, support and reinforce the incident investigation and reporting process; (HSE-13)
- Review incident investigation reports and verify that the company incident investigation process is followed; (HSE-13)
- Support corrective actions identified in incident investigations; and (HSE-13)
- Provide adequate support and resources for all aspects of the injury management program. (HSE-14)

### **3.10 Operations Manager/District Construction Manager**

The operations manager/district construction manager is responsible for assisting in the development and implementation of the HSE program for all district construction projects.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the operations manager/district construction manager shall:

- Account to the district manager/general manager;
- Receive regular reports from project management (site) regarding:
  - the effectiveness of district and project HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ and/or district HSE department regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs.
- Report to the district manager/general manager/district HSE manager regarding:
  - the effectiveness of district and project HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Implement HSE standards and procedures as stated in the HSE Manual;
- Conduct PSI audits; (HSE-05)
- Exercise authority to maintain compliance with regulatory and company requirements;
- Establish goals and objectives for employee training; (HSE-03)
- Provide resources necessary to carry out training goals and objectives; (HSE-03)
- Participate in the required training for their position; (HSE-03)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Assist with the development of a District Strategic HSE Plan and monitor progress at the District HSE Committee; (HSE-04)
- Verify that the hazard assessment process is followed within the district; (HSE-05)
- Verify that a Project Specific HSE Plan is developed for each project; (HSE-05)
- Participate in the CHA; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Verify that projects are following the Project Specific HSE Plan standards through auditing and observation; (HSE-05)

- Verify that applicable procedures are an integral part of the project specific HSE program; (HSE-15)
- Verify that project management is familiar with the Project Specific HSE Plan; (HSE-05)
- Conduct one formal inspection per month, at a minimum; (HSE-06)
- Set an appropriate example for employees under their direction; (HSE-07)
- Verify that PPE standards outlined in this manual are in place and approve any other that exceeds this manual; (HSE-07)
- Provide sufficient resources including materials, equipment, and training to effectively deal with potential emergencies at the workplace; (HSE-08)
- Verify the ERPs for the district projects are complete; (HSE-08)
- Provide sufficient resources, including materials, equipment, and training to effectively deal with security needs and issues; (HSE-09)
- Verify the Environmental Scope of Work form for each successful project is complete; (HSE-10)
- Verify an Environmental Action Plan is developed for each project; (HSE-10)
- Verify that projects are following the Environmental Action Plan standards through auditing and observation; (HSE-10)
- Implement the process for the screening and approval of PCL trade contractors; (HSE-11)
- Provide support and resources for the inspection, maintenance, and repair of equipment and tools; (HSE-12)
- Participate, support and reinforce the incident investigation and reporting process; (HSE-13)
- Review incident investigation reports and verify that the company incident investigation process is followed; (HSE-13)
- Support corrective actions identified in incident investigations; (HSE-13) and
- Provide adequate support and resources for all aspects of the injury management program (HSE-14).

### **3.11 Construction Manager/ Manager, Special Projects/Project Director**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the construction manager/ manager, special projects shall assist in the development and implementation of the Project Specific HSE Plan on assigned construction projects.

Responsible, with respect to the projects they manage, to:

- Account to the operations manager and/or district manager/general manager;
- Receive regular reports from project management (site) regarding:
  - the effectiveness of district and/or project HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ and/or district HSE department regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs.
- Report to the operations manager/project director/ district HSE manager:
  - the effectiveness of district and/or project HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Implement HSE standards and procedures as stated in the HSE Manual;
- Conduct PSI audits; (HSE-05)
- Verify that the SMC is being utilized and updated on an on-going basis;
- Comply with regulatory requirements and building codes, as to construction means, methods and project specifications;
- Exercise authority to maintain compliance with regulatory and company requirements;
- Establish goals and objectives for employee training; (HSE-03)
- Participate in the required training for their position; (HSE-03)
- Provide resources necessary to carry out training goals and objectives; (HSE-03)
- Verify that the superintendent is chairing and the project manager is co-chairing the Project HSE Committee meetings; (HSE-04)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Implement the District Strategic HSE Plan and report progress to the District HSE Committee; (HSE-04)
- Prepare HSE topics/issues for meeting agendas with clients, suppliers, and trade contractors; (HSE-04)
- Verify that the hazard assessment process is followed on each project; (HSE-05)
- Develop and approve the Project Specific HSE Plan prior to mobilization; (HSE-05)

- Complete regular revisions of the Project Specific HSE Plan as project conditions change; (HSE-05)
- Participate in the CHA; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Verify that projects are following the Project Specific HSE Plan standards through auditing and observation; (HSE-05)
- Verify that applicable procedures are an integral part of the project HSE program;
- Verify that project management is familiar with the Project Specific HSE Plan; (HSE-05)
- Verify that corrective actions identified during inspections are implemented; (HSE-06)
- Complete corrective action plans for items identified during audits; (HSE-06)
- Conduct one formal inspection per month, at a minimum; (HSE-06)
- Set an appropriate example for employees under their direction; (HSE-07)
- Verify that PPE standards outlined in this manual or otherwise established by the district are followed; (HSE-07)
- Provide sufficient resources (including materials, equipment, and training) to effectively deal with potential emergencies at the workplace; (HSE-08)
- Assist in the development of the ERPs and verify that it is implemented on projects; (HSE-08)
- Provide sufficient resources, including materials, equipment, and training to effectively deal with security needs and issues; (HSE-09)
- Submit the completed Environmental Scope of Work form and the CHA to the appropriate project management team to facilitate their assistance with the development of the Project Specific HSE Plan; (HSE-05) (HSE-10)
- Assist with the development of the Project Security Plan, and verify that it is part of the overall Project Specific HSE Plan; (HSE-09)
- Assist with the development of the Environmental Action Plan and verify that it is implemented on each project; (HSE-10)
- Verify that projects are following the Environmental Action Plan standards through auditing and observation; (HSE-10)
- Participate in the environmental inspection components of the Environmental Action Plan and address deficiencies where required; (HSE-10)
- Assist with the implementation of the PCL trade contractors' screening; (HSE-11)
- Continuously monitor trade contractors with poor HSE performance to the point where their HSE performance has sufficiently improved; (HSE-11)
- Notify trade contractors of work schedule, location, hazards, and special precautions, including the Project Specific HSE Plan content prior to the start of the project; (HSE-11)
- Verify the Project Specific HSE Plan acknowledgement form has been signed and returned to the project management team; (HSE-11)
- Monitor trade contractors to verify their work is conducted in a safe, responsible and compliant manner, is in accordance with the Project Specific HSE Plan and the trade contractor's HSE Plan; (HSE-11)
- Review the trade contractor's designated HSE qualifications; (HSE-11)



- Provide support and resources for the inspection, maintenance, and repair of equipment and tools; (HSE-12)
- Participate, support and reinforce the incident investigation and reporting process; (HSE-13)
- Review incident investigation reports and verify that the company incident investigation process is followed; (HSE-13)
- Communicate and report incidents to the appropriate client representatives as per district management directive; (HSE-13)
- Support corrective actions identified in incident investigations; (HSE-13) and
- Provide adequate support and resources for all aspects of the injury management program (HSE-14).

*On projects that do not have a project manager, the construction manager will assume or delegate the project manager's responsibilities.*

### **3.12 Project Manager**

The project manager is responsible for assisting in the development and implementation of the Project Specific HSE Plan for assigned projects. The project manager will work closely with the project superintendent and the district HSE manager to implement these HSE programs.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, project managers, in respect to their projects, shall:

- Account to the operations manager/construction manager/manager, special projects/general manager/district manager as applicable;
- Assist and develop regular reports regarding:
  - the effectiveness of project HSE programs and operations;
  - the occurrence of any significant HSE incident; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ and/or district HSE department regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs.
- Report to the operations manager/construction manager/manager, special projects/general manager/district manager/ district HSE manager as applicable:
  - the effectiveness of project HSE programs;
  - the occurrence of any significant HSE incident; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Implement HSE standards and procedures as stated in the HSE Manual;
- Conduct PSI audits; (HSE-05)
- Verify that the SMC is being utilized and updated on an on-going basis;
- Comply with regulatory requirements and building codes, as to construction means, methods and project specifications;

- Exercise authority to maintain compliance with regulatory and company requirements;
- Where practical participate in site orientations; (HSE-03)
- Participate in the required training for their position; (HSE-03)
- Provide resources necessary to carry out training goals and objectives; (HSE-03)
- Develop the Project HSE Trend Analysis; (HSE-04)
- Develop action plans arising from the Project HSE Trend Analysis; (HSE-04)
- Verify that the superintendent is chairing and the project manager is co-chairing the Project HSE Committee meetings; (HSE-04)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Implement the District Strategic HSE Plan and report progress to the District HSE Committee; (HSE-04)
- Prepare HSE topics/issues for meeting agendas with clients, suppliers, and trade contractors/sub-trade contractors; (HSE-04)
- Assist in the development and verify implementation of the Project Specific HSE Plan; (HSE-05)
- Verify that the hazard assessment process is followed; (HSE-05)
- Complete regular revisions of the Project Specific HSE Plan as project conditions change; (HSE-05)
- Participate in the CHA; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Verify that the project is following the Project Specific HSE Plan standards through auditing and observation; (HSE-05)
- Verify that applicable procedures are an integral part of the project HSE program;
- Verify that project management and project supervision are familiar with the Project Specific HSE Plan; (HSE-05)
- Verify that corrective actions identified during inspections are implemented; (HSE-06)
- Complete corrective action plans for items identified during audits; (HSE-06)
- Conduct one formal inspection per month, at a minimum; (HSE-06)
- Set an appropriate example for employees under their direction; (HSE-07)
- Verify that PPE standards outlined in the Project Specific HSE Plan are followed; (HSE-07)
- Provide sufficient resources including materials, equipment, and training to effectively deal with potential emergencies at the workplace; (HSE-08)
- Assist in ERP development and monitor the implementation on project; (HSE-08)
- Provide sufficient resources (including materials, equipment, and training) to effectively deal with security needs and issues; (HSE-09)
- Assist with the Project Security Plan development, and verify that it is part of the overall Project Specific HSE Plan; (HSE-09)
- Assist with the Environmental Action Plan development and monitor the implementation on project; (HSE-10)
- Verify the project is following the Environmental Action Plan standards through auditing and observation; (HSE-10)



- Participate in the environmental inspection components of the Environmental Action Plan and address deficiencies where required; (HSE-10)
- Assist with the implementation of the PCL trade contractor screening and approval process; (HSE-15)
- Hold a pre-job meeting to discuss trade contractor HSE performance expectations and communicate HSE requirements to the trade contractor prior to the start of the subcontract; (HSE-11)
- Support the trade contractor HSE program and provide assistance where required; (HSE-11)
- Continuously monitor trade contractors with poor HSE performance to the point where their HSE performance has sufficiently improved; (HSE-11)
- Notify trade contractors of work schedule, location, hazards, and special precautions, including the Project Specific HSE Plan content prior to the start of the project; (HSE-11)
- Verify the Project Specific HSE Plan acknowledgement form has been signed and returned to the project management team prior to trade contractor payment; (HSE-11)
- Monitor trade contractors to verify the work is conducted in a safe, responsible and compliant manner, is in accordance with the Project Specific HSE Plan, and trade contractor's HSE Plan; (HSE-11)
- Review trade contractor's designated HSE worker qualifications; (HSE-11)
- Provide support and resources for the inspection, maintenance, and repair of equipment and tools; (HSE-12)
- Participate, support and reinforce the incident investigation and reporting process; (HSE-13)
- Review incident investigation reports and verify that the company incident investigation process is followed; (HSE-13)
- Communicate and report incidents to the appropriate client representatives as per district management directive; (HSE-13)
- Support corrective actions identified in incident investigations; and (HSE-13)
- Provide adequate support and resources for all aspects of the injury management program. (HSE-14)

### **3.13 Chief Estimator**

The chief estimator (or designate) plays a significant role in identifying and establishing the HSE scope of work, together with accompanying costs for each project.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the chief estimator shall:

- Account to the district manager/general manager;
- Review bid/contract documents to determine HSE requirements;
- Verify appropriate funds are built into estimate to meet HSE requirements;
- Exercise authority to maintain compliance with regulatory and company requirements;
- Participate in the required training for their position; (HSE-03)
- Participate in the CHA; (HSE-05)

- Complete the Environmental Scope of Work form (a designate can be appointed); (HSE-10)
- Review (on successful bids) the completed Environmental Scope of Work form and the Environmental Checklist with the project management team so they can develop a Project Specific HSE Plan (HSE-10); and
- Set an appropriate example for employees under their direction. (HSE-07)

### **3.14 Regional HSE Manager**

The regional HSE manager is responsible for assisting the district management teams in defining and monitoring district HSE policies, practices, and procedures for districts within his/her jurisdiction.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the regional HSE managers shall:

- Account to the HSE director, USHO/HSE vice president, NAHQ, regional vice presidents and presidents;
- Receive regular reports from presidents/regional vice presidents, district managers, general managers, and HSE professionals (as applicable) regarding:
  - the effectiveness of district and/or project HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Prepare reports and make recommendations to HSE director, USHO/HSE vice president, NAHQ, presidents/regional vice presidents, district managers, general managers, and HSE professionals (as applicable) regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates;
  - the appropriateness and adequacy of resources (financial and time) for HSE programs;
  - the effectiveness of district and/or project HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents.
- Compile a written monthly report for HSE director, USHO/HSE vice president, NAHQ on the status of districts' inspections, audits, education and training, HSE incidents, and claims management;
- Report to and advise executive management/district management on current HSE legislation, information, and issues;
- Liaise and coordinate efforts with HSE vice president, NAHQ regarding legislation and information to facilitate development of company-wide policies, procedures, and programs where appropriate and requested;
- Assist district manager/general manager in evaluating HSE performance and exercising authority to maintain compliance with regulatory and company requirements;
- Research legislation and information applicable to operations;

- Assist the district managers/general managers with the recruitment and development of qualified HSE managers for placement within district locations;
- Monitor, assess and document the performance of district HSE manager(s) in consultation with district manager/general manager;
- Assist with HSEOP development and review;
- Assist district employees on HSE related issues;
- Assist with development of HSE audit results and industry trends which could impact company operations;
- Conduct PSI audits; (HSE-05)
- Participate in HSE associations;
- Monitor and assist districts with statistical reporting requirements;
- Assist the district manager/general manager in recognizing and positively reinforcing acceptable levels of HSE performance;
- Assist districts with recognition awards program(s);
- Assist districts with their claim's management programs; (HSE-14)
- Assist with education and training programs development for the company (HSE-03);
- Provide HSE education and training to district HSE managers and assist with implementation requirements; (HSE-03)
- Assist with coordination of trainers and resources to carry out training courses; (HSE-03)
- Audit training programs to verify compliance with training requirements; (HSE-03)
- Participate in the required training for their position; (HSE-03)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Assist districts in preparing and implementing their District Strategic HSE Plan (HSE-04);
- Review hazard assessments for accuracy and relevance to the work being performed; (HSE-05)
- Verify that all projects have a Project Specific HSE Plan; (HSE-05/ HSE-15)
- Assist with hazard assessments where required; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Assist HSE director, USHO/HSE vice president, NAHQ to develop and maintain a written HSE inspection and auditing program;
- Verify that project/facility inspections are conducted according to policy; (HSE-06)
- Perform one formal work site inspection per month, at a minimum; (HSE-06)
- Perform audits and additional inspections as directed by executive management; (HSE-06)
- Conduct annual regional formal/informal HSE audits (HSE-06);
- Conduct formal and informal district inspections in liaison with district HSE managers; (HSE-06)
- Set an appropriate example for employees under their direction; (HSE-07)
- Investigate, report, and recommend future preventative action plans; (HSE-08)

- Investigate (or assist with) significant HSE incidents; (HSE-13)
- Review incident investigation reports to verify accuracy, completeness, and evaluate corrective actions taken; (HSE-13)
- Acquire legal/technical assistance under the guidance of HSE director, USHO, HSE vice president, NAHQ; (HSE-13)
- Determine the need for procedure and policy changes within the district, other districts, USHO and NAHQ, as a result of incidents; (HSE-13)
- Verify that employees and supervisors are trained in injury management; (HSE-14)
- Develop the process and training to accomplish injury management program goals; (HSE-14)
- Verify that modified work programs are implemented within the requirements of the policy and local regulations; and (HSE-14)
- Ongoing liaison with medical practitioners and insurers regarding rehabilitation or return to work plans. (HSE-14)

### **3.15 District HSE Manager**

The district HSE manager is responsible for defining and monitoring HSE policies, practices, and procedures for all district construction activities.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the district HSE managers shall:

- Account to the district manager/general manager, and regional HSE manager;
- Receive regular reports from district management, project management, and HSE professionals (as applicable) regarding:
  - the effectiveness of district and project HSE programs and operations;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents;
- Prepare reports and make recommendations to district management, project management, and HSE professionals (as applicable) regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates;
  - the appropriateness and adequacy of resources (financial and time) for HSE programs;
  - the effectiveness of district and project HSE programs;
  - the occurrence of any significant HSE incident within the district; and
  - implementation of corrective or remedial actions arising out of significant incidents;
- Report to and advise district management on current HSE legislation, information, and issues;
- Liaise and coordinate efforts with regional vice presidents, HSE director, USHO, and vice president, NAHQ regarding legislation and information to facilitate development of company-wide policies, procedures, and programs where appropriate and requested;

- Assist district manager/general manager in evaluating HSE performance and exercising authority to maintain compliance with regulatory and company requirements;
- Distribute the updated HSE Manual or section documents to all district management, project management, and project supervision; (HSE-02)
- Research legislation and information applicable to operations;
- Recruit and develop qualified HSE professionals for placement within district locations;
- Monitor, assess and document the performance of project HSE staff;
- Assist with HSEOP development and review;
- Assist district on HSE related issues;
- Assist with development of HSE audit results and industry trends which could impact operations;
- Conduct PSI audits; (HSE-05)
- Verify that within the district, that employees right to refuse unsafe work is supported by managers and supervisors; (HSE-02)
- Participate in HSE associations;
- Provide information to district on HSE legislation standards and regulations;
- Liaise with regional HSE manager and/or HSE director, USHO/HSE vice president, NAHQ on district HSE related issues;
- Assist with, and verify that, the information contained in the SMC is up-to-date and accurate; (HSE-02)
- Issue and circulate HSE literature to enhance and maintain awareness;
- Notify government agencies of project starts and reportable incidents in accordance with local and federal regulations; (HSE-13)
- Review and organize HSE education and training programs, in consultation with the HSE director, USHO/HSE vice president, NAHQ; (HSE-03)
- Develop appropriate HSE training material; (HSE-03)
- Coordinate and provide trainers and resources to carry out training courses; (HSE-03)
- Audit the training program to verify compliance with the training requirements; (HSE-03)
- Participate in the required training for their position; (HSE-03)
- Establish goals and objectives for employee training; (HSE-03)
- Provide resources necessary to carry out training goals and objectives; (HSE-03)
- Assist in the organizing, planning, and implementation of the worker HSE orientation program (HSE-03) and the on-site PSI program; (HSE-05)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Prepare monthly HSE performance statistics and circulate to project management and project supervision; (HSE-04)
- Review HSE Field Meeting Minutes to verify that meaningful information is being provided to workers; (HSE-04)
- Verify with the chief estimator and the project management team that the Environmental Scope of Work form and the CHA form has been completed and reviewed prior to the development of Project Specific HSE Plan; (HSE-05/HSE-15)
- Review hazard assessments for accuracy and relevance to the work being performed; (HSE-05/HSE-15)

- Assist with the Project Specific HSE Plan preparation in collaboration with the district manager/general manager, project manager, project superintendent, client, and trade contractors, as required; (HSE-05/HSE-15)
- Research, evaluate, and select medical facilities and service providers to accommodate project requirements; (HSE-05)
- Review the Project Specific HSE Plan prior to distribution; (HSE-05)
- Assist with hazard assessments where required; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Verify that the hazard assessment process is followed within the district; (HSE-05)
- Verify a Project Specific HSE Plan is developed for each project; (HSE-05)
- Verify that projects are following the Project Specific HSE Plan standards through auditing and observation; (HSE-05)
- Provide appropriate methods of documenting inspections; (HSE-06)
- Verify that project/facility inspections are conducted according to policy; (HSE-06)
- Conduct monthly formal inspections of projects, in conjunction with project management; (HSE-06)
- Perform audits and additional inspections as directed by district management; (HSE-06)
- Evaluate HSE inspection reports to identify unsatisfactory performance trends; (HSE-06)
- Identify (through the inspection process) any HSE deficiencies, initiate corrective measures and document the related facts; (HSE-06)
- Verify that PPE standards are developed for the tasks performed by PCL; (HSE-07)
- Recommend PPE that meets applicable government, industry, or customer standard(s) governing its use; (HSE-07)
- Set an appropriate example for employees under their direction; (HSE-07)
- Assist in the development and implementation of the ERP; (HSE-08)
- Verify that the applicable ERP procedures are part of the Project Specific HSE Plan; (HSE-08)
- Check, through informal audits, that these procedures are up-to-date; (HSE-08)
- Verify projects are aware of, and have knowledge of, proper emergency reactions; (HSE-08)
- Investigate, report, and recommend preventative action plans; (HSE-08)
- Report to the various government regulatory agencies or environmental protection agencies and to the HSE director, USHO/HSE vice president, NAHQ; (HSE-08)
- Assist in Site Security Plan development and implementation; (HSE-09)
- Review the Environmental Action Plan prior to distribution; (HSE-10)
- Evaluate the trade contractor's pre-qualification documentation to determine the ability to achieve expected HSE performance; (HSE-11)
- Monitor trade contractor safety performance and verify correction and redirection as needed; (HSE-11)



- Determine the degree of PCL involvement in the trade contractor's HSE efforts; (HSE-11)
- Develop programs to verify that equipment and tools are maintained in safe working condition; (HSE-12)
- Provide incident investigation training to district management, project management, and project supervision; (HSE-13)
- Assist in the investigation of incidents and recommend corrective action to prevent reoccurrence; (HSE-13)
- Review incident investigation reports to verify accuracy, completeness, and evaluate corrective actions taken; (HSE-13)
- Investigate significant HSE incidents; (HSE-13)
- Acquire legal/technical assistance under the guidance of HSE director, USHO, HSE vice president, NAHQ; (HSE-13)
- Verify that employees and supervisors are trained in injury management; (HSE-14)
- Develop process and training to accomplish injury management program goals; (HSE-14)
- Verify that modified work programs are implemented within the requirements of the policy and local regulations; (HSE-14)
- Ongoing liaison with medical practitioners and insurers regarding rehabilitation or return to work plans; (HSE-14)
- Review medical treatment memorandums and prepare an employer's report of injury and forward copies to the project management in accordance with applicable privacy legislation; (HSE-14)
- Manage claims on compensation cases and/or assist injury management coordinators; (HSE-14)
- Verify that project site behavioral based observation (BBO) systems are conducted in accordance with minimum requirements specified in this procedure; (HSE-16)
- Provide technical assistance in developing and implementing the BBO system as requested; (HSE-16)
- Verify that weekly BBO meetings are conducted on all project sites that implement the system; (HSE-16)
- Verify that observation data is entered into the SMC; (HSE-16)
- Verify that information gathered from observations is included in project and district trend analyses; (HSE-16)
- Monitor trends identified by the observation system and advise the district manager when corrective actions are needed; (HSE-16)
- Verify that the resources are provided to implement the system; (HSE-16)
- Monitor or assist company-owned or rented equipment safety maintenance programs; (HSE-12) and
- Verify that applicable procedures are an integral part of the project HSE program.

### **3.16 Project Superintendent**

The project superintendent is responsible for initiating, developing, and implementing the Project Specific HSE Plan with the assistance of the project management team and/or project/district HSE professionals.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the project superintendents shall:

- Account to the project manager and/or construction manager;
- Assist and develop regular reports regarding:
  - the effectiveness of project HSE programs and operations;
  - the occurrence of any significant HSE incident; and
  - implementation of corrective or remedial actions arising out of significant incidents;
- Receive reports or recommendations from HSE director, USHO/HSE vice president, NAHQ and/or district HSE department regarding:
  - the effectiveness of HSE policies and programs, required reviews, and updates; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs;
- Report to the operations manager/ construction manager/ manager, special projects/ general manager/district manager/ district HSE manager (as applicable) regarding:
  - the effectiveness of project HSE programs;
  - the occurrence of any significant HSE incident; and
  - implementation of corrective or remedial actions arising out of significant incidents;
- Implement HSE standards and procedures as stated in the HSE Manual;
- Conduct PSI audits; (HSE-05)
- Assist supervisors with the on-site PSI program; (HSE-05)
- Assist with the development of SWPs, HSEOPs and JHAs;
- Verify that the SMC is being utilized and updated on an on-going basis; (HSE-02)
- Comply with regulatory requirements and building codes, as to construction means, methods and project specifications;
- Exercise authority to maintain compliance with regulatory and company requirements;
- Where practical, participate in site orientations; (HSE-03)
- Establish goals and objectives for employee training; (HSE-03)
- Participate in the required training for their position; (HSE-03)
- Provide resources necessary to carry out training goals and objectives; (HSE-03)
- Assist with action plan development arising from the Project HSE Trend Analysis; (HSE-04)
- Chair the Project HSE Committee meetings; (HSE-04)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Implement the District Strategic HSE Plan and report progress to the District HSE Committee; (HSE-04)



- Prepare HSE topics/issues for meeting agendas with clients, suppliers, and trade contractors/sub-trade contractors; (HSE-04)
- Make all workers aware of communication systems; (HSE-04)
- Assist in the development and verify implementation of the Project Specific HSE Plan; (HSE-05)
- Verify that the hazard assessment process is followed on each project; (HSE-05)
- Complete regular revisions of the Project Specific HSE Plan as project conditions change; (HSE-05)
- Participate in the CHA; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Review JHAs/SWPs/HSEOPs that are commensurate with the scope of work for PCL and trade contractors;
- Verify that the project is following the Project Specific HSE Plan standards through auditing and observation; (HSE-05)
- Verify that applicable procedures are an integral part of the project HSE program;
- Verify that project management and project supervision are familiar with the Project Specific HSE Plan; (HSE-05)
- Review completed hazard assessments with employees prior to the start of work; (HSE-05)
- Communicate the Project Specific HSE Plan to his/her workers in the area of their responsibility; (HSE-05)
- Conduct daily informal inspections of their work areas; (HSE-06)
- Verify that corrective actions identified during inspections are implemented; (HSE-06)
- Complete corrective action plans for items identified during audits; (HSE-06)
- Conduct one formal inspection per month, at a minimum; (HSE-06)
- Set an appropriate example for employees under their direction; (HSE-07)
- Verify that PPE standards outlined in the Project Specific HSE Plan are followed; (HSE-07)
- Provide sufficient resources including materials, equipment, and training to effectively deal with potential emergencies at the workplace; (HSE-08)
- Assist in the development of the ERPs and monitor the implementation on project; (HSE-08)
- Verify that emergency response standards are met for each project before commencement of work; (HSE-08)
- Inform all supervisors of their responsibilities within the ERP; (HSE-08)
- Assume leadership of the emergency response team; (HSE-08)
- Provide sufficient resources, including materials, equipment, and training to effectively deal with security needs and issues; (HSE-09)
- Assist with the project Site Security Plan development, and verify that it is part of the overall Project Specific HSE Plan; (HSE-09)
- Assist with the Environmental Action Plan development and monitor implementation on project; (HSE-10)
- Verify the project is following the Environmental Action Plan standards through auditing and observation; (HSE-10)

- Participate in the environmental inspection components of the Environmental Action Plan and address deficiencies where required; (HSE-10)
- Assist with the implementation of the PCL trade contractors screening and approval process; (HSE-11)
- Hold a pre-job meeting to discuss trade contractor HSE performance expectations and communicate HSE requirements to the trade contractor prior to the start of the subcontract; (HSE-11)
- Support the trade contractor HSE program and provide assistance where required; (HSE-11)
- Continuously monitor trade contractors with poor HSE performance to the point where their HSE performance has sufficiently improved; (HSE-11)
- Notify trade contractors of work schedule, location, hazards, and special precautions, including the content of the Project Specific HSE Plan prior to the start of the project; (HSE-11)
- Monitor trade contractors to verify their work is conducted in a safe, responsible and compliant manner and is in accordance with the Project Specific HSE Plan and the trade contractor's HSE Plan; (HSE-11)
- Review the trade contractor's designated HSE worker qualifications; (HSE-11)
- Do not permit the use of any piece of equipment or tools that have been tagged "OUT OF SERVICE" or "DO NOT USE" or are otherwise defective; (HSE-12)
- Verify the safe operation and maintenance of all equipment on the project; (HSE-12)
- Provide support and resources for the inspection, maintenance, and repair of equipment and tools; (HSE-12)
- Participate, support and reinforce the incident investigation and reporting process; (HSE-13)
- Review incident investigation reports and verify that the company incident investigation process is followed; (HSE-13)
- Communicate and report incidents to the appropriate client representatives as per district management directive; (HSE-13)
- Support corrective actions identified in incident investigations; (HSE-13)
- Determine, in conjunction with project HSE manager/supervisor/coordinator, if the Incident Investigation Form or if the Near Miss Form should be used; (HSE-13)
- Provide adequate support and resources for all aspects of the injury management program; (HSE-14)
- Provide employees and supervisors training in the injury management program; (HSE-14)
- Implement modified work programs within the requirements of the policy and local regulations; (HSE-14)
- Review all medical treatment memorandums and other incident related reports for accuracy and action as required; (HSE-14)
- Verify operators of mobile or hoisting equipment qualifications; and
- Verify that all equipment (particularly hoisting equipment) is inspected before use.

*On projects that do not have a project HSE supervisor, the project superintendent will assume or delegate the HSE supervisor's responsibilities.*

### **3.17 District Construction Engineer**

The district construction engineer is responsible for proper engineering practices related to PCL construction and HSE activities.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the district construction engineers shall:

- Account to the operations manager and/or district manager;
- Develop and provide training and/or recommend HSEOPs/design for construction activities such as multiple crane lifts, heavy lifts, man-lifts with cranes, flying forms, slab re-shore etc.;
- Recommend revisions to the HSEOPs/designs for construction activities such as multiple crane lifts, heavy lifts, man-lifts with cranes, flying forms, slab re-shore etc.;
- Assist with the development and implementation of the Project Specific HSE Plan; (HSE-15)
- Assist with the development of SWPs, HSEOPs and JHAs; (HSE-05)
- Provide engineering design for the safe use of construction equipment and structures such as false work, work platforms, spreader bars, etc.;
- Conduct periodic field checks for compliance with engineering design and HSEOPs;
- Conduct quarterly HSE inspections; (HSE-06) and
- Conduct PSI audits (HSE-05).

### **3.18 Field Engineer/Project Coordinator**

The field engineer/project coordinator assists with the implementation of the Project Specific HSE Plan.

In addition to the responsibilities of all employees as set out in Section 3.1 of this HSE-02, the field engineers/project coordinators shall:

- Account to project management;
- Assist with the development and implementation of the Project Specific HSE Plan; (HSE-15)
- Assist with the development of SWPs, HSEOPs and JHAs; (HSE-05)
- Assist project in the assembly of detail drawings and inspection procedures; (HSE-06)
- Perform one formal work site inspection per month, at a minimum; (HSE-06)
- Assist the superintendent in obtaining the necessary approvals prior to commencing construction activities such as heavy lifts or crane/man-lifts, erection, etc.;
- When assigned the task, provide necessary technical specifications requiring approval on all lifting and rigging equipment;

- Assist the superintendent in assembling detail drawings requiring a professional engineer's seal;
- Conduct PSI audits; (HSE-05) and
- Familiarize and comply with the Project Specific HSE Plan (HSE-15).

### **3.19 Quality Assurance/Quality Control Personnel**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the quality assurance/quality control personnel shall:

- Account to project management;
- Perform one formal work site inspection per month, at a minimum; (HSE-06)
- Assist with necessary technical specifications;
- Assist the superintendent in assembling detail drawings and HSE hazard assessments;
- Conduct PSI audits; (HSE-05) and
- Familiarize and comply with the Project Specific HSE Plan (HSE-15).

### **3.20 Procurement/Materials Manager**

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the procurement/materials managers shall:

- Account to the district manager/general manager and project management (as applicable);
- Verify that procurement systems meet the district HSE program needs; (HSE-05)
- Where directed by district management, review and issue subcontracts and major purchase orders in conformance with the respective HSE components;
- Manage yard operations and procurement accounts (i.e. small tools, stores, and temporary power) and verify such activities are conducted following PCL HSE program;
- Verify suppliers are instructed to supply MSDS with product delivery; (HSE-05)
- Forward MSDS to NAHQ HSE coordinator for entry into database; (HSE-05)
- Verify that all equipment intended for field use leaves the shop or yard properly equipped and able to meet the HSE standards required by regulations, laws, codes, and the PCL HSE program; (HSE-12)
- Conduct monthly formal inspections of yard, a minimum of one per month; (HSE-06) and
- Verify quarterly formal inspections of all permanent facilities, in conjunction with site management, are completed (HSE-06).

### **3.21 Project HSE Manager/Supervisor/Coordinator**

The project HSE manager/supervisor/coordinator assists with the development, implementation, and monitoring of the Project Specific HSE Plan with the assistance of the project management team and the superintendent. The responsibilities/accountability will be clearly identified in the Project HSE Plan by the district HSE manager.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the project HSE manager/supervisor/coordinator shall:

- Account to the construction manager/district HSE manager or as identified in the Project Specific HSE Plan;
- Develop regular reports and make recommendations for all workers/district management and project management (as applicable) regarding:
  - the effectiveness of project HSE programs and operations;
  - the occurrence of any significant HSE incident on the project;
  - implementation of corrective or remedial actions arising out of significant incidents; and
  - the appropriateness and adequacy of resources (financial and time) for HSE programs.
- Report to and advise project management on current legislation, information, and issues regarding HSE;
- Assist project management in evaluating HSE performance and exercising authority to maintain compliance with regulatory and company requirements;
- Research legislation and information applicable to operations;
- Assist project management on HSE related issues;
- Conduct PSI audits; (HSE-05)
- Verify that employees right to refuse unsafe work is supported by managers and supervisors; (HSE-02)
- Participate in HSE associations;
- Monitor, assess and document the performance of subordinate project HSE staff as defined in the Project Specific HSE Plan; (HSE-15)
- Liaise with district HSE manager on project HSE related issues;
- Assist with, and verify that, the information contained in the SMC is up-to-date and accurate;
- Issue and circulate HSE literature to enhance and maintain awareness; (HSE-04)
- Review investigation reports of incidents including HSE, medical, first aid cases, and damage to property or equipment and verify that corrective action has been completed; (HSE-13)
- Notify government agencies of project starts and reportable incidents in accordance with local and federal regulations as directed by the district HSE manager;
- Assist with development of education and training programs for the project; (HSE-03)
- Assist with development and review of HSEOPs;
- Assist with development of HSE audit results and industry trends which could impact project operations; (HSE-04)

- Prepare monthly HSE performance statistics and circulate to project management and as otherwise directed by project management; (HSE-04)
- Review HSE Field Meeting Minutes to verify that meaningful information is being provided to workers; (HSE-04)
- Assist in the organizing, planning, and implementation of the worker HSE orientation program (HSE-03) and the on-site PSI program; (HSE-05)
- Participate and attend all required HSE committee meetings; (HSE-04)
- Review hazard assessments for accuracy and relevance to the work being performed; (HSE-05)
- Review the Project Specific HSE Plan prior to distribution; (HSE-05)
- Assist with hazard assessments where required; (HSE-05)
- Provide coaching and recognition to employees on the implementation and development of SWPs, HSEOPs, JHAs, and the overall hazard assessment process; (HSE-05)
- Verify that the hazard assessment process is followed on the project; (HSE-05)
- Verify the project is following the Project Specific HSE Plan standards contained through auditing and observation; (HSE-05)
- Assist with CHA prior to mobilization to site; (HSE-05)
- Research, evaluate, and select medical facilities and service providers to accommodate project requirements;
- Assist with revisions of the Project Specific HSE Plan as project conditions change; (HSE-05)
- Coordinate the development, implementation, coordination, distribution, and communication of the Project Specific HSE Plan standards; (HSE-05)
- Verify the Project Specific HSE Plan is current; (HSE-05)
- Verify the Project Specific HSE Plan is communicated to all project workers in orientation; (HSE-05)
- Coordinate training for line supervision on the Project Specific HSE Plan content; (HSE-05)
- Audit the PSI process where the employees are performing the work; (HSE-05)
- Provide appropriate methods of documenting inspections; (HSE-06)
- Perform one formal work site inspection per week, at a minimum; (HSE-06)
- Perform audits and additional inspections as directed by project management; (HSE-06)
- Verify the project inspections are conducted according to policy; (HSE-06)
- Verify that corrective actions identified during inspections are implemented; (HSE-06)
- Evaluate HSE inspection reports to identify unsatisfactory performance trends;
- Complete corrective action plans for audits completed in their area of responsibility; (HSE-06)
- Verify that PPE standards are developed for the tasks performed by PCL; (HSE-07)
- Recommend PPE that meets applicable government, industry, or customer standard(s) governing its use; (HSE-07)
- Set an appropriate example for employees under their direction; (HSE-07)
- Assist in the development and implementation of the ERP; (HSE-08)



- Verify that the applicable ERP procedures are part of the Project Specific HSE Plan; (HSE-08)
- Verify through inspections that ERP procedures are up-to-date; (HSE-08)
- Verify project workers are aware of, and have knowledge of, proper emergency reactions; (HSE-08)
- Investigate, report, and recommend future preventative action plans for the ERP; (HSE-08)
- Verify that all workers are familiar with the ERP and can adequately respond if required; (HSE-08)
- Exercise the ERP with the emergency evacuation team in test situations at a frequency of no less than once per year. On major construction sites as defined by the district manager/HSE manager, emergency procedures should be completed every six months; (HSE-08)
- Verify that proper first aid procedures are carried out until the arrival of emergency response personnel; (HSE-08)
- Assist in the development and implementation of Site Security Plans; (HSE-09)
- Review the Environmental Action Plan prior to distribution; (HSE-10)
- Evaluate the trade contractor's pre-qualification documentation to determine the ability to achieve expected HSE performance; (HSE-11)
- Monitor trade contractor safety performance and verify correction and redirection as needed; (HSE-11)
- Determine the degree of PCL involvement in the trade contractor's HSE efforts; (HSE-11)
- Develop programs to verify that equipment and tools are maintained in safe working condition; (HSE-12)
- Monitor or assist company-owned or rented equipment safety maintenance programs;
- Provide incident investigation training to project management and project supervision; (HSE-13)
- Investigate or assist with the HSE incident investigations; (HSE-13)
- Review incident investigation reports to verify accuracy, completeness, and evaluate corrective actions taken; (HSE-13)
- Determine in conjunction with superintendent if the Incident Investigation ABC Form or if the Near Miss Form, should be used; (HSE-13)
- Verify that employees and supervisors are trained in injury management; (HSE-14)
- Assist with development of processes and training to accomplish injury management program goals; (HSE-14)
- Verify that modified work programs are implemented within the requirements of the policy and local regulations; (HSE-14)
- Ongoing liaison with medical practitioners and district HSE regarding rehabilitation or return to work plans; (HSE-14)
- Manage claims on compensation cases and/or assist injury management coordinators; (HSE-14)
- Verify that applicable procedures are an integral part of the Project Specific HSE Plan; (HSE-15)

- Assist supervisory staff with preparation of agenda and material for Project HSE Committee meetings and HSE Field meetings; (HSE-04)
- When the behavioral based observation system is employed, conduct the required weekly observer meetings; (HSE-16)
- Conduct or verify the conduct of behavioral safety observation training for all workers selected as observers; (HSE-16)
- Verify that behavioral based observation data is entered in the SMC and trended; (HSE-16)
- Provide assistance to project management in the implementation of corrective actions in regard to behavioral based safety; (HSE-16)
- Periodically assess the effectiveness of the behavioral based observation checklist(s) employed on the site; (HSE-16)
- Review HSE related reports and memorandums for accuracy and then forward, as required, to the district HSE manager; and
- Verify that site supervisors have adequately prepared their employees to act appropriately in emergency response situations (HSE-08).

### **3.22 Foreman/Supervisor/Lead Hand**

The foreman/supervisor/lead hand is responsible for promoting HSE awareness and demonstrating to the workers, through day-to-day example and actions.

In addition to the responsibilities of all employees as set out in section 3.1 of this HSE-02, the foremen/supervisors/lead hands shall:

- Account to the applicable immediate supervisor/project superintendent;
- Report to project superintendent promptly on occurrence of any significant HSE incident; (HSE-13)
- Verify that workers are able to conduct their work tasks in a safe manner;
- Assist with development and implementation of the Project Specific HSE Plan as directed by project management; (HSE-15)
- Participate in supervisory training outlined by the district; (HSE-03)
- Perform informal daily inspections of assigned work areas; (HSE-06)
- Conduct task specific HSE orientations for new workers prior to assignment of duties, including hazardous material and JHA instructions; (HSE-03)
- Implement/monitor the Project Specific HSE Plan requirements; (HSE-15)
- Assist with the SWPs, HSEOPs and JHAs development; (HSE-05)
- Provide PSIs to employees at the beginning of each shift and whenever new tasks are assigned; (HSE-05)
- Review and sign off on all PSIs; (HSE-05)
- Support the employees' right to refuse unsafe work by investigating the circumstances and communicating the support and hazard abatement actions to employees as warranted; (HSE-02)
- Issue appropriate PPE to employees as required; (HSE-07)
- Develop and maintain good housekeeping standards; (HSE-03)
- Monitor the work site through personal observation for environmental non-compliance or unsafe conditions/hazards and communicate these (with remedial action as required) to appropriate line supervisors or employees; (HSE-06)



- Conduct a preliminary investigation upon the occurrence of an incident; (HSE-13)
- Report results of the incident investigations to the project superintendent; (HSE-13)
- Hold HSE Field Meetings with employees as per HSE-04; (HSE-04)
- Verify that operators complete equipment inspection checklists;
- Check that operators are qualified, fit, and authorized to operate equipment or vehicles safely;
- Conduct PSI audits; (HSE-05)
- Enforce HSE rules and issue appropriate discipline; (HSE-02)
- Take immediate action to correct unsatisfactory HSE performance; (HSE-02) and
- Familiarize, comply with, and communicate to subordinate employees the Project Specific HSE Plan requirements. (HSE-15)

### **3.23 Trade Contractors**

Trade contractors on PCL worksites are responsible for the safety of their workers.

Trade contractors must:

- Account to the project management;
- Investigate and report to project superintendent promptly on occurrence of any HSE incident; (HSE-11) (HSE-13)
- Perform one formal HSE work site inspection per month, at a minimum; (HSE-11)
- Attend an on-site worker HSE orientation meeting; (HSE-03) (HSE-11)
- Provide PSIs to workers whenever new tasks are assigned or when job conditions change; (HSE-05)
- Before commencing work, contact the project superintendent for instructions regarding HSE hazards and controls per HSE-11; (HSE-05) (HSE-11)
- Review and sign off on the Project Specific HSE Plan and return the Project Specific HSE Plan Acknowledgement Form, HSE-15-01, to project management; (HSE-11) (HSE-15)
- Advise their workers of the Project Specific HSE Plan and verify compliance through personal observation; (HSE-11) (HSE-15)
- Provide education and training, and enforce the use of applicable PPE; (HSE-07)
- Provide specific hazard analysis that is commensurate with their scope of work (this may include SWPs, JHAs, and/or HSEOPs) to the project superintendent; (HSE-05)
- Make arrangements with the project superintendent concerning emergency procedures; (HSE-08)
- Immediately correct any unsafe conditions and acts observed in their jurisdiction;
- Immediately report to the PCL project superintendent any unsafe acts and conditions observed outside of their jurisdiction;

- Cooperate with all HSE PCL representatives having jurisdiction at the work site;
- Contact the PCL project superintendent if they have any questions regarding the meaning or interpretation of the Project Specific HSE Plan; (HSE-15)
- Conduct HSE meetings with their workers, document the meetings, and submit a copy of the minutes to the PCL project superintendent; (HSE-04)
- Conduct PSI audits; (HSE-05)
- Participate in the PSI program; (HSE-05)
- Maintain good housekeeping practices in their work areas; (HSE-03)
- Designate a qualified person to coordinate their project HSE program; (HSE-11)
- Understand and fully comply with the Project Specific HSE Plan, client HSE requirements, and legislative jurisdictional requirements; (HSE-11)
- Fully comply with all requirements related to trade contractors in the HSE Manual; (HSE-11)
- Communicate the above items to all contractor supervisors and workers; (HSE-11) and
- Demonstrate commitment to the PCL HSE policies and goal for zero incidents.

### **3.24 Visitors/Suppliers/Consultants**

Visitors, suppliers, and consultants are responsible for safeguarding their own health and safety and the safety of project workers and shall:

- Report to the project office before entry to the project site; (HSE-03)
- Report to PCL project superintendent promptly on occurrence of any significant HSE incident; (HSE-13)
- Participate and comply with HSE directives received from the PCL project superintendent;
- Comply with the PCL Project Specific HSE Plan; (HSE-15)
- Wear appropriate PPE; (HSE-07)
- Report any unsafe acts and/or unsafe conditions to the PCL project superintendent that could have any negative HSE consequence;
- Report any injury sustained on the work site; (HSE-14) and
- Demonstrate commitment to the PCL HSE policies and goal for zero incidents.

### **3.25 Workers**

- Never proceed with work that creates an unusually dangerous risk that is beyond the risks that are typically expected in his/her occupation;
- Participate in the required training for their position and attend the general orientation; (HSE-03)
- Except for short duration workers and visitors, all workers at a PCL worksite must complete a health, safety, and environment orientation; (HSE-03)
- At the completion of the HSE Orientation video, workers must complete HSE-03-02, HSE Orientation Quiz; (HSE-03)

- If appointed to an HSE committee, attend all applicable committee meetings; (HSE-04)
- Encourage fellow workers to make HSE suggestions; (HSE-04)
- Participate in the hazard assessment process; (HSE-05)
- Follow the standards contained in the Project Specific HSE Plan; (HSE-05)
- Follow hazard control measures identified for their work; (HSE-05)
- Participate in inspections as requested; (HSE-06)
- Wear PPE as required in PCL policy, practices, and procedures or where site specific requirements request PPE in addition to the company standard; (HSE-07)
- Care for and maintain the PPE issued to them according to manufacturer instructions, codes of practice, and related training they have received; (HSE-07)
- Use only approved PPE that is in clean and in good condition or repair; (HSE-07)
- Participate in PPE training; (HSE-07)
- Understand the ERP for their work area; (HSE-08)
- Participate in emergency response training and testing of the Emergency Response Plan; (HSE-08)
- Secure tools, equipment, and materials; (HSE-09)
- Report any losses of tools, equipment, materials, or other incidents of security to the project supervision as soon as they are discovered; (HSE-09)
- Report any suspicious behavior or presence of unauthorized individuals on the work site; (HSE-09)
- Inspect all equipment and tools before use; (HSE-12)
- Keep all equipment and tools in good repair; (HSE-12)
- Operators of vehicles/equipment shall be made aware of the servicing, maintenance schedule, and methods of maintaining the company vehicle; (HSE-12)
- Remove and tagout from service any defective tool or piece of equipment; (HSE-12)
- Leave all HSE devices operative on equipment and tools; (HSE-12)
- Report all incidents to their supervisor immediately; (HSE-13)
- Actively participate as required, in the incident investigation process; (HSE-13)
- Provide honest statements of known facts to investigators when requested; (HSE-13)
- Immediately report all injuries to their supervisor; (HSE-14)
- Participate in the modified work program, where medically acceptable; (HSE-14)
- Notify treating health care providers that modified work is available; (HSE-14)
- Notify project HSE staff and supervisors regarding medications, medical appointments, and medical work restrictions; (HSE-14)
- Notify project HSE staff and supervisors regarding any problems or concerns with the modified work; (HSE-14);
- Follow the standards contained in the Project Specific HSE Plan; (HSE-15)
- Accept behavioral based observations and assist the observer in making them meaningful; (HSE-16) and

- When selected as a behavioral based observer, accomplish four behavioral based observations per week and attend the weekly observer meeting. (HSE-16)

#### **4.0 REFERENCES**

- Legislative Jurisdictional Requirements
- PCL Health, Safety and Environment policy statements

#### **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

##### **5.1 Right to Refuse**

A worker's right, in accordance with local legislative jurisdictional requirements, to refuse to perform a particular task because the worker believes that such a task involves an unacceptable risk of injury or damage and the employer's obligation is to honor the refusal, investigate, correct if warranted and communicate the results to the worker in a timely manner.

#### **6.0 STANDARD**

##### **6.1 District Disciplinary Policy**

6.1.1 Each district and area office must publish their written disciplinary program that is consistent with Section 6.2 of this HSE-02 and make it available to employees within the district.

6.1.2 Disciplinary action must be consistently applied.

##### **6.2 Enforcement of HSE Rules**

Compliance with company and legislated HSE standards is necessary to maintain a safe and healthy work environment. Violations will be the cause for corrective action, which may result in disciplinary action up to and including termination of employment or services contract. Under most circumstances PCL family of companies uses a progressive discipline process. However, infractions of a serious nature and some single acts of misconduct deserving discharge from employment (zero tolerance activity) will be investigated and upon confirmation, instant termination of employment will result.

The following acts of misconduct are zero tolerance activities and will result in immediate termination unless otherwise directed by the district manager/general manager:

- Any criminal or illegal activities on the worksite;
- Possession of firearms, unless allowed by the jurisdictional authority;

- Any physical fighting or other acts of workplace violence;
- Theft or attempted theft of property of any value;
- Vandalism;
- Sleeping or resting with eyes closed during the scheduled work shift;
- Smoking in non-designated areas;
- Bomb threats;
- Unauthorized access/modification to a red flagged area or red tagged scaffold;
- Entry into a confined space without a valid permit;
- Willful violation of any project or operations work permit;
- Failure to follow fall prevention rules or comply with the manufacturer recommendations on the use and maintenance of equipment;
- Violation of the Lock Out/Tag Out procedure(s) and /or legislation;
- Tampering with fire prevention equipment or client plant equipment;
- Operating equipment without proper authority or qualifications; and
- Failure to utilize proper sanitary facilities.

Each district may identify additional zero tolerance activities to facilitate commitment to the PCL HSE policies and goal for zero incidents.

Where the violation does not involve a zero-tolerance activity, the following are guidelines for disciplinary action resulting from HSE infractions:

- On first offense, employee/worker will be given a documented verbal warning.
- On second offense, employee/worker will be given a written warning.
- On third offense, employee's/worker's employment may be terminated.

**PCL RESERVES THE RIGHT TO TERMINATE ANY EMPLOYEE ON A SINGLE HSE INFRACTION, WITH OR WITHOUT PRIOR NOTICE.**

The manager/superintendent or direct supervisor of the employee is responsible for the issuance of the disciplinary action.

The district manager/general manager/operations manager/district construction manager shall document and maintain consistency in the disciplinary process.

## **6.3 Program Administration**

### **6.3.1 District Distribution and Updating of HSE Manual**

After each district has received the HSE Manual or updated section documents, the HSE department will determine how to distribute the manual to all district management, project management, and project supervision. Additional HSE Manuals and subsequent updating will be distributed to others as identified by the district manager/general manager.

The HSE department will be responsible to determine how the manuals will be maintained/updated for control and audit purposes.

An up-to-date distribution list must be maintained at each district office. Each person who receives an HSE Manual must sign HSE-02-01, Acknowledgement Form, and return it to the district office.

HSE Manuals must be distributed and located at each district office and at every jobsite location. All on-site workers must be advised of the location and have access to the HSE Manual for familiarization, planning, resource, reference, awareness, education, training, compliance, inspection, and audit purposes.

#### 6.3.2 Documentation

All documentation relating to personal information in PCL possession shall be secured in accordance with applicable laws relating to privacy.

#### 6.3.3 Data Entry

All data must be entered into the SMC by the 10<sup>th</sup> of each month.

#### 6.3.4 Feedback and Continuous Improvement

Continuous improvement through feedback assists PCL in enhancing HSE performance. Every employee has the opportunity of providing information, which can improve our HSE program.

Employees are encouraged to provide feedback using the Employee Feedback Form, HSE-02-02, and shall be submitted to HSE director, USHO/HSE vice president, NAHQ.

#### 6.3.5 Review Committee

An HSE Manual review committee will review all information sufficient to provide necessary changes for the required update and publication of the HSE Manual. This committee will meet to discuss any updates or changes to the HSE Manual on a bi-annual basis.

#### 6.3.6 Policy Statements

All Health, Safety and Environment policy statements must be signed by the district/general manager in the current calendar year and posted in a highly visible location accessible to all workers at all work sites.

## 7.0 ATTACHMENTS

HSE-02-01	Acknowledgement Form
HSE-02-02	Employee Feedback Form



CONSTRUCTION

**PCL HSE MANUAL**  
Leadership and Administration  
Standard HSE-02-01

---

## HSE Manual Acknowledgement Form

**Company:** \_\_\_\_\_

**Project Name:** \_\_\_\_\_ **Project Number:** \_\_\_\_\_

**Plan/Revision Date:** \_\_\_\_\_

**Received Date:** \_\_\_\_\_ DD/MM/YY

**Received By:** \_\_\_\_\_ **Print** **Signature:** \_\_\_\_\_





## Employee Feedback Form

Please provide your comments, suggestions or recommendations below:

---

---

---

---

---

---

---

---

---

---

Upon completion, please mail your comments to:

HSE Vice President, NAHQ  
PCL Constructors Inc.  
5410 – 99 Street  
Edmonton, Alberta, Canada  
T6E 3P4

HSE Director, USHO  
PCL Construction Services Inc.  
2000 S. Colorado Blvd.  
Tower 2, Suite 2-500  
Denver, Colorado, U.S.A. 80222

To receive a reply to your comments, complete the following:

Name: \_\_\_\_\_ Print \_\_\_\_\_  
Location: \_\_\_\_\_  
Date of Submittal: \_\_\_\_\_ DD/MM/YY \_\_\_\_\_  
Phone/Fax: \_\_\_\_\_

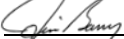


## HSE ORIENTATION AND TRAINING STANDARD HSE-03

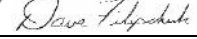
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-03     HSE ORIENTATION AND TRAINING**

- 1.0     PURPOSE
- 2.0     SCOPE
- 3.0     RESPONSIBILITY
- 4.0     REFERENCES
- 5.0     DEFINITIONS
- 6.0     STANDARD
- 7.0     ATTACHMENTS

## **1.0 PURPOSE**

The purpose of the HSE Orientation and Training Standard is to provide all workers with health, safety, and environment information, education, and training which is appropriate for their duties while working at a PCL work site.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the HSE Orientation and Training responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Develop appropriate HSE training material;
- Coordinate and provide trainers and resources to carry out training courses;
- Audit the training program to verify compliance with the training requirements; and
- Participate in the required training for their position.

### **3.2 District Management (Off-Site)**

- Establish goals and objectives for employee training;
- Participate in the required training for their position; and
- Provide resources necessary to carry out training goals and objectives.

### **3.3 Project Management (Site)**

- Where practical, the project/site manager will participate in the site specific orientation;
- Provide appropriate resources to complete the required HSE training; and
- Participate in the required training for their position.

### **3.4 Project Supervision (Site)**

- Participate in the required training for their position;
- Verify that workers have the required training before starting work; and
- Assign competent workers to tasks or provide direct supervision for workers deemed not competent for a specific task.

### **3.5 Project HSE Staff (Site)**

- Participate in the required training for their position;
- Provide and/or assist in delivering the site specific orientation to workers; and
- Support, coordinate, and deliver HSE training.

### **3.6 Workers**

- Participate in the required training for their position and attend the site specific orientation.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Competent Person / Competent Worker / Qualified Worker**

One who is capable of identifying existing and predictable hazards in their surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them or as otherwise defined by applicable legislation.

### **5.2 Formal Training**

Formal training is a structured instruction that must be documented. It will be provided by a competent trainer for a specific skill, task, or understanding.

### **5.3 Informal Training**

Informal training passes on knowledge, skill, and understanding from one employee to another or from a supervisor to an employee.

### **5.4 Short Duration Worker**

For the purpose of this standard, short duration worker refers to a worker performing work on a PCL work site for a period of less than two business days that is not repetitive, or anticipated to be repeated through the duration of the project.

## **6.0 STANDARD**

### **6.1 Health, Safety, and Environment Orientation - Site Specific**

Except for short duration workers and visitors, all workers at a PCL work site must complete a health, safety, and environment orientation. The requirements for short term workers and visitors are set out in section 6.4 of this standard. The Health, Safety, and Environment Orientation is comprised of two segments including:

Part One: HSE Orientation Video

The HSE Orientation video contains an overview of general construction HSE practices and procedures and follows along with HSE-03-01, HSE Orientation Checklist.

Part Two: Site Specific Orientation

HSE-03-02, HSE Orientation Quiz, and HSE-03-01, HSE Orientation Checklist, must be completed as part of this site specific orientation.

#### **6.1.1 HSE Orientation Checklist**

The HSE-03-01, HSE Orientation Checklist, will be used as an outline for the site specific orientation and to identify all information that has been reviewed with the workers.

The HSE Orientation Checklist items below should be reviewed with the worker:

#### **Introduction, Responsibilities, and Enforcement of Safety Rules**

1. An overview of PCL's policies, practices, and procedures
2. Intoxicating beverages and drugs are not allowed on the worksite
3. Identification of OH&S, OSHA, environmental regulations, WHMIS and HAZCOM, and the location of WHMIS/HAZCOM documents
4. Working safely is a condition of employment, and of the disciplinary procedures associated with failure to adhere to this or other site requirements
5. Firearms or weapons of any kind are not allowed on the worksite
6. HSE signs and compliance
7. Our zero incidents goal/culture

#### **Incident Reporting**

8. All injuries must be reported and recorded
9. Reporting procedures for incidents including near misses, equipment, or vehicle damage
10. Modified work program



### **Stretching Program/Manual Lifting**

11. Stretch and Flex program
12. Manual and mechanical lifting procedures (including a demonstration)
13. Proper selection, care, and use of the following protective equipment as warranted:
  - Hard Hats
  - Safety Footwear
  - Personal Fall Arrest
  - Safety Glasses
  - Hearing Protection
  - Respiratory Equipment
  - Face Shields
  - Dust Masks
  - Reflective Vests
  - Goggles
  - Gloves
  - Other
14. Hearing protection must be worn if sound levels exceed 85dB

### **Hazard Control**

15. Scaffold requirements:
  - Access/Egress
  - Tagging
16. Ladder requirements
17. Guardrail requirements
18. PCL's requirements for openings
19. Environmentally sensitive activities

### **Tools Maintenance, Mechanical Lifting, Housekeeping, and Fire Prevention**

20. Housekeeping requirements
21. Use of a fire extinguisher

### **Pre-Job Safety Instruction (PSI) Program & Job Hazard Analysis (JHA) Program**

22. Pre-Job Safety Instruction (PSI) and the following steps:
  - recognizing potential hazards?
  - controlling potential hazards?
  - minimizing exposure to potential hazards?
23. The worker should request a PSI and a JHA, if applicable, from his foreman upon leaving this orientation and joining his/her crew

### **Site Specific Information**

24. Job hazards:

- Harmful Gases
- Restricted Work Areas
- Traffic
- Tools
- Other
- Overhead Activity
- Demolition
- Stored Energy
- Aerial Lifts
- Congested Work Areas
- Underground/Above Ground Utilities
- Electrical Safety
- Hand and Finger Safety

25. Review of the project site plot plan including location of muster areas, first aid stations, spill kits, etc.

26. Medical facilities and services on and off the job

- Responsibility to provide first aid coverage

27. On-site fire prevention, emergency notification, and emergency response plan

28. Project fall protection plan requirements

29. Emergency response for spills

30. Mandatory attendance at HSE Field Meetings

31. Regular hours of work, lunch breaks, and coffee breaks

32. Any other items? (Circle or describe which ones.)

(i.e. Workers' Right of Refusal, Codes of Practice, Special Client Requests, Special Pre-job, Worker Access to Exposure Records and Medical Records, Mold Considerations, Workplace Violence Policy)

33. A representative of project management was introduced and that person explained their own commitment to HSE on the project

### **Orientation and Other Videos**

34. HSE Orientation video?

35. Other applicable videos?

#### **6.1.2 Completion of HSE Orientation Quiz**

At the completion of the HSE Orientation video, workers must complete HSE-03-02, HSE Orientation Quiz.

Completed quizzes will be reviewed with participants to provide/review correct responses, as well as discuss the intent and application of quiz information.

## **6.2 Education and Training**

High standards of HSE performance are supported by education and training.

Each district is responsible to develop and provide appropriate training to all levels of their organization. Yearly training requirements must be developed in conjunction with the District Strategic HSE Plan.

Project management and project supervision will receive training in the following areas:

- HSE communication systems;
- Incident investigation;
- Work site inspections;
- Environmental management;
- Hazard identification and control;
- Alcohol and drug policy (if applicable); and
- Injury management.

### **6.2.1 Worker Training**

In addition to the health, safety and environment orientation, all workers except for visitors, will be required to provide evidence of training that allows them to effectively deal with the hazards of the work. The requirements for short term workers and visitors are set out in section 6.4 of this standard.

The specific training requirements will be developed as part of the Project Specific HSE Plan.

## **6.3 Training Records Retention**

Up-to-date records must be kept of all health, safety, and environment training including orientations for each worker. Training records must be retained for a minimum of three years beyond completion of the project or longer if legislative jurisdictional requirements apply. Records will be available for company, client, regulatory reviews, and audits.

## **6.4 Visitor and Short Duration Worker HSE Orientation**

Visitors and short duration workers will attend a visitor or short duration worker HSE orientation facilitated by an employee.

6.4.1 For visitors, this orientation will follow HSE-03-04, Visitor Site Orientation Checklist and consists of the following questions:

### **Part 1: Requirements for Entry**

1. Has a review of the emergency response/project site plot plan been completed?
2. Has the 6 foot fall protection requirement been explained to the visitor?
3. Has the Pre-Job Safety Instruction (PSI) program been explained and reviewed with the visitor?
4. Is the visitor aware that he/she is to be accompanied by the escort identified below at all times?
5. Have site requirements for the use of the following protective equipment been reviewed?
  - Safety Glasses
  - Hard hats
  - Gloves
  - Face Shields
  - Hearing Protection
  - Mono-Goggles
  - Safety Footwear
  - Fall Protection
  - Dust Mask
  - Vests
  - Respiratory Equipment
  - Other

### **Part 2: Orientation Acknowledgement**

The visitor, escort, and facilitator sign HSE-03-04, Visitor Site Orientation Checklist, and the form will be retained on file at the project work site location.

- 6.4.2 For short duration workers, this orientation will follow HSE-03-03, Short Duration Worker HSE Orientation Checklist, and consists of:

#### **Part One**

- Advising the short duration worker that working safely is a condition of access and of the disciplinary procedures associated with failure to adhere to this or other project site requirements;
- Reviewing legislative jurisdictional requirements appropriate to the purpose of the visit or short term work;
- Reviewing PCL's policies, practices, and procedures;
- Reviewing the Project Site Plot Plan;
- Reviewing regular hours of work, lunch breaks, and coffee breaks, if applicable;

- Explaining and reviewing the PSI program:
  - Recognizing potential hazards;
  - Eliminating potential hazards;
  - Controlling potential hazards; and
  - Minimizing exposure to potential hazards.
- Informing the short duration worker of the site specific PPE requirements;
- Advising short duration worker about HSE signs and compliance;
- Reviewing housekeeping requirements with the short duration worker;
- Reviewing the current site specific hazards;
- Reviewing any applicable site specific procedures (e.g. scaffolding, guardrail, ladder, fall protection plan requirements), if applicable;
- Advising the short duration worker that intoxicating beverages and drugs are not allowed on the worksite, if applicable;
- Reviewing the short duration worker's right to refuse work and the procedures associated with such circumstances, if applicable;
- Reviewing the Workplace Violence/Harassment policies, if applicable;

#### **Part Two: Incident Management**

- Reviewing the emergency response/evacuation procedures; and
- Reviewing the incident reporting procedures.

The short duration worker and facilitator sign HSE-03-03, Short Duration Worker HSE Orientation Checklist, and the form will be retained at the project work site location.

All visitors/short duration workers will sign in and sign out at the project office.

A PCL employee or designate who has completed the full health safety and environment orientation will be responsible to escort the visitor/short duration worker while on the project site. The escort will be responsible for the safe acts and conditions of the visitor/short duration worker.

Upon each separate visit, the Visitor/Short Duration HSE Worker Orientation will be repeated.

### **6.5 Refresher Training**

Each 24 months, every employee working on or visiting projects shall receive HSE refresher training in the basic orientation subject matter and applicable legislative jurisdictional requirements. HSEOPs and HSE Manual revision training shall be conducted as they are released. This can be delivered through multiple weekly HSE meetings or in a classroom setting.

## **6.6 Project Deliveries**

Orientation requirements for project delivery personnel will be addressed in each Project Specific HSE Plan. Variances to the site specific or visitor/short duration worker HSE orientation requirements will require written authorization from the district HSE manager.

## **7.0 ATTACHMENTS**

HSE-03-01	HSE Orientation Checklist
HSE-03-02	HSE Orientation Quiz and Answer Sheet
HSE-03-03	Short Duration Worker HSE Orientation Checklist
HSE-03-04	Visitor Site Orientation Checklist



CONSTRUCTION

**PCL HSE MANUAL**  
HSE Orientation and Training  
Standard HSE-03-01

## HSE Orientation Checklist

COMPANY NAME: \_\_\_\_\_ ☐ PERMANENT ☐ TEMPORARY ☐ TRANSFER

WORKER'S NAME: \_\_\_\_\_

PROJECT SUPERVISOR: \_\_\_\_\_ ORIENTATION DATE: \_\_\_\_\_ DD/MM/YY

PROJECT: \_\_\_\_\_

**Legend:** N/A = Not Applicable; CL = Client

Check the response boxes CL and YES if these safety points have already been completed by the client during their orientation.

Please confirm the following was reviewed with you:

### INTRODUCTION, RESPONSIBILITIES, AND ENFORCEMENT OF SAFETY RULES

	YES	NO	N/A	CL
1. An overview of PCL's policies, practices, and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Intoxicating beverages and drugs are not allowed on the worksite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identification of OH&S, OSHA, environmental regulations, WHMIS and HAZCOM, and the location of WHMIS/HAZCOM documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Working safely is a condition of employment, and of the disciplinary procedures associated with failure to adhere to this or other site requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Firearms or weapons of any kind are not allowed on the worksite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. HSE signs and compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Our zero incidents goal/culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### INCIDENT REPORTING

8. All injuries must be reported and recorded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Reporting procedures for incidents including near misses, equipment, or vehicle damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Modified work program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### STRETCHING PROGRAM/MANUAL LIFTING

11. Stretch and Flex program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Manual and mechanical lifting procedures (including a demonstration)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Proper selection, care, and use of the following protective equipment as warranted				
<input type="checkbox"/> Hard Hats	<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> Face Shields	<input type="checkbox"/> Goggles	
<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Dust Masks	<input type="checkbox"/> Gloves	
<input type="checkbox"/> Personal Fall Arrest	<input type="checkbox"/> Respiratory Equipment	<input type="checkbox"/> Reflective Vests	<input type="checkbox"/> Other	
14. Hearing protection must be worn if sound levels exceed 85dB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### HAZARD CONTROL

15. Scaffold requirements	<input type="checkbox"/> Access/Egress	<input type="checkbox"/> Tagging	<input type="checkbox"/>	<input type="checkbox"/>
16. Ladder requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Guardrail requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. PCL's requirements for openings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Environmentally sensitive activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



CONSTRUCTION

**PCL HSE MANUAL**  
HSE Orientation and Training  
Standard HSE-03-01

Please confirm the following was reviewed with you:

**TOOLS MAINTENANCE, MECHANICAL LIFTING, HOUSEKEEPING, AND FIRE PREVENTION**

	YES	NO	N/A	CL
20. Housekeeping requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Use of a fire extinguisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PRE-JOB SAFETY INSTRUCTION (PSI) PROGRAM & JOB HAZARD ANALYSIS (JHA) PROGRAM**

22. Pre-Job Safety Instruction (PSI) and the following steps:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o recognizing potential hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o controlling potential hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o minimizing exposure to potential hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. The worker should request a PSI and a JHA, if applicable, from his foreman upon leaving this orientation and joining his/her crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SITE SPECIFIC INFORMATION**

24. Job hazards:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Harmful Gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Restricted Work Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Overhead Activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Demolition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Congested Work Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Underground/Above Ground Utilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Electrical Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hand and Finger Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Review of the project site plot plan including location of muster areas, first aid stations, spill kits, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Medical facilities and services on and off the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o Responsibility to provide first aid coverage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. On-site fire prevention, emergency notification, and emergency response plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Project fall protection plan requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Emergency response for spills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Mandatory attendance at HSE Field Meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Regular hours of work, lunch breaks, and coffee breaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Any other items? (Circle or describe which ones.) (i.e. Workers' Right of Refusal, Codes of Practice, Special Client Requests, Special Pre-job, Worker Access to Exposure Records and Medical Records, Mold Considerations, Workplace Violence Policy) Describe: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. A representative of project management was introduced to you and explained their own commitment to HSE on the project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**ORIENTATION AND OTHER VIDEOS**

34. HSE Orientation video?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Other applicable videos?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, please list _____				

**THIS FORM WILL BE RETAINED ON FILE AT THE PROJECT WORKSITE LOCATION**

**Worker's Signature:** \_\_\_\_\_

**Facilitator's Name:** \_\_\_\_\_ Print

**Facilitator's Signature:** \_\_\_\_\_



## HSE Orientation Quiz

**Worker's Name:** \_\_\_\_\_ [Print](#)  
**Worker's Employer:** \_\_\_\_\_  
**Project Name:** \_\_\_\_\_  
**Project Location:** \_\_\_\_\_

Note: Please select the correct response:

1. You must remember that PCL has zero tolerance for:
  - A. Any use of illegal drugs.
  - B. Alcohol on our jobsites.
  - C. Taking prescription drugs that could cause impairment while working.
  - D. All of the above.
  
2. You should report unsafe acts and conditions to your supervisor immediately.  
☐ True  
☐ False
  
3. Which of the events below should be reported to your supervisor?  
☐ All injuries  
☐ Near misses  
☐ Equipment damage  
☐ Vehicle damage
  
4. If you are injured and your doctor says you can work, PCL has a modified work program.  
☐ True  
☐ False

5. Choose the correct lifting procedure:

☐☐

6. Personal Protective Equipment like hearing protection, fall protection or respiratory protection equipment should be worn whenever:

- A. Someone else is wearing it.
- B. Your supervisor advises you to wear it.
- C. The potential for personal injury exists.
- D. You feel like wearing it.

7. The Workplace Hazardous Material Information System (WHMIS)/Hazardous Communication system (HAZCOM) requires products to be labeled. The label tells you the: (check all that apply)

- ☐ Name of the product.
- ☐ Hazard symbol.
- ☐ Risks when you use it.
- ☐ Personal protective equipment to wear.
- ☐ First aid treatment if necessary.

8. Yellow tape around an area means there is hazardous activity in the area.

- ☐ True
- ☐ False

9. What does a red tag on a scaffold mean?

- A. The scaffolding meets all requirements for safe use.
- B. The scaffolding is under construction or being dismantled and should not be used.
- C. The scaffolding can be used with caution, fall protection should be used.
- D. The scaffolding is currently in use.

10. It is OK to carry material or tools up or down any ladder.

- ☐ True
- ☐ False

11. There are some basic items you should know about fire prevention including:

- A. Where fire extinguishers are located.
- B. How to use the fire extinguishers.
- C. Emergency evacuation routes and assembly areas.
- D. All of the above.

12. What is the Pre-job Safety Instruction (PSI)?

- A. Pre-task planning tool designed to increase productivity and decrease the possibility of an incident.
- B. A tool designed to help recognize, minimize and control potential hazards.
- C. Both A and B.
- D. None of the above.

13. Which of the following can be found on the jobsite plot plan: (check all that apply)

- ☐ Subcontractor offices
- ☐ Muster points
- ☐ Gate numbers
- ☐ Loading zones
- ☐ First aid station locations
- ☐ Fire extinguishers locations
- ☐ Spill kit locations

14. PCL requires fall protection at or above this height:

- A. Six feet/1.8 meters or above.
- B. Five feet/1.5 meters or above.
- C. Eight feet/2.44 meters or above.
- D. Nine feet/2.74 meters or above.

15. If you see a spill, notify your supervisor immediately.

- ☐ True
- ☐ False

16. Everyone has the right to refuse a task if they think that it is not safe to do it.

- ☐ True
- ☐ False

**Worker's Name:** \_\_\_\_\_ Print

**Worker's Signature:** \_\_\_\_\_ Print

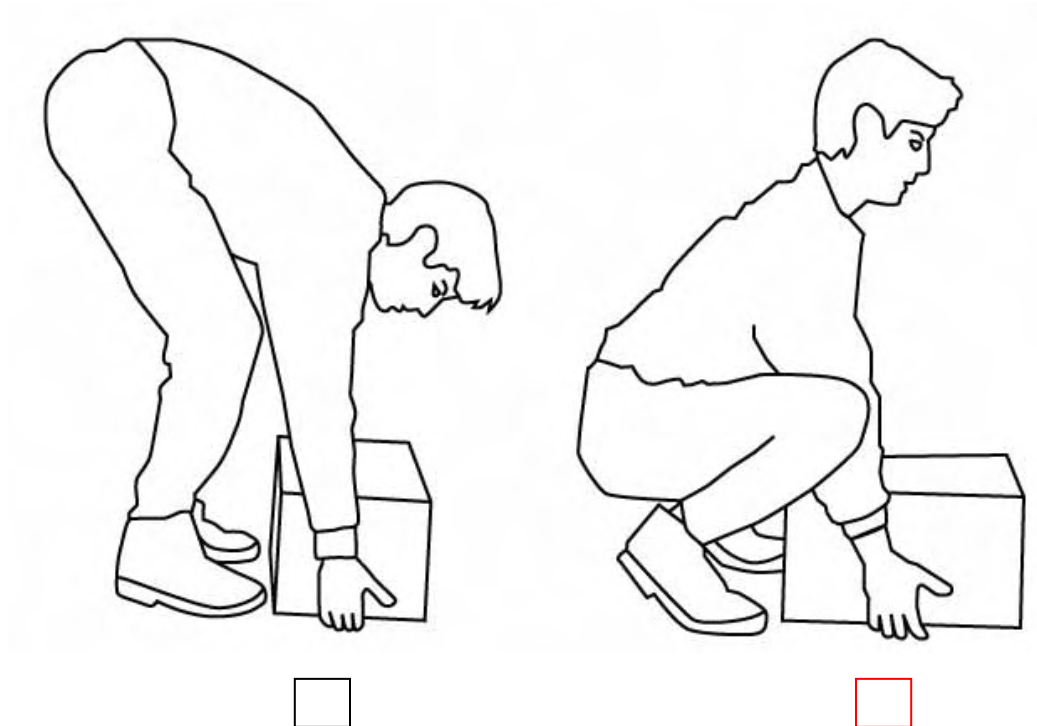
## HSE Orientation Quiz Answer Sheet

**Worker's Name:** \_\_\_\_\_ [Print](#)  
**Worker's Employer:** \_\_\_\_\_  
**Project Name:** \_\_\_\_\_  
**Project Location:** \_\_\_\_\_

Note: Please select the correct response:

1. You must remember that PCL has zero tolerance for:
  - A. Any use of illegal drugs.
  - B. Alcohol on our jobsites.
  - C. Taking prescription drugs that could cause impairment while working.
  - D. All of the above.**
  
2. You should report unsafe acts and conditions to your supervisor immediately.  
☐ **True**  
☐ False
  
3. Which of the events below should be reported to your supervisor?  
☐ **All injuries**  
☐ **Near misses**  
☐ **Equipment damage**  
☐ **Vehicle damage**
  
4. If you are injured and your doctor says you can work, PCL has a modified work program.  
☐ **True**  
☐ False

5. Choose the correct lifting procedure:



6. Personal Protective Equipment like hearing protection, fall protection or respiratory protection equipment should be worn whenever:

- A. Someone else is wearing it.
- B. Your supervisor advises you to wear it.
- C. The potential for personal injury exists.**
- D. You feel like wearing it.

7. The Workplace Hazardous Material Information System (WHMIS)/Hazardous Communication system (HAZCOM) requires products to be labeled. The label tells you the: (check all that apply)

- ☐ Name of the product.
- ☐ Hazard symbol.
- ☐ Risks when you use it.
- ☐ Personal protective equipment to wear.
- ☐ First aid treatment if necessary.

8. Yellow tape around an area means there is hazardous activity in the area.

☐ True

☐ False

9. What does a red tag on a scaffold mean?

A. The scaffolding meets all requirements for safe use.

B. The scaffolding is under construction or being dismantled and should not be used.

C. The scaffolding can be used with caution, fall protection should be used.

D. The scaffolding is currently in use.

10. It is OK to carry material or tools up or down any ladder.

☐ True

☐ False

11. There are some basic items you should know about fire prevention including:

A. Where fire extinguishers are located.

B. How to use the fire extinguishers.

C. Emergency evacuation routes and assembly areas.

D. All of the above.

12. What is the Pre-job Safety Instruction (PSI)?

A. Pre-task planning tool designed to increase productivity and decrease the possibility of an incident.

B. A tool designed to help recognize, minimize and control potential hazards.

C. Both A and B.

D. None of the above.

13. Which of the following can be found on the jobsite plot plan: (check all that apply)

- ☐ Subcontractor offices
- ☐ Muster points
- ☐ Gate numbers
- ☐ Loading zones
- ☐ First aid station locations
- ☐ Fire extinguishers locations
- ☐ Spill kit locations

14. PCL requires fall protection at or above this height:

- A. Six feet/1.8 meters or above.
- B. Five feet/1.5 meters or above.
- C. Eight feet/2.44 meters or above.
- D. Nine feet/2.74 meters or above.

15. If you see a spill, notify your supervisor immediately.

- ☐ True
- ☐ False

16. Everyone has the right to refuse a task if they think that it is not safe to do it.

- ☐ True
- ☐ False

**Worker's Name:** \_\_\_\_\_ Print

**Worker's Signature:** \_\_\_\_\_ Print



## Short Duration Worker HSE Orientation Checklist

Company: \_\_\_\_\_

Name: \_\_\_\_\_ PRINT \_\_\_\_\_

Orientation Date: \_\_\_\_\_ DD/MM/YY \_\_\_\_\_

Project: \_\_\_\_\_

### Part One: The General HSE Orientation

Have the following been reviewed with the short duration worker:

	YES	NO	N/A	CL
1. Working safely is a condition of access, and of the disciplinary procedures associated with failure to adhere to this or other project site requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Legislative jurisdictional HSE requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. An overview of PCL's policies, practices and procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The Project Site Plot Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Regular hours of work, lunch breaks, and coffee breaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The Pre-Job Safety Instruction (PSI) program and the following steps been explained and reviewed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Recognizing potential hazards?				
<input type="checkbox"/> Controlling potential hazards?				
<input type="checkbox"/> Eliminating potential hazards?				
<input type="checkbox"/> Minimizing exposure to potential hazards?				
7. The proper selection, care and use of the following PPE?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Hard Hats				
<input type="checkbox"/> Monogoggles				
<input type="checkbox"/> Face Shields				
<input type="checkbox"/> Safety Glasses				
<input type="checkbox"/> Gloves				
<input type="checkbox"/> Hearing Protection				
<input type="checkbox"/> Dust Masks				
<input type="checkbox"/> Safety Footwear				
<input type="checkbox"/> Other: _____				
8. HSE signs and compliance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Housekeeping requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the following site specific job hazards been reviewed? They are subject to but not limited to:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Demolition				
<input type="checkbox"/> Water Service Lines				
<input type="checkbox"/> Gas Lines				
<input type="checkbox"/> Congested Work Areas				
<input type="checkbox"/> Heavy Lifts				
<input type="checkbox"/> Restricted Work Areas				
<input type="checkbox"/> Personal Radios				
<input type="checkbox"/> Harmful Gases				
<input type="checkbox"/> Other: _____				

**If applicable:**

	YES	NO	N/A	CL
11. Scaffold requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ladder requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Guardrail requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Project fall protection plan requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Intoxicating beverages and drugs prohibited on the worksite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Have the following items been reviewed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a) <input type="checkbox"/> Worker's Right to Refuse Work				
b) <input type="checkbox"/> Workplace Violence/Harassment Policies				

**Part Two: Incident Management**

17. The emergency response/evacuation procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. The incident reporting procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**This form will be retained on file at the project work site location.**

Short Duration Worker's Name: _____	Print	Short Duration Worker's Signature: _____
Facilitator's Name: _____	Print	Facilitator's Signature: _____

**Legend:** N/A = Not Applicable    CL = Client



CONSTRUCTION

## Visitor Site Orientation Checklist

Company: \_\_\_\_\_ Orientation Date: \_\_\_\_\_ DD/MM/YY

Project Number: \_\_\_\_\_ Project Name: \_\_\_\_\_

Visitor's Name: \_\_\_\_\_ Print

Part 1: Requirements for Entry	YES	NO	N/A		
1. Has a review of the Emergency Response/Project Site Plot Plan been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Has the 6 foot fall protection requirement been explained to the visitor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Has the Pre-Job Safety Instruction (PSI) program been explained and reviewed with the visitor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Is the visitor aware that he/she is to be accompanied by the escort identified below at all times?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Have site requirements for the use of the following protective equipment been reviewed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> Gloves	<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Dust Mask	<input type="checkbox"/> Respiratory Equipment
<input type="checkbox"/> Hard Hats	<input type="checkbox"/> Face Shields	<input type="checkbox"/> Mono-Goggles	<input type="checkbox"/> Fall Protection	<input type="checkbox"/> Vests	<input type="checkbox"/> Other _____

**Part 2: Orientation Acknowledgment**

This form will be retained on file at the project worksite location

Visitor's Signature: \_\_\_\_\_

Escort's Name: \_\_\_\_\_ Print

Escort's Signature: \_\_\_\_\_

Facilitator's Name: \_\_\_\_\_ Print

Facilitator's Signature: \_\_\_\_\_

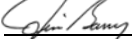


**HSE COMMUNICATION SYSTEMS**  
***STANDARD HSE-04***

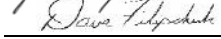
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

**REVISION LOG**

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-04     HSE COMMUNICATION SYSTEMS**

- 1.0     PURPOSE
- 2.0     SCOPE
- 3.0     RESPONSIBILITY
- 4.0     REFERENCES
- 5.0     DEFINITIONS
- 6.0     STANDARD
- 7.0     ATTACHMENTS

## **1.0 PURPOSE**

The purpose of this standard is to outline the HSE communication systems that include the exchange of information and ideas.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the HSE Communication Systems' responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Participate and attend all required HSE committee meetings.

### **3.2 District Management (Off-Site)**

- Participate and attend all required HSE committee meetings; and
- Arrange HSE meetings under their responsibility – prepare agenda, allocate time, meeting space, etc.

### **3.3 Project Management**

- Participate and attend all required HSE committee meetings.

### **3.4 Project Supervision**

- Participate and attend all required HSE committee meetings and HSE Field Meetings; and
- Verify that all workers are aware of HSE communication systems.

### **3.5 Project HSE Staff**

- Participate and attend all required HSE committee meetings.

### **3.6 Workers**

- If appointed to an HSE committee, attend all applicable committee meetings; and
- Encourage fellow workers to make HSE suggestions.



## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements
- HSEOP-06: HAZCOM and WHMIS

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Crew**

A group of workers working together and engaged in a portion of the construction activities on a project site.

### **5.2 Lagging Indicators**

Lagging indicators identify incident trends that have occurred within the workplace and may include the number of first aids, medical aids, modified works, and lost time injuries, time and place of incident, type of injury, etc.

### **5.3 Leading Indicators**

Leading indicators are conditions and activities that precede and affect the occurrence of workplace injuries and illness. They measure the level of safety performance on a jobsite, even when no injuries have occurred. For example, evidence obtained from an HSE audit relating to the proportion of workers using gloves on a PCL project site is a leading indicator related to the risk of hand injuries.

### **5.4 Safety Management Center**

The Safety Management Center (SMC) is a web-based software solution that facilitates the collection and analysis of safety statistics and provides real time safety trend analysis data and graphs.

## **6.0 STANDARD**

### **6.1 Communications Systems**

The HSE communication system includes, but is not limited to:

- The documents provided to workers outlining applicable HSE policies, procedures, and practices (HSE Policy Statements, HSE Manual, HSEOPs, CHAs, Project Specific HSE Plans, JHAs, PSIs, etc.)
- District HSE Committees;
- Project HSE Committees;
- Special HSE committees/QUEST;
- HSE Field Meetings;
- Daily HSE Meetings;
- HSE action plans;
- Health, Safety, Environment User Group meetings;
- District HSE Trend Analysis;
- Project HSE Trend Analysis;
- HSE alerts & bulletins; and
- Resource information.

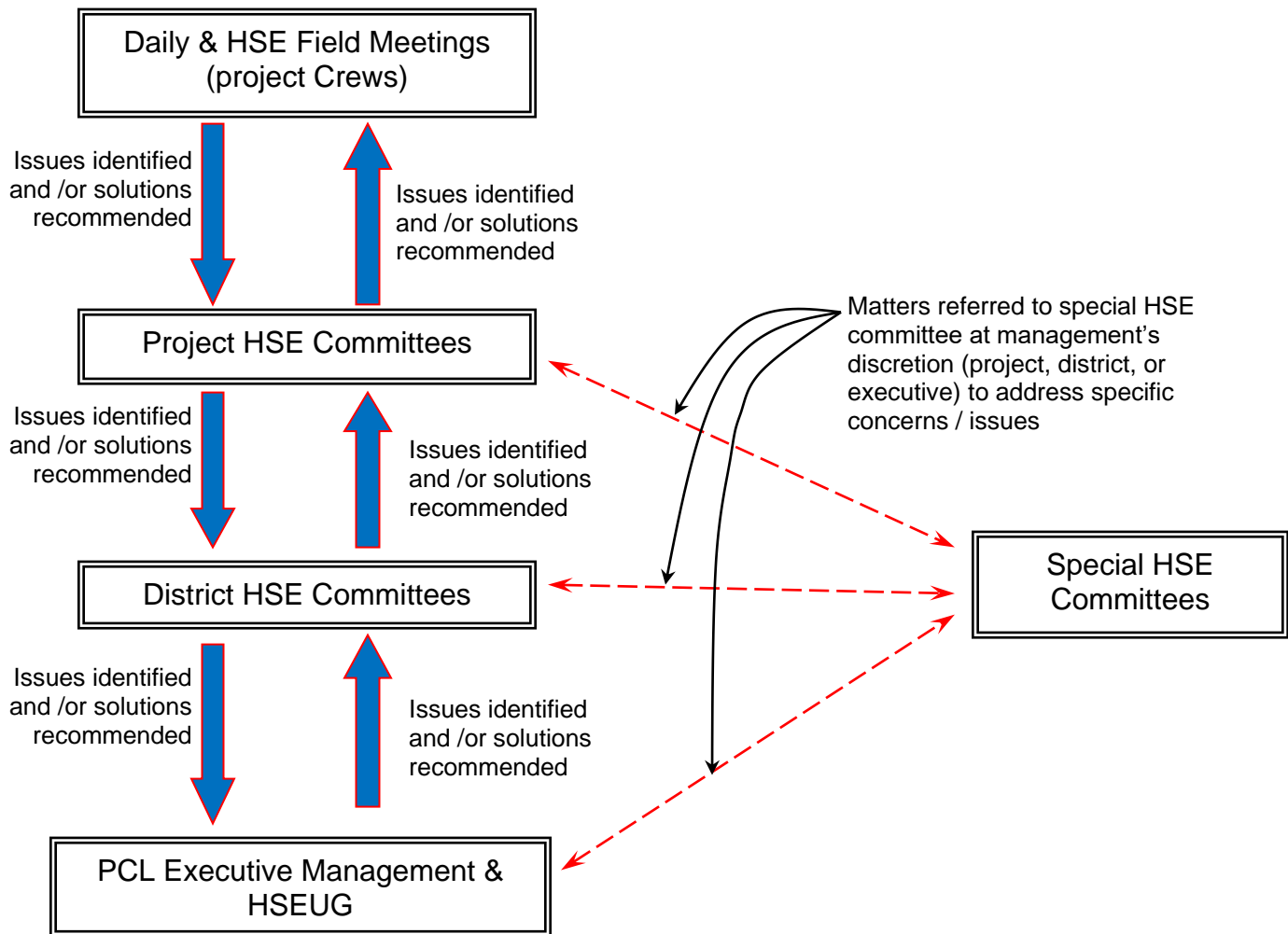
### **6.2 HSE Documents**

HSE documents are addressed in other parts of this manual. These are communicated to workers through a number of means, including the HSE orientation as well as formal and informal training.

Employees who wish to provide comments regarding any of these documents may use HSE-02-02, Employee Feedback Form.

### **6.3 Committees and HSE Meetings**

As part of the HSE communication system, PCL will conduct meetings and will form committees where participants will discuss HSE issues. These meetings will range from meetings involving front line workers to meetings involving PCL executive management. The following diagram illustrates the exchange of information between the participants of these various meetings. More information regarding the conduct of these meetings and committees is provided in the sections that follow the diagram.



\*\*\*\*\*Exchange of information between these various levels of organization intended to facilitate communication of HSE issues, creation of creative solutions to HSE issues, and to develop / exchange best practices

### 6.3.1 Daily HSE Meetings

The frequency and attendance requirements of these meetings will be outlined in the Project Specific HSE plan and will be documented.

### 6.3.2 HSE Field Meetings

HSE Field Meetings involving workers on PCL projects are a good opportunity for workers to discuss HSE issues and for PCL supervision to review HSE risks or communicate any new HSE information to workers. Accordingly, no less frequently than once per week, each PCL crew shall participate in a HSE Field Meeting to discuss health, safety, and environment issues that relate to project activities. All members of the crew are expected to attend. If a worker is unable to attend the meeting, the worker's supervisor should inform the worker of any significant items discussed at the meeting.

The supervisors and/or lead hands are responsible for conducting the HSE Field Meeting.

The topics for discussion should pertain to health, safety, and environment matters only. Unless a particular item is not applicable to the work undertaken by the crew, the supervisors and/or lead hands shall follow this process set out below during the HSE Field Meeting:

- Review minutes of the last Project HSE Committee meeting;
- Bring forward topics for discussion, e.g. environmental, at risk behaviors, practices, or conditions that have been observed;
- Review of the following:
  - Inspection(s) DD/MM/YY;
  - Incident(s); and
  - SDS(s).
- Review the trend analysis/action plans;
- Rollout any new safety campaigns;
- Encourage employee suggestions and discussion;
- Decide on corrective actions and follow up to verify that this has been completed;
- Brief the crew on new types of equipment and controlled products;
- Discuss personal protective equipment suitable to the work on the project site;
- Review first aid and emergency procedures and update on current changes;
- Discuss current HSE risks on the work site;
- Use the results of HSE inspections or audits as a source of discussion items; and
- Periodically, request assistance from the district HSE manager or project HSE supervisor in regard to content or special presentations.

The supervisor and/or lead hand shall record the minutes of the HSE Field Meeting and each crew member must print and sign their names on HSE-04-02, HSE Field Meeting form. The district HSE manager shall specify the distribution requirements for the HSE Field Meetings Minutes in the Project Specific HSE Plan.

#### 6.3.3 Project HSE Committees

Projects that are greater than three months in duration, with a minimum of 19 workers on site averaging 3,000 manhours over the month, or otherwise deemed necessary by the district manager and district HSE manager will establish a Project HSE Committee. Where required by legislation, the structure, function, membership, and authority of the Project HSE Committee must meet legislative jurisdictional requirements.

The Project HSE Committee will be chaired by the project superintendent and co-chaired by the project manager and could include the owner, architect, consultants, and other contractors. To be practical and efficient, the size of the Project HSE Committee must be limited. However, membership can rotate to allow as many people as possible to benefit from the experience of committee work.

The Project HSE Committee shall:

- Develop and promote safe work practices;
- Review the Project HSE Trend Analysis (see 6.5.2);
- Develop action plans from trends and monitor the effectiveness of such action plans (see 6.5.3);
- Develop and promote practices that protect the environment;
- Review the progress of any applicable project HSE action plans; and
- Makes recommendations to management that will improve compliance with the PCL HSE program and health and safety of the workers on the project.

The Project HSE Committee shall meet no less frequently than once per month.

It may also be necessary for the chairman to call special or emergency meetings to solve an urgent problem. Meetings must be held on company time. Definite rules of procedure must be used to prevent confusion or omission of important items. The format of the regular meeting is as follows:

- Call to order;
- Roll call - chairman introduces guests or visitors;
- Review business arising out of minutes of previous meeting;
- Review of project HSE statistics/trend analysis action plans;
- Read relevant correspondence (including HSE Field Meeting summaries);

- Review incidents and unsafe acts;
- Review the progress of applicable project HSE action plans;
- Potential practices to protect the environment;
- Potential recommendations to management that will improve compliance with the PCL HSE program and health and safety of the workers on the project;
- Special health, safety, and environment guest speakers;
- Conduct an inspection of the site;
- Set the date, time, and location for the next meeting; and
- Adjourn.

Project HSE Meeting Minutes should be recorded on HSE-04-01, HSE Committee Meeting Minutes, and will be retained on file at the project worksite location. The minutes will be kept in traditional paper format or logged into the SMC.

The minutes will be posted on site, reviewed in HSE Field Meetings, and forwarded to the district office. From the committee, members are expected to distribute information, decisions, and procedures to their managers, supervisors, workers, and suppliers.

#### 6.3.4 District HSE Committees

A District HSE Committee will be established by the district/general manager for the purpose of:

- Promoting incident prevention concepts to improve the district's overall HSE performance and awareness;
- Determine the frequency of JHA audits and the employees responsible to conduct them. The committee will oversee the JHA audits and direct corrective actions as warranted;
- Reviewing the District HSE Trend Analysis (see 6.5.2);
- Developing action plans from trends and monitoring the effectiveness of such action plans (see 6.5.3);
- Monitoring and reviewing the effectiveness of the District Strategic HSE Plan;
- Reviewing and evaluating the HSE performance of each project within the district;
- Evaluating recommendations from Project HSE Committee meeting minutes;
- Presenting HSE topics, literature and/or videos that will enhance and maintain awareness in the district;
- Providing a forum for participation, feedback, and teamwork;
- Keeping current on HSE related items;
- Reviewing the progress of any applicable District HSE Action Plans and any applicable District Strategic HSE Plans; and
- Establishing and maintaining a uniform and consistent approach to the implementation of the HSE Manual at the district level.

The district manager will be chairman of the District HSE Committee and will attend meetings and participate in an influential manner.

At a minimum, committee membership will include:

- One representative, in addition to the district manager, from district management (off-site);
- One representative from district HSE management (off-site);
- Two representatives from project management;
- One representative from project supervision; and
- One representative from project HSE staff.

At a minimum, District HSE Meetings will be held every other month (at least six times a year, no longer than 90 days between meetings) at a location designated by the district manager.

District HSE Committee Meeting Minutes will be prepared and posted in the district office and in all district project locations.

#### 6.3.4.1 Communication

At the district level, any health, safety, or environment related item or issue that is introduced at the District HSE Committee Meeting can, in turn, be circulated to all projects if required. Recorded minutes of district meetings will be retained on file in the district office as well as copies distributed to district project locations. Items from the District HSE Committee will be communicated to executive management, who will communicate significant issues and/or solutions to the HSEUG committee. The HSEUG committee will assess the need for further communication throughout the PCL family of companies.

#### 6.3.5 Special HSE Committees

Special HSE/QUEST committees can be convened at the request of any level of management to address special areas of concern or to address specific issues. A special HSE committee can focus on project or district issues.

The structure of the committee will be flexible, based on the underlying reasons for the formation of the special HSE committee.

### 6.3.6 Duties of Committee Members

#### 6.3.6.1 Chairman

The chairman is responsible to:

- Have the meeting time, date, and place arranged;
- Have the agenda prepared (including speakers, suggestions, training aids), with the assistance of the district HSE manager or other district staff;
- Review previous meeting minutes and new materials prior to each meeting; and
- Chair the meeting.

#### 6.3.6.2 Secretary

The secretary, as selected by the chairman, is responsible to:

- Record, prepare, and distribute meeting minutes;
- Notify members of meetings;
- Report the status of recommendations; and
- Write reports and correspondence.

#### 6.3.6.3 Other Members

The members are responsible to:

- Report all unsafe acts, procedures, and conditions observed;
- Report incidents and property/environmental damage;
- Assist in the investigation of incidents when called upon;
- Assist with health, safety, and environment inspections when called upon;
- Contribute ideas and suggestions for health, safety, and environment improvements;
- Influence others to work safely;
- Encourage fellow workers to make HSE suggestions; and
- Demonstrate commitment to company policy statements and zero incidents.

## 6.4 Health, Safety, and Environment User Group (HSEUG)

The HSEUG is comprised of PCL executive management. The HSEUG shall meet every quarter to review PCL's overall health, safety, and environment program and solicit input from all districts concerning:

- Program elements that are currently working effectively;
- Program elements that require changes/improvements; and
- Consideration of new program elements as inclusions to the existing program.



HSEUG will also:

- Review and approve amendments to the HSEOPs; and
- Review amendments to the HSE Manual and other HSE policies (as that term is defined in the PCL Policy on the Authority to Make Rules available on PCL Connects) and make recommendations for approval to the Corporate Services Executive Committee.

## **6.5 Monthly Action Plans/Trend Analysis**

### **6.5.1 District HSE Trend Analysis**

The District HSE Trend Analysis is designed to consolidate monthly HSE statistical information, not only for company-wide reporting, but also to provide a detailed review of each district's health, safety, and environment performance. The District HSE Trend Analysis will be a monthly agenda item for the District HSE Committee Meeting.

The District HSE Trend Analysis is intended to answer the following questions:

- What HSE related items and trends have been identified in the district?
- On what projects did they occur?
- Have action plans been developed and effectively implemented?
- What trends have been identified on projects within the districts?

The District HSE Trend Analysis is to be communicated to all stakeholders within the district.

### **6.5.2 Project HSE Trend Analysis**

The Project HSE Trend Analysis is designed to consolidate monthly HSE statistical information from project sites. This will provide a detailed review of each project's HSE performance. The Project HSE Trend Analysis shall include inspections, PSIs, first aids, medical aids, modified work, near misses, and lost time incidents and will be a monthly agenda item for the Project HSE Committee Meeting.

The Special Projects' trend analysis may be consolidated. The requirement for trending on an individual special project will be determined by the district HSE manager in consultation with the regional HSE manager/HSE director.

In order to compile and amalgamate the district monthly statistics, the project manager for each project will complete a trend analysis from the SMC and communicate it to the district.

### 6.5.3 Action Plans

Action plans from the Project and District HSE Trend Analysis shall be developed from leading and lagging indicators. Both district and project action plans will clearly state items, target dates, action by, milestone, percentage complete. The project/district HSE action plans will be a monthly agenda item for the Project/District HSE Committee Meeting.

These action plans are to be completed monthly and communicated to offset the likelihood of reoccurrence by the project manager for project action plans and the district manager/general manager for district action plans. All action plans shall be entered into the SMC.

## 6.6 District Strategic HSE Plan

The District Strategic HSE Plan will be developed by the district manager/general manager from past and present trends using HSE-04-03, District Strategic HSE Plan. This District Strategic HSE Plan will be an agenda item for the bi-monthly District HSE Committee Meeting. It may include:

- Zero incident concepts;
- Bob Tarr audit results;
- District training; and
- Injury management.

District Strategic HSE Plans will take into consideration upcoming work and must be demonstrated through documentation within the district to support the plan.

This plan must be reviewed and approved by one level above the district manager/general manager, the HSE director USHO/HSE vice president, NAHQ and/or regional HSE manager and submitted to NAHQ/USHO by November 30 annually and quarterly thereafter.

## 6.7 Resource Information

Workers participating in any of the HSE communication systems may obtain information from the following resources:

- QUEST bulletins
- Governmental HSE publications;
- Newspaper articles;
- Project Specific HSE Plans;
- HSE Operating Procedures (HSEOPs);
- Safe Work Practices (SWPs);
- Job Hazard Analyses (JHAs);
- Construction Hazard Assessments (CHA);
- HSE magazines; i.e. National Safety Council, Safety Smarts;
- HSE Field Meetings; and
- Safety Management Center (SMC) reports.

## **6.8 HSE Alerts and Bulletins**

Topics for HSE alerts will include incident findings and lessons learned, industry information, off-the-job HSE issues, and injury prevention information. HSE alerts must be posted and reviewed at HSE meetings.

Alerts distributed and affecting a single project site will be reviewed and approved at the project management level. Alerts distributed and affecting multiple sites within a single district will be reviewed and approved by district management. Alerts distributed and affecting locations outside the district will be reviewed and approved by the HSE director, USHO/HSE vice president, NAHQ. Any alerts being sent outside company operations will be approved by HSE director, USHO/HSE vice president, NAHQ.

## **6.9 Perception Surveys**

Each district is to conduct an HSE perception survey on an annual basis. These perception surveys are to be completed prior to the end of August. The district manager/general manager will determine the extent of the survey and the targeted population.

## **7.0 ATTACHMENTS**

HSE-04-01	HSE Committee Meeting Minutes
HSE-04-02	HSE Field Meeting
HSE-04-03	District Strategic HSE Plan





CONSTRUCTION

## HSE Committee Meeting Minutes

**Meeting Minutes #:** \_\_\_\_\_

**Date:** \_\_\_\_\_

DD/MM/YY

**Time:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Participant's Name:**

**District, Jobsite, Company etc.:**

Print	
Print	
Print	
Print	
Print	
Print	
Print	
Print	
Print	
Print	
Print	
Print	

**Absent:**


TOPIC		DISCUSSION	ACTION BY
Topic Name Heading (e.g. Review of Previous Minutes)			
1.1			
1.2			
1.3			

### NEXT MEETING

The next meeting is scheduled for: \_\_\_\_\_

Time: \_\_\_\_\_

Location: \_\_\_\_\_





CONSTRUCTION

## HSE Field Meeting

**Company/District:** \_\_\_\_\_  
**Date:** \_\_\_\_\_ DD/MM/YY  
**Project Supervision:** \_\_\_\_\_ Print  
**Trade:** \_\_\_\_\_  
**Project Name:** \_\_\_\_\_  
**Project Number:** \_\_\_\_\_  
**Trade Contractor:** \_\_\_\_\_

### Attendees

1.	_____ Print	_____ Signature
2.	_____ Print	_____ Signature
3.	_____ Print	_____ Signature
4.	_____ Print	_____ Signature
5.	_____ Print	_____ Signature
6.	_____ Print	_____ Signature
7.	_____ Print	_____ Signature
8.	_____ Print	_____ Signature
9.	_____ Print	_____ Signature
10.	_____ Print	_____ Signature

**Safety Items Discussed:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Employee Suggestions:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Corrective Actions:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Safety Talk Used:** \_\_\_\_\_  
**Safety Campaigns:** \_\_\_\_\_  
**Project Supervision:** \_\_\_\_\_ Signature  
**Reviewed By:** \_\_\_\_\_ Print

**See reverse side for Project Supervision responsibilities**



### **HSE Field Meeting – Responsibilities of Project Supervision**

- Review the last Project HSE Committee Meeting Minutes;
- Bring forward topics for discussion; e.g. environmental, at risk behaviors, practices, or conditions that have been observed.
- Review the following:
  - Inspections DD/MM/YY;
  - Incidents; and
  - MSDS.
- Encourage worker suggestions and discussion;
- Decide on corrective action and follow up to verify that this has been completed;
- Brief the workers on new types of equipment and controlled products;
- Discuss personal protective equipment suitable for the work on site;
- Review first aid and emergency procedures, update of any current changes;
- Discuss current HSE risks on the job site;
- Use the results of HSE inspections or audits as a topic of discussion; and
- Periodically, request assistance from the district HSE manager or project HSE supervisor in regards to content or special presentations.



## District Strategic HSE Plan

No.	Action Item & Specific Steps	Goal	Responsible	Resource	Target Date	% Complete	Comments
		•		•			•



## HAZARD IDENTIFICATION AND CONTROL *STANDARD HSE-05*

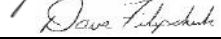
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-05      HAZARD IDENTIFICATION AND CONTROL**

- 1.0    PURPOSE
- 2.0    SCOPE
- 3.0    RESPONSIBILITY
- 4.0    REFERENCES
- 5.0    DEFINITIONS
- 6.0    STANDARD
- 7.0    ATTACHMENTS

## **1.0 PURPOSE**

Hazard assessment is the basis for the prevention of incidents in the workplace. The purpose of this standard is to create a process that facilitates identification, assessment, monitoring, and control of hazards at PCL work sites.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Hazard Identification and Control responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Review hazard assessments for accuracy and relevance to the work being performed;
- Coordinate the development of the Project Specific HSE Plan by PCL project management, owner representatives, and joint venture representatives;
- Review the Project Specific HSE Plan prior to distribution;
- Assist with hazard assessments where required;
- Audit the PSI process where the workers are performing the work; and
- Provide coaching and recognition to employees on the hazard assessment process.

### **3.2 District Management (Off-Site)**

- Verify that the hazard assessment process is followed within the district;
- Verify that a Project Specific HSE Plan is developed for each project;
- Review the Project Specific HSE Plan prior to distribution;
- Initiate the start of the CHA;
- Verify that projects are following the standards contained within the Project Specific HSE Plan through inspections and observation;
- Audit the PSI process where the workers are performing the work; and
- Provide coaching and recognition to employees on the hazard assessment process.

### **3.3 Project Management (Site)**

- Complete the CHA prior to mobilization to the project site;
- Provide coaching and recognition to employees on the implementation and development of JHAs and the overall hazard assessment process including the implementation of SWPs and HSEOPs;
- Verify that corrective or hazard reduction actions identified in the hazard assessment process are implemented in their areas of responsibility;
- Develop and approve the Project Specific HSE Plan prior to mobilization;

- Complete regular revisions of the Project Specific HSE Plan as project conditions change;
- Audit the PSI process where the workers are performing the work; and
- Provide coaching and recognition to employees on the hazard assessment process.

### **3.4 Project Supervision (Site)**

- Conduct hazard assessments as required under the company HSE Manual;
- Provide coaching and recognition to employees on the implementation and development of JHAs, and the overall hazard assessment process including the implementation of SWPs and HSEOPs;
- Identify current and future methods of control for identified hazards;
- Review completed hazard assessments with employees prior to the start of work;
- Review, implement, and maintain the standards in the Project Specific HSE Plan;
- Make workers in his/her area of responsibility aware of the standards in the Project Specific HSE Plan;
- Attend training and sign off acknowledgement on the Project Specific HSE Plan;
- Audit the PSI process where the workers are performing the work; and
- Provide coaching and recognition to employees on the hazard assessment process.

### **3.5 Project HSE Staff (Site)**

- Participate in hazard assessments as required under the company HSE Manual;
- Provide coaching and recognition to employees on the implementation and development of JHAs, and the overall hazard assessment process including the implementation of SWPs and HSEOPs ;
- Coordinate the development, implementation, coordination, distribution, and communication of the standards in the Project Specific HSE Plan;
- Verify that the Project Specific HSE Plan is current;
- Verify that the Project Specific HSE Plan is communicated to all project workers in orientation;
- Assist with training for line supervision in the content of the Project Specific HSE Plan;
- Audit the PSI process where the workers are performing the work; and
- Provide coaching and recognition to employees on the hazard assessment process.

### **3.6 Workers**

- Be continually alert for unsafe conditions and behaviors and exercise their right to refuse work.
- Participate in the hazard assessment process;
- Follow the standards contained in the Project Specific HSE Plan; and
- Follow hazard control measures identified for their work.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements
- Standard HSE-07, Personal Protective Equipment

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Administrative Controls**

Administrative 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.

### **5.2 Elimination/Substitution**

Elimination is the process of removing a hazard from the worksite and using an alternative means to reach the same goal. For example, substitution occurs when a less risky chemical or substance is used instead of an existing riskier chemical or substance.

### **5.3 Engineering Controls**

Engineering controls help reduce risk to potential hazards either by isolating the hazard or removing it from the work environment. Engineering controls may include mechanical ventilation, sound-dampening materials to reduce noise levels, permanent railings, or substitution of less hazardous materials.

Engineering controls are usually preferred to other control measures such as the use of personal protective equipment.

### **5.4 Personal Protective Equipment**

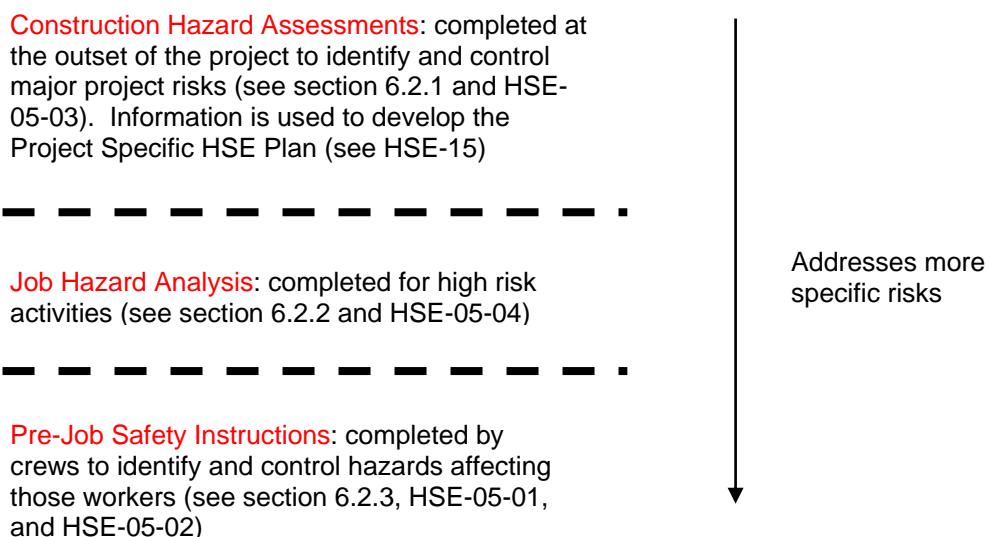
Personal protective equipment includes all clothing and other work accessories designed to create a barrier against workplace hazards. Examples include safety goggles, blast shields, hard hats, hearing protectors, gloves, respirators, aprons, and work boots.



## 6.0 STANDARD

### 6.1 Hazard Identification and Control

Hazard identification and control are key components in maintaining a safe and healthy workplace. Accordingly, potential hazards on a PCL job site must be assessed using the procedures set out in this standard. These hazard assessment procedures operate at the following levels:



Different processes are used at these levels. However, in general, the assessment processes are comprised of the following four basic elements:

- Recognizing the hazard risk or potential hazard risk;
- Identifying the source;
- Evaluating the risk of potential loss; and
- Controlling risk of potential loss.

### 6.2 Hazard Assessment Tools

#### 6.2.1 Construction Hazard Assessment (CHA)

The CHA is essential to identify hazards, risks and controls prior to the start of a project. The estimating department shall initiate HSE-05-03, Construction Hazard Assessment (CHA), and complete information on the first page and hand it off to the project team.

The project team will review Section A to determine if all potential hazards, risks and jobsite conditions are included and then will complete Section B including all the items in columns 1-6. Information collected during the CHA will be used to determine if JHAs are required and to develop the Project Specific HSE Plan (see HSE-15).

The project team will determine if the tasks involve a Class A Hazard after implementation of controls and, if so, the HSE-05-03, CHA, form will be forwarded to the appropriate HSE regional manager in Canada or HSE director/USHO in the US and the regional/divisional vice president for their input and review.

After completion, the CHA will be provided to all trade contractors and posted on safety bulletin boards on the project. A copy will be filed in the project HSE department office. During the life of the project, the CHA will be updated as necessary.

#### 6.2.2 Job Hazard Analysis (JHA)

The completion of a JHA by the project team is required for high risk activities to verify that hazards and risks associated with a specific task are identified and appropriate controls are implemented prior to execution of the task. All hazards identified must be prioritized. The JHA must be communicated to all workers involved with the task. Feedback from the workers should be encouraged prior to the start of the task and must be signed off by project management team/workers.

The project manager must notify the district manager of all activities that include hazards that are classified as a Class A Hazard following implementation of the control measures specified in the JHA. The project manager must receive the district manager's approval prior to proceeding with such activities.

The completed analysis shall meet or exceed the criteria set forth in HSE-05-04, Job Hazard Analysis. All forms are to be commensurate with the scope of work being performed.

##### 6.2.2.1 Special Reviews

Under certain circumstances special reviews of a JHA are required by an engineer and the district HSE manager. Some examples of such reviews are:

- manbaskets suspended by a crane;
- engineered lifts; and
- other activities where required by legislative jurisdictional requirements and/or PCL policies.

#### 6.2.2.2 JHA Audits

The frequency of JHA audits and employees responsible for their conduct are to be determined by the District HSE Committee. The Committee shall oversee the JHA audits and direct corrective actions as warranted.

#### 6.2.3 Pre-Job Safety Instruction (PSI)

The PSI program is a documented program designed to assist supervisors and workers to safely accomplish their day-to-day activities and responsibilities through the application of hazard identification and control where the work is conducted.

The PSI is used to enhance communication between workers and supervisors resulting in increased awareness between all crew members. Workers and supervisors will be trained in the proper completion of HSE-05-02, Pre-Job Safety Instruction Form.

The PSI will be completed at a minimum:

- At the start of any shift
- When tasks or conditions change; and
- Reviewed upon return from a break.

PSI Steps are:

- Assemble workers involved in the work;
- Identify the scope of work being performed;
- Identify actual and potential hazards;
- Identify appropriate controls for each hazard;
- Document the scope of work, actual hazards and controls;
- Workers involved shall sign the PSI, and initial after breaks;
- Review the PSI with the entire work group;
- Communicate the assessment to all workers involved; and
- Review with workers after breaks.

#### 6.2.4 PSI Audits

PSI audits will be conducted by project management staff / project supervision during the workday to commend, correct, and coach on the proper completion of a PSI. The PSI audit consists of a review of documentation, observations, and interviews at the task location. The information gathered can be recorded on the back of the PSI.

Ten percent of all PSIs completed in the field will be audited. There may be circumstances where the district manager may ask for a variance on the percent of PSI audits to be completed from the HSE director, USHO and/or HSE vice president, NAHQ.

Participation in these reviews will be tracked and reported to the project management team on a monthly basis.

### **6.3 Purchasing Controls**

Health, safety, and environment must be taken into consideration when purchasing equipment, tools, and materials for use on company work sites.

All controlled products are required to have a current SDS readily available to the worker using the product.

Employees who purchase or receive materials are responsible to verify that the MSDS is received for that product. A copy of all SDSs must be forwarded to the HSE coordinator, NAHQ for entry into MSDS Online.

### **6.4 Occupational Hygiene, Health, and Ergonomics**

The primary objective of occupational hygiene is to prevent or reduce employee risk to occupational health hazards that can lead to occupational disease and/or injury. This is accomplished through a process of anticipating, recognizing, measuring, evaluating, and controlling health hazards.

## **7.0 ATTACHMENTS**

HSE-05-01	PSI Info
HSE-05-02	Pre-Job Safety Instruction (PSI) Form
HSE-05-03	Construction Hazard Assessment (CHA)
HSE-05-04	Job Hazard Analysis (JHA)

## PSI Info



### PRE-JOB SAFETY INSTRUCTION

#### PSI Steps:

- Do PSI at site of task
- Identify scope of work
- Identify hazards
- Identify hazard controls
- Document on PSI
- Review PSI with workers
- Workers sign PSI
- Workers initial after breaks

Return PSI to foreman at end of each shift.



**OUR GOAL IS "ZERO INCIDENTS"**

#### Questions to be answered:

1. Is the area safe to work in?
2. Will the activities of other crews interfere with safe operations?
3. Has a job hazard analysis been completed and do workers understand their work assignments?
4. Have the proper tools and equipment been provided?
5. Are tools and equipment in safe operating condition?
6. Has proper personal protective equipment been provided?
7. Is the crew knowledgeable on how to properly use all personal protective equipment?
8. Can the crew communicate effectively with each other or are there restrictions due to high noise, restricted vision or language barriers?
9. If chemical products or compounds are being used, is the crew aware of the hazards and safety controls required to safely complete work assignments?
10. Is the crew aware that the Pre-Job Safety Instruction is there to assist them in getting the job done safely?
11. Have workers been encouraged to make suggestions to assist in completing job assignments safely?
12. Has the crew been advised to report any unsafe acts or unsafe conditions to their supervisors?



CONSTRUCTION LEADERS



CONSTRUCTION LEADERS





## Pre-Job Safety Instruction Form (Front)



Pre-Job Safety Instruction (PSI)  
Please complete a PSI at the task location prior to start of each task or when conditions change.

Company / Craft	Date	Time	Job No. / Permit No.
Project	Task Location	Muster / Meeting Point	

✓ Review these items with the crew at the site of the task and check the blocks that apply to the work.  
 "HIGH RISK" activities need a HSE Operating Procedure or a JHA. (Supervisor to Identify)

<b>Environmental Hazards</b> <input type="checkbox"/> spill potential / containment <input type="checkbox"/> HAZMAT / TDG storage <input type="checkbox"/> weather conditions <input type="checkbox"/> MSDS reviewed for hazardous materials <input type="checkbox"/> ventilation required <input type="checkbox"/> heat stress / cold exposure <input type="checkbox"/> lighting levels too low <input type="checkbox"/> housekeeping <b>Ergonomics Hazards / Material Handling</b> <input type="checkbox"/> working in a tight area <input type="checkbox"/> parts of body in line of fire <input type="checkbox"/> working above your head <input type="checkbox"/> pinch points identified <input type="checkbox"/> repetitive motion <b>Work at Height Hazards</b> <input type="checkbox"/> barricades, flagging, and signs in place <input type="checkbox"/> hole coverings in place <input type="checkbox"/> protect from falling items <input type="checkbox"/> powered platforms <input type="checkbox"/> others working overhead/below <input type="checkbox"/> fall arrest systems <input type="checkbox"/> ladders	<b>Activity Hazards</b> <input type="checkbox"/> welding / grinding <input type="checkbox"/> burn / heat sources <input type="checkbox"/> compressed gasses <input type="checkbox"/> working on / near energized equipment <input type="checkbox"/> electrical cords / tools - condition <input type="checkbox"/> equipment / tools inspected <input type="checkbox"/> critical lift meeting required <input type="checkbox"/> energy isolation <input type="checkbox"/> airborne particles <input type="checkbox"/> open hole(s) / leading edge(s) <input type="checkbox"/> mobile equipment / vehicle <input type="checkbox"/> rigging <input type="checkbox"/> excavation / underground work hazards <input type="checkbox"/> confined space <b>Access / Egress Hazards</b> <input type="checkbox"/> scaffold (inspected and tagged) <input type="checkbox"/> slip / trip potential identified <input type="checkbox"/> required permits in place <input type="checkbox"/> excavations <input type="checkbox"/> walkways / roadways <input type="checkbox"/> Other: _____	<b>Personal Limitations / Hazards</b> <input type="checkbox"/> clear instructions provided <input type="checkbox"/> trained to use tool and perform task <input type="checkbox"/> distractions in work area <input type="checkbox"/> working alone (communication) <input type="checkbox"/> lift too heavy / awkward position <input type="checkbox"/> external noise levels <input type="checkbox"/> physical limitations <input type="checkbox"/> first aid requirements <b>PPE Requirements</b> <input type="checkbox"/> goggles / Fectoggles / Spoggles <input type="checkbox"/> face shield <input type="checkbox"/> gloves (kevlar or leather) <input type="checkbox"/> covers (fire retardant) <input type="checkbox"/> hearing protection <input type="checkbox"/> respirator <input type="checkbox"/> harness / lanyard <input type="checkbox"/> reflective vest <input type="checkbox"/> footwear (condition / application)
--	---	---

✓ Identify the task steps and hazards, and then identify the plans to eliminate or control the hazards.

TASK STEPS	HAZARD	CONTROL

DO NOT SIGN UNTIL YOU UNDERSTAND AND AGREE WITH THE PSI. REVIEW AND INITIAL AFTER BREAKS AND LUNCH.

Worker Signature: _____	1 <sup>st</sup> Break	Initial after: Lunch	2 <sup>nd</sup> Break	Worker Signature: _____	1 <sup>st</sup> Break	Initial after: Lunch	2 <sup>nd</sup> Break
_____				_____			
_____				_____			
_____				_____			

Supervisor: \_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature





CONSTRUCTION

## PCL HSE MANUAL

Hazard Identification and Control  
Standard HSE-05-02

# Pre-Job Safety Instruction Form (Back)

Auditor: \_\_\_\_\_ Print Name \_\_\_\_\_ Signature \_\_\_\_\_ DD/MM/YY \_\_\_\_\_

	Adequate	Inadequate		Adequate	Inadequate
1. Task description			6. Workers' names legible		
2. Hazard identification			7. Reviewed / signed by foreman		
3. Hazard controls			8. Muster / assembly point identified		
4. All sections implemented			9. Tools and equipment inspected		
5. Initialed after breaks / lunch			10. PSI at task location		

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Auditors will comment on all inadequate items and those that are worthy of positive recognition.







CONSTRUCTION

**PCL HSE MANUAL**Hazard Identification and Control  
Standard HSE-05-03**Construction Hazard Assessment**

Date: \_\_\_\_\_ Project Name: \_\_\_\_\_ Project Number: \_\_\_\_\_ Estimator: \_\_\_\_\_ Print

**Brief Description of Project:**

<b>Applicable Scopes of Work/ Work Activities</b>	Boilermaking	Equipment Maintenance	Ironwork/Steel Erection	Module Installation
	Carpentry	Equipment Operation	Masonry	Roofing
	Concrete Finishing	Flooring	Millwright	Sheet Metal Working
	Construction Labor	Glazing	Painting	Specialty
	Drywalling	Inspecting	Plumbing and Pipefitting	Surveying
	Electrical/ Instrumentation	Insulating	Rigging	Welding
	Demolition	Scaffold Erection/Dismantle	Pile Driving	Other? _____

**Section A. Identify Existing and Anticipated Job Hazards by placing an X in the box to the right of the identified hazard**

Potential Hazards		Local Area Risks and Jobsite Conditions	
A. Working at heights 6' or greater	V. Hazardous Materials	1. Existing client operations	19. Remote location
B. Noise > 85 dBa	V1. Lead	2. Public interference	19A. Distant medical facilities
C. Inadequate lighting	V2. Asbestos	3. Crime	19B. Long ambulance response
D. Radiation sources	V3. Mould	3A. Threat of attack/injury	19C. Fire truck response
E. Biological (virus, bacterial, waste)	V4. Silica	3B. High theft rate	20. Impeded response
F. Chemical (toxic, corrosive)	V5. Carbon Monoxide	3C. Trespassing/mischief	20A. Due to rail way
G. Mechanical equipment	V6. Hexavalent Chromium	4. Homeless population	20B. Due to draw bridge
H. Compressed air	V7. PCBs	5. Area vehicular traffic	20C. Due to road conditions
I. Engulfment (water, chemicals, other)	V8. Other? _____	6. Animal infestation	21. Excessive muddy surfaces
J. Struck by/contact with/caught in	W. Working over water	7. Difficult access to project	22. Poor indoor air quality
K. Manual lifting over 50 pounds	X. Working overhead	8. Inadequate storage space	23. Previously disturbed soil
L. Congested work areas	Y. Excavation/trenching	9. Nearby structural instability	24. Overhead power lines
M. Repetitive motion, strains, sprains	Z. Grinder use	10. Underground storage tanks	25. Underground
N. Electrical	AA. Awkward work positions	11. Nearby plant emergency risk	26. Contaminated soil
O. Confined spaces (Circle Level 1, 2 or 3)	BB. Working alone	12. Archeological impact	27. Contaminated water
P. Critical lifts	CC. Welding arc	13. Flooding	28. No telephone service
Q. Open holes	DD. Laydown space insufficient	14. Worker parking remote	29. Unusual hours e.g. multiple shifts
R. Structural collapse	EE. Fuel storage tanks	15. Work near railroad tracks	30. Other? _____
S. Heavy equipment	FF. Propane/natural gas tanks	16. FAA or NAV Canada airspace rules	31. Other? _____
T. Stored energy	GG. Temperature extremes	17. Human/equipment interface	32. Other? _____
U. Fire/explosion	FFOther? _____	18. No potable water supply	33. Other? _____



## Construction Hazard Assessment

**Section B. Assessment and Controls – identify the letter or number of the hazard, risk or condition from Section A on the previous page**

(1) Item Number	(2) Hazard, Risk or Condition (Letter or Number)	(3) Controls to Establish (Consider the hierarchy of controls: Elimination, Substitution, Engineering, Administrative, PPE)	(4) Company/Person Responsible	(5) To Be Addressed In JHA? Y/N	(6) Covered In Project HSE Plan? Y/N

**Continue to the next page to sign off on the form**



CONSTRUCTION

**PCL HSE MANUAL**Hazard Identification and Control  
Standard HSE-05-03**Construction Hazard Assessment**

(1) Item Number	(2) Hazard, Risk or Condition (Letter or Number)	(3) Controls to Establish (Consider the hierarchy of controls: Elimination, Substitution, Engineering, Administrative, PPE)	(4) Company/Person Responsible	(5) To Be Addressed In JHA? Y/N	(6) Covered In Project HSE Plan? Y/N

**Completed by:****Project HSE Dept:**

Print

Signature

Date:

DD/MM/YY

**General Superintendent:**

Print

Signature

Date:

DD/MM/YY

**Reviewed by:****Project Manager:**

Print

Signature

DD/MM/YY

**Construction Manager:**

Print

Signature

DD/MM/YY

**Copy to:****Site Safety Bulletin Boards, Trade Contractors, HSE File**



## Job Hazard Analysis (JHA)

Project Number: \_\_\_\_\_ Project Name: \_\_\_\_\_  
Work Activity/Work Task: \_\_\_\_\_ JHA/ \_\_\_\_\_ -001 rev.

Steps*	Hazards <i>Considerations to: People, Equipment, Material, Environment, Tools, (Chemical, Biological, Physical, Hygiene and Ergonomics)</i>	Pre-control Risk Rating	Control	Post Control Risk Rating	Controls Verified Yes / No

\*Additional lines on page 2

**REVIEW BY:** \_\_\_\_\_ **SPECIAL REVIEW BY:** \_\_\_\_\_  
Project Superintendent: \_\_\_\_\_ Date: DD/MM/YY **Required:** \_\_\_\_\_  
Foreman: \_\_\_\_\_ Date: DD/MM/YY Engineer: \_\_\_\_\_ Yes ☐ No ☐ Date: DD/MM/YY  
Project HSE: \_\_\_\_\_ Date: DD/MM/YY District HSE Manager: \_\_\_\_\_ Yes ☐ No ☐ Date: DD/MM/YY

**Crew Reviewed with Signatures:**

_____	Date: <u>DD/MM/YY</u>	_____	Date: <u>DD/MM/YY</u>
_____	Date: <u>DD/MM/YY</u>	_____	Date: <u>DD/MM/YY</u>
_____	Date: <u>DD/MM/YY</u>	_____	Date: <u>DD/MM/YY</u>
_____	Date: <u>DD/MM/YY</u>	_____	Date: <u>DD/MM/YY</u>



January 2021  
Rev. 04



CONSTRUCTION

**PCL HSE Manual**  
Hazard Identification & Control  
Standard HSE 05-04

Item	Adequate	Inadequate	Item	Adequate	Inadequate
1. Work Activity/Work Task Description			6. Controls Verified		
2. Steps Identified			7. All sections completed		
3. Hazard Identification			8. Review Signatures Required		
4. Pre/Post control Risk Rating			9. Crew Signatures		
5. Hazard Controls			10. JHA at task location		

**Comment:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Auditor's Name:** \_\_\_\_\_ **Print** **Auditor's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **DD/MM/YY**  
**Auditor's Name:** \_\_\_\_\_ **Print** **Auditor's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **DD/MM/YY**

## Job Hazard Analysis Audit

Auditors will provide comments on all inadequate items and those that are worthy of positive recognition.

Frequency of Task					
Category		Term	Definition		
4		Very Frequent	Possibility of repeated activities (many times in the course of a task)		
3		Frequent	Possibility of isolated activities (several times in the course of a task)		
2		Occasional	Likelihood of activity occurring sometime (likely in overall task and/or project)		
1		Infrequent	Possible it will occur but not likely to		
Severity – Consequences					
Consequence Category		People	Property	Environment	Public Image, Reputation & Disruption
4	Major	Fatality	Impact >\$100,000	Reportable Occurrence	Government intervention
3	Critical	Permanent, long-term injury or illness	Impact < \$100,000 but > \$50,000	Client Standards Not Met	Owner Intervention
2	Serious	Recordable Injury	Impact < \$50,000 but > \$ 10,000	Site Conditions Unacceptable	Community Attention
1	Minor	On-site/ No Treatment	Impact < \$10,000	No Impact	Individual or none

		Frequency of Task			
		4	3	2	1
Severity	4	16	12	8	4
	3	12	9	6	3
	2	8	6	4	2
	1	4	3	2	1

Risk Category		Definition
"A"	High (8-16)	Situation must be corrected immediately. Approval to continue at current level of risk by District Manager, Senior Construction Manager and District HSE Manager.
"B"	Medium (4-6)	Approval to continue at current level of risk by 2 senior supervisory project team members.
"C"	Low (1-3)	Managed appropriately at field level.



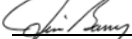
## INSPECTIONS AND AUDITS

### STANDARD HSE-06

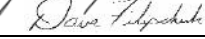
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

#### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-06     INSPECTIONS AND AUDITS**

- 1.0     PURPOSE
- 2.0     SCOPE
- 3.0     RESPONSIBILITY
- 4.0     REFERENCES
- 5.0     DEFINITIONS
- 6.0     STANDARD
- 7.0     ATTACHMENTS

## **1.0 PURPOSE**

The purpose of an inspection is to identify conditions and hazards in the workplace that can lead to an incident and identify positive conditions, behaviors, and observations.

The purpose of an audit is to evaluate the implementation of this HSE Manual against the requirements set out in this manual.

The purpose of the Inspections and Audits Standard is to identify conditions and hazards in the workplace that can lead to an incident and evaluate the implementation of this HSE Manual.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Inspection and Audit responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Provide appropriate methods of documenting inspections;
- Conduct monthly formal inspections of projects, in conjunction with project management;
- Conduct quarterly inspections of permanent facilities, in conjunction with district management;
- Conduct periodic project audits to verify implementation of the HSE Manual; and
- Verify that project/facility inspections are conducted according to policy.

### **3.2 District Management (Off-Site)**

- Conduct monthly formal inspections of projects, in conjunction with project management, a minimum of one project per month;
- Conduct quarterly formal inspections of all permanent facilities, in conjunction with project site management; and
- Participate in periodic audits of project sites.

### **3.3 Project Management (Site)**

- Conduct formal inspections of projects;
- Verify that corrective actions identified during inspections are implemented; and
- Create corrective action plans for audits completed in their area of responsibility.

### **3.4 Project Supervision (Site)**

- Conduct daily inspections of their work areas; and
- Implement corrective actions identified in inspections of their work areas.

### **3.5 Project HSE Staff (Site)**

- Conduct daily inspections of projects;
- Conduct weekly formal inspections of projects, in conjunction with project management and/or supervision;
- In the absence of project HSE staff, the above shall default to the project management team;
- Provide assistance to project management in the implementation of corrective actions; and
- Provide inspection training to supervisors.

### **3.6 Workers**

- Participate in inspections as requested.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Audit**

Audits are much more detailed than inspections and focus on the overall HSE process or management system. This includes such items as communication, administration, documentation, HSE education, training, practices, and procedures. When supported within a framework of frequency statistical analysis and HSE inspections, this system is very efficient and effective in terms of HSE performance measurement.

### **5.2 Formal Inspection**

Formal inspections are documented visual tours of the work place which identify hazards and hazardous conditions. Items inspected include, but are not limited to all 29 items identified on the back of HSE-06-01.

### **5.3 Informal Inspection**

Informal inspections are daily visual inspections of workplace conditions.

## **6.0 STANDARD**

### **6.1 Informal Inspections**

All employees must complete daily informal inspections of their work environment. If a Hazard Classification "A" is observed, help to make the situation safe and then report the 'A' hazard to the HSE manager or superintendent. They will open an informal inspection using HSE-06-01, HSE Inspection Checklist, to record the Hazard Classification "A" and will enter the hazard into the SMC to make sure corrective action is taken.

### **6.2 Formal Inspections**

Formal inspections shall be conducted using HSE-06-01, HSE Inspection Checklist. Inspectors shall identify the hazards on this form. Action items and identified hazards are to be entered into the SMC as soon as possible. Once the corrective actions are completed, they are to be closed out in the SMC.

#### **6.2.1 Permanent Facility Inspections**

All permanent facilities will be inspected on a quarterly basis. All noted hazards are to be recorded on HSE-06-01, HSE Inspection Checklist, as well as in the SMC. Copies of the report must be posted and kept with the permanent facility records.

#### **6.2.2 Project Inspections**

Project management will conduct a formal inspection of the project site on a weekly basis. Prior to conducting a formal inspection, project management is to review the most recent formal inspection and verify that the corrective action has taken place.

On a monthly basis, the district manager and operations manager will participate in a formal inspection of a project with project management.

All noted deficiencies are to be signed off on HSE-06-01, HSE Inspection Checklist, as well as in the SMC. Project management is responsible to verify that the corrective actions are completed.

#### **6.2.3 Monthly Inspections**

Monthly formal inspections will be completed at all PCL worksites. These inspections will be done by the district HSE manager or project HSE supervisor accompanied by the project superintendent and documented on the HSE-06-01, HSE Inspection Checklist.

All noted deficiencies are to be signed off on HSE-06-01, HSE Inspection Checklist, as well as in the SMC. Project management is responsible to verify that the corrective actions are completed.

#### 6.2.4 Inspection Training Requirements

Every person who participates in the HSE inspection will receive formal training sufficient to:

- Identify hazards;
- Identify safe and at risk behavior; and
- Evaluate workplace hazards.

#### 6.2.5 Inspection Documentation

All formal inspections will be documented on HSE-06-01, HSE Inspection Checklist, and entered into the Safety Management Center (SMC). All formal inspection reports shall be reviewed by one level above the inspector.

The hazard classification rating will be identified on HSE-06-01, HSE Inspection Checklist. The district manager/general manager will receive notification of all Hazard Classification "A"s.

Records of documented inspections are to be maintained for a minimum of three years.

### 6.3 HSE Audits

#### 6.3.1 Purpose of an HSE Audit

HSE audits provide the objective means for a methodical and systematic analysis of the level of implementation of the HSE program.

#### 6.3.2 Formal HSE Audits

At a minimum, each district must complete an audit once per year that is equal to or greater than the standards set in the Bob Tarr audit process. The audit must contain a representative sample of the active work that is being performed in the district at the time of the audit. This annual audit must include an action plan after the audit for internal review. These action plans must be communicated to project sites and district staff.

All formal HSE audits will be conducted by the HSE director, USHO, HSE vice president, NAHQ, or an appointed designate annually through the Bob Tarr auditing process. Off year audits will be conducted by an outside HSE manager or person equally qualified that is approved by the regional HSE manager/HSE director, USHO/HSE vice president, NAHQ.

##### 6.3.1.1 Bob Tarr Safety Award

The prestigious Bob Tarr Safety Award is symbolic of HSE excellence within PCL and was introduced in 1992 in memory of PCL's former chief executive officer, Bob Tarr.

The Bob Tarr Safety Award is presented annually to the district that has the best HSE performance within the overall company. To successfully receive this award, the winning district must achieve the highest composite score on the formal HSE audit based on the weighted categories of incident frequency, incident severity, inspections, audits, and criteria established by the executive review committee.

#### **6.4 Governmental Inspections**

Inspectors from regulatory agencies will be permitted to inspect company facilities and projects, without obstruction, provided they have the appropriate authorization and identification.

The project superintendent or facility supervisor must notify the district HSE manager immediately if an inspector from a regulatory agency indicates that he/she will be conducting an inspection.

An opening conference must be held prior to the start of the inspection to clarify and confirm the purpose.

Inspectors from a regulatory agency must wear the appropriate PPE for the facility or the project and must be accompanied by project management.

A close out conference must be held once the inspection has been completed. Copies of all regulatory inspections must be forwarded to the district office by close of business on the day of the inspection. Copies of the regulatory inspection must also be retained in the project or facility files for reference and posted where required.

Project management is responsible for all corrective actions that need to be carried out. The inspection will be entered into the SMC as a "Government" inspection (the government inspection form will be uploaded as an attachment to the inspection in the SMC). Regulatory orders will be posted as per legislative jurisdictional requirements.

### **7.0 ATTACHMENTS**

HSE-06-01 HSE Inspection Checklist



## Health, Safety and Environmental Inspection Checklist

<b>Project #*:</b>			<b>Date*:</b> DD/MM/YY			
<b>Project Name*:</b>			<b>Time*:</b>			
<b>Inspection Location:</b>			<b>Previous Inspection Reviewed*:</b> Y / N			
<b>Company Conducting Inspection*:</b>					<b>CCIP*?</b> Y / N	
<b>Weather Conditions*:</b> <i>Circle one</i>	Hot/Humid	Indoors	Clear	Raining	Freezing Rain	Overcast
	Snowing	Foggy	Sunny	Windy	Underground	
<b>Lighting*:</b> <i>Circle one</i>	Daylight	Darkness	Artificial	Dusk	Dawn	
<b>Inspection Type*:</b> <i>Circle one</i>	Trade Cont.	Project Team	Security	Insurance	Formal	Informal
	Weekly	Monthly	Government	3 <sup>rd</sup> Party	Environmental	OSHA
	District HSE Committee		Project HSE Committee			

<u>INSPECTION TEAM</u>	<u>COMPANY</u>	<u>PRINT</u>	<u>SIGN</u>
<b>Lead Inspector*:</b>		*	*
<b>Inspector:</b>			
<b>Inspector:</b>			
<b>Inspector:</b>			
<b>Inspector:</b>			
<b>Inspector:</b>			
<b>Inspector:</b>			

<u>PROJECT SUPERVISORS</u>	<u>COMPANY</u>	<u>PRINT</u>	<u>SIGN</u>
<b>Superintendent*:</b>		*	*
<b>Project Manager*:</b>		*	*
<b>Lead Inspector's Supervisor*:</b>		*	*

<b>POSITIVE OBSERVATIONS**</b> Any positive observations must include Category, Standard, and Company	
<b>1</b>	<b>Positive Observation Category:**</b>
	<b>Positive Observation Standard:**</b>
	<b>Company Involved:**</b>
	<b>Supervisor/Person Involved:</b>
	<b>Example:</b>
<b>2</b>	<b>Positive Observation Category:**</b>
	<b>Positive Observation Standard:**</b>
	<b>Company Involved:**</b>
	<b>Supervisor/Person Involved:</b>
	<b>Example:</b>

<b>Notes:</b>
---------------

**Class "A" Hazard :** a condition or practice likely to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material.  
**Class "B" Hazard:** a condition or practice likely to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive.  
**Class "C" Hazard:** a condition or practice likely to cause minor (non-disabling) injury or illness or non-disruptive property damage.

## Health, Safety and Environmental Inspection Checklist

Page: \_\_\_\_\_ of \_\_\_\_\_

Hazard Rating\*: A, B, C      Active Hazard Category\*: \_\_\_\_\_  
Hazard Standard\*: \_\_\_\_\_  
Company Involved\*: \_\_\_\_\_  
Supervisor Involved\*: \_\_\_\_\_      Person Involved: \_\_\_\_\_  
Hazard Notes: \_\_\_\_\_  
Assigned to: Person\*: \_\_\_\_\_      Notes: \_\_\_\_\_  
Corrective Action\*: \_\_\_\_\_  
Target Date\*: \_\_\_\_\_      Completion Date: \_\_\_\_\_

Hazard Rating\*: A, B, C      Active Hazard Category\*: \_\_\_\_\_  
Hazard Standard\*: \_\_\_\_\_  
Company Involved\*: \_\_\_\_\_  
Supervisor Involved\*: \_\_\_\_\_      Person Involved: \_\_\_\_\_  
Hazard Notes: \_\_\_\_\_  
Assigned to: Person\*: \_\_\_\_\_      Notes: \_\_\_\_\_  
Corrective Action\*: \_\_\_\_\_  
Target Date\*: \_\_\_\_\_      Completion Date: \_\_\_\_\_

Hazard Rating\*: A, B, C      Active Hazard Category\*: \_\_\_\_\_  
Hazard Standard\*: \_\_\_\_\_  
Company Involved\*: \_\_\_\_\_  
Supervisor Involved\*: \_\_\_\_\_      Person Involved: \_\_\_\_\_  
Hazard Notes: \_\_\_\_\_  
Assigned to: Person\*: \_\_\_\_\_      Notes: \_\_\_\_\_  
Corrective Action\*: \_\_\_\_\_  
Target Date\*: \_\_\_\_\_      Completion Date: \_\_\_\_\_

Hazard Rating\*: A, B, C      Active Hazard Category\*: \_\_\_\_\_  
Hazard Standard\*: \_\_\_\_\_  
Company Involved\*: \_\_\_\_\_  
Supervisor Involved\*: \_\_\_\_\_      Person Involved: \_\_\_\_\_  
Hazard Notes: \_\_\_\_\_  
Assigned to: Person\*: \_\_\_\_\_      Notes: \_\_\_\_\_  
Corrective Action\*: \_\_\_\_\_  
Target Date\*: \_\_\_\_\_      Completion Date: \_\_\_\_\_

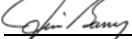
\*Required field in the SMC

**PERSONAL PROTECTIVE EQUIPMENT**  
***STANDARD HSE-07***

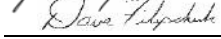
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (d. Filipchuk)

**DATE:** January 2021

**REVISION LOG**

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-07      PERSONAL PROTECTIVE EQUIPMENT**

- 1.0    PURPOSE
- 2.0    SCOPE
- 3.0    RESPONSIBILITY
- 4.0    REFERENCES
- 5.0    DEFINITIONS
- 6.0    STANDARD
- 7.0    ATTACHMENTS

## **1.0 PURPOSE**

The purpose of Personal Protective Equipment (PPE) is to provide an effective barrier between a worker and potentially dangerous objects, substances, and processes. The Personal Protective Equipment Standard establishes mandatory rules regarding the use of PPE on PCL project sites.

## **2.0 SCOPE**

This standard applies to all PCL project sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Personal Protective Equipment responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Verify that PPE standards are developed for the tasks performed by PCL;
- Recommend PPE that meets applicable government, industry, or customer standard(s) governing its use;
- Set an appropriate example for employees under their direction; and
- Include PPE as a component of the work site inspection.

### **3.2 District Management (Off-Site)**

- Set an appropriate example for employees under their direction; and
- Approve PPE standards for use on company work sites.

### **3.3 Project Management (Site)**

- Set an appropriate example for employees under their direction;
- Wear the required PPE for the work they are supervising; and
- Verify that the required PPE is available at the work site, along with appropriate training.

### **3.4 Project Supervision (Site)**

- Wear the required PPE for the work they are supervising;
- Verify that employees under their direction comply with the PCL PPE requirements and the client's health, safety, and environment policy;
- Identify additional PPE requirements for specific job sites;
- Verify that the required PPE is available at the work site;
- Confirm that appropriate maintenance logs are kept for specialty PPE in their area; and
- Enforce the use of PPE for protection against the hazards identified.



### **3.5 Project HSE Staff (Site)**

- Wear the required PPE for the work environment;
- Identify additional PPE requirements for specific job sites;
- Set an appropriate example for all workers;
- Include PPE as a component of the work site inspection; and
- Review and assess the appropriate PPE training has been given.

### **3.6 Workers**

- Wear PPE as required in PCL policy, practices, and procedures or where site specific requirements request PPE in addition to the company standard;
- Care for and maintain the PPE issued to them according to manufacturer instructions, codes of practice, and related training they have received;
- Use only approved PPE that is in clean and in good condition or repair; and
- Participate in PPE training.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements
- HSEOP-12, Respiratory Procedures
- HSEOP-24, Fall Protection
- HSEOP-25, Grinders
- HSEOP-28, Heat Stress Prevention
- HSEOP-29, Working in Cold Environments

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Personal Protective Equipment (PPE)**

Personal protective equipment includes all clothing and other work accessories designed to create a barrier against workplace hazards. Examples include safety goggles, blast shields, hard hats, hearing protectors, gloves, respirators, aprons, and work boots.

## **6.0 STANDARD**

### **6.1 Basic Personal Protective Equipment**

At a minimum, all workers on a PCL job site must wear:

- Head protection;
- Eye protection;
- Foot protection;
- Hand protection (when required); and
- Face protection (when required).

Rules relating to this mandatory PPE are provided in sections 6.1.1 to 6.1.4.

Project management is responsible to conduct a hazard assessment and identify additional requirements for assigned projects based on the task specific risk. PPE must be selected based on the following information:

- Hazard assessments (CHAs, JHAs, inspections, PSIs);
- Material Safety Data Sheets (MSDS);
- Client requirements; and
- Legislative jurisdictional requirements.

These additional requirements are to be identified in the Project Specific HSE Plan (see HSE-15). Additional rules regarding project specific PPE are provided in section 6.2, below.

#### 6.1.1 Head Protection

Workers shall wear hard hats that are in good condition and meet legislative jurisdictional requirements. Bump hats and metal hard hats shall not be worn as head protection.

Employees must wear hard hats with the company logo and the employee's name clearly displayed on the hard hat.

Alteration of hard hats is prohibited. Hard hats shall be worn in the manner prescribed by the manufacturer. Only head apparel designed to be worn under a hard hat will be allowed.

#### 6.1.2 Eye and Face Protection

Employees shall be provided with properly fitting eye and face protection commensurate with district directive.

Workers must wear properly fitting eye and face protection commensurate with district directive.

Face and eye protection shall be kept clean and in good repair.

If a worker cannot wear safety glasses, as documented by a physician's note, alternate arrangements must be made to verify the individual's face and eyes are protected.

All components of prescription glasses that are being used for eye protection must meet approved legislative jurisdictional requirements. The prescription glasses will include sideshields that must meet the legislative jurisdictional requirements. Coverall glasses or goggles shall be required for prescription glasses that do not meet the standard.



### 6.1.3 Hand Protection

All employees must have gloves available on their persons. Gloves are to be worn when conducting work activities with hazards that may injure hands.

### 6.1.4 Foot Protection

All workers on a job site must wear safety footwear. For Canadian operations, the minimum is a CSA approved, grade one (green triangle), 6" high cut boot appropriate to the task.

For US operations, the minimum is a sturdy, leather boot.

No running shoes of any kind are permitted on job sites.

Safety footwear must be in good repair. It is the responsibility of the employee to verify that their footwear is in proper working condition.

## 6.2 Project Specific PPE

### 6.2.1 Hearing Protection

Workers shall receive an overview of hearing protection requirements during the project HSE orientation. The training shall include identification of any hearing protection required areas, the hazards associated with noise exposure, and the purpose, use, maintenance, and limitations of the protective equipment provided on site.

Workers shall not be exposed to noise in excess of the occupational exposure limits set by legislative jurisdictional requirements. This may be accomplished by:

- Instituting engineering controls;
- Work practices/administrative controls; and/or
- Providing personal hearing protection.

When a noise exposure assessment is required or requested, the HSE department shall arrange for a competent individual to perform and interpret the assessments. Results of any assessments will be communicated to the workers.

There are two types of recognized hearing protection available for use in effectively reducing noise exposure – earplugs and earmuffs.

In most instances, earplugs are acceptable hearing protection. Cotton plugs are not acceptable and shall not be used.

When using earmuffs for hearing protection special care must be given to check they are disinfected before being used by another worker.

#### 6.2.2 Limb and Body Protection

Where there is risk of injury to an employee's limb and/or body, adequate limb and body protection must be worn and equipment designed to protect employees from injury to their limbs and body must be used.

Where there is risk of injury due to congested work area or the movement of heavy equipment in and/or around the work area, all employees must wear high visibility apparel.

When work is being done in extreme hot or cold temperatures, the protective clothing being worn must be reviewed to verify that it is adequate. Employees must be informed of any special precautions that need to be taken or special protective clothing that needs to be worn (see also *HSEOP-28* and *HSEOP-29*).

At a minimum, a 4 inch sleeve is required.

#### 6.2.3 Respiratory Protection

Each district shall develop a respiratory program in compliance with *HSEOP-12*, Respiratory Protection. A review of the legislative jurisdictional requirements is to be completed.

#### 6.2.4 Fire Retardant Clothing

Fire retardant clothing (FRC) must be used where there is risk of flash fire or explosion, legislative jurisdictional requirements dictate, or client requirements dictate.

Where FRC is required, the outer layer of employee's clothes, including rain gear, must be made of fire retardant material.

#### 6.2.5 Personal Fall Protection

100% Fall Protection must be utilized where workers are exposed to falls at and above six feet in height.

Note: Use of ladders on a job site is to be addressed through a hazard analysis process that will be identified in the Project Specific HSE Plan.

Personal fall protection (fall restraint, fall arrest) will only be employed after it has been determined that engineering controls such as guardrails are not feasible. When possible, a fall restraint system, if applicable, must be used prior to a fall arrest system.



Personal fall protection equipment, at a minimum consists of:

- Full body harness;
- Connecting means;
- Double lanyards;
- Anchorage connector; and
- Anchorage.

All equipment must meet legislative jurisdictional requirements.

### **6.3 Employee Owned PPE**

Personally owned PPE must be approved by project management prior to use on a project site. All personally owned equipment must meet the company PPE standards and pre-use inspection requirements.

Personally owned fall arrest protection systems will not be accepted on any job sites.

### **6.4 Defective/Damaged PPE**

Workers must inspect PPE prior to use to verify that it is fit for use.

Defective or damaged PPE must be immediately removed from use and repaired or discarded. All PPE removed from service for repair will be tagged as "Out of Service". Any PPE tagged "Out of Service" will not be returned until repaired and inspected by a qualified person approved by the district HSE manager.

## **7.0 ATTACHMENTS**

N/A



## EMERGENCY RESPONSE PLAN

### STANDARD HSE-08

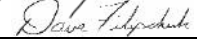
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

#### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-08      EMERGENCY RESPONSE PLAN**

- 1.0    PURPOSE
- 2.0    SCOPE
- 3.0    RESPONSIBILITY
- 4.0    REFERENCES
- 5.0    DEFINITIONS
- 6.0    STANDARD
- 7.0    ATTACHMENTS

## **1.0 PURPOSE**

The purpose of this standard is to mandate the development of Emergency Response Plans (ERPs) that provide guidelines for the response required in the event of an injury, fire, or any other emergency at a work site.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Emergency Response Plan responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration

### **3.1 District HSE Department (Off-Site)**

- Assist in the development and implementation of the ERP;
- Confirm that the applicable ERP procedures are part of the Project Specific HSE Plan;
- Check, through informal audits, that these procedures are up-to-date;
- Verify workers are aware of, and have knowledge of, proper emergency reactions;
- Investigate, report, and recommend preventative action plans; and
- Report to the various government regulatory agencies or environmental protection agencies and to the HSE director, USHO/HSE vice president, NAHQ.

### **3.2 District Management (Off-Site)**

- Provide sufficient resources including materials, equipment, and training to effectively deal with potential emergencies at the work place;
- Implement the ERPs for district projects;
- Verify that applicable ERP procedures are an integral part of the project HSE program;
- Confirm that all workers are familiar with the plan and can adequately respond if required;
- Verify that the site of the emergency is provided with suitable resources to handle the situation, such as:
  - Extra workers;
  - Specialty workers (i.e., district construction engineer); and
  - Equipment.
- Inform NAHQ/USHO of the situation;
- Contact PCL Construction Resources if necessary;
- Handle media relations; and
- Verify that the company contacts any victims' families and displays compassion and sensitivity.



### **3.3 Project Management (Site)**

- Develop written site specific ERPs based on the CHA and update as required;
- Verify that emergency response standards are met for each project before commencement of work;
- Inform all supervisors of their responsibilities regarding the ERP details;
- Develop a drawing indicating gates, designated emergency meeting points, control point, and an emergency security program;
- Assume leadership of the emergency response team;
- Verify that the ERP is implemented;
- Confirm the district manager is kept informed of the situation;
- Maintain worker safety by means of work stoppage evacuation, worker counts, maintenance of project site security, etc.;
- Verify appropriate steps are taken to limit loss or damage to property or equipment and that corrective action, if applicable, is taken as soon as possible; and
- Confirm work is resumed when the emergency subsides.

### **3.4 Project Supervision (Site)**

- Verify that workers understand the site specific ERP and their roles in an emergency;
- Be knowledgeable of the site specific ERP;
- Assist the project superintendent in the event of an emergency;
- Verify that all new or transferred workers to the project are aware of the procedures to follow during emergencies;
- Assist the project superintendent in the control of worker safety and project site security;
- Provide assurance to the project superintendent that all workers are accounted for; and
- Confirm that project site access is controlled.

### **3.5 Project HSE Staff (Site)**

- Participate in the development and implementation of site specific ERPs;
- Coordinate the integration of the project specific PCL ERP with the client site plan and site emergency services and the Project Specific HSE Plan;
- Assist the project superintendent in the implementation of the ERP;
- Advise project workers of the ERP procedures;
- Assist the project superintendent in emergency procedures;
- Check that proper first aid procedures are carried out until the arrival of emergency response personnel;
- Verify that assistance is provided to emergency response personnel;
- Assist supervisors with project site control and security;
- Assist district HSE manager with investigation of the incident;
- Verify that the project superintendent has assumed control as team leader;
- Establish a medical emergency evacuation team for the project to respond to and participate in the ERP; and Verify that emergency response agencies have been called.

### **3.6 Workers**

- Understand the ERP for their work area; and
- Participate in emergency response training and testing of the emergency response plan.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements
- PCL Media Relations Spokesperson Policy

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Crisis**

A significant disruption of one or more PCL companies normal activities that may stimulate media coverage and/or public scrutiny.

### **5.2 Emergency Assembly/Muster Point/ Emergency Meeting Points**

Emergency assembly/muster points/emergency meeting points are predetermined locations where workers will gather in the case of an emergency or evacuation and to meet responding emergency response crews.

### **5.3 Table Top Exercise**

A table top exercise is an emergency simulation exercise conducted in a classroom or office setting instead of an actual evacuation exercise in the field.

## **6.0 STANDARD**

### **6.1 General Requirements**

#### **6.1.1 Permanent Facilities**

All permanent facilities will have an ERP based on a site hazard assessment that addresses or includes, at a minimum:

- Fire;
- Medical emergency;
- Emergency contacts;
- Certified first aid personnel;
- Spills, leaks, and release of hazardous materials; and
- Natural disasters.

This ERP will be communicated to workers as part of the facility orientation and made available and posted in conspicuous locations. All permanent facilities will post a map showing:

- First aid kit locations;
- Fire extinguisher locations;
- Evacuation routes and emergency assembly/muster points;
- Controlled product storage;
- Utility shutoffs; and
- Environmental spill kit (when required).

ERPs for permanent facilities will be reviewed on an annual basis.

#### 6.1.2 Project Sites

All project sites must have an ERP based on a project site hazard assessment that addresses or includes at a minimum:

- Fire;
- Medical emergency;
- Spills, leaks, and release of hazardous materials;
- Natural disasters;
- Certified first aid personnel;
- Nearest medical facility and travel routes; and
- Map showing/identifying:
  - First aid attendants/services,
  - Fire extinguisher/firefighting equipment locations,
  - Evacuation routes,
  - Emergency assembly/muster points,
  - Media assembly areas,
  - Helicopter landing areas (as required), and
  - Controlled product storage.

This ERP must be communicated to all workers.

Response to spills, leaks, and release of hazardous materials must be set out in the Environmental Action Plan as further described in HSE-10.

#### 6.1.3 Site Plot Plan

As part of the ERP for a project site, project management will complete a Site Plot Plan and must indicate the locations of access gates, streets, emergency meeting points, and telephones.

The Site Plot Plan will be reviewed with emergency response agencies such as ambulance, police, and fire departments. Utility companies (such as local gas or electric utilities) may be contacted as part of the response team's procedure.

#### 6.1.4 Emergency Contact List

As part of the ERP for a project site, project management will complete an emergency contact list that shall be kept current and shall include the following information and contacts:

- PCL project supervision;
- Project management;
- Client representatives;
- District HSE department;
- Government agencies;
- Medical transportation services (land and air);
- Medical services; and
- NAHQ/USHO offices.

### 6.2 Emergency Procedures

#### 6.2.1 Emergency Coordination

Project superintendents (or other designates) must be able to respond to any emergencies that may occur. All trade contractors should participate by identifying their qualified first aid personnel.

During an emergency, all radio traffic will be dedicated to the emergency.

Exercise this plan with the emergency evacuation team in test situations at a frequency of no less than once per year. On major construction sites, as defined by the district manager/HSE manager, emergency procedures should be exercised every six months. When it is not practical to conduct an exercise involving a medical emergency, fire, evacuation drill or any other type of response, a table-top exercise may be conducted.

All project workers should use the following procedures if they need emergency help.

State the following by radio or telephone:

- The construction project location and area;
- The nature of the emergency – for example:
  - Storms,
  - Tornado,
  - Flooding,
  - Earthquake,
  - Landslide,
  - Fire,
  - Injured worker,
  - Bomb threats,
  - Structure or equipment, or
  - Hazardous substance release or spill.

- The emergency meeting point (i.e., street address or intersection as designated on the ERP). A responsible employee will be sent to this meeting point to direct traffic; and
- Direct the emergency vehicle crew to the scene.

#### 6.2.2 Emergency Evacuation

Workers, visitors, or the public may be informed of an evacuation by means of:

- As defined in Project Specific HSE Plan;
- Word of mouth;
- Plant alarm/site alarm; or
- Repeated crane whistle/horn.

All workers on a project will be required to comply with the following procedure when notified of a project evacuation:

- All work shall be stopped;
- All loads shall be lowered if possible;
- Equipment and energy sources shall be shut down;
- All workers shall proceed to the nearest muster point;
- Workers shall report to a supervisor for a name check-off (foremen will assist in name check-off);
- Project site security measures shall be established in the area as necessary to keep non-essential people sufficiently away from the emergency; and
- Work shall be resumed only under the direction of the project superintendent. (Where work permits have been issued, they must be validated).

### 6.3 Crisis Communications

The Crisis Communications Plan will be initiated when district management determines that an emergency situation is deemed to be a crisis, as defined in this manual. HSE-08-05, Crisis Management Plan Template, is provided to help affected PCL employees determine the proper steps to take during a potential crisis situation. This Plan is an important part of PCL's overarching Reputation Management Plan. This guide is not meant to replace the PCL HSE Emergency Response Plan (HSE-08), but to augment the Emergency Response Plan and assist in ensuring that we effectively respond to events which may threaten our companies' reputation or viability.

#### 6.3.1 Fact Gathering

The district HSE manager is responsible to vet through information sent in from the project site regarding the crisis to verify that the information is accurate. This information will be forwarded to the district manager or delegate to assist with the accurate communication of the crisis. The complete flow chart of crisis communications is illustrated on the Crisis Communications Reporting Diagram, HSE-08-02.

#### 6.3.2 Key Message/Statement Preparation

The district manager or designate will prepare the Key Message/Statement in consultation with NAHQ or USHO Communications using HSE-08-01, Key Message/Statement Template.

#### 6.3.3 Employee Communications

When possible, employee communication will precede media communication. The district manager is responsible to communicate the facts of the crisis to district employees as soon as reasonably possible and keep employees updated. This communication will be the same key message communication that is prepared for the media.

If it is determined that the crisis may be a regional, national, or international news story, the president and CEO will determine the timing of communications to all employees.

#### 6.3.4 Media Relations

Media relations will be conducted in accordance with the HSE-08-04, PCL Media Relations Spokesperson Policy.

### 7.0 ATTACHMENTS

HSE-08-01	Key Message/Statement Template
HSE-08-02	Crisis Communications Reporting Diagram
HSE-08-03	Emergency/Crisis Contact Phone List
HSE-08-04	PCL Media Relations Spokesperson Policy
HSE-08-05	Crisis Management Plan Template



CONSTRUCTION

## Key Message/Statement

“This is what we can confirm at the present time:

At approximately \_\_\_\_\_ we experienced a \_\_\_\_\_  
(Time) (Brief description)

At this point we cannot verify the extent of the damage or injuries other than to say that it has involved

\_\_\_\_\_  
(Specific facilities—if known)

and \_\_\_\_\_ people.  
(Number)

We will not disclose the names and conditions of the persons involved until their families and loved ones have been notified.

Emergency assistance from \_\_\_\_\_ responded to this incident. We will be providing  
(police, fire, etc.)

additional information as it is confirmed.”

If you are asked additional questions, make the following statement:

That is all I can confirm at the present time. I am sure you understand we all are very busy trying to deal with this situation and ask for your patience. As soon as we have more information that has been confirmed, it will be disclosed. Anything involving our employees will be disclosed to their families and loved ones first.

Thank you very much.”

Drafted By: \_\_\_\_\_ Approved By: \_\_\_\_\_ *Print*

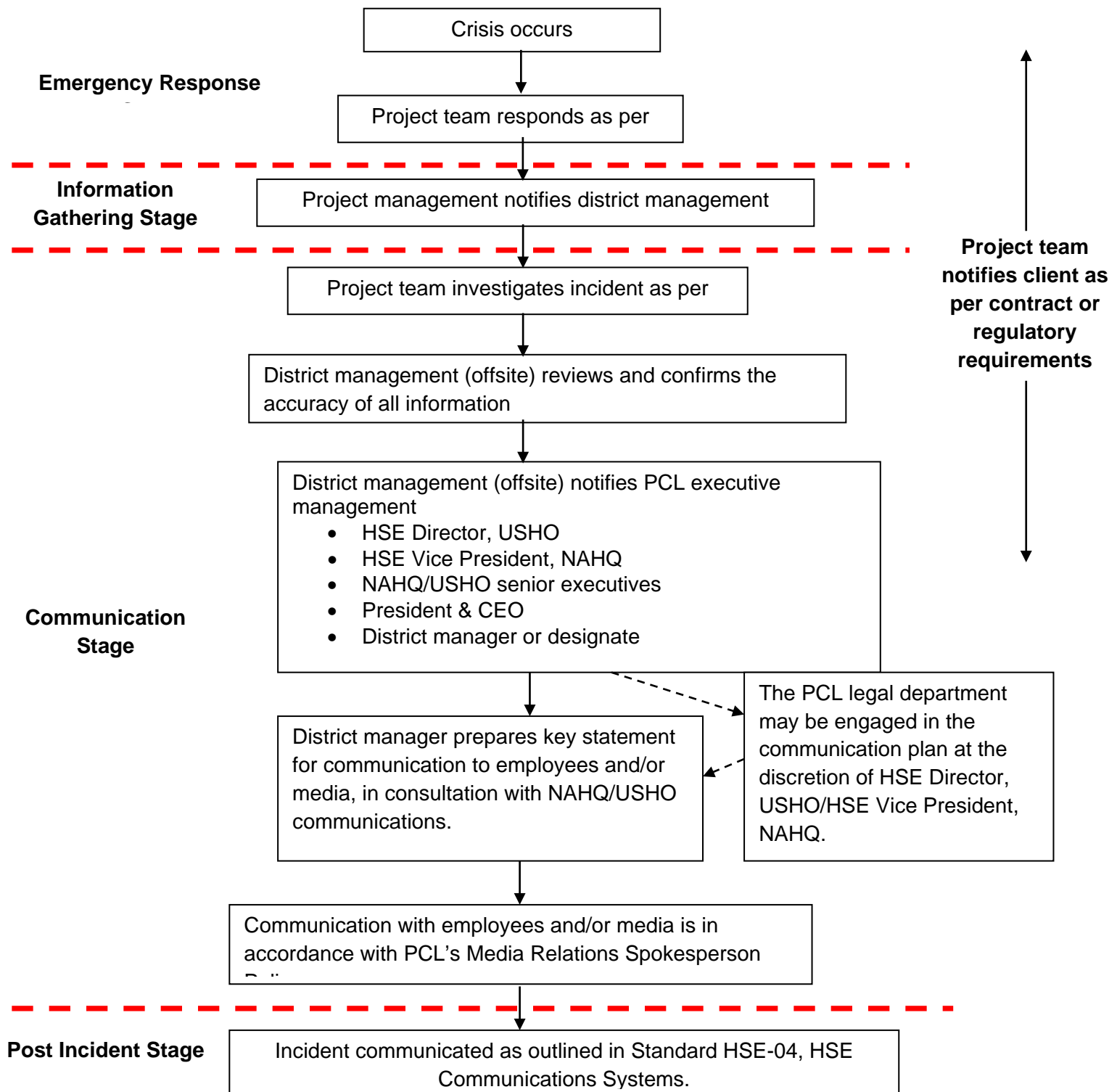
Phone #: \_\_\_\_\_ Date: *DD/MM/YY* Time: \_\_\_\_\_

**( Any additional statements will be written in consultation with NAHQ/USHO Communications.)**





## Crisis Communication Report Diagram





## Emergency/Crisis Contact Phone List

### Civic Emergency Telephone Numbers

Organization	Number
Police Services	
Fire Department	
Medical Services (Ambulance)	

### Utility Emergency Telephone Numbers

Organization	Number
Natural Gas	
Electrical Power	
Sewer Drainage	
Water Flooding	
Water Quality	

### Local Hospitals

Name	Address	Number

### District Office

Name	Office	Fax	Cellular	Home

### Media (Optional)

Name	Office	Fax	Cellular	Home

### Federal, Provincial/State and Local Municipalities

Name	Office	Fax	Cellular	Home



## Media Relations Spokesperson Policy

<b><u>Purpose</u></b>	The PCL family of companies is committed to the ongoing preservation and enhancement of the organization's corporate reputation. The following <b>Media Relations Spokesperson Policy</b> serves to ensure that all steps are taken to respond to media requests in a manner in which this reputation is upheld.
<b><u>Application</u></b>	This policy applies to all PCL employees.
<b><u>Policy</u></b>	<p>Only the following spokespersons are approved to speak on company matters. The spokespersons may delegate their responsibility to others in specific circumstances.</p> <p><b>For district specific or project specific media inquiries:</b> the district manager. <i>(Due to the large number of districts in the Edmonton-area, all Edmonton-area media inquiries are to be directed to the Manager, NAHQ Communications for assignment to the appropriate spokesperson.)</i></p> <p><b>For issues that affect more than one district but not national:</b> the US regional vice president for that area or Canadian regional president for that area. <i>(Due to the large number of districts in the Edmonton-area, all Edmonton-area media inquiries are to be directed to the Manager, NAHQ Communications for assignment to the appropriate spokesperson.)</i></p> <p><b>For national media inquiries in the United States:</b> the president and chief operating officer, US Operations or the president and chief operating officer responsible for the market sector from which the request originates.</p> <p><b>For national media inquiries in Canada:</b> the president and chief operating officer responsible for the market sector from which the request originates. If the request is not market-specific, the spokesperson shall be the president and chief executive officer.</p> <p><b>For company-wide or corporate media inquiries:</b> the president and chief executive officer.</p>

	<p><b>All spokespersons are responsible to:</b></p> <ul style="list-style-type: none"> <li>• Provide accurate and truthful information to and respond in a timely manner to media inquiries.</li> <li>• Keep superiors informed of all media situations and inquiries that could affect the organization's corporate reputation negatively.</li> <li>• Prepare key messages and responses.</li> <li>• Inform either NAHQ Communications or USHO Corporate Development of all media situations and inquiries that could affect the organization's corporate reputation negatively.</li> <li>• Participate in the media relations training required to appropriately perform spokesperson duties.</li> </ul> <p><b>All PCL employees are responsible to:</b></p> <ul style="list-style-type: none"> <li>• Understand this policy and direct any media inquiries to their supervisor, who should in turn direct the inquiry according to the above policy.</li> </ul>
<b><u>Communication of this Policy</u></b>	This policy is intended to be communicated to all employees of the PCL family of companies by posting on PCL Connects.

Enter Year

# PCL Crisis Management Plan



Updated:

## Table of Contents

---

### Crisis Management Plan Introduction

---

Message from our CEO	3
----------------------	---

### Crisis Management

---

What is a Crisis?	4
Specific Crises Which Require the Establishment of a Crises Response Team	1
What is the Purpose of this Crisis Management Plan?	3
Crisis Response Team	4

### Crisis Management Plan Overview

---

Plan Organization	6
-------------------	---

### Crisis Management Plan – Crisis Response

---

Part A: First Responder Obligations	7
Part A: Crisis Communications	9
Part B: Crisis Response Team Obligations	10
<b>SEVEN STEPS FOR CRISIS MANAGEMENT</b>	10
STEP 1: Verify Crisis and Gather Information	14
STEP 2: Notification, Response Team & Assignments	17
STEP 3: Establish a Communications Plan	19
STEP 4: Evaluate the Crisis	16
STEP 5: Establish Strategy and Messages	20
STEP 6: Implementation	21
STEP 7: Monitor and Obtain Feedback	19

### Resources: B – Crisis Levels

---

Crisis Levels Matrix	20
----------------------	----



# Crisis Management Introduction

---

## Message from our CEO

Dear PCL Employee:

This Crisis Management Plan is provided to help affected PCL employees determine the proper steps to take during a potential crisis situation. This Plan is an important part of PCL's overarching Reputation Management Plan.

This guide is not meant to replace the PCL HSE Emergency Response Plan (HSE-08), but to augment that document and assist in ensuring that we effectively respond to events which may threaten our companies' reputation or viability.

After researching and reviewing a variety of crisis plans for different organizations, along with best practices in this area, this guide has been designed to provide a simple but comprehensive framework for addressing crises, while acknowledging the need for flexibility in connection with the variety of possible crises scenarios which could arise.

It is our goal that these materials serve as a valuable resource to help us proactively and effectively manage a crisis event, should the need arise.

Sincerely,

Paul Douglas  
President and CEO  
PCL family of companies

## Crisis Management

---

### What is a Crisis?

A crisis is any situation or event that seriously threatens the viability, integrity, or reputation of PCL. Unlike standard business challenges, crises involve matters that attract public and client scrutiny, create significant financial, legal, or governmental/regulatory impacts on the business, and seriously threaten the company's reputation.

The CEO will determine whether any specific set of circumstances or event constitutes a crisis sufficient to trigger the implementation of this plan. However, PCL's leadership has identified several specific crisis events which would likely trigger the implementation of this plan. These issues are set forth below.

It is the responsibility of every employee to be aware of how PCL defines a crisis, as described above, and to notify appropriate management personnel of any situation which you believe may lead to a serious threat to the viability, integrity, or reputation of PCL.

Notably, while any crisis, by definition, represents a serious threat to PCL's viability or reputation, certain potential crises are inherently more serious than others. Therefore, under this plan, crisis incidents will be evaluated at the outset to help PCL's decision-makers determine the appropriate company reaction, based on the severity of the crisis. PCL's Crisis Management Plan contemplates four (4) crisis levels of increasing intensity. Crisis levels 1 (Minimally Intense) through 4 (Highly Intense) are further defined in Section B - the "Resources" Appendix.

Examples of events that may require the establishment of a crisis management response team include the following:

1. Significant Personal Injury Events
  - Any fatality at a PCL place of work or jobsite.
  - The accidental death of or serious injury to PCL's CEO or any senior executive or board member.
  - Any serious injury at a PCL place of work or jobsite involving multiple persons.
  - The suicide of any PCL executive.
2. Terrorism, Sabotage, or Workplace Violence Events
  - A shooting, bombing, or other attack at a PCL place of work or jobsite.
  - Any sabotage activity at PCL project or facility.
  - The kidnapping of any PCL employee.
  - Riots or civil unrest resulting in damage to or otherwise involving a PCL facility or jobsite.

## Crisis Management

---

3. Significant Property Damage Events
  - Any significant loss or damage to property involving either an active PCL project or a PCL facility which has a potential for media interest, whether resulting from a natural disaster or potential negligent or intentional conduct.
  - Actual or potential significant violations of environmental laws by PCL or any trade contractor or any other significant environmental impact involving or related to a PCL project.
4. Significant Litigation or Dispute Events
  - Any significant litigation or dispute event which has the potential for media or client scrutiny as determined by the General Counsel or any other senior executive.
  - Any time PCL, any PCL executive, or one of PCL's projects or trade contractors becomes the target of an investigation by a governmental authority.
  - The arrest of any PCL senior executive.
5. Missing Personnel
  - One or more PCL employees not accounted for longer than 48 hours.
6. The unanticipated insolvency of a PCL banking partner, lender, surety or insurer resulting in a significant financial risk or hardship to the company.
7. Significant damage to systems and technology equipment resulting in a potential or actual disruption of service for more than 24 hours due to any cause, including but not limited to cyber attack, virus, sabotage, or natural disaster.
8. Any other event or situation which actually results in significant negative media coverage which has a potential to significantly impact PCL's reputation, including any focused negative media attention or attack on PCL or any PCL senior executive.

See *Resources* for related documents:

- Crisis Levels

## Crisis Management

---

### What is the Purpose of this Crisis Management Plan?

A crisis management plan is a vital part of emergency preparedness and response. PCL's success as a company is dependent, in large part, upon its reputation. Therefore, the protection and enhancement of our reputation is critical to the long term viability of our family of companies. This plan is designed to provide straightforward guidelines for key decision-makers to follow in the event of a crisis situation involving the PCL family of companies in order to help preserve the reputation of the company and to ensure that key executives and subject-matter experts are engaged in the response to any potential crisis.

From a practical application standpoint, this crisis management plan does the following:

- Defines and assigns the crisis team;
- Outlines roles and responsibilities of the crisis team and any first responders;
- Outlines the steps to be undertaken in a crisis event;
- Indicates who to contact and available resources in the event of a crisis; and
- Provides a platform for training, testing, and improvement.

In the event of a crisis, this plan shall be implemented to effectively mitigate and prevent the escalation of the crisis. This plan is designed to work in tandem with PCL's existing HSE emergency response plan (HSE 08).

### What is the Crisis Response Team Structure?

#### **Crisis Response Team (CRT)**

The CRT consists of key executives and appointed subject-matter experts who are empowered to make all necessary decisions in a timely manner in the event of a crisis.

#### **Crisis Communications Team (CCT)**

A sub-set of the CRT, the CCT will be established by the Senior Director, Communications, and is charged with identifying and supporting crisis communications needs during a crisis event.

#### **Site Response Team (SRT)**

Each district will establish site response teams (SRT) that will assist, as necessary or requested, in advising on and responding to any project site emergency situations.

## Crisis Management

### Crisis Response Team

The composition of any crisis response team may vary depending upon the nature of the event, and the following key roles should be considered in every crisis situation: operations, legal counsel, communications, safety, human resources, and subject matter expertise. Every crisis management team shall be overseen by and shall report to a **Crisis Response Team Leader (CRTL)**, who shall approve all crisis management strategies and shall appoint appropriate crisis team members. However, the following *core crisis response team members* shall form a part of every crisis response team:

#### Core Crisis Response Team Members

Member	Role
Chief Executive Officer	The CEO will either appoint or act as the Crisis Response Team Leader. Where the CEO elects not to act as the Crisis Response Team Leader (typically, where the crisis is not deemed to be Highly Intense), the CEO will act in an advisory role, to be determined by the CEO.
Senior Director, Communications and Brand	The Senior Director, Communications and Brand, will appoint and oversee the Crisis Communications Team and will advise the Crisis Response Team Leader. The Senior Director, Communications and Brand, may delegate some or all of these functions to other PCL communications personnel, with the approval of the Crisis Response Team Leader.
General Counsel	The General Counsel will advise the Crisis Response Team Leader and will perform an evaluation of the legal and regulatory risks to the company in connection with any crisis. The General Counsel may delegate some of these tasks to Legal Counsel or external counsel, as appropriate.
Chief Financial Officer (CFO)	The Chief Financial Officer will advise the Crisis Response Team Leader, as appropriate, and will perform an evaluation of the financial risks to the company in connection with any crisis. The CFO may delegate these tasks as appropriate.

## Crisis Management

Chief Operating Officer (COO) – Applicable Division As Determined by the CEO.	The COO of any affected division, as determined by the CEO, shall serve on the CRT and will typically serve as the Crisis Response Team Leader where the CEO does not elect to serve in that role.
Subject Matter Expert(s)	The Crisis Response Team Leader shall appoint an individual or individuals with specific expertise in the subject area implicated by the crisis. The subject matter expert shall serve on the CRT and advise the Crisis Response Team Leader and CRT on subjects specific to their area of expertise.
Any other person or subject-matter expert appointed by the CEO or the Crisis Response Team Leader.	To be determined by the CEO or Crisis Response Team Leader.

Additional personnel from both inside and outside PCL may be called upon to participate on a CRT, as appropriate depending on the nature of the crisis. The Crisis Response Team Leader, subject to the authority of the CEO, shall be responsible for assembling an appropriate CRT based upon the facts and circumstances surrounding any individual crisis event or situation.

### Crisis Communication Team

The Senior Director, Communications and Brand, in consultation with the Crisis Response Team Leader, shall appoint a Crisis Communications Team sufficient to meet the requirements of the CRT and the circumstances. External communications resources or firms that might effectively supplement PCL's internal communications department personnel should be considered when establishing the Crisis Communications Team.

### Site Response Team

Each district shall train and appoint appropriate personnel to serve on a Site Response Team for each project should such a team be necessary under the circumstances or otherwise requested by the Crisis Response Team Leader. The Site Response Team shall consist, at a minimum, of the applicable district Operations Manager, the Project Manager, and the district or project HSE Supervisor. The Crisis Response Team Leader, in consultation with the applicable District Manager, shall appoint any other appropriate persons to a Site Response Team, as necessary.

# Crisis Management Plan Overview

---

## Plan Organization

PCL's crisis management plan is divided into three major parts:

- 1) *Crisis Response* –
  - a. First Responder Obligations: This part identifies the notification requirements and other obligations of employees who first identify or respond to a crisis situation, if applicable.
  - b. Crisis Response Team Obligations: This part identifies the seven (7) key response actions any crisis management team must undertake in connection with the management of any crisis.
- 2) *Additional Resources* – Additional resources are provided as an Appendix to this plan. These resources provide more information on various elements of crisis response, templates, checklists, and reference materials. The documents within the *Resources* section can be clicked on through hyperlinks as they are referenced in the plan or by the listed page number.
- 3) *Crisis Communications Manual* – This separate document sets forth additional specific guidance to PCL's communications team in connection with crisis communications management.

## Plan Instructions

Corporate executives, district executives, and project managers will maintain a copy of this plan at all places of work, including all offices and jobsites. A copy of the plan will also be maintained electronically via PCL Connects. [Search PCL Crisis Management Plan to be taken to the document.](#)

It is the responsibility of the Senior Director, Communications and Brand, to ensure that a current copy of the plan is available to all employees for use in the event of a crisis. It is also the responsibility of the Senior Director, Communications and Brand, to ensure that the plan is kept up-to-date and that crisis response team members have read the plan and understand its contents.

## Crisis Response Planning and Training

The Core Crisis Response Team and PCL's senior executives shall receive periodic media training with a focus on crisis response. PCL shall periodically, in the discretion of the CEO, conduct crisis response simulations to ensure crisis response preparedness.



# Crisis Management Plan – Crisis Response

---

## Crisis Response

Frequently, crises that face large organizations like PCL arise due to a combination of events that occur over some period of time. In those situations, the senior management of the organization will recognize the emerging crisis and will establish a crisis response team in the ordinary course of business at the point in time when those executives determine that the situation has become one which may negatively impact the viability, integrity, or reputation of the organization.

In some instances, however, a crisis may arise suddenly and unexpectedly from a single event or incident, such as a serious job site accident. In those circumstances, it is critical that those employees “on the scene” of the incident take prompt action to (1) notify appropriate authorities and senior PCL executives of the event, (2) mitigate or eliminate the threat of additional harm, when it is possible to safely do so, and (3) document what has occurred in as much detail as necessary such that information may be preserved and communicated to decision-makers.

Accordingly, PCL’s Crisis Response section is divided into two parts, the first of which, Part A, specifies the steps First Responders must take in the event of a sudden and unexpected crisis. This Part A is only applicable in the event of a sudden unexpected crisis or event which PCL’s senior management may not yet be aware of.

The second section, Part B, sets out the basic evaluative and response process to be engaged in by the Crisis Response Team members once they become aware that a crisis or potential crisis exists. The crisis response process set forth in Part B may be initiated either by the report of a crisis by a “first responder” or on the initiative of the CEO. In any event, the decision regarding whether to organize a Crisis Response Team and implement a formal crisis response evaluation and response shall be within the sole discretion of the CEO. In the event that the CEO is unavailable, then this responsibility shall reside with the next senior executive with operational responsibility for the business unit out of which the crisis arose or was reported.



## Crisis Management Plan – Crisis Response

### PART A: First Responder Obligations

In the event a crisis or a potential crisis, as defined by this plan, arises suddenly from an unanticipated event or incident, the persons identifying the event or situation must take the following actions in the following order:

**In the event of a crisis or potential crisis involving an injury, potential injury or physical danger, or a fatality to any person:**

- Step 1: Call 911 immediately and report the event or situation to local law enforcement and other appropriate governmental authorities.
- Step 2: Refer to HSE 08 and follow that procedure.
- Step 3: Take any safe and appropriate measures to assist any injured persons and to assure the safety of any endangered persons through eliminating any continuing unsafe conditions.
- Step 4: Call PCL's Crisis Hotline at **1-866-910-9070** to report the event or situation. The Crisis Hotline personnel will take over primary responsibility for making contact with the senior executives responsible for addressing crisis situations.
- Step 5: Contact your immediate supervisor to report the event or situation.
- Step 6: Be available to receive further communications and direction from Crisis Response Team members; and/or your supervisor. It is crucial that First Responders maintain open phone and electronic lines of communication to ensure the availability of additional necessary information to the members of the Crisis Response Team.
- Step 7: Take time to document the event or situation in writing to the best of your ability and then secure this information. You will be asked to provide this information to the Crisis Response Team within a short time following your initial report.

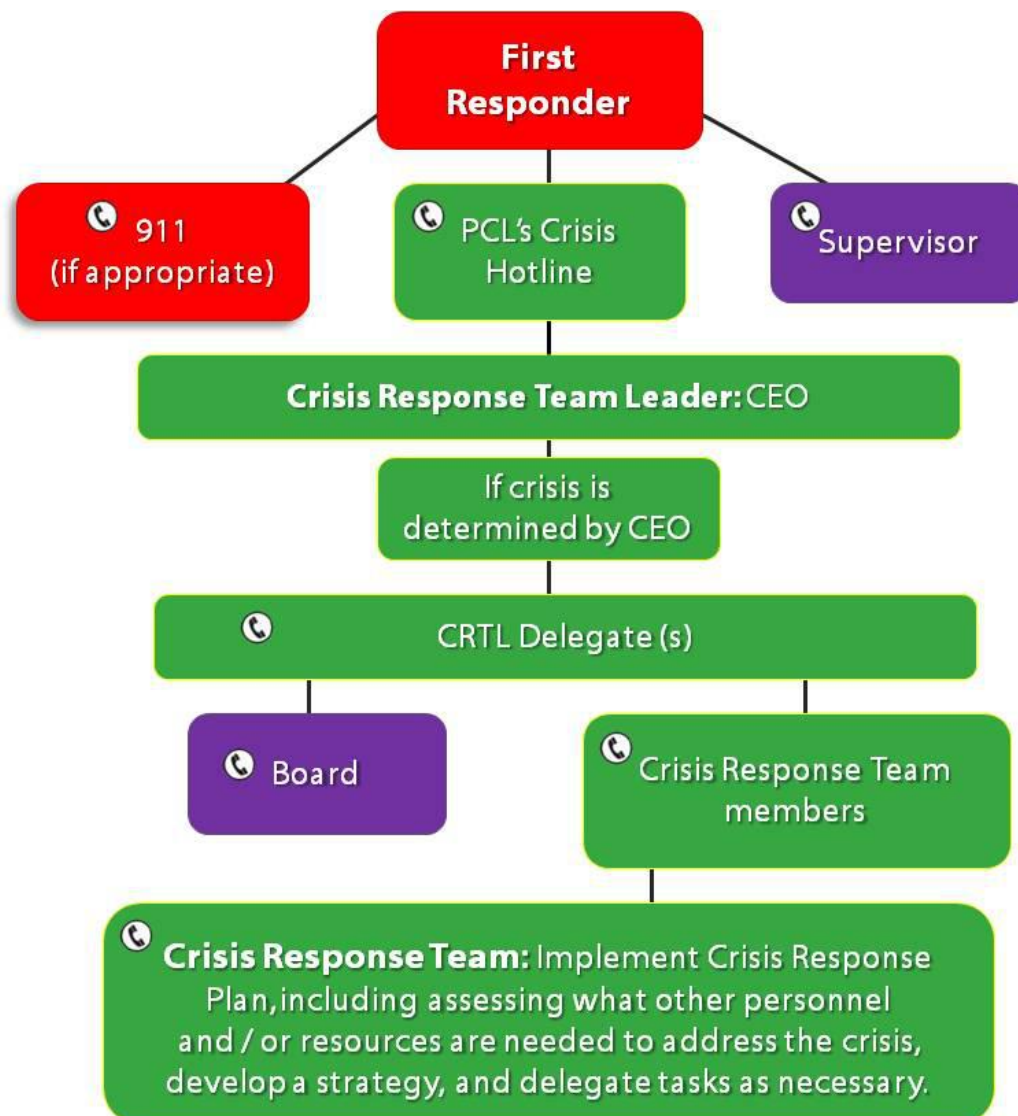
**In the event of any crisis or potential crisis not involving an injury, potential injury or physical danger, or a fatality to any person:**

Follow Steps 4 through 7 above.

# Crisis Management Plan – Crisis Response

## Part A: Crisis Communications

The following chart depicts how communications should flow from the First Responder to PCL's Crisis Hotline to the Crisis Response Team Leader to the entire Crisis Response Team:



---

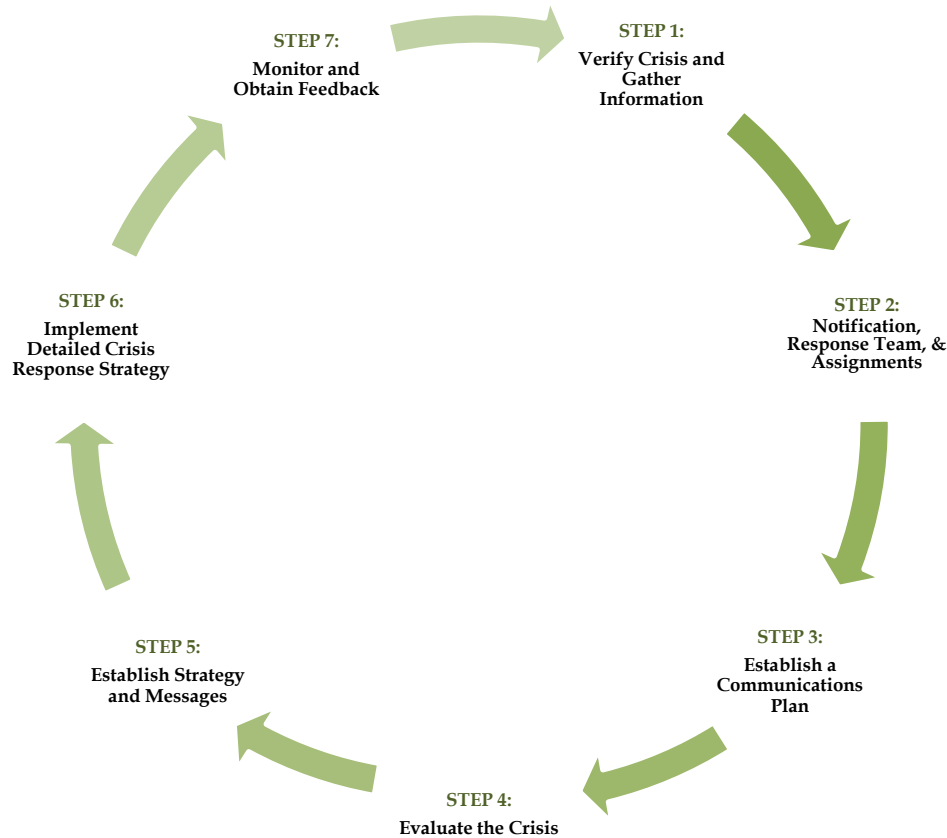
## Crisis Management Plan – Crisis Response

### PART B: Crisis Management Response Team Obligations – 7 Steps for Crisis Response

The development of a coordinated, senior executive-driven crisis response strategy is fundamental to the successful resolution of any crisis. Effective, timely, and centralized communications with stakeholders, affected persons, and the media during a crisis is also critical.

Accordingly, PCL has developed the following Seven-Step process that the members of any Crisis Response Team should follow, in addition to any other necessary or appropriate actions, to ensure that PCL develops and implements effective strategies and communications respecting crises. Depending on the nature or severity of the crisis, it is possible that all of these steps could be taken within the first hours of a crisis and then repeated, as needed, over time as the crisis event evolves. This process is necessarily generalized in order to be flexible enough to be applied to any and all crisis situations, without regard to the specific nature of any specific crisis event.

## **SEVEN-STEP CRISIS RESPONSE PROCESS**



## **Crisis Management Plan – Crisis Response**

### **STEP 1: Verify Crisis and Gather Information**

The first step in any potential crisis is to determine what has happened (who, what, when, where, why, and how), by promptly communicating with either the First Responder or other employees involved in the event(s), and gathering as many facts as possible:

**WHO** is involved; who should be alerted; who should be consulted?

**WHAT** happened; what is currently being done; what are the consequences?

**WHEN** did this happen; when must action be taken?

**WHERE** did the events occur and which executives should be involved?

**HOW** did it happen; how is the project/district team addressing the situation?

Once sufficient facts have been gathered, the CEO must make the decision whether a crisis of sufficient potential importance or impact exists such that a Crisis Response Team should be put in place. If the CEO is unavailable, this decision must be made by the next senior executive with operational responsibility for the business unit out of which the crisis arose or was reported.

When making the decision to establish a Crisis Response Team, the following questions should be considered:

- Do we have **all** the pertinent facts (to the best of your knowledge)?
- Is **other information** needed to put the event into perspective?
- Has the situation been **confirmed**?
- Was the information source(s) **credible**?
- Is information **consistent** from several sources?

If the decision is made to establish a Crisis Response Team, then it is important to engage all members of the Crisis Response Team as quickly as possible to develop preliminary strategies. See Step 2.

If the decision is made not to establish a Crisis Response Team, then key executives and the Communications Department should be notified of the situation, and instructions should be given to those groups respecting future reporting regarding the event.

---

## **Crisis Management Plan – Crisis Response** \_\_\_\_\_

In some cases, the media may be alerted to a potential crisis situation before all of these facts can be determined. **If a situation arises in which PCL must respond to the media prior to the establishment of a communications strategy, rather than providing “no comment,” PCL executives should provide the media with a statement indicating that the situation is under investigation and that more information will be provided as soon as it becomes available.** Please contact PCL’s Communications Department or review PCL’s media relations policy for more information on how to respond. You can also reference the sample holding statement in the Crisis Communications Manual.

## Crisis Management Plan – Crisis Response

### STEP 2: Notification, Response Team & Assignments

After the CEO/Crisis Response Team Leader has collected the facts as outlined in Step 1 and made the determination that a crisis exists, he or she should move rapidly to notify all other Crisis Response Team Members as detailed below. In the event that the CEO elects not to serve as the Crisis Response Team Leader, he or she should immediately appoint an appropriate senior executive to serve in that capacity.

#### Notification Steps

1. The CRTL will ensure that all core members of the Crisis Response Team (CRT) are notified of the situation and provided with available information.
2. The CRTL will make a preliminary assessment respecting the need for subject-matter experts or other CRT members, and will engage those individuals (or will obtain recommendations regarding subject-matter experts) as appropriate.
3. An initial conference call will be scheduled with all CRT members. The purpose of the call will be to establish initial assignments and action items for CRT members, to determine initial response strategies and to establish a preliminary communications plan, consistent with the Seven-Step process. The agenda for the call will include a determination of whether additional team members or resources are needed.

Some suggested initial assignments, duties and responsibilities of the Crisis Response Team members are outlined below. Actual duties and assignments will be made on a case-by-case basis by the CRTL based upon the specific situation. A Crisis Contact List shall be approved by the CEO and shall be maintained and made available in a manner authorized by the CEO and which balances confidentiality concerns of individuals included on the Crisis Contact List against the need for this information to be readily available in the event of a crisis.

## **Crisis Management Plan – Crisis Response**

### Suggested Initial Crisis Response Team Member Assignments

<b>Potential Preliminary Roles &amp; Responsibilities</b>
<u>CEO/Crisis Response Team Leader (CRTL)</u> <ul style="list-style-type: none"> <li>• <u>Leads the development of strategy</u></li> <li>• Leads PCL's communication response to a crisis event</li> <li>• Interacts directly with legal, government, and other 3<sup>rd</sup> party entities as appropriate</li> <li>• Oversees message development and acts as spokesperson for the company</li> <li>• Final approval on all publicly disseminated information</li> <li>• Arranges and schedules team meetings</li> <li>• Ensures required resources are available for team member assigned duties</li> </ul>
<u>General Counsel/Internal Legal Counsel</u> <ul style="list-style-type: none"> <li>• Provides the CRTL with an analysis of all legal issues connected with the crisis</li> <li>• Advises the CRTL on strategy respecting the crisis</li> <li>• Assists the Communications Department with respect to communications</li> </ul>
<u>Senior Director, Communications and Brand / Communications Team</u> <ul style="list-style-type: none"> <li>• Develops and makes recommendations to the CRTL respecting all crisis-related communications.</li> <li>• Advises the CRTL on strategy respecting the crisis</li> <li>• Acts as a family liaison in the event of injuries, fatalities, or other issues impacting employee family members.</li> </ul>
<u>CFO or Finance Department Designee</u> <ul style="list-style-type: none"> <li>• Provides the CRTL with an analysis of the actual and potential financial impacts to the company arising out of any crisis</li> <li>• Advises the CRTL on strategy respecting the crisis</li> <li>• Consults with external stakeholders (banking, insurance, bonding partners, etc.)</li> </ul>
<u>COO/Operations Executive</u> <ul style="list-style-type: none"> <li>• Advises the CRTL on strategy respecting the crisis</li> </ul>
<u>Site Response Team Representative (if applicable)</u> <ul style="list-style-type: none"> <li>• Act as the communication liaison between site operations and the CRT</li> <li>• Keep CRTL and core decision group up-to-date on new developments</li> </ul>
<u>Subject Matter Expert(s)</u> <ul style="list-style-type: none"> <li>• Advises the CRTL with respect to issues which require expertise on specific subject areas involved in the crisis</li> <li>• Oversees any specific logistical or coordination efforts necessary given the subject areas involved in the crisis</li> </ul>



## Crisis Management Plan – Crisis Response

---

### STEP 3: Establish a Communications Plan

The CRLT, in consultation with the other members of the CRT, specifically including the Senior Director, Communications and Brand, must promptly establish a preliminary communications plan respecting the crisis.

The preliminary crisis communications plan must include:

- the development of appropriate written media statements,
- key talking points,
- training for executives and other employees who may have media contact,
- messaging for clients, trade contractors, and other non-media third-parties and community groups,
- internal communications protocols, which must include a strategy for preserving attorney-client communications, as appropriate, and limiting the inadvertent creation of written communications by PCL personnel,
- messaging for employees, and
- if applicable, a plan for communicating with and otherwise supporting affected family members.
- a plan for consulting with external stakeholders (banking, insurance, bonding partners, etc.)

Once a preliminary crisis communications plan is established, the CRT must ensure that it is communicated to all key employees to ensure proper implementation.

---

## Crisis Management Plan – Crisis Response

---

### STEP 4: Evaluate the Crisis

Once Steps 1-3 have been implemented, the CRTL must ensure that the CRT promptly and thoroughly gathers all additional information which may have a bearing on PCL's strategy for the effective resolution of the crisis.

The CRTL must then obtain evaluations of the relevant facts, potential crisis consequences, and potential resolution strategies from each of the members of the CRT and any appropriate external subject-matter experts and consultants, based on their respective areas of expertise. The General Counsel must advise on issues surrounding the protection and confidentiality of all requested evaluations before any such evaluations are undertaken.

Any requested evaluations shall be promptly prepared. All evaluations shall be shared with all of the members of the CRT, if approved by the CRTL and General Counsel.

Once the necessary fact gathering and CRT evaluations have been completed, the CRTL shall promptly set a meeting to confer with the CRT members, who shall make recommendations to the CRTL regarding the appropriate detailed and/or long-term strategy for successfully resolving the crisis.

The CRTL will be responsible for making all final decisions regarding crisis management and communications strategies, subject to the approval of the CEO (if applicable).

### STEP 5: Establish Strategy and Messages

After receipt of any evaluations requested from the CRT, and consultation with other senior executives or third-party consultants, as appropriate under the circumstances, the CRTL shall establish and communicate to the CRT and others stakeholders a detailed crisis response strategy, which must include a detailed communications plan.

---

## **Crisis Management Plan – Crisis Response** \_\_\_\_\_

### **STEP 6: Implementation**

Once a specific course of action is decided upon, all PCL employees involved in the crisis management strategy shall be responsible to take all necessary action to implement the crisis management strategy promptly and in accordance with the requirements of the CRTL, as approved by the CEO (if applicable).

The CRTL shall be responsible to ensure that the crisis response plan/strategy he or she approves is fully and effectively implemented by the CRT and all other PCL employees or third-party consultants engaged to assist in the implementation of PCL's crisis response.

### **STEP 7: Monitor and Obtain Feedback**

During and after the crisis, the CRTL will coordinate with the CRT to:

1. Review crisis response plan implementation.
2. Review and evaluate public perception of PCL's response, including evaluating media coverage.
3. Evaluate whether changes to PCL team members or strategies are necessary or appropriate to achieve PCL's goals.
4. Evaluate whether PCL's strategies need to be adjusted or supplemented.
5. Review PCL's crisis communications strategy to ensure effectiveness.
6. Obtain feedback from internal and external sources.
7. Repeat the Seven-Step process with the CRT to ensure that PCL's strategy remains effective in light of any changed circumstances or developments.
8. Determine when the crisis situation has ended and the CRT can be relieved of responsibilities respecting the crisis.

## Resources: Crisis Levels

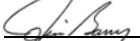
LEVEL	COMMUNICATION CHARACTERISTICS
<b>4</b> <b>HIGHLY</b> <b>INTENSE</b>	<ul style="list-style-type: none"> <li>Media has immediate and urgent need for information about the crisis. CEO may need to provide opening statement of empathy/caring.</li> </ul>
	<ul style="list-style-type: none"> <li>One or more groups or individuals express anger or outrage.</li> </ul>
	<ul style="list-style-type: none"> <li>Broadcast and print media appear on-site for live coverage.</li> </ul>
<b>3</b> <b>INTENSE</b>	<ul style="list-style-type: none"> <li>Crisis causes growing attention from local and regional media.</li> </ul>
	<ul style="list-style-type: none"> <li>Media contacts non-CCT staff for information about the crisis.</li> </ul>
	<ul style="list-style-type: none"> <li>In addition to the media, stakeholders and community partners are present at site.</li> </ul>
	<ul style="list-style-type: none"> <li>Affected and potentially affected parties threaten to talk to the media.</li> </ul>
<b>2</b> <b>MODERATELY</b> <b>INTENSE</b>	<ul style="list-style-type: none"> <li>Crisis situation may/may not have occurred; the situation is attracting slow, but steady media coverage.</li> </ul>
	<ul style="list-style-type: none"> <li>Crisis is highly intense or intense, but limited to a specific region.</li> </ul>
	<ul style="list-style-type: none"> <li>External stakeholders (e.g., clients, government, agencies, etc.) receive media inquiries.</li> </ul>
	<ul style="list-style-type: none"> <li>The public at large is aware of the situation/event but is attracting very little attention.</li> </ul>
<b>1</b> <b>MINIMALLY</b> <b>INTENSE</b>	<ul style="list-style-type: none"> <li>Crisis attracts little or no attention.</li> </ul>
	<ul style="list-style-type: none"> <li>Pre-event information requests are received.</li> </ul>
	<ul style="list-style-type: none"> <li>Public and/or media are virtually unaware of crisis.</li> </ul>

**SECURITY**  
**STANDARD HSE-09**

**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

**REVISION LOG**

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Reviewed and no revisions made.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-09     SECURITY**

- 1.0     PURPOSE
- 2.0     SCOPE
- 3.0     RESPONSIBILITY
- 4.0     REFERENCES
- 5.0     DEFINITIONS
- 6.0     STANDARD
- 7.0     ATTACHMENTS

## **1.0 PURPOSE**

The purpose of this standard is to establish guidelines for developing and implementing permanent facility, project site, and office security plans that reduce the risk of losses caused by violence or other criminal activities.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Security responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Assist in the development and implementation of Project Security Plans; and
- Coordinate the development, implementation, and communication of the permanent facilities security program.

### **3.2 District Management (Off-Site)**

- Provide sufficient resources, including materials, equipment, and training to effectively deal with security needs and issues.

### **3.3 Project Management (Site)**

- Interview and support the selection of third party security services, where necessary;
- Develop the Project Security Plan, as part of the overall Project Specific HSE Plan;
- Serve as liaison with local law enforcement and regulatory authorities;
- Confirm that the third party security services provider meets project expectations; and
- Report any suspicious behavior or presence of unauthorized individuals on the project site.

### **3.4 Project Supervision (Site)**

- Security of on-site and off-site facilities;
- Enforce all security rules and regulations for all employees under their direction at the project location;
- Secure tools, equipment, and materials;
- Report any losses of tools, equipment, materials, or other incidents of security to the project HSE staff and the project management team as soon as such incidents are discovered; and
- Report any suspicious behavior or presence of unauthorized individuals on the project site.



### **3.5 Project HSE Staff (Site)**

- Coordinate the development, implementation, and communication of the Project Security Plan;
- Verify that the Project Security Plan is current;
- Include security in regular inspections of the project or facility; and
- Report any suspicious behavior or presence of unauthorized individuals on the project site.

### **3.6 Workers**

- Secure tools, equipment, and materials;
- Report any losses of tools, equipment, materials, or other security related incidents to project supervision as soon as they are discovered;
- Report any suspicious behavior or presence of unauthorized individuals on site; and
- If required, workers will cooperate with random searches of personal belongings/tools when entering or exiting the site.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements
- HSEOP 23 – Preventing Violence in the Workplace (Canada Only)

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

N/A

## **6.0 STANDARD**

### **6.1 Permanent Facilities Security Program**

The district HSE department shall assist with coordination, development, implementation, and communication of a security program for all permanent facilities used by the district and shall review the security program on an annual basis or more frequently if required. In Canada, the security program shall have regard for HSEOP 23 – Preventing Violence in the Workplace.

### **6.2 Project Security Plan**

The district and project management teams shall develop a written Project Security Plan prior to the start of a project. The Project Security Plan shall, at a minimum, consider the following:

#### 6.2.1 Public Access

When planning public access and control, the project location is the major determining factor which may affect the use of fencing, construction hoarding, gates, signs, lighting, visitor registration, and security patrol.

#### 6.2.2 Fencing and/or Physical Barriers

The purpose of fencing and/or physical barriers is to keep the general public off the project site and to keep materials and equipment inside the project site.

#### 6.2.3 Gates

All gates shall be identified as to their purpose and must be numbered.

Where possible, access gates should be locked when not in use and opened only when required for specific deliveries or other authorized entries.

All fencing, gates, and barricades must be constructed and maintained in a fashion that does not pose a threat to workers and/or the general public.

#### 6.2.4 Signs

Signs need to be posted and visible. To order signage, contact your procurement and equipment group.

At a minimum, the following signs will be located around project sites under construction:

- PPE requirements;
- No trespassing;
- Hazard warning signs;
- Entry identification signs;
- Emergency contact information;
- Visitors to report; and
- Any additional signage identified by the project management team.

#### 6.2.5 Visitor Control

All visitors must report to the project office prior to going on the project site and must attend a visitor orientation as set out in HSE-03, section 6.4.

All sites/locations will develop a system to identify and control visitors.

#### 6.2.6 After Hours Activity

The Project Security Plan must address “after-hours” activity on the project site. All project employees and trade contractors that return to the project after hours or on weekends must be authorized to do so by the project superintendent or operations designate.

#### 6.2.7 Employee Access

##### 6.2.7.1 Parking

Employee parking, if available, will be communicated to workers. When onsite parking is necessary, a controlled entrance/exit must be set up.

##### 6.2.7.2 Vehicle Access

Only authorized vehicles are allowed on the project site. Project management shall control vehicle entry. All vehicles entering and exiting the project site are subject to search.

#### 6.2.8 Tool and Equipment Control

Each project shall have a program for tool and equipment control. This program will include a method of accepting and verifying tools and equipment issued from the district yard and/or supplier, as well as the control of tools and equipment that are issued.

The project management team is responsible for control of tools and equipment issued to their crews. Inventories of tools and equipment must be conducted on a regular basis by the project management team with the deficiencies reported to the project superintendent.

Ignition keys must not be left with the equipment after hours or when a vehicle is parked in a public location.

Components of equipment that can be dismantled will be stored separately.

Fuel and maintenance supplies such as gas, oil, and grease must be secured to prevent unauthorized use or pilferage. They must also be stored in a safe manner away from consumable supplies and permanent equipment.

#### 6.2.9 Shipping, Receiving, and Material Control

Each project must have a designated person(s) who is responsible for receiving and shipping materials and equipment, and a written plan for shipping, receiving and material control.

The shipper/receiver delegate location will be identified and communicated to delivery personnel. Examination of shipments must be carried out in all cases to immediately detect shortages or damage.

The shipper/receiver must be aware of the company procedure for shipping, receiving, and control of packing slips. Beware of the following inadequacies:

- Partial shipment;
- Damaged shipment (i.e. Moldy and wet materials);
- Inaccurate packing slip, inadequate shipping document; and/or
- Inaccurate listings of shipments returned to equipment or material suppliers.

#### 6.2.10 Key Control

The project management team is responsible to develop a project specific key control program. Keys that access general areas will only be issued to supervisors. An inventory and signature system must be set up to control keys, including vehicle and equipment keys. Spare keys must be secured against theft.

#### 6.2.11 Legal Requirements

The legislative jurisdictional requirements and client requirements must be considered. In addition, in Canada, the Project Security Plan shall have regard for HSEOP-23, Preventing Violence in the Workplace.

### 6.3 Pre-Job Review of Project Security Plan

During the district office pre-job meeting, the district HSE manager will review the Project Security Plan with project supervision.

## 7.0 ATTACHMENTS

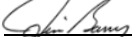
N/A

## ENVIRONMENTAL MANAGEMENT *STANDARD HSE-10*

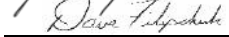
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Reviewed and no revisions made.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-10 ENVIRONMENTAL MANAGEMENT**

- 1.0 PURPOSE
- 2.0 SCOPE
- 3.0 RESPONSIBILITY
- 4.0 REFERENCES
- 5.0 DEFINITIONS
- 6.0 STANDARD
- 7.0 ATTACHMENTS

## **1.0 PURPOSE**

The purpose of this standard is to create a framework that facilitates identification and management of environmental issues on PCL projects and PCL permanent facilities.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Environmental Management responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Review the Environmental Action Plan prior to distribution; and
- Report serious environmental incidents to the HSE director, USHO/HSE vice president, NAHQ.

### **3.2 District Management (Off-Site)**

- Complete HSE-10-03, the Environmental Scope of Work Form, for each successful project;
- Verify that an Environmental Action Plan is developed for each project;
- Review the Environmental Action Plan prior to distribution; and
- Verify that projects are following the standards contained within the Environmental Action Plan through auditing and observation.

### **3.3 Project Management (Site)**

- Develop and approve the site-specific Environmental Action Plan prior to mobilization;
- Complete regular revisions of the Environmental Action Plan as project conditions change; and
- Review environmental inspection components of the Environmental Action Plan and address deficiencies where required.

### **3.4 Project Supervision (Site)**

- Participate in the development of the Environmental Action Plan;
- Review, implement, and maintain the standards in the Environmental Action Plan;
- Make workers in his/her area of responsibility aware of the standards in the Environmental Action Plan; and
- Conduct environmental inspections in accordance with the standards outlined in the Environmental Action Plan.



### **3.5 Project HSE Staff (Site)**

- Coordinate the development, implementation, coordination, distribution, and communication of the standards in the Environmental Action Plan;
- Verify that the Environmental Action Plan is current;
- Verify that the Environmental Action Plan is communicated to all project workers in orientation;
- Coordinate training for line supervision in the content of the Environmental Action Plan; and
- Conduct environmental inspections in accordance with the standards outlined in the Environmental Action Plan.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- Environmental Action Plan
- PCL Health, Safety and Environment policy statements
- HSEOP-06, Hazcom & WHMIS
- HSEOP-16, Asbestos Abatement
- HSEOP-17, Lead Based paint Abatement
- HSEOP-19, Waste Management (Canadian Operations)
- HSEOP-21, Silica Protection

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

N/A

## **6.0 STANDARD**

### **6.1 Program Objectives**

PCL's environmental program is comprised of measurable objectives that include:

- Legislated and regulatory compliance;
- Environmental protection;
- Waste minimization;
- Education and training;
- Continuous improvement (i.e. practices and procedures);
- Stakeholder participation and feedback; and
- Inspections and audits.

## **6.2 Employee Commitment**

PCL requires the commitment of all employees to implement and maintain a successful environmental program. This commitment is required to transform the environmental management system into an effective process. Employee decisions, actions, and follow-up contribute to the achievement of the organization's environmental objectives.

## **6.3 Continuous Improvement**

PCL's construction activities are diverse and performed in many geographical areas of North America where there is a multitude and variety of environmental legislation and exposures. Within this complex framework, PCL will encounter new challenges and develop new methods for addressing those challenges. Accordingly, all employees are encouraged to share information by providing ongoing input and feedback through the utilization of HSE-02-02, the Employee Feedback Form, contained in HSE-02.

These responses will be consolidated with additional information received from district committees, inspections, audits, and third party sources. All information will then be reviewed, assessed, and applicable changes will be incorporated into the health, safety, and environment program, thus providing continuous performance improvement for PCL.

## **6.4 Supplementary Resources**

As a result of the diversity and complexity of projects undertaken by PCL, it is anticipated that supplementary resources will be required by district operations from time to time. These supplementary resources are intended to provide additional support information not contained in the HSE Manual or the HSEOPs. To facilitate these requirements, the district manager (or designate) will contact the HSE director, USHO/HSE vice president, NAHQ identifying specific needs. The HSE director, USHO/HSE vice president, NAHQ may allocate the necessary resources which may include the use of consultants or third party experts or agencies.

## **6.5 Education and Training**

Environmental education and training is necessary to maintain employee performance, awareness, and compliance with applicable standards. Accordingly, employees will be provided with environmental training appropriate to their positions and project environmental standards will be included as part of the site specific HSE orientation.

## **6.6 Environmental Scope of Work**

Establishing an Environmental Scope of Work, HSE-10-03, for each contract is to be completed for each project by the chief estimator. To assist in this process, use the Environmental Checklist, HSE-10-01, for contract bidding and field operations.

The Environmental Checklist, HSE-10-01, for contract bidding will be reviewed and completed by the district's chief estimator (or designate) with assistance of the district management team.

The Environmental Scope of Work, HSE-10-03, and the Environmental Checklist, HSE-10-01, are extremely important because the matters addressed in those documents affect the job related costs. In addition, these are the KEY DOCUMENTS required by the project management team in developing a project specific Environmental Action Plan (see 6.7 below).

## **6.7 Environmental Action Plan (EAP)**

A project specific Environmental Action Plan is an important element in the overall success of PCL's company-wide environmental program. Accordingly, on any successful project, the project management team will prepare an Environmental Action Plan addressing the matters identified in this section 6.7. To accomplish this, project management will work closely with the district HSE manager to develop and implement the completed project specific Environmental Action Plan. The completed Environmental Action Plan will become part of the overall Project Specific HSE Plan.

In circumstances where clients or other parties have already developed an Environmental Action Plan, that plan will be incorporated into the Project Specific HSE Plan.

### **6.7.1 Environmental Action Plan**

The Environmental Action Plan must address the following elements if applicable to the work site:

#### **6.7.1.1 Contract Review**

A thorough review and understanding of the client's environmental contract requirements is the first step in developing a proper Environmental Action Plan. The project management team should compile a list of items to be completed for reference and review purposes.

#### **6.7.1.2 Consultants Reports**

Some contracts include an environmental consultant report. This report should be thoroughly reviewed and a copy retained at the project site for easy reference.

#### **6.7.1.3 Legislative Jurisdictional Requirements**

A review establishing what environmental legislation standards apply to the work to be completed should be made.

#### 6.7.1.4 Permits and Licenses

Many clients/owners arrange for permits or licenses for construction activities. There are however, instances where the client/owner may require or request PCL to arrange these. The requirements relating to these permits should be carefully reviewed and summarized in the Environmental Action Plan.

#### 6.7.1.5 Project Environmental Designate

Although the project superintendent is responsible for all environmental project requirements, he/she may select a project environmental designate or designates (depending on size of project) to assist in this discipline.

#### 6.7.1.6 Environmental Project Checklist

The Environmental Project Checklist, HSE-10-02, shall be completed by project management concurrent with the development of the Project Specific HSE Plan and included in the Environmental Action Plan.

#### 6.7.1.7 Chemical Products Information

Information of all chemical products anticipated to be involved in the project should be compiled and incorporated in the Environmental Action Plan.

#### 6.7.1.8 Spill Prevention and Response Plan

The Environmental Action Plan should contain a spill prevention and response section, which is to be communicated to all on-site project workers. The principles set out below should be incorporated into this section of the Environmental Action Plan:

##### 6.7.1.8.1 Spill Prevention and Response Guidelines

Hazardous material spills or releases require prompt attention to reduce or eliminate harmful or undesirable effects that may last for extended periods of time.

Conditions that could be considered critical in nature may involve the release of toxic vapors or gases, explosion, fire, or a combination of these.

Other contributing factors for consideration include quantities and types of materials, number of responders, personal protection requirements, nature of the work involved, and the population that could potentially be affected.

Typically, when responding to a spill, there is no time to develop procedures. Therefore, procedures, contingency plans, emergency response, education, and training must be established and implemented at the beginning of each project.

The following guidelines are provided to assist in the planning, development, and deployment of a spill containment and response plan:

#### 6.7.1.8.1.1 Communication System

An effective communications system will be set up so that key employees such as the project environmental designate, superintendent, district manager, and district HSE manager can be contacted in a timely manner. This system should include public agencies such as Environmental Protection Agency, ambulance and fire department as required.

#### 6.7.1.8.1.2 Evaluation of Hazards

Potential hazards pertaining to a spill can be evaluated beforehand to some degree. However, all potential situations and circumstances at the time of a spill are difficult to predict. As such, the evaluation of hazards at the time of a spill will be extremely important. Onsite evaluations should be made at location(s) upwind of contaminated area(s).

The evaluation should include the identification of potential health, physical and environmental hazards as well as hazardous vapors, the presence of electrical, thermal, or mechanical energy sources which could act as ignition sources.

#### 6.7.1.8.1.3 Spill Details

When a spill occurs, details of the spill are important, such as:

- Location;
- Name of spilled substance;
- Volume or how much was spilled;
- Total quantity involved (this refers to potential of additional spillage);
- Source of the spill or leak;
- Hazards involved;
- Size of area affected by spill; and
- Injuries or workers requiring medical attention or rescue.

#### 6.7.1.8.1.4 Spill Station/Spill Containment Kit

A spill station or spill containment kit should be set up in a strategic location on site. Depending on project requirements, the following items may be considered for inclusion.

- Material Safety Data Sheets (MSDSs) so that the correct responses can be accomplished in a timely manner;
- Personal protective equipment;
- Chemically inert absorption socks, loose materials, pillows or sheets in sufficient quantity to absorb spill volume;
- Shovels, pails, plastic bags, overpack barrel(s);
- Neutralizers;
- Labels for hazardous waste; and
- Shipping forms such as manifests and dockets.

#### 6.7.1.8.1.5 Control of Contaminated Area

When a spill occurs, designated first responders should evaluate the situation and hazards before proceeding. Consider the following:

- Proper identification of spilled product or substance;
- Check MSDS for allocation of appropriate personal protective equipment and other control measures;
- Weather conditions which could affect contaminated area such as rain, snow, wind and temperature;
- Evacuation of the area to protect workers;
- Cordoning off and securing the contaminated area;
- Equipment/materials required to control spill area;
- Personal protective equipment required to protect workers;
- Containment to minimize contaminated area;
- Extinguish or remove sources of ignition;
- Stopping leak or spill at source, i.e. repairing a leaking drum or container, turn off valves, or shut down compressor or pump;
- Placing dams of absorption materials to protect sensitive watershed areas such as floor drains, area drains for surface moisture collection, open recessed drains, spillways or watershed avenues; and
- Taking photographs of contaminated and affected area(s).

#### 6.7.1.8.1.6 Clean Up Operations

Clean up operations will vary depending on the situation and circumstances, but will generally consist of:

- Extraction and transfer of spilled material/substance into tanks or barrels;
- Extraction and transfer of contaminated soil, material or water into tanks or drums;
- Placement of damaged drums or containers into over packs;
- Extraction and transfer of used absorbents into drums;
- Placement of labels on drums, tanks and over packs; and
- Proper storage and transfer of materials or substances.

#### 6.7.1.8.1.7 Disposal of Hazardous Waste

Disposal of hazardous waste will generally consist of:

- Having samples of waste items characterized by a qualified service provider;
- Securement of a waste disposal permit (name may vary depending on geographical location); and
- Transfer of hazardous waste by a licensed hauler/disposal agency using properly trained employees.

#### 6.7.1.8.1.8 Hazardous Waste Manifest

Hazardous waste manifests are to be carefully checked for accuracy and completeness when transporting hazardous waste products.

Copies of hazardous waste manifests from the licensed hauler/disposal agency, as well as copies of manifests from the receiving agent at disposal site, must be kept on the project or district file per regulatory requirements.

#### 6.7.1.8.1.9 Restoration of Contaminated Area(s)

Contaminated area(s) must be restored to the acceptable legislative jurisdictional requirements after completion of cleanup operations.

#### 6.7.1.8.1.10 Decontamination

Consideration should be given to the removal of residues in contaminated areas, as well as the requirements for personal protective equipment. Depending on job specific tasks, decontamination may require isolation areas and special shower facilities for personal and equipment decontamination.

#### 6.7.1.8.1.11 Restocking

The spill station/spill contaminant kit must be restocked to replace all items which have been used for previous spill responses.

### 6.7.1.9 Waste Management

A waste management section for hazardous and non-hazardous waste must be included in the Environmental Action Plan. The principles set out below should be incorporated into this section of the Environmental Action Plan.

Hazardous and non-hazardous waste management are important, if not crucial issues in the day-to-day operations.

#### 6.7.1.9.1 Non-Hazardous Waste Management

The project specific Environmental Action Plan shall contain effective methods of managing the waste generated on the project site. The objective shall be to minimize this non-hazardous waste through reduction, reuse, and recycling initiatives. The different waste material categories which could be considered, for these three initiatives, during both demolition and construction phases, but also for office operations, include: wood, concrete, masonry, metal, gypsum products, asphalt, roofing materials, aluminum, glass, carpet, cardboard, paper, plastics, food waste, etc.

Depending on the geographic location, there may be some legislative jurisdictional requirements that require waste categories to be separated at the source where the waste is generated (i.e. do not allow the co-mingling of waste in bins on the project site). In most locations co-mingling is allowed, but often require that the waste category quantities be tracked and reported to prove that the co-mingled waste was later separated and diverted away from landfill (similar to the requirements of LEED® credit MRc2: construction waste management).



Recycling agencies are available in many provinces / states where company operations exist and should be contacted to verify that the project can achieve corporate goals for waste diversion. This should all be reviewed during the creation of the project specific Environmental Action Plan and the Waste Management Plan specifically.

#### 6.7.1.9.2 Hazardous Waste Management

The applicable legislation to hazardous waste management is far more complex and onerous as opposed to non-hazardous waste management.

Although the same principles of waste minimization, such as recovery, recycling reduction, and reuse still apply, a cradle-to-grave approach is central to hazardous waste legislation. As its basis, hazardous waste legislation has established a system to identify and track hazardous waste generation, accumulation, storage, transportation, disposal, and treatment. Where hazardous waste is generated, PCL will follow the required legislative jurisdictional requirements for the handling and disposal of such material. When working on client sites, all hazardous waste will be managed through the client waste management programs.

#### 6.7.1.10 Storage Areas

This section should identify physical areas where items such as hazardous waste, diesel fuel, gasoline, form oils, lubricating oils, propane cylinders, hydraulic fluids, oxygen cylinders, acetylene cylinders, glycol, and other environmentally damaging substances are to be stored. Equally important, appropriate areas should be identified for storage of the involved equipment when not in use (i.e. at night or weekends). This should be in an area where, if a spill or leak occurred, the escaped substances it would not readily enter any sensitive watershed or drainage area.

Posting of environmental signs should be identified in the Environmental Action Plan. For instance, since PCL may have lead abatement, asbestos abatement, or other specialty work being performed simultaneously in controlled areas, this should be properly identified.

#### 6.7.1.11 Decontamination Facilities/Areas

Some projects may require the use of decontamination facilities and/or special pre-work and post activity exit areas as per legislative jurisdictional requirements. The establishment and operation of these features are to be clearly identified in the Environmental Action Plan and communicated to workers.

#### 6.7.1.12 Communication System

When the Environmental Action Plan is complete, it should be properly communicated to all on-site workers. This can be accomplished through a variety of methods including:

- General project specific HSE orientations;
- Job specific assignments;
- HSE Field meetings; and
- Committee meetings.

#### 6.7.1.13 Emergency Plan

The Environmental Emergency Plan should contain:

- Name of the emergency coordinator;
- Emergency evacuation routes;
- Assembly areas;
- Names and telephone numbers of PCL employees to be contacted; and
- Telephone numbers of police, fire department, ambulance, hospital, government agencies and professional support resources.

NOTE: For more information, refer to HSE-08, Emergency Response Plan.

### 6.8 Environmental Incident Reporting

#### 6.8.1 General

Environmental incident reporting is important for the following reasons:

- To maintain regulatory compliance;
- Share information within the company to prevent a recurrence;
- To provide educational resource information;
- To promote and maintain awareness; and
- To provide documentation for corrective measures as due diligence, evidence, future review and analysis for continuous improvement.

#### 6.8.2 Environmental Incident Categories

There are essentially two types of environmental incident reporting categories:

- Incidents which are not in compliance with legislative jurisdictional requirements and must be reported to the relevant government agencies such as the Environmental Protection Agency; and
- Incidents which are not serious in nature but have a serious hazard or liability potential are reported within the company only.

#### 6.8.3 Environmental Incident Investigations

Environmental incidents are to be investigated using the seven-step process identified in HSE-13, Incident Investigation, and the report contained in HSE-13-01, Incident Investigation Report Form, and HSE-13-01E, Environmental/Environmental Spill Facts, must be completed. The level of investigation is determined by the assigned risk category in HSE-13, Incident Investigation, with the sole exception that the on-site environmental designate must participate in every investigation of an environmental incident.

Where serious incidents require the services of consultants, expert personnel, or special agencies, arrangements are to be made in consultation with the HSE director, USHO (for US operations) or the HSE vice president, NAHQ.

#### 6.8.4 Environmental Spill Reporting

Any incident that is in non-compliance, as per legislative jurisdictional requirements, is to be reported to HSE director, USHO/HSE vice president, NAHQ immediately and shall be investigated using the seven step process identified in HSE-13, Incident Investigation, and the report contained in HSE-13-01, Incident Investigation Report Form, and HSE-13-01E, Collect Environmental/Environmental Spill Facts, must be completed. Documented reports are to be submitted in three days. Photographs of contaminated areas will be taken and submitted with the report. Additional detailed information will include:

- Date of report;
- Date and time of incident;
- Project name;
- Project location;
- District name;
- Name of project superintendent;
- Name of company responsible for spill;
  - address and phone number;
  - contact name and position;
- Name of product/substance which was spilled or released (refer to SDS);

- Total quantity involved;
- Quantity spilled;
- Location of spills;
- Weather conditions during clean up operations;
- Cause of spill;
- What was affected by spill;
- A description of how spill was contained;
- Corrective measures taken to complete operations (include clean up, packaging, storing, and disposal information);
- Date and time of clean up completion;
- Recommendations to prevent reoccurrence;
- Notification procedure;
- Injury report information;
- Name of on-site environmental designate; and
- Name of district HSE manager.

#### 6.8.5 Environmental and Environmental Spill Incident Reporting

All incidents, including environmental and environmental spills, will be documented on HSE-13-01, Incident Investigation Report Form and HSE-13-01-E, Collect Environmental/Environmental Spill Facts, in HSE-13, Incident Investigation.

#### 6.8.6 Environmental Reports

A copy of all Environmental Incident Report forms will be sent to the HSE vice president, NAHQ for reporting requirements.

#### 6.8.7 District HSE Committee Reviews

The District HSE Committee will review all environmental incident reports that occur in their district and provide recommendations to prevent a recurrence.

#### 6.8.8 Project HSE Committee Reviews

At the discretion of the district manager, the Project HSE Committee (where the incident occurred) may review the environmental incident report to encourage feedback, problem solving techniques, enhance communications, and maintain awareness.

### 6.9 Environmental Inspections and Audits

Environmental inspections and audits are regarded as cornerstone elements in HSE management and are necessary to evaluate the company's performance to predetermined standards.

Formal environmental inspections are to be conducted on a monthly basis or based on legislative jurisdictional requirements. These can be included with regular HSE inspections.

All project site inspections will examine the worksite to identify and address any environmental hazards or potential environmental concerns.

Environmental inspections and audits are to be conducted in accordance with the criteria contained in HSE-06, Inspections and Audits, and the HSE audit protocol.

## **6.10 Environmental Records Management**

It is vitally important that environmental records be properly managed and retained for future reference and review purposes. Environmental records are "**PROOF**" that activities related to environmental protection were conducted.

Unless otherwise required by applicable legislation or the client/owner, all environmental records will be retained in each district for a period of "THREE YEARS".

The following is a listing of environmental records that should be considered. These include:

- Contractual documents;
- Education/training records;
- Permits and permit applications;
- Company standards and procedures;
- Material Safety Data Sheets;
- Documented sampling data;
- Manifests/bills of lading;
- Waste inventories;
- Hazardous materials inventory;
- Inspection and audit records;
- Environmental incident reports;
- Government citations;
- Government/third party inspections and audits;
- Site specific HSE orientations;
- HSE Field Meeting Minutes; and
- Committee meeting minutes.

## **7.0 ATTACHMENTS**

HSE-10-01	Environmental Checklist
HSE-10-02	Environmental Project Checklist
HSE-10-03	Environmental Scope of Work
HSE-10-04	Vacant for Future Use
HSE-10-05	Responsibility and Distribution Chain



## Environmental Checklist

District Name: \_\_\_\_\_ Print Project Name: \_\_\_\_\_ Print  
Chief Estimator: \_\_\_\_\_ Print Initials: \_\_\_\_\_  
Date of Review: \_\_\_\_\_ DD/MM/YY

### INSTRUCTIONS

- This “Environmental Checklist” has been compiled to assist the chief estimator and project management team(s) define an Environmental Scope of Work.
- When completed, this “Environmental Checklist” must be attached to the “Environmental Scope of Work Form” for distribution.
- The project manager is responsible to review this information with project management team and modify (if necessary) to facilitate field operations.

### 1. Available Information Regarding the Site

	YES	NO	N/A
<b>a. Reports/Assessments and other pre-existing information.</b>			
Has an Environmental report/Phase I/II report been included with the contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the date of the report acceptable? (data current enough to still be utilized?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there clearly defined conclusions and recommendations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A list of clear conclusions and recommendations:			
Was the Phase I/II assessment completed in accordance with any standards or protocols (i.e. CSA or ASTM)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

	YES	NO	N/A	
<b>b. Contract</b>				
Does the bid document identify or indicate the presence of any on-site environmental contaminants, pollutants or hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reference Note(s): _____				
Have any environmental enforcement or clean-up actions been initiated by the EPA at or near the proposed projectsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reference Note(s): _____				
Is the site on the Government's:				
• National Contaminated Sites List (Canadian)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
National Priorities List (US)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reference Note(s): _____				
<b>c. Document</b>				
	<b>Possible Information Sources:</b>			
• Aerial photographs?	Local libraries, private companies, the federal government, certain provincial/state or federal government directories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____				
• Property use records?	Insurance companies, municipal, provincial/state or federal government directories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____				
• Records of previous ownership, such as title transfer documents?	Provincial/state land registries, title search companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____				



	<b>Possible Information Sources:</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
<ul style="list-style-type: none"> <li>Previous environmental assessment reports</li> </ul>	Engineering and other firms that have conducted environmental studies at the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reference Note(s): \_\_\_\_\_

<ul style="list-style-type: none"> <li>Company records, including site plans, building plans (including as-builts) and permits, production and maintenance records, emergency response or contingency plans, and spill reports?</li> </ul>	Internal company files and accounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------	--------------------------

Reference Note(s): \_\_\_\_\_

<ul style="list-style-type: none"> <li>Geological and geotechnical reports?</li> </ul>	Engineering and other firms that have conducted environmental studies at the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	---	--------------------------	--------------------------	--------------------------

Reference Note(s): \_\_\_\_\_

<ul style="list-style-type: none"> <li>Environmental permits, orders and charges relating to hazardous material storage, hazardous waste treatment, landfills, and contamination of adjacent sites, and other regulatory documents?</li> </ul>	Federal or provincial/state government agencies dealing with waste management, water quality, public health, and environmental planning and protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--	--------------------------	--------------------------	--------------------------

Reference Note(s): \_\_\_\_\_

**d. Inspection of the site**

Has PCL taken any groundwater, soil, microbial or other samples been taken and analyzed which are not part of any consultants report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------

Current uses of the property that may involve hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------

Reference Note(s): \_\_\_\_\_

	YES	NO	N/A
Details about hazardous materials and unidentified substances observed on the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Evidence of present or former underground or aboveground storage tanks. These indicate a high probability of environmental contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
The condition of any storage areas and bins. These can suggest the presence of hazardous materials such as solvents and other chemicals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
The presence of "special attention" items, such as items containing asbestos, CFC's and lead". Transformers and old light ballasts suggest the presence of PCB's, which may have leaked or spilled onto surface soils?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Unusual odors at the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Housekeeping practices, indicated by the general maintenance and appearance of a site, and by the condition and tidiness of any buildings, storage or waste-disposal areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Is there evidence of any bird or mouse feces (body waste) in any of the buildings proposed work areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

	YES	NO	N/A
<b>e. Interior Observations:</b>			
Type of fuel used in heating and cooling systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Stains on floors, walls, or ceilings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
The location and condition of floor drains and sumps?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Interior finishes of buildings, which may include hazardous materials such as asbestos & lead paint?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Is there evidence of water damage (i.e. Surface stains, sewer backup markings, broken water line or fire suppression)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Is there any black or greenish-black mold growth present on interior surfaces?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
<b>f. Exterior Observations:</b>			
The exterior condition of buildings on the property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Natural and artificial surface features (i.e. topography and geology). These features sometimes allow judgments to be made about subsurface conditions, such as direction of groundwater flow and migration of contaminants to or from the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

	YES	NO	N/A
The presence of wells on the site. Those that are not used as sources of water may have been used for contamination assessment or impact studies, disposal of liquid wastes; those that are still in use are potential sources of contaminated water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Waste-disposal practices, such as disposal of process liquids, sewage and solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Pits and lagoons used for waste disposal or waste treatment, surface water drainage systems, and wastewater discharge systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Surface staining, which can suggest the discharge of waste materials or other causes of soil contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Type and condition of vegetation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Unusual surface formations and areas of fill. These may contain hazardous or otherwise contaminated materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Features of adjacent property that may have a direct influence on the presence and type of contamination at site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

	YES	NO	N/A
Did the Phase II report include:			
• An executive summary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• The date of assessment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• A list of clear conclusions and recommendations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Data current enough to still be utilized?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	_____		
Was the Phase II assessment completed in accordance with any standards or protocols (i.e. CSA or ASTM)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	_____		
Were these standards and protocols clearly defined within the Phase II report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	_____		
Are existing underground tanks or structures identified on any drawings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	_____		

## 2. Identification of Potential Environmental Risks

Protected Areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	_____		

### 3. Identification of Potential Environmental Risks

	YES	NO	N/A
<b>a. Hazardous Materials</b>			
Will PCL be responsible for dealing with any contaminants? If yes, check the following areas of responsibility:			
• Handling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Removal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Storage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Transportation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Monitoring and Sampling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Laboratory Analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Quality Control/Assurance Procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Water related risks			
Has a dewatering assessment or plan been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
<b>b. Environmental Permits</b>			
Who is responsible for acquiring the hazardous waste generator permit:			
• the client?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• PCL?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there sufficient time for proper acquisition of permits?			
Which environmental permits is PCL responsible for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Noise/dust/emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

	YES	NO	N/A
Species at risk/migratory birds Are there any protected, threatened or endangered species in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reference Note(s): \_\_\_\_\_

**Other risks**

Landslides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any historical or archaeological concerns on or near the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reference Note(s): \_\_\_\_\_

#### 4. PCL's Contractual or Other Legal Liability for Identified Environmental Risks

Are there any clauses addressing unanticipated environmental occurrences?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------

If yes, check the following items:

• Is work to be stopped?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Has the responsibility for dealing with this problem been clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is there adequate and equitable adjustment available for suspension of work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Will change orders be issued for remedial work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Will approval time be adequately allowed to facilitate schedule requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there provisions for Environmental Liability Release and Indemnity for PCL?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------

Reference Note(s): \_\_\_\_\_

Does the bid document contain any deviation clauses or information which places undue environmental liability on PCL? (i.e. to determine the presence and type of environmental contaminants)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------

Reference Note(s): \_\_\_\_\_

	YES	NO	N/A
Does the contract document expressly state any environmental scope of work requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
• Does the contract clearly identify the regulatory requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• If yes, do they coincide with PCL's interpretation of regulatory requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• If no, have we clarified requirements with the client?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

## 5. PLOT PLAN AND CONSTRUCTION DRAWINGS:

Are existing underground tanks or structures identified on any drawings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			

## 6. ON-SITE CONSIDERATIONS

Will on-site spill kits be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Will containment booms be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Will absorbent booms be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			
Will transfer pumps be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s): _____			



	YES	NO	N/A
Will containment membranes be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	<hr/>		
Will storage bins be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	<hr/>		
Will spill containment trays be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	<hr/>		
Will spill overpack drums be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	<hr/>		
Will special personal protective and activity isolation equipment be required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference Note(s):	<hr/>		

[illegible]

# ENVIRONMENTAL RISK EVALUATION AND CONTROL CONSIDERATIONS

## Topic or Item

### GENERAL CONTRACT CONSIDERATIONS

An extremely important contract consideration is determining the environmental risks associated with the proposed scope of work which in most cases, have accompanying liabilities and costs. The following items have been compiled to assist with this evaluation:

#### Environmental Risk Assessment and Control

##### **HAZARD** (definition)

Any object, chemical, material, activity, operation, situation, etc. with the inherent ability to cause harm or adverse impact.

Harms/Adverse Impacts Include:

- Environmental damage
- Occupational or community health and safety
- Adverse financial or operational cost impact
- Increased regulatory agency scrutiny
- Public, client or labor relations image
- Management perception
- Operational or manpower resource impacts
- Regulatory compliance program resource impact
- Civil and criminal liability (and cost of defense)

##### **VULNERABILITY, SUSCEPTIBILITY, OR SEVERITY** (Definition)

The vulnerability or susceptibility of the potential "hazard receptor" to harm or adverse impacts, or the severity of these impacts resulting from the particular hazard(s).

Receptors include:

- Public
- Workers (direct hire)
- Trade contractors
- Third Party/Consultants
- Property
- Environment
- Business Operations
- Operating Resources
- Public Image
- Utilities such as storm drains



## Environmental Project Checklist

**Name of Project:** \_\_\_\_\_  
**Job Location:** \_\_\_\_\_ **Date:** DD/MM/YY  
**Project Superintendent:** \_\_\_\_\_ **Print**  
**District/Location:** \_\_\_\_\_

No.	Topic or Item	YES	NO	N/A
1.	Has an on-site environmental designate been selected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Has a list of the on-site environmentally sensitive products/contaminants been developed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Has a chemical substitution review been completed, which would provide less hazardous and more environmentally friendly products?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Is current health hazard information on products available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Have the necessary environmental permits/licenses been arranged for?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Has a procedure for safe storage and handling of products been completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Have arrangements for an on-site spill containment kit been established?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Has a spill containment and response plan been developed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Has a communication system been established with the on-site environmental designate and the district HSE manager pursuant to notification of relevant government regulators such as the Environmental Protection Agency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	In the event of a spill, have retrieval, transportation and disposal of products been addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Is emergency response equipment and personal protective equipment available on-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Have contact procedures for preferred environmental consultants or labs for emission analysis or product sampling and testing been established?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Is there a system in place on how to accommodate audits/inspections by government regulators such as the Environmental Protection Agency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Name of Environmental Designate:** \_\_\_\_\_ **Print**

**Signature of Environmental Designate:** \_\_\_\_\_ **Signature**

**Note:** Use reverse side as required.



Use this portion for additional information which may be required as part of the Environmental Checklist.

[illegible]



## Environmental Scope of Work

### **INSTRUCTIONS**

- The identification of an environmental scope of work for each project is mandatory to meet regulatory compliance and to develop a Project Specific HSE Plan so all on-site workers can be effectively protected.
- The chief estimator (or designate) is responsible to identify the project specific environmental scope of work on this form.
- To assist this process, an Environmental Checklist, HSE-10-01 (for contract bidding and field operations) has been prepared and is included in this section. This must be completed (only to the extent required) and attached to the Environmental Scope of Work form, HSE-10-03.
- In some cases, there may not be any environmental requirements identified at the bidding stage. In such cases, it must be identified on this form that there is **NO ENVIRONMENTAL SCOPE OF WORK**.
- Upon completion of this form and if we are successful in achieving the contract, this completed form (together with HSE-10-01, Environmental Checklist) must be submitted to the construction manager who will in turn submit it to the appropriate project management team who is responsible for having the Project Specific HSE Plan developed (see HSE-10-05, Responsibility and Distribution Chain, attached).

District Name:

---

Project Name:

---

Location of Project:

---

Environmental Scope of Work:

---

*(Use other side if necessary)*

Date:

DD/MM/YY

---

Chief Estimator (or designate):

Print

---

Signature

---

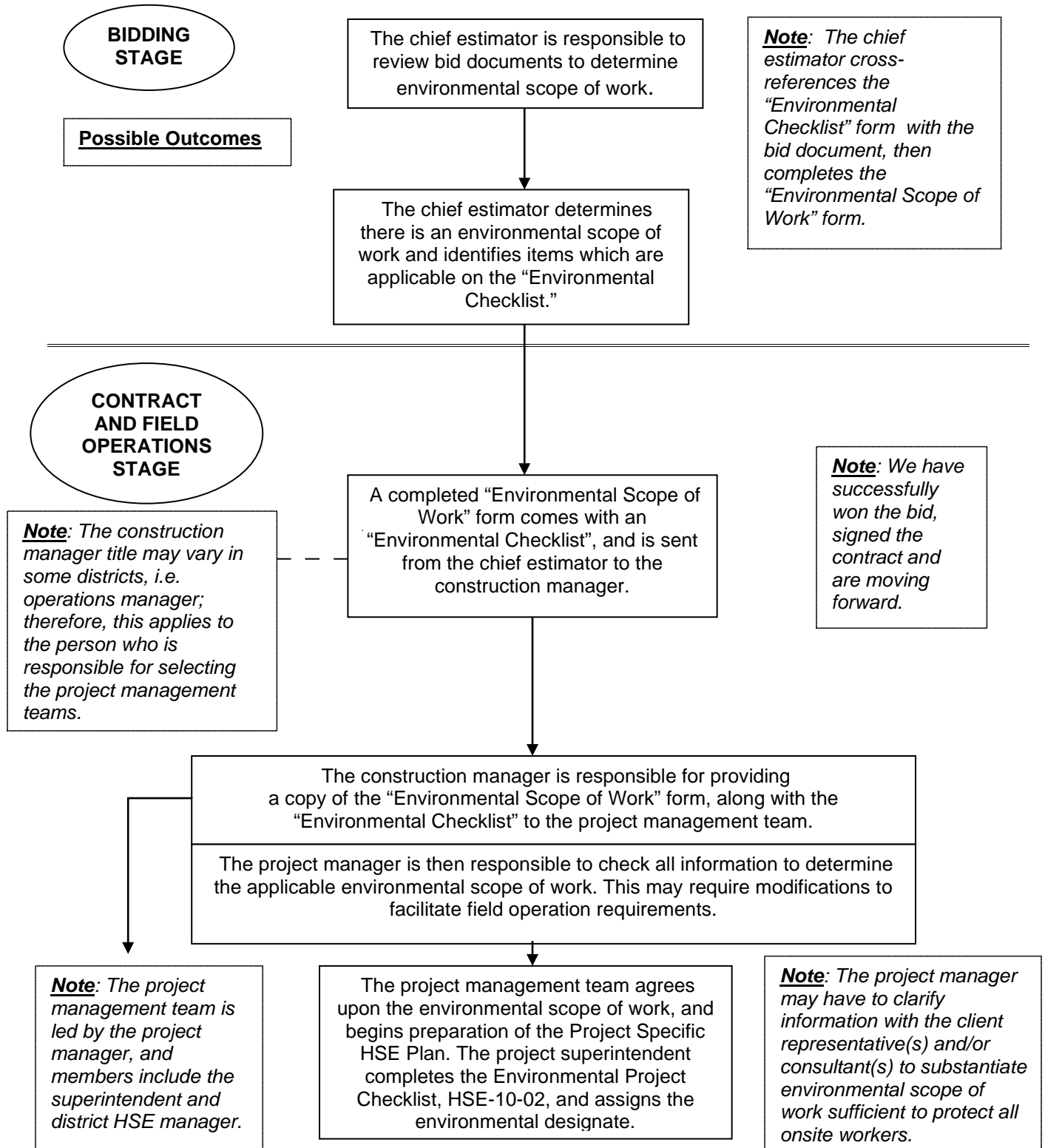


### Environmental Scope of Work (continued)

[illegible]



## Responsibility and Distribution Chain



**For Clarification: Please contact HSE Director, USHO/HSE Vice President, NAHQ**

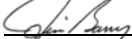


## TRADE CONTRACTOR HSE PROGRAM *STANDARD HSE-11*

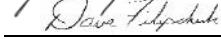
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.



## **HSE-11      TRADE CONTRACTOR HSE PROGRAM**

- 1.0    PURPOSE
- 2.0    SCOPE
- 3.0    RESPONSIBILITY
- 4.0    REFERENCES
- 5.0    DEFINITIONS
- 6.0    STANDARD
- 7.0    ATTACHMENTS

## **1.0 PURPOSE**

The purpose of the Trade Contractor HSE Program Standard is to:

- (1) Establish a system to direct PCL's selection and management of trade contractors based upon HSE considerations; and
- (2) Set rules that apply to trade contractors on PCL project sites.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Trade Contractor HSE Program responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Evaluate the trade contractor's pre-qualification documentation to determine their ability to achieve expected HSE performance;
- Monitor trade contractor safety performance and verify correction and redirection as needed; and
- Determine the degree of PCL involvement in the trade contractor's HSE efforts.

### **3.2 District Management (Off-Site)**

- Develop a process for the screening and approval of PCL trade contractors;
- Advise potential trade contractors of the HSE performance expected of them; and
- Confirm that the trade contractor fully understands project HSE requirements, and their quotation must include the appropriate resources, prior to the award of a subcontract.

### **3.3 Project Management (Site)**

- Work with district approved trade contractors on PCL project sites;
- Hold a pre-job meeting to discuss expectations of trade contractor HSE performance and communicate HSE requirements to the trade contractor prior to the start of the subcontract;
- Support the trade contractor HSE program and provide assistance where required;
- Continuously monitor trade contractors with poor HSE performance until their HSE performance has improved;

- Notify trade contractors of their work schedule, location, hazards, HSE expectations, and special precautions, including the content of the Project Specific HSE Plan prior to the start of the project;
- Verify HSE-15-01, Project Specific HSE Plan Acknowledgement Form, has been signed and returned to the project management team;
- Monitor trade contractors to verify their work is conducted in a safe and responsible manner in compliance with legislative jurisdictional requirements and the PCL and Trade Contractor's Project Specific HSE Plan; and
- Review the qualifications of trade contractor's designated HSE workers.

### **3.4 Project Supervision (Site)**

- Monitor trade contractors to verify their work is conducted in a safe and responsible manner in compliance with legislative jurisdictional requirements and the PCL and Trade Contractor's Project Specific HSE Plan.

### **3.5 Project HSE Staff (Site)**

- Support the trade contractor HSE program and provide assistance where required;
- Monitor trade contractors to verify their work is conducted in a safe and responsible manner;
- Continuously monitor trade contractors with poor HSE performance until their HSE performance has improved;
- Attend pre-job meeting with trade contractors; and
- Require prompt reporting and full investigation of incidents.

### **3.6 Trade Contractor**

- Designate a qualified person to coordinate their project HSE program;
- Understand and fully comply with the Project Specific HSE Plan, client HSE requirements, and legislative jurisdictional requirements;
- Fully comply with all requirements related to trade contractors in the HSE Manual;
- Communicate the above items to all trade contractor supervisors and workers; and
- Conduct all work in accordance with the above directives.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety, and Environment policy statements
- PCL standard form subcontracts

## **5.0 DEFINITIONS**

The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.

N/A

## **6.0 STANDARD**

### **6.1 Trade Contractor HSE Evaluation**

The selection of a suitable trade contractor must include an HSE evaluation based on current and historical HSE claims/litigation and three-year statistical HSE information including hours worked by the trade contractor, recordable injuries, recordable injury frequency and environmental deficiency.

Claim rates and rate history, including surcharges and discounts, clearance letter from the jurisdiction work is executed in, and liability insurance amounts, including a Certificate of Insurance are also required.

Evaluating the trade contractor's HSE program could include their:

- HSE Manual;
- Field Level Hazard Assessment (FLHA)/PSI;
- Job Hazard Analysis (JHAs);
- Safe Work Practices (SWPs);
- HSE Operating Procedures (HSEOPs);
- HSE Field Meetings;
- Incident investigation;
- Inspection program;
- Injury management procedures; and
- Fall protection standards.

### **6.2 Trade Contractor's Contractual Obligations**

The PCL subcontracts used will require the trade contractor to comply with PCL's HSE policies and with applicable laws. In addition, the subcontracts require the trade contractor to comply with the terms of the prime/general contractor. Failure to comply with the HSE policies could be grounds for termination of the contract.

### **6.3 Trade contractor's Project Specific HSE Plan and Administration of HSE Program**

Trade contractors must provide their own Project Specific HSE Plan and/or safe work practices commensurate with their scope of work. These plans must be in compliance with PCL's Project Specific HSE Plan.



The trade contractor shall designate a representative to be responsible for the administration of the trade contractor HSE program. This person may be a line manager or supervisor. If this person is a HSE professional, they shall integrate their activities into the site HSE team as closely as possible to prevent duplication of effort.

#### **6.4 Personal Protective Equipment**

Trade contractors are responsible for verifying that their workers have the appropriate PPE and are trained in its use and maintenance. The Trade Contractor's Project Specific HSE Plan needs to specifically describe personal protective equipment requirements. The requirements must be outlined in detail during the trade contractor's worker orientations.

#### **6.5 HSE Reporting**

The trade contractor must notify PCL of all incidents including near misses.

All incidents must be reported to the PCL project site supervisor immediately. All incidents that require medical attention, or have the potential for medical attention require the immediate notification of the PCL project management team. The Trade Contractor's Project Specific HSE Plan shall identify the time frames for notification of other incidents.

The PCL project management team must, as soon as reasonably possible, notify the district HSE manager whenever a serious violation of the Project Specific HSE Plan or legislative jurisdictional requirements involving a trade contractor occurs.

#### **6.6 Incident Investigation**

An investigation must be conducted by trade contractor supervisors for all incidents involving their workers.

A preliminary investigation report must be submitted to the project management team within twenty-four hours of occurrence. These reports must be completed to the satisfaction of the PCL project management team. Serious and non-compliance incidents will have a preliminary review within two hours of occurrence and a formal review within forty-eight hours.

#### **6.7 Statistical Reporting**

Each trade contractor shall submit, on a weekly basis, a report detailing the following information:

- Workers on site per day;
- Total manhours per week and to date;
- Number of first aids per week and to date;
- Number of recordable incidents per week and to date;

- Number of work days lost per week and to date; and
- Number of incidents (near misses) per week and to date.

## **6.8 Inspections**

Trade contractors shall conduct informal inspections of their work areas and their trade contractors' work areas on an on-going basis to verify compliance with HSE requirements. Trade contractors must conduct monthly formal inspections on their job sites in accordance with the Project Specific HSE Plan and provide copies of the inspections to the PCL project management team.

If non-compliance is observed, the trade contractors must rectify any unsafe acts and/or conditions. If corrective action is not taken within the specified time, a written notification will be issued by the PCL project management team stating the "non-conformance". Work which is not in compliance with applicable HSE standards may be stopped until corrective action is implemented.

## **6.9 HSE Orientation and Training**

All trade contractor workers must be trained and competent to perform the assigned work. Training requirements must meet or exceed requirements outlined in the Project Specific HSE Plan.

When identified in the Project Specific HSE Plan, trade contractors will provide worker training records. Normally, the Project Specific HSE Plan will require submission of those records for workers who operate cranes, aerial lifts, and swing and non-swing earthmoving equipment.

PCL mandates that trade contractor site workers attend a site specific HSE orientation as set out in HSE-03, HSE Orientation and Training.

## **6.10 HSE Meetings**

All trade contractor workers shall attend or conduct the following meetings:

### **6.10.1 HSE Field Meetings**

HSE Field Meetings are to be held a minimum of once per week, at a time agreed to with the PCL project management team. Meeting minutes are to be submitted to the PCL project management team on the day of the meeting in a format that meets or exceeds the requirements as outlined in the PCL Project Specific HSE Plan.

The trade contractor shall address the issues identified in HSE-04, HSE Communication Systems, section 6.3.2 as part of its HSE Field Meeting procedures.

#### 6.10.2 Project HSE Committee Meetings

As set out in HSE-04, HSE Communications Systems, section 6.3.3.

### **7.0 ATTACHMENTS**

N/A

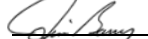


## PREVENTATIVE MAINTENANCE STANDARD HSE-12

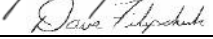
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Reviewed and no revisions made.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-12      PREVENTATIVE MAINTENANCE**

- 1.0      PURPOSE
- 2.0      SCOPE
- 3.0      RESPONSIBILITY
- 4.0      REFERENCES
- 5.0      DEFINITIONS
- 6.0      STANDARD
- 7.0      ATTACHMENTS

## **1.0 PURPOSE**

The purpose of the Preventative Maintenance Standard is to verify that the tools and equipment provided to workers are properly maintained.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Preventative Maintenance responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Develop programs to verify that equipment and tools are maintained in safe working condition.

### **3.2 District Management (Off-Site)**

- Provide support and resources for the inspection, maintenance, and repair of equipment and tools.

### **3.3 Project Management (Site)**

- Do not permit the use of any piece of equipment or tools that have been tagged "OUT OF SERVICE" or "DO NOT USE" or are otherwise defective; and
- Confirm the safe operation and maintenance of all equipment on the project.

### **3.4 Project Supervision (Site)**

- Verify repairs or corrections of defects to equipment and tools are reported to them in a timely manner;
- Remove from service any pieces of equipment or tools that have been tagged "OUT OF SERVICE" or are otherwise defective;
- Verify maintenance and/or inspection logs remain with the vehicle or equipment when releasing to another location;
- Alert operators of vehicles/equipment of the servicing, maintenance schedule, and methods of maintaining the company vehicle/equipment; and
- Inspect equipment and tools for defects.

### **3.5 Project HSE Staff (Site)**

- Verify compliance with the relevant government requirements and PCL maintenance policies.



### **3.6 Workers**

- Inspect all equipment and tools before use;
- Keep all equipment and tools in good repair;
- Remove and tagout from service any defective tool or piece of equipment; and
- Leave all HSE devices operative on equipment and tools.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements
- HSEOP-02, Tower Cranes
- HSEOP-03, Mobile Cranes, Personnel Baskets and Rigging
- HSEOP-04, Personnel & Material Hoists
- HSEOP-08, Compressed Gases
- HSEOP-09, Swing and Non Swing Type Earthwork
- HSEOP-11, Cutting & Welding
- HSEOP-12, Respiratory Protection
- HSEOP-15, Scaffolding
- HSEOP-24, Fall Protection
- HSEOP-25, Grinders
- HSEOP-26, Aerial Work Platforms
- PCL Motor Vehicle Policy

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

N/A

## **6.0 STANDARD**

### **6.1 General Requirements**

#### **6.1.1 Inspection**

Tools and equipment shall be inspected daily and prior to each use by the user to verify that they are in proper working order. Damaged or defective tools or equipment must be tagged "OUT OF SERVICE", and the damage is to be identified on the tag and returned to the tool room or yard. Under no circumstances shall tools or equipment in need of inspection or repair remain in service.

#### **6.1.2 Maintenance**

Qualified workers will maintain all tools and equipment in accordance with the manufacturer's maintenance requirements. Records of maintenance will be kept.

## **6.2 Site Requirements**

### **6.2.1 General**

All tools and equipment, company owned or rented, dispatched to the project site shall be sent in good mechanical condition and with required HSE equipment installed.

When provided by PCL Resources, all tools and equipment dispatched to a district or project site shall be accompanied by operation, testing, and maintenance instructions. Rental equipment maintenance and inspection records, with the exception of cranes, may be maintained at the rental company's facility but should be spot-checked periodically to verify that the rental company has an effective maintenance program. All crane records are required to be maintained on the project site where the crane is located.

### **6.2.2 Dispatching Equipment**

The procurement/materials manager shall verify to the district manager that all tools and equipment intended for field use shall leave the shop or yard properly equipped and able to meet the HSE standards required by regulations, laws, codes, and the company HSE program.

## **6.3 Motor Vehicles**

All vehicles must be inspected and maintained in accordance with the PCL Motor Vehicle Policy.

## **7.0 ATTACHMENTS**

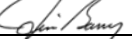
N/A

## INCIDENT INVESTIGATION STANDARD HSE-13

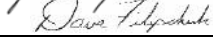
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.



## **HSE-13      INCIDENT INVESTIGATION**

- 1.0    PURPOSE
- 2.0    SCOPE
- 3.0    RESPONSIBILITY
- 4.0    REFERENCES
- 5.0    DEFINITIONS
- 6.0    STANDARD
- 7.0    ATTACHMENTS

## **1.0 PURPOSE**

The purpose of the Incident Investigation Standard is to conduct a methodical examination of the facts of an incident that resulted or could have resulted in injury, illness, loss, property damage or liability to identify contributing and root causes, as well as recommendations for corrective action.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

The following sections outline the Incident Investigation responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Participate in investigations where required;
- Provide incident investigation training to district management, project management, and project supervision;
- Review incident investigation reports to verify accuracy, completeness, and evaluate corrective actions taken; and
- Determine the need for procedure and policy changes within the district, other districts, USHO and NAHQ, as a result of incidents.

### **3.2 District Management (Off-Site)**

- Participate, support and reinforce the incident investigation and reporting process;
- Acquire legal/technical assistance as necessary, report incidents to the regulatory bodies as required by legislative jurisdictional requirements;
- Review incident investigation reports and verify that the incident investigation process set out in this standard is followed; and
- Support corrective actions identified in incident investigations.

### **3.3 Project Management (Site)**

- Verify that the incident investigation process set out in this standard is followed;
- Communicate and report incidents to the appropriate client representative and district management;
- Coordinate and implement the Substance Abuse Policy, if applicable;
- Verify that corrective actions identified in investigations are implemented and are effective; and
- Direct the investigation according to the requirements in this standard.

### **3.4 Project Supervision (Site)**

- Report all incidents according to this standard;
- Report incidents to the appropriate project management and district management;
- Conduct prompt investigations into incidents that occurred in their area of responsibility;
- Determine behavior, root causes, and corrective actions in the investigation process;
- Implement corrective actions identified as a result of investigations; and
- Determine, in conjunction with the project HSE staff, if HSE-13-01, Incident Investigation Form ABC, or HSE-13-02, Near Miss Form, should be used.

### **3.5 Project HSE Staff (Site)**

- Provide investigation support to the project management and supervisory team;
- Support and mentor project supervision and project management in the development of their investigation skills; and
- Determine in conjunction with the superintendent if HSE-13-01, Incident Investigation Form ABC, or HSE-13-02, Near Miss Form, should be used.

### **3.6 Workers**

- Report all incidents to their supervisor immediately;
- Actively participate as required, in the incident investigation process; and
- Provide honest statements of known facts to investigators when requested.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Contributing Cause**

Substandard acts and/or conditions that are the immediate or primary factors that contribute to an incident and lead to the determination of root causes.

## **5.2 First Aid**

Any one time treatment and subsequent observation(s) of minor, superficial injuries (i.e. minor scratches, cuts, burns, abrasions and splinters or foreign objects embedded only in surface tissue) that do not require the professional medical care by a medical professional even though such an individual may have delivered the care.

## **5.3 Incident**

An incident is an undesired event that results in harm to people, loss of process, environmental interference, property damage or liability.

## **5.4 Incident Classification A (Class A Incident)**

An event that results from a condition or practice that has the potential to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material. Based upon the risk assessment set out on HSE-13-01, the district HSE manager and district management (off-site) are required to oversee the investigation, and may include the HSE director, USHO/regional HSE manager.

## **5.5 Incident Classification B (Class B Incident)**

An event that results from a condition or practice that has the potential to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive. Based upon the risk assessment set out on HSE-13-01, on-site project management is required to oversee the investigation, but district management (off-site) may also participate.

## **5.6 Incident Classification C (Class C Incident)**

An event that results from a condition or practice that has the potential to cause minor (non-disabling) injury or illness or non-disruptive property damage. Based upon the risk assessment set out on HSE-13-01, the investigation team is established at the discretion of project superintendent and project supervision, but project management and district management may also participate.

## **5.7 Loss of Process**

Loss of process is an undesired incident that results in the disturbance of normal construction operations caused by an incident, damage to property, equipment, or the environment.

## **5.8 Lost Time Injury (LTI)**

A LTI is an injury where the worker is away from work on a day after the day on which the incident occurred, on the advice of a medical professional.



## **5.9 Major Incident**

An incident that results in one or more of the following:

- Fatality;
- Property damage more than \$100,000;
- Reportable/damage to environmental; or
- Government intervention.

## **5.10 Medical Treatment (Medical Aid)**

An injury or illness-related procedure other than first aid or preventative treatment that is intended to provide remedy or palliative care.

## **5.11 Minor Incident**

An incident that involves one or more of the following:

- An injury that only requires on-site first aid;
- Property damage less than \$10,000;
- No impact to the environment; and
- Does not otherwise affect the public or PCL's reputation.

## **5.12 Modified Work (Restricted Work)**

This refers to work duties that have been modified to accommodate an injured worker who cannot perform their regular work duties as directed by a medical professional.

## **5.13 Near Miss**

A near miss is an unplanned, unwanted event that might have resulted in personal harm or property damage.

## **5.14 Non-Life Threatening Incident**

Any incident that causes a medical aid, modified work, or first aid.

## **5.15 Root Cause**

The most *basic* cause that can *reasonably* be identified that management has control to *fix* and, when fixed, will prevent recurrence.

## **5.16 Serious Incident**

An incident that results one or more of the following:

- A recordable injury;
- Property damage between \$10,000 and \$50,000;
- Site conditions that do not trigger a reporting obligation to an environmental agency, but PCL considers unacceptable; or
- Involvement of senior PCL management or a shutdown of the project.

## **6.0 STANDARD**

### **6.1 Objective**

The objective of investigating and reporting an incident is to identify the contributing and root cause(s) of an incident and determine the proper corrective actions regarding:

- An incident;
- Damage to property, equipment, and the environment; and
- Loss of process.

An HSE incident investigation is a systematic process of examination, observation, and inquiry comprised of seven parts including:

1. Secure the scene
  - Verify that the scene of the incident is safe to enter and that initial medical aid, identification of witnesses and safeguarding of evidence has been achieved.
2. Risk classification
  - The risk classification determines the level of management that is required to be engaged in the incident investigation.
3. Collect the facts
  - Activities include interviewing witnesses, gathering and identifying physical evidence, arranging for technical reports, taking digital pictures, sketching the scene, gathering pertinent documentation such as training records, and obtaining equipment and medical reports.
4. Description/Develop the sequence of events
  - The description identifies in detail how, when, and where the incident occurred including all related factors (i.e. weights, heights, distances, time of day, weather conditions). Developing a sequence of events indicates a timeline regarding specific occurrences that led to an incident.
5. Determine the root cause(s) (Why did the incident occur?)
  - What acts, failures to act, and conditions contributed to the incident.
6. Corrective action(s)
  - After the root cause(s) of the incident has been determined, recommendations to prevent recurrence will be prepared.
7. Signoff and Final Report
  - The report is complete when the required signatures are obtained, action items are recorded in the SMC for follow-up and the report is transmitted to the required offices.

## **6.2 Incident Investigation**

The investigation will be proportionate to the loss potential based on a risk classification and the classification scheme outlined in HSE-13-01, Incident Investigation Form ABC, or HSE-13-05, Incident Investigation Users' Guide. As the degree of loss potential increases based on probability and severity, so will the degree of investigation.

The following information has been prepared to assist the investigation process.

### **6.2.1 Investigation Team**

Project management is responsible to conduct on site investigations.

Incidents classified in the "A" risk category will be investigated by the district HSE manager and/or district management off-site and corporate or regional HSE staff may lead or participate in the investigation.

Incidents classified in the "B" risk category will be investigated by a project superintendent, construction manager or project manager and/or other project management officials on-site and district management off-site may lead or participate in the investigation.

Incidents classified in the "C" risk category will be investigated by the project superintendent and/or other project supervision and may also include district management.

### **6.2.2 Incident Investigation Kits**

Incident Investigation kits can contain the following:

- Digital camera;
- Voice recorder;
- Flashlight;
- Tape measure;
- Red danger tape;
- Pens/pencils;
- Graph paper/notepad;
- Ruler;
- Rubber gloves;
- Plastic Ziploc bags; and
- Clipboard.

### 6.2.3 Incident Response

#### 6.2.3.1 First Aid/Emergency Services

People's lives and their well-being come first. Have first aid administered and direct someone to call for help. Be specific. Tell what service to call, where the telephone is, and where this emergency number can be found. Every telephone will have emergency numbers posted in a strategic location near the phone. Assist and monitor injured workers until emergency services arrive.

#### 6.2.3.2 Establishing Control

Establishing control at the scene where the incident occurred is critical to the success of the investigation.

### 6.2.4 Secure the Scene

The success of an investigation is generally the result of a prompt and efficient response. Many things can happen in a short period of time that can mitigate or compromise evidence and information. The following is a list of some initial steps to assist and support this process:

#### 6.2.4.1 Control Potential Secondary Occurrences

Prior to entering an area where an incident has occurred, an assessment of potential hazards must be done. Secondary occurrences can sometimes be more serious because normal controls can be weakened or modified as a result of the incident. Positive temporary actions need to be taken after timely but careful consideration of the consequences.

#### 6.2.4.2 Take Digital Photographs

Digital photographs effectively preserve the visual aspects of the scene. When properly done, they can save hours of note taking, drawing, and writing, and can also be used for training purposes. Photographs will be taken as follows:

- Use a long range, medium range, and close up sequence;
- Take a general scene photograph;
- Take a photograph of workstation(s);
- Take a close up shot of deficiency items, damaged and impacted area(s);
- Photograph the scene from all sides; and
- Number each photograph and document the location of each shot on the sketch where the incident occurred.

#### 6.2.4.3 Sketch the Scene

A sketch will be made of the area(s) where the incident occurred. In most cases a plan view is sufficient; however, elevation views may be necessary to identify certain items. Sketches will include directional orientation (i.e. north, south, east, and west) so that recorded information adequately describes the site where the incident occurred. Measurements will be included to identify and determine who and what was where. Witness locations (when incident occurred) will be noted on the sketch as well as photograph locations. Some affected areas may require a grid that in turn will be included in the sketch.

#### 6.2.4.4 Identify Sources of Evidence

Conditions can change rapidly after an incident has occurred. Emergency rescue work involving equipment, machinery, lights, ventilation, and people can alter the scene and destroy valuable evidence. The investigator needs to know and recognize these things while taking other initial actions. This is when photographs can be very useful. If photographs are taken, note the locations at which photographs were taken on the sketch plan.

#### 6.2.4.5 Identify Witnesses and Take Initial Statements

As soon as possible after the scene is safe and injured workers are being treated, record the names of all witnesses, keeping the witnesses separate. Take the initial statements by asking the witness to write "What Did You See?" in their own words (Refer to 6.2.5). At a later time, more comprehensive interviews may be conducted, if necessary.

#### 6.2.4.6 Preserve Evidence

Affected areas will be cordoned off, work stopped in that area immediately, and people restricted from entering the area until the investigation has been completed.

#### 6.2.4.7 Collection of Evidence

##### Equipment Examination

An investigation will include the tools, equipment, and materials that people were using at the time of the incident. In some cases, this may require the services of an expert. Guards, warning labels, condition of tools, application of tools, equipment, and materials as well as wear and tear can reveal evidence of what may have happened.

#### Records Check

Review all records (training, maintenance, schedule of work practices, and job procedures) to determine possible contribution to the incident (PSI, work plans, drawing, JHA, disciplinary actions).

#### Medical Condition

Investigate thoroughly; that is, evaluate all factors that may or may not be relevant. Consider, among other things, substance abuse, mental health, physical disabilities, fraudulent behavior, and future job continuity.

#### Re-enactment

On occasion, a reenactment of the incident may become necessary to see what happened and how it occurred.

Reenactment will only be used when:

- The information cannot be gained in any other way;
- It is vital to the development of remedial or corrective actions; and
- It is absolutely necessary to verify critical facts.

#### 6.2.5 Interviewing Witnesses

Immediately after the site has been secured, witnesses must be interviewed using HSE-13-03, Witness Statement Form. A witness is anyone who knows something related to what happened. Eyewitnesses and the people involved in the incident will be interviewed first. The first details from these witnesses give the investigator symptoms of the problem(s) and/or causes of the incident. The investigators will obtain more objective information when they demonstrate a calm, supportive, and non-judgmental attitude. The district's alcohol and drug program, if applicable, is to be referenced to make the determination for testing.

#### 6.2.5.1 The Interviewing Process

Interviews will be conducted as follows:

- Interview as soon as possible;
- Find fact, not fault;
- Interview near the scene (if possible) where incident occurred;
- Mark the locations where witnesses were when incident occurred on the site sketch;
- Interview one on one separately from other witnesses;
- Put the witness at ease;
- Ask open-ended questions;
- Ask witness to complete HSE-13-03, Witness Statement Form;
- Repeat information to witness for verification;
- Offer the witnesses a copy of their statements;
- Thank the witnesses for their time and effort; and
- Keep communication open by advising them if they remember anything else to call you.

#### 6.2.6 Incident Analysis

After all information and evidence has been collected, the analysis of what happened can begin. This process will include but not be limited to:

- Writing down all facts;
- Listing the facts that contradict one another;
- Comparing facts with physical evidence to establish the most likely answer;
- Developing a sequence of events;
- Identifying contributing and root causes; and
- Determining corrective actions.

#### 6.2.7 Report

Write the Report

The report will include all pertinent information including copies of gathered documents and lessons learned. The report shall be completed and submitted to NAHQ/USHO no later than 72 hours after the occurrence of the incident. If the incident is still under investigation by a regulatory agency, then a preliminary report may be submitted to NAHQ/USHO within 24 hours.

#### 6.2.8 Lessons Learned

TEMPORARY ACTION includes those items that can be implemented immediately to prevent recurrence of the incident.

PERMANENT ACTION includes those items that take substantial time to implement such as training and/or developing or modifying a particular practice, standard, or procedure. In any case, corrective action will be monitored until fully implemented.

### 6.3 Documenting and Reporting Procedure

#### 6.3.1 General

All incidents including a near miss must be reported, investigated, and documented immediately on HSE-13-01, Incident Investigation Form ABC, or HSE-13-02, Near Miss Form. Where appropriate, infractions/non-compliance issues identified during an inspection or any other time found on site may result in a documented investigation as determined by the superintendent.

The proper reporting structure is shown in HSE-13-04, Incident Reporting Diagram. Also see HSE-02 for an employee's roles and responsibilities. In order to facilitate the claims process, the district HSE manager must have accurate and timely information.

The success of the company HSE program depends entirely on the cooperation and commitment of all employees to all phases of the program. It is of the utmost importance that all managers and supervisors know and comply with the procedures as outlined herein.

Completion of corrective action items will be signed-off by a manager one level above the lead investigator who authored the report.

#### 6.3.2 Regulatory Reporting

All contact and reporting to government officials is to be done by the district HSE manager with consultation of HSE director, USHO/HSE vice president, NAHQ. In regard to injuries, all compensation carriers have specific legislative reporting requirements for the employer, worker, and attending physician(s).

#### 6.3.3 Internal Reporting

All incidents must be reported to the site supervisor immediately. All incidents that require medical attention or have the potential for medical attention require the immediate notification of the project HSE supervisor and superintendent. All incidents must be reported to the district HSE manager immediately – the notification of NAHQ/USHO, and any government agencies will be coordinated by the district HSE manager.



### First Aid Injuries

All injuries, major and minor, must be recorded in the project first aid treatment log maintained by the first aid attendant unless otherwise specified in the Project Specific HSE Plan.

### Medical Aid Injuries

Injuries requiring medical attention must use the following administrative procedures (optional in the US):

- The foreman or project HSE supervisor initiates HSE-14-03, Medical Treatment Memorandum;
- HSE-14-03, Medical Treatment Memorandum (the form is located in HSE-14) is sent along with the injured worker to the physician or hospital (optional in the US); and
- Accompany the injured worker to the medical facility.

### 6.3.4 Reporting Equipment and Property Damage

The district HSE manager and manager, finance and administration must be promptly notified of equipment or property damage. The HSE-13-01, Incident Investigation Report Form ABC, must be completed for all incidents and forwarded to the district office for administrative processing.

### 6.3.5 Statistical Reporting

Each district is responsible to document, monitor, and report to NAHQ in their monthly operations report (MOR) on a monthly basis all:

- Near misses;
- First aids;
- Modified work cases;
- Medical aids;
- Lost time incidents; and
- Fatalities.

## 7.0 ATTACHMENTS

HSE-13-01	Incident Investigation Report Form ABC
HSE-13-01-I	Collect Injury Incident Facts
HSE-13-01-E	Collect Environmental/Environmental Spill Facts
HSE-13-01-L	Collect Loss Incident Facts
HSE-13-02	Near Miss Report Form
HSE-13-03	Witness Statement Form
HSE-13-04	Incident Reporting Diagram
HSE-13-05	Incident Investigation Users' Guide
HSE-13-06	Incident Investigation Flowchart



**Investigation No. (Auto-generated from SMC) \_\_\_\_\_**  
**Incident Investigation Report Form ABC**

**Seven Step Process**

- |   |                               |                       |
|---|-------------------------------|-----------------------|
| 1. Secure the Scene                           | 2. Risk Matrix Classification | 3. Collect the Facts  |
| 4. Description/Develop the Sequence of Events | 5. Determine the Cause(s)     | 6. Corrective Actions |
| 7. Signoff and Final Report                   |                               |                       |

**STEP 1- SECURE THE SCENE**

**STEP 2- RISK MATRIX CLASSIFICATION**

**A      B      C      \*Complete prior to investigation\***

**Frequency of Task\***

Category	Term	Definition
4	Frequent	Possibility of repeated events (many times over the course of
3	Common	Possibility of isolated events (several times over the course
2	Occasional	Possibility of event occurring sometime (likely in a year)
1	Remote	Event not likely to occur (occasionally over a course of

**Severity – Consequences\***

Consequence Category		The possibility of the event consequences resulting in:			
		People	Property	Environment	Public Image, Reputation & Disruption
4	Major	Fatality	Impact >\$100,000	Reportable/Damage to Environment	Government Intervention
3	Critical	Permanent, Long-Term Injury or Illness	Impact < \$100,000 but > \$50,000	Reportable Incident/Minimal Environmental Impact	Community Attention
2	Serious	Recordable Injury	Impact < \$50,000 but > \$10,000	Site Conditions Unacceptable	Senior Management Involvement/Project Shutdown
1	Minor	On-site FA Treatment	Impact < \$10,000	No Impact	Individual or None

**Frequency of Task**

		4	3	2	1
Severity	4	16	12	8	4
	3	12	9	6	3
	2	8	6	4	2
	1	4	3	2	1

Risk Category		Definition	Level of Investigative Involvement/Instruction
"A"	High (8-16)	Class "A" Incident: a condition or practice with the potential to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material.	<b>District HSE Manager;</b> DISTRICT MANAGEMENT (OFF-SITE) <i>May include corporate/regional HSE manager</i>
"B"	Medium (4-6)	Class "B" Incident: a condition or practice with the potential to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive.	<b>SUPERINTENDENT/CM/PM;</b> PROJECT MANAGEMENT (ON-SITE) <i>May include district management off site</i>
"C"	Low (1-3)	Class "C" Incident: a condition or practice with the potential to cause minor (non-disabling) injury or illness or non-disruptive property damage.	<b>AS DELEGATED BY SUPERINTENDENT;</b> PROJECT SUPERVISION <i>May include project management and/or district management</i>

## Classify the Type of Incident

**HSE-13-01-I:** Select one Injury Incident Fact Form for each person injured in the incident.  
**HSE-13-01-E:** Select the Collect Environmental/Environmental Spill Facts form for incidents that include damage to the environment.  
**HSE-13-01-L:** Select one Loss Incident Fact Form for each owner that suffered a loss.  
 A selection from the Not Recordable field is used to make a record of an alleged incident in SMC that is not included in SMC reports.

<b>HSE-13-01-I</b> <b>Collect Injury Incident Facts</b>	<b>HSE-13-01-E</b> <b>Collect Environmental/ Environmental Spill Facts</b>	<b>HSE-13-01-L</b> <b>Collect Loss Incident Facts</b>	<b>Not Recordable</b>
First Aid Medical Aid Modified Work Lost Time Fatality	Environmental Environmental Spill	Fire Vehicle Damage Equipment/Property Theft Equipment/Property Damage Third Party/Public	Client Classification Non-Occupational Report Only

## STEP 3- COLLECT THE GENERAL FACTS:

<b>Project Name*:</b>				<b>Project No.*:</b>							
<b>Client*:</b>				<b>Incident Location:</b>							
<b>Brief Summary of Incident*:</b>											
<b>Company Reporting Incident*:</b>				<b>CCIP Company- US Projects Only*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO							
<b>Reported To:</b>				<b>Reported By:</b>							
<b>Date &amp; Time of Incident*:</b> Day DD		Month MM		Year YYYY		<b>Time:</b> HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM					
<b>Date &amp; Time of Incident Reported:</b> Day DD		Month MM		Year YYYY		<b>Time:</b> HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM					
<b>Weather*:</b>	Indoors	Overcast	Raining	Freezing Rain	Clear	Snowing	Foggy	Sunny	Windy	Underground Work	Hot/Humid
<b>Temperature:</b> ___ °F / °C		<b>Wind Speed:</b> ___ Mph / Km/h		<b>Wind Direction:</b> NW N NE E SE S SW W							
<b>Lighting*:</b> Daylight		Darkness		Artificial Light		Dusk		Dawn			
<b>Witnesses*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO				<b>If Yes, How many*?</b>							

**Insert Collect Injury Incident Facts, Collect Loss Incident Facts, Collect Environmental /Environmental Spill Facts and Witness Statement here.**

HSE-13-01-I	Collect Injury Incident Facts
HSE-13-01-L	Collect Loss Incident Facts
HSE-13-01-E	Collect Environmental/Environmental Spill Facts
HSE-13-01-W	Witness Statement

\* indicates a mandatory field in the SMC.



## STEP 4- DESCRIPTION

**Describe the Incident\*:**

*NOTE: If additional space is required to completely describe this incident, please add an additional page.*

[illegible]

### Develop the Sequence of Events\*:

**Use the information collected and determine the events prior to, during, and after the incident.**

*NOTE: If additional space is required to fully develop the sequence of events, please add an additional page.*

This image shows a full page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice or general writing. There are no margins, text, or other markings on the page.

**STEP 5- DETERMINE CAUSE(S):**

**Add Contributing Cause(s):** Choose at least one Substandard Act and/or Condition and/or Hazard Standard that are the immediate or primary factors that contribute to an incident and lead to the determination of root causes.

Substandard Acts	Substandard Conditions
<input type="checkbox"/> Operating Equipment Without Authority <input type="checkbox"/> Failure to Warn <input type="checkbox"/> Failure to Secure <input type="checkbox"/> Travelling Too Fast or Rushing to Complete a Task <input type="checkbox"/> Making Safety Devices Inoperative <input type="checkbox"/> Using Defective Equipment <input type="checkbox"/> Compliance With Personal Protective Equipment Requirements <input type="checkbox"/> Improper Loading <input type="checkbox"/> Improper Placement <input type="checkbox"/> Improper Lifting and Hoisting <input type="checkbox"/> Improper Position For the Task <input type="checkbox"/> Servicing Equipment in Operation <input type="checkbox"/> Horseplay <input type="checkbox"/> Under Influence Of Alcohol and/or Other Drugs <input type="checkbox"/> Using Equipment Improperly <input type="checkbox"/> Failure to Follow Procedures / Policy / Practice <input type="checkbox"/> Failure to Identify Hazard / Risk <input type="checkbox"/> Failure to Check / Monitor <input type="checkbox"/> Failure to React / Correct <input type="checkbox"/> Failure to Communicate / Coordinate	<input type="checkbox"/> Inadequate Guards or Barriers <input type="checkbox"/> Defective Tools, Equipment or Materials <input type="checkbox"/> Congestion or Restricted Action <input type="checkbox"/> Inadequate Warning System <input type="checkbox"/> Fire and Explosion Hazards <input type="checkbox"/> Poor Housekeeping / Disorder <input type="checkbox"/> Noise Exposure <input type="checkbox"/> Radiation Exposure <input type="checkbox"/> Temperature Extremes <input type="checkbox"/> Inadequate or Excessive Lighting <input type="checkbox"/> Inadequate Ventilation <input type="checkbox"/> Presence of Harmful Materials <input type="checkbox"/> Inadequate Instructions / Procedures <input type="checkbox"/> Inadequate Preparation/Planning <input type="checkbox"/> Inadequate Communications Hardware / Software Process <input type="checkbox"/> Road Conditions <input type="checkbox"/> Weather Conditions

**Contributing Cause(s), Inspection Hazard Categories and Standards Deficiencies:**

Identify contributing causes from the Hazard Categories and Standard's list.

Hazard Category	Hazard Standard



1 - GENERAL PROJECT REQUIREMENTS	
1 - Post PCL policies	11 - Provide common area lighting
2 - Post government documents	12 - Provide appropriate task lighting
3 - Orient everyone before they go to the work site	13 - PCL employee name and company on hard hat
4 - Competent person lists developed	14 - Abate scratch / cut / impalement hazards
5 - Conduct inspections / audits	15 - Project HSE plan is available to workers
6 - Manage trade contractor HSE program	16 - Comply with project HSE plan/HSEOP requirements
7 - Develop/post/implement emergency response plan	17 - Maintain project free of racist, sexist or hostile graffiti
8 - Post signage to establish storage location(s)	18 - Engineering drawings
9 - Post signage to identify special activity areas	19 - Other
10 - Post signage and identify restricted areas	
2 - PUBLIC SAFETY / SECURITY / SIGNAGE	
1 - Develop security plan	11 - MOT installed per plan & standards
2 - Visitor report to PCL office signage	12 - MOT monitored / inspected per schedule
3 - Post PCL safety/PPE signage	13 - Flaggers face traffic
4 - PCL contact information posted	14 - Monitor MOT devices
5 - Site security established	15 - Implement vehicle site authorization process
6 - Maintain perimeter security	16 - Implement tool/equipment control plan
7 - Post No Trespassing signage	17 - Implement material control plan
8 - Post emergency contact list	18 - Implement key control plan
9 - Maintain safe access and egress with exit signs if route is not obvious	19 - Implement visitor orientation/control system
10 - Maintenance of traffic (MOT) plan	20 - Other
3 - OCCUPATIONAL HEALTH	
1 - Appropriate first aid kits and log accessible with CPR mask and gloves	12 - Maintain worker awareness of hazardous materials and controls
2 - Identify first aid stations	13 - Identify MSDS location and inventory of hazardous material
3 - Label potable/non potable water sources	14 - Provide an MSDS for material on site
4 - Provide drinking water, cups and a trash receptacle	15 - Label containers with material id, hazard warnings and controls
5 - Provide adequate toilets	16 - Provide adequate waste containers
6 - Where contaminants may be harmful, provide hand washing facilities	17 - Use proper lifting technique
7 - No eating or drinking in a contaminated area	18 - Use material handling equipment for heavy loads
8 - Maintain an effective vermin control program	19 - Control silica dust
9 - Provide hearing protection where noise levels exceed 84 DBA	20 - Review MSDS for PPE requirements
10 - Post signs warning of laser in use	21 - Other
11 - Protect workers from exposures exceeding PEL/TLVs	

**4 - ENVIRONMENTAL**

1 - Environmental checklists/scope of work completed	10 - Identify hazmat storage locations
2 - Develop / implement site specific environmental action plan	11 - Develop/implement the project HSE waste management plan
3 - Develop a storm water, erosion & sedimentation control plan	12 - Separate hazardous materials by class
4 - Implement / maintain the storm water, erosion and sedimentation control plan	13 - Recycle per the project HSE plan
5 - Develop/implement a mold response procedure	14 - Implement dust control plan
6 - Provide 110% secondary containment at fuel and hazardous liquid storage	15 - Maintain adjacent streets free of mud/site debris.
7 - Provide adequate spill cleanup kits	16 - Prevent rain/snow contamination at secondary containment vessels
8 - Develop/implement spill response procedure and team	17 - Other
9 - Establish and contain concrete washout	

**5 - PERSONAL PROTECTIVE EQUIPMENT**

1 - Wear appropriate eye protection	11 - Wear fall protection harness/lanyard
2 - Wear a face shield	12 - Attach retractable device snap hook directly to harness d-ring
3 - Wear a hard hat	13 - Wear harness d-ring centered in the back and at shoulder height.
4 - Wear hard hat with welding face shield	14 - Inspect fall protection PPE before each use
5 - Provide appropriate hearing protection	15 - Adjust PPE to fit for its intended use
6 - Wear appropriate gloves	16 - Wear only manufacturer approved headgear under hard hat
7 - Wear appropriate footwear	17 - Provide PPE training to workers
8 - Wear appropriate clothing	18 - Eye wash & showers are required where workers handle acid batteries
9 - Wear fire retardant clothing	19 - Wear high VIZ vests/clothing when required
10 - Wear appropriate properly adjusted flotation device	20 - Other

**6 - FIRE PROTECTION / PREVENTION**

1 - Firefighting equipment is in good condition & accessible	13 - Store flammables away from egress routes / exits
2 - Personnel trained to use the equipment	14 - Clean up / dispose of combustible trash
3 - FE size and class is appropriate for hazard	15 - Maintain access for fire department
4 - Travel distance to FE $\leq$ 100'	16 - Keep weeds and grass from becoming a fire hazard
5 - 1 FE / 3000' of protected building area	17 - Store flammable liquids in approved containers
6 - FE in offices/conexes	18 - Install 20# ABC FE @ $>25'$ & $<75'$ of outdoor flammable liquid storage
7 - Perform FE annual inspection/service	19 - Segregate non compatible materials which create a fire hazard
8 - Document monthly FE inspection	20 - FE on vehicles/cranes/equipment
9 - FE located on each floor at the stairway landings	21 - Implement hot work permit program
10 - Install / energize permanent firefighting equipment ASAP	22 - Store flammable wastes in fire resistant containers
11 - Smoke in designated areas	23 - Other
12 - Post appropriate no smoking signs	





7 - MATERIAL HANDLING / STORAGE	
1 - Post signs/barriers when dropping waste through holes in deck	7 - Remove nails from used lumber before stacking
2 - Clean-up scrap and waste as work progresses	8 - Store cylindrical materials in racks or blocked to prevent rolling
3 - Equipment/material is stored in a stable/secure condition	9 - Storage areas are free of trip, slip, fire, explosion and vermin hazards
4 - Post safe load limits on storage racks, elevated floors and decks	10 - Establish a CAZ with monitor when dropping material outside a building
5 - Keep route clear for movement of materials/people	11 - Other
6 - Store material far enough back from the edge (6' min) so it can't fall off	
8 - HAND & POWER TOOLS	
1 - Maintain hand and power tools in a safe condition	10 - Properly dispose of unused powder actuated tool charges
2 - Use guards provided by manufacturer	11 - Loaded powder actuated tools shall not be left unattended
3 - Guard moving or rotating parts	12 - Crib or block a load immediately after jacking it up
4 - Point of operation guarding keeps the operator safe	13 - Use tools and equipment as the manufacturer intended
5 - Keep wooden handles of tools free of splinters and tight in the tool	14 - Tools and equipment will be inspected daily and prior to use
6 - Electric power tools shall be double insulated or grounded	15 - Tag defective tools / equipment and return them for repairs
7 - Secure air supply at hose and tool connections	16 - Store tools/equipment per project standard
8 - Install safety device to reduce air pressure in case of hose failure	17 - Other
9 - Shut off equipment when refueling, servicing or maintaining	
9 - WELDING AND CUTTING	
1 - Transport/store cylinders upright with valve closed and cap on	11 - Move or protect flammables & combustibles from hot work
2 - Secure cylinders to keep them upright	12 - Prevent sparks and slag from falling onto combustibles or people
3 - Separate fuel and oxygen by 20' or a fire barrier per requirements	13 - Provide a fire extinguisher dedicated to the hot work operation
4 - Do not store fuel gas cylinders in unventilated spaces	14 - Provide a fire watch long enough to ensure no fires occur
5 - Protect cylinders from sparks, hot slag or flames	15 - Shut off the gas at the cylinder when torch is unattended
6 - Train workers in the safe use of fuel gases	16 - Provide sufficient mechanical ventilation to exhaust fumes
7 - Inspect hoses, torches and regulators at the beginning of the shift	17 - Wear sufficient PPE for the hot work performed
8 - Within 10' of the stinger the cable will be free of nicks or repairs	18 - Flashback arrestors are in place
9 - Repair cable with exposed conductors before use	19 - Other
10 - Erect arc welding shields to protect other workers	



10 - ELECTRICAL	
1 - Enclose sparking / arcing electrical parts	15 - Extension cords will be three wire type and designed for hard usage
2 - Manufacturer label on electrical equipment is legible	16 - Don't run extension cords through holes or conceal cords in ceilings or walls
3 - Lock door to unattended electrical rooms with live panels	17 - Energized extension cords will have a grounded plug in a plug receptacle
4 - Post signs restricting access to qualified persons at electrical rooms	18 - Don't hang extension cords with staples, wires or nails
5 - Maintain the polarity of cords & equipment	19 - Keep walking/working areas clear of cords/cables/hoses
6 - All circuits must include ground fault circuit interrupters	20 - Extension cords shall be connected to plugs with strain relief
7 - Portable electric generators more than 5KW shall have GFCI circuits	21 - Nicked, worn or frayed cords/cables shall not be used
8 - Site assured grounding conductor program is implemented/ records filed	22 - Electrical gear and accessories in wet locations will be weatherproof
9 - Wires on poles will be at least 10' above grade or deck	23 - In hazardous locations electrical gear must be rated for the hazard
10 - The path to ground shall be permanent and continuous	24 - Post warnings/wear FRP when arc flash hazards exist
11 - Temporary lighting must be on a separate circuit and hard wired	25 - Inspect temporary power per schedule
12 - Protect light bulbs with cages or sleeves	26 - Maintain clear access to circuit breakers/service components at all times
13 - Don't hang temporary lights from the electric cord	27 - Other
14 - Protect cords/cables/hoses from pinch points/ equipment/ traffic	
11 - SCAFFOLD ERECTION	
1 - Trained scaffold erectors will be supervised by a competent person	13 - Scaffold uprights shall be plumb, level and braced to prevent swaying
2 - 100% fall protection is required for scaffold erectors @ > 6' exposure	14 - Fully plank decks with no more than 1" gaps between planks
3 - Construct the scaffold as the manufacturer / designer intended	15 - Wood planks overhang supports by 6" min
4 - Scaffolding will be designed by a registered P. E. when required	16 - Do not cantilever planks over supports more than 12"
5 - Do not use damaged parts to erect a scaffold	17 - Brace scaffold with push/pull ties at the horizontal member closest to 4:1
6 - Install access for the erection crew as the scaffold is erected	18 - Free standing towers height cannot exceed 3 times their width
7 - Erectors shall not stand on or climb cross braces	19 - Rolling scaffold height cannot exceed 3 times the width
8 - Provide scaffold platform access if the change in elevation is $\geq$ 2'	20 - Caster stems, screw jacks and wheel stems shall be secured
9 - Provide cleats on ramps that are steeper than 1:8	21 - Rolling scaffolds shall be braced horizontally to prevent racking
10 - The minimum scaffold platform or walkway surface is 18" (46 cm) wide	22 - Repair, brace or replace damaged scaffold components
11 - Use adequate mudsills and fasten base plates to them	23 - Other
12 - Unstable objects shall not be used to support scaffolds	



12 - SCAFFOLD USE	
1 - Workers will be trained to recognize scaffold hazards	10 - Scaffold planks should not deflect more than 1/60th of their span
2 - Retrain workers when conditions change or they appear to need it	11 - Fall protection is required on scaffolds if workers could fall 6' or more
3 - A competent person will inspect and tag the scaffold at the start of the shift	12 - Fall protection will be in place before work starts
4 - Cross braces shall not be used as a means of access	13 - Do not remove guardrails w/o wearing fall protection PPE
5 - Do not overload scaffolds	14 - Prevent objects from falling off scaffolds and striking workers below
6 - Do not use unstable objects (i.e. buckets) as work platforms	15 - Do not rest/hang equipment or material on guardrails
7 - Do not use ladders on a scaffold	16 - Lock the wheels when working on a mobile scaffold
8 - Secure/support a scaffold equipped w/ screens against wind loads	17 - Other
9 - Debris shall not be allowed to accumulate on scaffold/AWP decks	
13 - CRANES / HOISTS / LIFTS	
1 - Annual inspection certificate on site	10 - The entire crane is a continuous conductor and grounded
2 - Crane operators shall possess a valid operating certificate	11 - Do not hoist workers without an approved plan
3 - Authorize a signal person and post crane hand signals used	12 - The worker hoist plan must conform to the standard
4 - Operate/inspect/maintain crane per manufacturer instructions	13 - Do not exert any horizontal pull at any angle to the crane jib
5 - Maintain the crane equipment log and crane operators log on the crane	14 - Loads will not be left suspended when the crane is not attended
6 - Post warnings and load charts where operator can see them	15 - Tag lines shall be used unless their use creates an unsafe condition
7 - Prevent worker access to the swing radius of the rear of the crane	16 - All containers that may be hoisted must have the capacity marked on them
8 - If loads must fly over workers, effectively warn them	17 - Other
9 - Maintain adequate distance from power lines	
14 - VEHICLES AND EQUIPMENT	
1 - Develop/implement a preventive maintenance plan	11 - Do not move unstable loads with the fork truck
2 - Document the equipment inspection before use on each shift	12 - Vehicles must have service & parking brakes, brake lights & horn
3 - Obtain the manufacturers' approval before modifying equipment	13 - If visibility is low all vehicles must have 2 headlights & 2 tail lights
4 - Equipment manual/name plates/markings must be in place/legible	14 - All vehicles must have a back-up alarm or only back up with an observer
5 - Each equipment operator will be trained, evaluated & certified	15 - Vehicles with cabs will have a distortion free view
6 - Do not stand under the loaded or empty elevated forks	16 - The operator is authorized to operate the equipment on site
7 - No passengers allowed on fork trucks unless there is a seat and seat belt	17 - Wear the seat belt
8 - If leaving the fork truck, set brake, lower the forks, put it in neutral	18 - Prevent workers from falling into/onto dangerous equipment
9 - Chock tires if on an incline/at dock/otherwise required	19 - Inappropriate use of cell phone while operating vehicles/equipment
10 - All traffic regulations shall be observed	20 - Other



15 - EXCAVATIONS	
1 - Complete a JHA before starting underground work	13 - Spoil piles, materials and equipment will be at least 3' back from edge
2 - Remove or support surface objects which may become unstable	14 - Protect workers from falling objects / sloughing dirt / stones
3 - Locate underground utilities before excavation starts	15 - Excavation inspection checklist (HSEOP-05-04) completed before entry
4 - Locate utilities by hand when within 3' feet of estimated location	16 - Prevent cave-ins in excavations 5' deep or more
5 - Underground utilities shall protected, supported or removed	17 - Soil analysis/HSEOP-05-02 & 03 documented
6 - Provide safe egress within 25' of workers in an excavation $\geq$ 4'	18 - Class C soil sloped 1 1/2 to 1
7 - The incline angle of an egress ramp must allow workers to walk out upright	19 - Class B soil sloped at 1 to 1
8 - Install barricades around excavations	20 - Class A soil sloped at 3/4 to 1
9 - Fall protection is required when exposed to a 6' or greater fall	21 - No workers allowed under loads lifted by digging equipment
10 - Test the atmosphere when hazardous gases could be expected	22 - Substantial barricade
11 - Do not work in an excavation holding water	22 - Other
12 - Prevent surface water from draining into the excavation w/ berms	
16 - CONCRETE & MASONRY	
1 - Determine the structures load capacity and then don't exceed it	6 - Install reshoring per engineered drawings
2 - Prevent impalement from workers falling onto or into rebar	7 - Brace or guy reinforcing steel to prevent overturning or collapse
3 - Engineered formwork/shoring drawings will be on site	8 - Establish a CAZ before starting to lay block walls
4 - Inspect shoring prior to, during and immediately after concrete pour	9 - Brace CMU walls over 8' high until support structures are installed
5 - Properly install and secure shore posts	10 - Other
17 - STEEL ERECTION	
1 - Implement written erection and hoisting sequence plan	5 - Provide overhead protection for workers active below erectors
2 - Controlled access zone for erectors only	6 - Perimeter guarding inspected/accepted by GC
3 - Erector fall protection required @ 6' (2M) or more	7 - Connectors training records for procedures used are on site
4 - Falling object protection: Secure material and tools aloft	8 - Other
18 - DEMOLITION	
1 - Complete/implement a written demolition plan prior to starting work	5 - Only workers essential to the demolition are allowed in the area
2 - Cut off or relocate and protect live utilities	6 - A competent person will inspect for hazards as work progresses
3 - Test for and remove hazardous materials before starting demo	7 - Post warning signs/provide PPE where live circuits may be hidden
4 - Provide and secure covers on floor openings	8 - Other



19 - LADDERS	
1 - Provide 2 ladders/25 workers when ladders are used for access/ egress	11 - Barricade the ladder in doorways and high traffic areas
2 - Keep ladder access clear to permit free passage	12 - Ladders shall not be moved, shifted or extended while occupied
3 - Job built ladders conform to applicable standards	13 - Open stepladders and lock the spreaders before use
4 - Ladder rungs shall be parallel and uniformly spaced	14 - Do not stand or sit on the top or the top step of a step ladder
5 - Use ladders for the purpose they were designed	15 - Inspect ladders before use and tag if in bad order
6 - Ladder side rails extend 3' (min) above the landing surface	16 - Face ladder and maintain 3 point contact when climbing ladder
7 - Maintain ladders free of slip hazards	17 - Do not carry materials up or down a ladder
8 - Set up angle for manufactured ladders 4:1 and job built 8:1	18 - Train and retrain workers when necessary in ladder use
9 - Set up ladders on stable, level surface	19 - Store ladders per project standard
10 - Secure (tie off) the ladder at top landing	20 - Other
20 - CONFINED SPACE	
1 - Address project confined space hazards in orientation	14 - File records of the training on site
2 - Post danger signs at permit required confined spaces	15 - Training: authorized attendants know their duties
3 - Develop/implement a written confined space permit program	16 - Training: authorized entrants know their duties
4 - Document process determining non-permit required confined spaces	17 - Training: entry supervisors know their duties
5 - Implement continuous forced air ventilation	18 - Provide one attendant outside while the permit space is occupied
6 - Provide proper equipment to entrants	19 - Evaluate challenges and select an appropriate rescue team
7 - Testing of permit space atmosphere witnessed by entrants before entry	20 - Provide training/practice for the rescue team
8 - Supervisors / entrants are trained to use the gas monitor	21 - If feasible facilitate non-entry retrieval rescue
9 - Complete & post the permit & pre entry checklist at the entry portal	22 - Rescue teams conduct practice drills annually (min)
10 - Terminate and file the permit at the completion of the task	23 - Document the review of the annual site confined space program
11 - Document problems on permit	24 - Shut off fuel gas source outside the confined space when not in use
12 - Monitor the space during the task	25 - Remove torches and hoses at the end of the shift
13 - Train the team members to perform their duties	26 - Other



21 - LOCKOUT TAGOUT	
1 - Establish a LOTO plan for each piece of equipment	13 - Document LOTO training
2 - Conduct LOTO training for each piece of equipment	14 - Review the LOTO procedure before each implementation
3 - If a piece of equipment is capable of being locked out, it must be	15 - The LOTO sequence of equipment shutdown will be followed
4 - An attendant must guard a piece of equipment that is only tagged out	16 - Use LOTO device(s) to hold isolating devices in the safe position
5 - LOTO devices will be provided by the employer	17 - Stored energy: relieve all potential or residual energy
6 - LOTO devices shall not be used for other purposes	18 - Verify that isolation/release of stored energy has occurred
7 - LOTO devices: durable, standardized, substantial & identifiable	19 - Inspect the equipment before restarting
8 - Audit LOTO procedures at least annually	20 - Inform affected employees before machine startup
9 - Audit each employee using LOTO annually to verify training retention	21 - Each authorized worker removes his own lock
10 - Document annual audits of LOTO program and worker retention	22 - All employers shall inform each other of their respective LOTO programs
11 - Train authorized users of the LOTO program	23 - Group LOTO shall provide protection equal to individual LOTO
12 - Provided awareness training to workers affected by LOTO	24 - Other
22 - PROCEDURES: PSI, JHA, INFECTION, ACCESS ZONES	
1 - Develop Construction Hazard Assessment	9 - Comply with asbestos abatement control procedures
2 - Develop Job Hazard Analysis (JHA)	10 - Comply with lead based paint abatement procedures
3 - JHA communicated & signed off by project management & workers	11 - Comply with biological/infection control procedures
4 - Implement JHA/SWP/construction plan	12 - Comply with cadmium control procedures
5 - Workers and supervisors trained in the proper completion of PSI	13 - Limited access zones may only be occupied by authorized workers
6 - Conduct PSI at the start of the shift and when tasks/conditions change	14 - Establish a limited access zone for falling object protection
7 - PSI is signed by workers	15 - Other
8 - Review / initial PSI after breaks and lunch	
23 - RIGGING	
1 - Inspect rigging at start of shift and as used during the day	8 - Use the right number/spacing of U-bolt wire rope clips
2 - Defective rigging equipment shall be removed from service	9 - The U-bolt goes on the "dead end" of the cable
3 - Know the weight of the load and use adequate rigging	10 - Rigging will be protected from kinks/sharp edges
4 - Remove rigging from work area and store properly when not in use	11 - Keep hands and fingers away from between the sling and the load
5 - Capacity tags attached to all rigging	12 - Rigging will be done by trained qualified workers
6 - Makeshift rigging will not be used	13 - Other
7 - Ends of wire rope will be covered or blunted	



24 - STAIRWAYS	
1 - Provide a stair or ladder at elevation breaks of 19" or more	8 - Hand/stair rails are required at 4 rises or 30"
2 - Keep single stairway access and egress open or provide other access	9 - Handrails and stair rails must support 200# imposed down or outward
3 - Provide fall protection at stairways before opening for use	10 - Handrail height is between 36" & 37" to the top of the rail
4 - Temporary stairs: provide a landing 30" long and 20" wide every 12' of rise	11 - Handrails shall provide an adequate handhold that may be grasped
5 - Stairways will be free of snag, puncture or laceration hazards	12 - Unprotected sides of stair landings will have a guardrail system (42" +/- 3")
6 - Eliminate slip/trip conditions on stairs	13 - Other
7 - Temporarily fill pan stairs full width and depth before use	
25 - FALL PROTECTION SYSTEMS	
1 - Top of top rails shall be 42" +/- 3" from the deck	15 - Adjust harness with D ring above shoulder blades and centered
2 - Top rails will support 200# with < 2" deflection	16 - Personal fall protection: a harness, 2 lanyards and a 5000# anchorage
3 - Top rails must be a minimum of 1/4" wire rope and every flagged 6'	17 - Snap hooks: 1/D-ring, not snapped directly to webbing, rope or wire rope
4 - Midrails are 1/2 way between the top rail and the deck	18 - Lifelines are engineered/inspected/used per plan
5 - Screens shall extend from the top rail to the deck	19 - Vertical lifelines: use softeners at sharp edges
6 - Screens/midrails will support 150# pressure down or out	20 - Anchorages shall be capable of supporting 5000# (22.2 kN)
7 - 3 1/2" toe boards with no more than 1/4" gap below or 1" gap between	21 - Rig fall protection to prevent a free fall of > 6' or striking surface below
8 - Toe boards will support 50# pressure down or out	22 - Use a lanyard with and rig positioning devices to prevent a fall >2'
9 - Openings in screens will prevent anticipated material from falling	23 - Warning line systems must be at least 6' back from roof edge
10 - Guardrails are free of puncture, snag or laceration hazards	24 - Warning lines will be flagged and between 34" and 39" above deck
11 - End guardrails at terminal post if projection is hazardous	25 - Leading edge warning line is between 6' and 25' back from leading edge
12 - Covers will support 2X the anticipated load	26 - A warning line parallel to hazard ties to guard rails at both ends
13 - Holes are covered and covers are secured to prevent displacement	27 - A CAZ line is between 39" & 45" and flagged
14 - Covers are marked with a circle and an "X"	28 - Other
26 - FALL PROTECTION	
1 - Worker fall hazard recognition/control training records filed	11 - Install fall restraint system at material landing zones
2 - Conduct fall protection retraining when required	12 - Provide fall protection at holes
3 - Confirm walking working surfaces will support imposed loads	13 - Provide an offset guardrail or gate at ladder access
4 - Develop/implement fall protection plan when exposed to a 6' fall	14 - Fall protection required at wall openings (>30"x18") < 39" above deck
5 - Install fall protection where fall hazards exist before beginning work	15 - Precast erection & leading edge work qualify for fall protection plans
6 - Inspect PPE before each use	16 - Provide/Implement a leading edge fall protection plan
7 - Document formal inspections of fall PPE	17 - Protect workers from falling objects
8 - Store fall PPE properly	18 - Plan and practice fall rescue plans
9 - Do not tie off to guard rail systems	19 - Abate slip / trip conditions
10 - Wear fall protection when removing guardrails	20 - Other





27 - MARINE OPERATIONS	
1 - Post barge/crane load limits within operator view	6 - Maintain gangway free of slip / trip hazards
2 - Secure mobile crane to barge	7 - Maintain barge deck in safe condition
3 - Revise crane capacity chart for barge	8 - Provide fall protection on deck load
4 - Provide safe barge access	9 - Provide Life ring and ladder access to barge
5 - Provide adequate dock and gangway lighting	10 - Other
28 - RESPIRATOR PROGRAM	
1 - A site specific respirator plan is required if workers use respirators	13 - Store respirators to protect them from damage and deformation of face piece
2 - Review respirator hazards for the voluntary use of dust masks	14 - Inspect the respirator before each use
3 - Evaluate the extent of the respiratory hazard, the chemical state and its form	15 - Repair or discard damaged / defective respirators
4 - Select an appropriate respirator to control the hazard	16 - Compressed (supplied air) respirator hoods will be supplied with Grade D air
5 - Provide medical evaluation for workers wearing respirators and file clearance	17 - Monitor the supplied air to ensure it meet Grade D standards
6 - Provide fit testing for negative air pressure respirators	18 - All filters, cartridges and canisters will be color coded and labeled
7 - Wear appropriate respirator	19 - Provide initial training to users and annual refresher training
8 - Facial hair is not allowed if it interferes with the respirator seal	20 - Document the annual program evaluation for implementation and effectiveness
9 - Perform a user seal check each time the respirator is put on.	21 - Recordkeeping: medical clearance, fit testing, respirator type, dates
10 - Do not remove the respirator in the hazardous area	22 - The site specific respirator plan is filed on site.
11 - Clean and maintain the respirator as required	23 - Other
12 - Do not share a respirator unless it has been cleaned	
29 - AERIAL WORK PLATFORMS	
1 - Obtain the manufacturers permission before modifying an aerial lift	9 - Establish a controlled access zone to protect workers from falling objects
2 - Document AWP inspections prior to use with form HSEOP-26-01	10 - Fall protection PPE must not allow worker to strike the ground
3 - AWP: Only authorized persons shall operate aerial lifts	11 - Lower / retract the AWP when traveling
4 - AWP: Do not tie off to adjacent poles, structures or equipment	12 - A rescue plan must be in place when AWP are in use
5 - Keep your feet on the aerial work platform deck	13 - Hook chain / latch access gate to AWP
6 - Tie off to the attachment provided in the basket	14 - Equipment operator's manual / inspection checklist on AWP
7 - Do not exceed the load limit while working in an aerial lift	15 - Other
8 - Adhere to PCL Procedure HSEOP 26-02 to exit / access an elevated AWP	





CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-01

**Root Cause(s):** Select the most basic cause that when corrected will prevent the likelihood of recurrence.

<input type="checkbox"/> <b>Orientation and Training</b> <input type="checkbox"/> Not Required <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Established <input type="checkbox"/> Not Current <input type="checkbox"/> Not Available <input type="checkbox"/> Not Compliant <input type="checkbox"/> Not Understood	<input type="checkbox"/> <b>Communication Systems</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant
<input type="checkbox"/> <b>Hazard Identification and Control</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant	<input type="checkbox"/> <b>Inspection and Audits</b> <input type="checkbox"/> Not Established <input type="checkbox"/> No Action Plans <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Communicated <input type="checkbox"/> Inadequate Frequency <input type="checkbox"/> No Closure <input type="checkbox"/> Current Form/ Checklist Not Used <input type="checkbox"/> Not Trended <input type="checkbox"/> Preventive Maintenance Inadequate
<input type="checkbox"/> <b>Security/Emergency Response</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant	<input type="checkbox"/> <b>Environmental Management</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant
<input type="checkbox"/> <b>Standard Operating Procedures Practices and Legislation</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant	<input type="checkbox"/> <b>Trade-contractor Management</b> <input type="checkbox"/> Not Required <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Established <input type="checkbox"/> Not Compliant <input type="checkbox"/> Not Available <input type="checkbox"/> Pre-qualification/Selection <input type="checkbox"/> Not Understood
<input type="checkbox"/> <b>Engineering</b> <input type="checkbox"/> Not Required <input type="checkbox"/> No Current Standards Available <input type="checkbox"/> Not Available <input type="checkbox"/> Not Compliant <input type="checkbox"/> Not Understood <input type="checkbox"/> Inadequate	<input type="checkbox"/> <b>Procurement</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Not Timely <input type="checkbox"/> Not Available <input type="checkbox"/> Improper Selection <input type="checkbox"/> Inadequate <input type="checkbox"/> Inadequate or No Specifications <input type="checkbox"/> Not Compliant
<input type="checkbox"/> <b>Site Specific Safety Plan</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant	<input type="checkbox"/> <b>HR/PD</b> <input type="checkbox"/> Inappropriate Hire <input type="checkbox"/> Not Competent <input type="checkbox"/> Inappropriate Placement <input type="checkbox"/> Not Available
<input type="checkbox"/> <b>Leadership and Administration</b> <input type="checkbox"/> Inadequate <input type="checkbox"/> Inadequate Planning Accountability <input type="checkbox"/> Schedule Pressure <input type="checkbox"/> Lack of Discipline <input type="checkbox"/> Poor Execution <input type="checkbox"/> Lack of Enforcement <input type="checkbox"/> Not Communicated <input type="checkbox"/> Inadequate <input type="checkbox"/> Lack of Resources	


**STEP 6- ADD CORRECTIVE ACTIONS:**

Specific	Measureable	Accountable	Realistic	Timely	Effective	Reviewed
What are the corrective actions for substandard acts and conditions?				Assigned To*:	Target Date*:	Date Completed :
1. Substandard Act/Condition:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						
2. Substandard Act/Condition:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						
3. Substandard Act/Condition:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						

What are the corrective actions for hazard categories/standards deficiencies?				Assigned To*:	Target Date*:	Date Completed :
1. Hazard Category/Standard:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						
2. Hazard Category/Standard:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						
3. Hazard Category/Standard:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						

What are the corrective actions with a root cause?				Assigned To*:	Target Date*:	Date Completed :
1. Root Cause:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						
2. Root Cause:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						
3. Root Cause:					DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:						

**Insert Notes to Incident:**

Note	Created By:	Created On:



**Documents to consider are:**

- |   |   |   |  |  |
|---|---|---|--|--|
| <input type="checkbox"/> Photos             | <input type="checkbox"/> Certifications | <input type="checkbox"/> Inspections          | <input type="checkbox"/> Training Records      | <input type="checkbox"/> HSE Field Meeting Minutes |
| <input type="checkbox"/> Drawings/Blueprint | <input type="checkbox"/> Sketches       | <input type="checkbox"/> Timecards            | <input type="checkbox"/> HSEOPs                | <input type="checkbox"/> Vendor Agreements         |
| <input type="checkbox"/> JHAs/PSIs          | <input type="checkbox"/> CHAs           | <input type="checkbox"/> Permits              | <input type="checkbox"/> Schedules             | <input type="checkbox"/> Purchase Orders           |
| <input type="checkbox"/> Daily Log          | <input type="checkbox"/> Contracts      | <input type="checkbox"/> Witness<br>Statement | <input type="checkbox"/> Insurance Certificate |  |

### STEP 7- INSERT SIGNATURES:

FAX / EMAIL IMMEDIATELY AND FORWARD ORIGINAL TO HSE DEPARTMENT

<b>Lead Investigator*:</b>	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
<b>Investigation Team Members*:</b>	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
<b>PCL Project Superintendent*:</b>	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
<b>PCL Project Manager*:</b>	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>
<b>District/General Manager*:</b>	<u>Print</u>	<u>Signature</u>	<b>Date:</b> <u>DD/MM/YY</u>

**Additional Management Comments: (if required)**

[illegible]





CONSTRUCTION

## Collect Loss Incident Facts

### STEP 3 - COLLECT LOSS INCIDENT FACTS

<b>Injury Incident Type*:</b>								
Fire	Vehicle Damage	Equipment/Property Theft	Equipment/Property Damage	Third Party/Public	Environmental	Environmental Spill		
<b>Company with the Loss*:</b>				<b>CCIP Company- US Projects Only*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO				
<b>Company with Loss Superintendent*:</b>				<b>Company with Loss Foreman (PCL only*):</b>				
<b>Company with Loss Worker's Name*:</b>				<b>(PCL only*):</b> <input type="checkbox"/> Hourly <input type="checkbox"/> Salary				
<b>Hire Date (PCL Only*):</b> DD/MM/YYYY				<b>Orientation/Start Date on the Project*:</b> DD/MM/YYYY				
<b>Trade &amp; Trade Status:</b>				<b>Number of Years in Craft:</b>				
<b>Hours of Employment on the day of the Incident*:</b> FROM- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM TO- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM								
<b>Number of Days in Shift Rotation*:</b> 4/3 5/2 6/1 10/4 14/7 21/7 ___/___								
<b>Day in Rotation Loss*:</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 ___								
<b>PSI Completed*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO								
<b>Post-incident Alcohol and Drug Testing*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO				<b>If Yes, who was the next level of management consulted? (Canada only*):</b>				
				<b>If No, why not*:</b>				
<b>Did This Incident Involve Another Trade Contractor*?</b>				<input type="checkbox"/> YES <input type="checkbox"/> NO				
<b>If Yes, Trade Contractor Name*:</b>								
<b>CCIP Company: (US Projects only*)</b> <input type="checkbox"/> YES <input type="checkbox"/> NO								
<b>Trade Contractor Superintendent Name*:</b>								
<b>Division of Work*:</b>	<input type="checkbox"/>	Sitework	<input type="checkbox"/>	Wood	<input type="checkbox"/>	Specialties	<input type="checkbox"/>	Painting
	<input type="checkbox"/>	Demolition	<input type="checkbox"/>	Waterproofing	<input type="checkbox"/>	Conveying	<input type="checkbox"/>	Other: _____
	<input type="checkbox"/>	Concrete	<input type="checkbox"/>	Fireproofing	<input type="checkbox"/>	Systems		
	<input type="checkbox"/>	Masonry	<input type="checkbox"/>	Doors & Windows	<input type="checkbox"/>	Mechanical		
	<input type="checkbox"/>	Metals	<input type="checkbox"/>	Finishes	<input type="checkbox"/>	Electrical Insulation		
<b>Work Activity:</b>								
	<b>Boilermaking</b>	<input type="checkbox"/>	Aligning Sections	<input type="checkbox"/>	Material Handling	<input type="checkbox"/>	Using Hand Tools	
		<input type="checkbox"/>	Attaching Rigging	<input type="checkbox"/>	Updating Components	<input type="checkbox"/>	Using Power Tools	
<input type="checkbox"/>		Installing Boilers	<input type="checkbox"/>	Repairing Boilers	<input type="checkbox"/>	Walking To/From Job Area		
<input type="checkbox"/>		Maintaining Boilers	<input type="checkbox"/>	Signaling Crane Operators	<input type="checkbox"/>	Other: _____		
<input type="checkbox"/>		WHMIS / HAZCOM	<input type="checkbox"/>	Lockout				
<b>Carpentry</b>	<input type="checkbox"/>	Building Stairs	<input type="checkbox"/>	Installing Doors	<input type="checkbox"/>	Setting Repetitive Formwork		
	<input type="checkbox"/>	Constructing Wooden Frames	<input type="checkbox"/>	Installing Finish Carpentry	<input type="checkbox"/>	Stripping Loose Formwork		
	<input type="checkbox"/>	Cutting Wood	<input type="checkbox"/>	Installing Millwork	<input type="checkbox"/>	Stripping Repetitive Formwork		
	<input type="checkbox"/>	Erecting Scaffolding	<input type="checkbox"/>	Installing Windows	<input type="checkbox"/>	Using Hand Tools		
	<input type="checkbox"/>	Framing Walls	<input type="checkbox"/>	Joining Materials	<input type="checkbox"/>	Using Power Tools		
	<input type="checkbox"/>	Material Handling	<input type="checkbox"/>	Setting Loose Formwork	<input type="checkbox"/>	Walking To/From Job Area		
	<input type="checkbox"/>	Building Formwork	<input type="checkbox"/>	WHMIS / HAZCOM	<input type="checkbox"/>	Other: _____		

\* indicates a mandatory field in the SMC.



CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-01-L

<b>W O R K  A C T I V I T Y</b>	<b>Concrete Finishing</b>	<input type="checkbox"/> Building Formwork	<input type="checkbox"/> Finishing Concrete	<input type="checkbox"/> Placing Concrete
		<input type="checkbox"/> Cleaning Concrete	<input type="checkbox"/> Grinding Concrete	<input type="checkbox"/> Removing Pavement
	<b>Construction Labor</b>	<input type="checkbox"/> Coloring Concrete Surfaces	<input type="checkbox"/> Installing Base Material	<input type="checkbox"/> Rubbing & Patching Concrete
		<input type="checkbox"/> Compacting Base Material	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Walking To/From Job Area
		<input type="checkbox"/> Cutting Concrete	<input type="checkbox"/> Mixing Concrete	<input type="checkbox"/> Other: _____
		<input type="checkbox"/> Fabricating Concrete Beams	<input type="checkbox"/> WHMIS / HAZCOM	
		<input type="checkbox"/> Building Formwork	<input type="checkbox"/> Housekeeping	<input type="checkbox"/> Using Hand Tools
		<input type="checkbox"/> Disassembling Scaffolds	<input type="checkbox"/> Identifying Building Materials	<input type="checkbox"/> Using Power Tools
<b>Demolition</b>	<input type="checkbox"/> Erecting Scaffolds	<input type="checkbox"/> Landscaping	<input type="checkbox"/> Walking To/ From Job Area	
	<input type="checkbox"/> Flagging and Signaling	<input type="checkbox"/> Mixing Concrete	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> General Demolition	<input type="checkbox"/> Operating Machinery		
	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Operating Man/Material Hoists		
	<input type="checkbox"/> Asbestos Abatement	<input type="checkbox"/> Lead Abatement	<input type="checkbox"/> Striking an Arc	
	<input type="checkbox"/> Driving Site Vehicles	<input type="checkbox"/> Lockouts	<input type="checkbox"/> Using Hand Tools	
<b>Drywalling</b>	<input type="checkbox"/> Dust Control	<input type="checkbox"/> Manual Lifting	<input type="checkbox"/> Using Power Tools	
	<input type="checkbox"/> Flagging and Signaling	<input type="checkbox"/> Operating Crane	<input type="checkbox"/> Using A Torch	
	<input type="checkbox"/> Fall Protection	<input type="checkbox"/> Operating Loading Equip.	<input type="checkbox"/> Walking To/From Job Area	
	<input type="checkbox"/> General Demolition	<input type="checkbox"/> Recycling Material	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> Housekeeping	<input type="checkbox"/> Removing Glass		
	<input type="checkbox"/> Applying Textured Surfaces	<input type="checkbox"/> Joining Material	<input type="checkbox"/> Sanding Drywall	
<b>Electrical/ Instrumentation</b>	<input type="checkbox"/> Cutting Drywall	<input type="checkbox"/> Lifting Ceiling Panels	<input type="checkbox"/> Taping Joints	
	<input type="checkbox"/> Fastening Moldings	<input type="checkbox"/> Measuring Drywall	<input type="checkbox"/> Using Hand Tools	
	<input type="checkbox"/> Filling Joints	<input type="checkbox"/> Mounting Tiles or Blocks	<input type="checkbox"/> Walking To/From Job Area	
	<input type="checkbox"/> Fitting Drywall	<input type="checkbox"/> WHMIS / HAZCOM	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Pressing the tile		
	<input type="checkbox"/> Calibration	<input type="checkbox"/> Installing Electrical Systems	<input type="checkbox"/> WHMIS / HAZCOM	
	<input type="checkbox"/> Commissioning	<input type="checkbox"/> Installing Electronic Controls	<input type="checkbox"/> Repairing Electrical Equip.	
	<input type="checkbox"/> Connecting Electrical Systems	<input type="checkbox"/> Installing Wiring Systems	<input type="checkbox"/> Rewiring Electrical Systems	
<b>Equipment Maintenance</b>	<input type="checkbox"/> Connecting Wire	<input type="checkbox"/> Locating Problems	<input type="checkbox"/> Testing Electrical Systems	
	<input type="checkbox"/> Fastening Electrical Components	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Upgrading Electrical Systems	
	<input type="checkbox"/> Inspecting All Equipment	<input type="checkbox"/> Placing Conduit	<input type="checkbox"/> Walking To/From Job Area	
	<input type="checkbox"/> Maintaining Electrical Controls	<input type="checkbox"/> Pulling Wires/Cables	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> Maintaining Electrical Systems	<input type="checkbox"/> Terminating		
	<input type="checkbox"/> Assembling Equipment	<input type="checkbox"/> Lubricating Machinery	<input type="checkbox"/> Using Power Tools	
<b>Equipment Operation</b>	<input type="checkbox"/> Calibrating Equipment	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Walking To/From Job Area	
	<input type="checkbox"/> Checking Performance	<input type="checkbox"/> Performing Repairs	<input type="checkbox"/> WHMIS / HAZCOM	
	<input type="checkbox"/> Cleaning Machinery	<input type="checkbox"/> Preventative Maintenance	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> Disassembling Equipment	<input type="checkbox"/> Testing Machinery		
	<input type="checkbox"/> Installing New Machinery	<input type="checkbox"/> Using Hand Tools		
	<input type="checkbox"/> Digging Trenches	<input type="checkbox"/> Operating Loading Equip.	<input type="checkbox"/> Operating Tamping Equip.	
	<input type="checkbox"/> Driving Site Vehicles	<input type="checkbox"/> Operating Manlifts	<input type="checkbox"/> Repairing Equipment	
	<input type="checkbox"/> Flagging and Signaling	<input type="checkbox"/> Operating Paving Equipment	<input type="checkbox"/> Site Grading Activities	
<b>Flooring</b>	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Equipment	<input type="checkbox"/> Using Power Tools	
	<input type="checkbox"/> Heat Taping	<input type="checkbox"/> Operating Pile Driving Equip.	<input type="checkbox"/> Walking To/From Job Area	
	<input type="checkbox"/> Inspecting the Surface	<input type="checkbox"/> Operating Surface Equip.	<input type="checkbox"/> WHMIS / HAZCOM	
	<input type="checkbox"/> Joining Materials	<input type="checkbox"/> Operating Excavation Equip.	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> Removing Materials			
	<input type="checkbox"/> Cutting Material	<input type="checkbox"/> Sanding Surfaces	<input type="checkbox"/> Walking To/From Job Area	
<b>Glazing</b>	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Scraping Surfaces	<input type="checkbox"/> Working with Chemicals	
	<input type="checkbox"/> Cleaning Glass	<input type="checkbox"/> Stretching the Carpet	<input type="checkbox"/> WHMIS / HAZCOM	
	<input type="checkbox"/> Cutting Glass	<input type="checkbox"/> Trimming Edges	<input type="checkbox"/> Other: _____	
	<input type="checkbox"/> Cutting Marble	<input type="checkbox"/> Using Hand Tools		
	<input type="checkbox"/> Cutting Plastic	<input type="checkbox"/> Using Power Tools		
	<input type="checkbox"/> Flagging and Signaling	<input type="checkbox"/> Material Handling	<input type="checkbox"/> Using Power Tools	
	<input type="checkbox"/> Installing Curtain Wall	<input type="checkbox"/> Walking To/From Job Area		
	<input type="checkbox"/> Installing Glass Panels	<input type="checkbox"/> WHMIS / HAZCOM		
	<input type="checkbox"/> Installing Materials	<input type="checkbox"/> Other: _____		
	<input type="checkbox"/> Selecting Glass			
	<input type="checkbox"/> Using Hand Tools			



CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-01-L

<b>W O R K  A C T I V I T Y</b>	<b>Inspecting</b>	<input type="checkbox"/> Inspecting Bridges <input type="checkbox"/> Inspecting Buildings <input type="checkbox"/> Inspecting Earth Work <input type="checkbox"/> Inspecting Electrical Systems <input type="checkbox"/> Inspecting Lifting/Conveying Devices <input type="checkbox"/> Inspecting Shoring	<input type="checkbox"/> Inspecting Mechanical Systems <input type="checkbox"/> Inspecting Plumbing <input type="checkbox"/> Inspecting Renovations <input type="checkbox"/> Inspecting Roadway <input type="checkbox"/> Inspecting Sewer Systems <input type="checkbox"/> Inspecting Structural Steel	<input type="checkbox"/> Material Handling <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Insulating</b>	<input type="checkbox"/> Blowing Loose Fill Insulation <input type="checkbox"/> Cutting Insulation <input type="checkbox"/> Fastening Insulation <input type="checkbox"/> Installing Heat Tracing <input type="checkbox"/> Installing Materials <input type="checkbox"/> Securing Insulation	<input type="checkbox"/> Material Handling <input type="checkbox"/> Measuring Insulation <input type="checkbox"/> Protecting Insulation <input type="checkbox"/> Removing Old Insulation <input type="checkbox"/> Spraying Foam Insulation <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Ironwork</b>	<input type="checkbox"/> Assembling Cranes & Derricks <input type="checkbox"/> Bending Bars <input type="checkbox"/> Bolting Steel <input type="checkbox"/> Checking Alignment <input type="checkbox"/> Connecting Beams & Columns <input type="checkbox"/> Cutting Rebar <input type="checkbox"/> Erecting Steel Frames <input type="checkbox"/> Fabricating Structural Metal	<input type="checkbox"/> Flagging and Signaling <input type="checkbox"/> Installing Ornamental Iron/Steel <input type="checkbox"/> Installing Rebar Spacers <input type="checkbox"/> Material Handling <input type="checkbox"/> Placing Iron or Steel <input type="checkbox"/> Positioning Mesh <input type="checkbox"/> Post Tensioning <input type="checkbox"/> Rigging & Hoisting	<input type="checkbox"/> Securing Mesh <input type="checkbox"/> Setting Rebar <input type="checkbox"/> Tying Rebar <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Welding Steel <input type="checkbox"/> Welding Bars <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Masonry</b>	<input type="checkbox"/> Building/ Repairing Chimneys <input type="checkbox"/> Building/ Repairing Fireplaces <input type="checkbox"/> Building/Repairing Floor <input type="checkbox"/> Building /Repairing Partition <input type="checkbox"/> Building/Repairing Structures <input type="checkbox"/> Building Stone Floors <input type="checkbox"/> Building Stone Walls	<input type="checkbox"/> Cutting Block <input type="checkbox"/> Filling Joints Between Stones <input type="checkbox"/> Installing Firebrick Linings <input type="checkbox"/> Installing Wall Panels <input type="checkbox"/> Material Handling <input type="checkbox"/> Repairing Cracks <input type="checkbox"/> Setting Block	<input type="checkbox"/> Smoothing Mortar <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Millwright</b>	<input type="checkbox"/> Replacing, Repairing Machinery <input type="checkbox"/> Alignment <input type="checkbox"/> Repair & Lubricate Machines <input type="checkbox"/> Assemble & Install Equipment <input type="checkbox"/> Attach Moving Parts <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Layout Mounting Holes	<input type="checkbox"/> Drilling <input type="checkbox"/> Dismantle Machines <input type="checkbox"/> Hoisting and Rigging <input type="checkbox"/> Anchor Installation <input type="checkbox"/> Shipping & Receiving <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Hot Work	<input type="checkbox"/> Working from Heights <input type="checkbox"/> Manual Lifting <input type="checkbox"/> Climbing <input type="checkbox"/> Ladders <input type="checkbox"/> Maintenance of Machine <input type="checkbox"/> Lockouts <input type="checkbox"/> Other: _____
	<b>Painting</b>	<input type="checkbox"/> Abrasive Blasting Surfaces <input type="checkbox"/> Applying Coatings <input type="checkbox"/> Brushing Off Dust <input type="checkbox"/> Climbing Scaffolds <input type="checkbox"/> Erecting Scaffolds <input type="checkbox"/> Filling Holes/Cracks <input type="checkbox"/> Material Handling	<input type="checkbox"/> Mixing Paints <input type="checkbox"/> Painting with a Brush <input type="checkbox"/> Painting with a Roller <input type="checkbox"/> Painting with a Sprayer <input type="checkbox"/> Sanding Rough Spots <input type="checkbox"/> Sanding Surfaces <input type="checkbox"/> Stripping Surfaces	<input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Washing Walls/Trim <input type="checkbox"/> Waster Blasting Surfaces <input type="checkbox"/> Working With Chemicals <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Plumbing and Pipefitting</b>	<input type="checkbox"/> Pneumatic Testing <input type="checkbox"/> Aligning Flanges <input type="checkbox"/> Bending Pipe <input type="checkbox"/> Clearing Drains <input type="checkbox"/> Cutting Pipe <input type="checkbox"/> Fitting Pipe <input type="checkbox"/> Bonding Pipe <input type="checkbox"/> Hand Tools	<input type="checkbox"/> Hot Work <input type="checkbox"/> Hanging Steel Supports <input type="checkbox"/> Installing Fixtures <input type="checkbox"/> Joining Pipes <input type="checkbox"/> Ladders <input type="checkbox"/> Material Handling <input type="checkbox"/> Preparing and Grading Trenches <input type="checkbox"/> Preparing Surfaces	<input type="checkbox"/> Threading Pipe <input type="checkbox"/> Leak Testing <input type="checkbox"/> Soldering Pipe <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Hydro Testing <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Rigging</b>	<input type="checkbox"/> Assisting Operators <input type="checkbox"/> Attach Loads, Pulleys & Blocks <input type="checkbox"/> Climbing To/From <input type="checkbox"/> Erection/Dismantling <input type="checkbox"/> Equipment Maintenance <input type="checkbox"/> Inspect	<input type="checkbox"/> Fall Protection <input type="checkbox"/> Flagging/Marshalling <input type="checkbox"/> Hand Tools <input type="checkbox"/> Manual Lifting <input type="checkbox"/> Setup & Repair Rigging <input type="checkbox"/> Signal Crane	<input type="checkbox"/> Tagline <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Roofing</b>	<input type="checkbox"/> Damp Proofing <input type="checkbox"/> Hammering/Chiseling Rough Spots <input type="checkbox"/> Installing Insulation <input type="checkbox"/> Installing Roofing Felt <input type="checkbox"/> Installing Shingles	<input type="checkbox"/> Installing Roofs <input type="checkbox"/> Material Handling <input type="checkbox"/> Repairing Shingles <input type="checkbox"/> Repairing Roofs <input type="checkbox"/> Sealing Roof Seams <input type="checkbox"/> Spreading Coating	<input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Water Proofing <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____



CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-01-L

<b>W O R K  A C T I V I T Y</b>	<b>Scaffolding</b>	<input type="checkbox"/> Climbing Scaffolds <input type="checkbox"/> Disassembling Scaffolds <input type="checkbox"/> Erecting Scaffold Frame/ Guardrail <input type="checkbox"/> Material Handling	<input type="checkbox"/> Operating Loading Equip. <input type="checkbox"/> Operating Aerial Work Platform <input type="checkbox"/> Planking Scaffold <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Sheet Metal Working</b>	<input type="checkbox"/> Assembling Sheet Metal Pieces <input type="checkbox"/> Bending Pieces of Sheet Metal <input type="checkbox"/> Building Commissioning <input type="checkbox"/> Cutting Pieces of Sheet Metal <input type="checkbox"/> Drilling Parts <input type="checkbox"/> Fastening Seams and Joints Together <input type="checkbox"/> Hammering Parts	<input type="checkbox"/> Material Handling <input type="checkbox"/> Installing Duct Work <input type="checkbox"/> Making Sheet Metal Parts <input type="checkbox"/> Nailing/Welding Parts Together <input type="checkbox"/> Operating Equipment <input type="checkbox"/> Shaping Pieces of Sheet Metal <input type="checkbox"/> Testing and Balancing <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Working with Fiberglass <input type="checkbox"/> Working with Plastic Materials <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Specialty</b>	<input type="checkbox"/> Abatement <input type="checkbox"/> Bolting/Welding Beams/Rails <input type="checkbox"/> Construct Scaffolding <input type="checkbox"/> Erecting <input type="checkbox"/> Erecting Containment Areas <input type="checkbox"/> Installing Elevator Cabs <input type="checkbox"/> Installing Elevator Controls <input type="checkbox"/> Installing Lift Equipment	<input type="checkbox"/> Material Handling <input type="checkbox"/> Mold Remediation <input type="checkbox"/> Operating Heavy Machinery <input type="checkbox"/> Packaging Radioactive Material <input type="checkbox"/> Removing Asbestos <input type="checkbox"/> Removing Lead <input type="checkbox"/> Testing Lift Equipment <input type="checkbox"/> Using Monitoring Devices	<input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Using Sandblasters <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Surveying</b>	<input type="checkbox"/> Collecting Data in the Field <input type="checkbox"/> Holding Vertical Rods <input type="checkbox"/> Material Handling	<input type="checkbox"/> Operating Surveying Instruments <input type="checkbox"/> Taking Physical Measurements <input type="checkbox"/> Walking To/From Job Area	<input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Welding</b>	<input type="checkbox"/> Cutting Metal <input type="checkbox"/> Forming an Inert Gas <input type="checkbox"/> Grinding Metal <input type="checkbox"/> Machine Welding <input type="checkbox"/> Manual Welding	<input type="checkbox"/> Material Handling <input type="checkbox"/> Position Welding <input type="checkbox"/> Repair Welding <input type="checkbox"/> Striking an Arc <input type="checkbox"/> Surface Preparation	<input type="checkbox"/> Tack Welding <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Welding Metal <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____

**HAND/SMALL POWER TOOLS**

<input type="checkbox"/> Air Compressor <input type="checkbox"/> Axe <input type="checkbox"/> Banding Tool <input type="checkbox"/> Battery Charger <input type="checkbox"/> Broom <input type="checkbox"/> Cable Puller <input type="checkbox"/> Cable Stripper <input type="checkbox"/> Chisel <input type="checkbox"/> Concrete, Bucket <input type="checkbox"/> Concrete, Vibrator <input type="checkbox"/> Conduit/ Pipe Bender <input type="checkbox"/> Crow Bar <input type="checkbox"/> Cutter, Bolt <input type="checkbox"/> Cutter, Pipe <input type="checkbox"/> Drill <input type="checkbox"/> Drill Bit <input type="checkbox"/> Drill Press <input type="checkbox"/> Drill, Magnetic <input type="checkbox"/> Extension Cord <input type="checkbox"/> File <input type="checkbox"/> Fish Tape <input type="checkbox"/> Grinder, Floor <input type="checkbox"/> Grinder, Bench <input type="checkbox"/> Grinder, Right Angle <input type="checkbox"/> Gun, Caulk <input type="checkbox"/> Gun, Grease <input type="checkbox"/> Gun, Heat <input type="checkbox"/> Gun, Soldering/ Iron <input type="checkbox"/> Hammer <input type="checkbox"/> Hammer, Sledge	<input type="checkbox"/> Hoe <input type="checkbox"/> Hoist, Block and Tackle <input type="checkbox"/> Hoist, Chain <input type="checkbox"/> Hoist, Come-along <input type="checkbox"/> Hose <input type="checkbox"/> Impact Gun <input type="checkbox"/> Jack <input type="checkbox"/> Jack Hammer <input type="checkbox"/> Jointer <input type="checkbox"/> Ladder, Extension <input type="checkbox"/> Ladder, Step <input type="checkbox"/> Leaf Blower <input type="checkbox"/> Level <input type="checkbox"/> Lifeline <input type="checkbox"/> Material Lift/Jack <input type="checkbox"/> Nibbler <input type="checkbox"/> Paint Brush <input type="checkbox"/> Paint Roller <input type="checkbox"/> Paint Sprayer <input type="checkbox"/> Pallet Jack <input type="checkbox"/> Pick Axe <input type="checkbox"/> Pipe, Stand <input type="checkbox"/> Planer <input type="checkbox"/> Pliers <input type="checkbox"/> Plug, Test Ball <input type="checkbox"/> Pneumatic Fastener <input type="checkbox"/> Pocket Knife <input type="checkbox"/> Porta Power Ram <input type="checkbox"/> Pressure Washer <input type="checkbox"/> Pry Bar	<input type="checkbox"/> Pump <input type="checkbox"/> Punch <input type="checkbox"/> Rake <input type="checkbox"/> Regulator, Cmp. Gas <input type="checkbox"/> Rigging Spreader Bar <input type="checkbox"/> Rigging <input type="checkbox"/> Riveter, Pop <input type="checkbox"/> Rope <input type="checkbox"/> Router <input type="checkbox"/> Sander <input type="checkbox"/> Saw, Band <input type="checkbox"/> Saw, Chain <input type="checkbox"/> Saw, Chop <input type="checkbox"/> Saw, Circular <input type="checkbox"/> Saw, Concrete <input type="checkbox"/> Saw, Cutoff <input type="checkbox"/> Saw, Hack <input type="checkbox"/> Saw, Hole <input type="checkbox"/> Saw, Jig <input type="checkbox"/> Saw, Miter <input type="checkbox"/> Saw, Radial Arm <input type="checkbox"/> Saw, Reciprocating <input type="checkbox"/> Saw, Table <input type="checkbox"/> Saw, Wet <input type="checkbox"/> Scaffold <input type="checkbox"/> Screed, Hand <input type="checkbox"/> Screw Driver <input type="checkbox"/> Shop Vac. <input type="checkbox"/> Shovel <input type="checkbox"/> Snatch Block	<input type="checkbox"/> Square <input type="checkbox"/> Stapler <input type="checkbox"/> Tamper <input type="checkbox"/> Tap and Die <input type="checkbox"/> Tape Measure <input type="checkbox"/> Threader <input type="checkbox"/> Tin Snip <input type="checkbox"/> Torch, Cutting <input type="checkbox"/> Torch, Soldering <input type="checkbox"/> Torch, Tiger <input type="checkbox"/> Trowel, Hand <input type="checkbox"/> Tugger <input type="checkbox"/> Utility Knife <input type="checkbox"/> Vise <input type="checkbox"/> Welder <input type="checkbox"/> Welding Cable <input type="checkbox"/> Welding Hose <input type="checkbox"/> Welding Screen <input type="checkbox"/> Wheelbarrow <input type="checkbox"/> Wire Brush <input type="checkbox"/> Wrench, Adjustable <input type="checkbox"/> Wrench, Box <input type="checkbox"/> Wrench, Chain <input type="checkbox"/> Wrench, Open End <input type="checkbox"/> Wrench, Pipe <input type="checkbox"/> Wrench, Socket <input type="checkbox"/> Wrench, Spud <input type="checkbox"/> Wrench, Torque <input type="checkbox"/> Other
--	---	--	---





CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-01-L

**LARGE EQUIPMENT/POWER TOOLS**

<input type="checkbox"/> Air Compressor	<input type="checkbox"/> Forklift, RT/Ext. Boom	<input type="checkbox"/> Pile, Casing Clamp	<input type="checkbox"/> Trowel, Power
<input type="checkbox"/> Crane, RT	<input type="checkbox"/> Forklift, vertical mast	<input type="checkbox"/> Pile Hammer, Diesel	<input type="checkbox"/> Truck, Boom
<input type="checkbox"/> Crane, Crawler	<input type="checkbox"/> Generator	<input type="checkbox"/> Pile Hammer, Vibratory	<input type="checkbox"/> Truck, Dump
<input type="checkbox"/> Crane, Gantry	<input type="checkbox"/> Georgia Buggy	<input type="checkbox"/> Pile, Extraction Clamp	<input type="checkbox"/> Truck, Flatbed
<input type="checkbox"/> Crane, Drill Rig	<input type="checkbox"/> Grader, Motor	<input type="checkbox"/> Pipe, Prep/Bevel Mach.	<input type="checkbox"/> Truck, Hiway Tractor
<input type="checkbox"/> Crane, Tower	<input type="checkbox"/> Grader, Wheel Tractor	<input type="checkbox"/> Pump, Concrete	<input type="checkbox"/> Truck, Pick Up
<input type="checkbox"/> Compactor, Plate	<input type="checkbox"/> Scraper	<input type="checkbox"/> Pump, Epoxy	<input type="checkbox"/> Truck, Water
<input type="checkbox"/> Compactor, Roller	<input type="checkbox"/> Heater (LP/Nat. Gas)	<input type="checkbox"/> Pump, Grout	<input type="checkbox"/> Trailer
<input type="checkbox"/> Compactor, Vibratory	<input type="checkbox"/> Light Plants	<input type="checkbox"/> Pump, Dewater	<input type="checkbox"/> Trailer, Lowboy
<input type="checkbox"/> Dozer	<input type="checkbox"/> Loader, Wheeled	<input type="checkbox"/> Screed Truss, Power	<input type="checkbox"/> Trailer, Highboy
<input type="checkbox"/> Excavator, Mini	<input type="checkbox"/> Loader, Skid Steer	<input type="checkbox"/> Screed, Bidwell	<input type="checkbox"/> Trailer, Gravel
<input type="checkbox"/> Excavator, Back Hoe	<input type="checkbox"/> Main Panel/Transformer	<input type="checkbox"/> Sweeper, Walk	<input type="checkbox"/> Trailer, Vans
<input type="checkbox"/> Excavator, Vacuum	<input type="checkbox"/> B Box	<input type="checkbox"/> Sweeper, Ride	<input type="checkbox"/> Welder (gas/diesel)
	<input type="checkbox"/> C Panel		

**A) Damage to Work Under Construction**

Brief Description of Items Damaged or Stolen:

**B) Equipment Including Small Tools and Rented Equipment**

Equipment and/or Serial No.:

Brief Description of Items Damaged or Stolen:

**C) Damage or Loss to a Third Party**

Owner of Damaged Property:

Telephone of Owner: (###) ###-####

Address of Owner:

Brief Description of Loss:

**D) Licensed Vehicles (Including Rented Vehicles)**

Driver's Name\*:

Driver's License No.:

Is it a PCL Vehicle\*: ☐ YES ☐ NO

Make of Vehicle

Year of Vehicle:

Type of Vehicle:

License Plate No.:

Serial No.:

Equipment No.:

Describe Damage\*:

Registered Owner's Name:

Registered Owner's Address:

Insurance Company:

Policy No.:

Insurance Company Address:

Witness Name:

Witness Telephone No.

Witness Address:

Was There More Than One Vehicle Involved?\*: ☐ YES ☐ NO



CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-01-L

<b>E) Loss Reported to Police</b>	
Was the Loss Reported to the Police?*: <input type="checkbox"/> YES <input type="checkbox"/> NO	If Yes, Police Report No.*:
<b>F) Security Company</b>	
Was a Security Company Employed?*: <input type="checkbox"/> YES <input type="checkbox"/> NO	If Yes, Name of Security Company Involved*:
<b>G) Is a Sketch Showing the Relationship of the Vehicles Involved Attached?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>H) Detailed Description of the Loss:</b>	
<b>I) Estimate of Loss Damage (\$):</b>	
Note: If Environmental Spill or Loss Occurred Include HSE-13-01-E With This Loss Report Form.	

**STEP 7- SIGNOFF**

**Loss Worker\*:** \_\_\_\_\_ Print \_\_\_\_\_ Signature **Date:** DD/MM/YY \_\_\_\_\_

**Loss Worker's Foreman\*:** \_\_\_\_\_ Print \_\_\_\_\_ Signature **Date:** DD/MM/YY \_\_\_\_\_

**Loss Worker's Superintendent\*:** \_\_\_\_\_ Print \_\_\_\_\_ Signature **Date:** DD/MM/YY \_\_\_\_\_



## Collect Environmental/Environmental Spill Facts

### STEP 3 – COLLECT ENVIRONMENTAL SPILL FACTS

Project Environmental Designate*:											
Name of product/Substance that was spilled/released*:											
Total Quantity Involved:						Estimated Quantity Spilled/Released:					
Time Spill/Release Started: HH:MM (AM/PM)						Time Spill/Release Stopped: HH:MM (AM/PM)					
What caused the spill/release?											
What was affected by the spill/release? (Identify surface area, wetlands, rivers/lakes):											
Describe the measures taken to control the spill/release:											
Weather During Cleanup*:											
Indoors	Overcast	Raining	Freezing Rain	Clear	Snowing	Foggy	Sunny	Windy	Underground Work	Hot/Humid	
Who was contacted?:											
District Manager, Government		District HSE Manager, Environmental Protection Agency			US HSE Director,			NAHQ HSE Vice President,			
Other Government Agency (Who/When):											

\* indicates a mandatory field in the SMC.





## Near Miss Report Form ABC

### Seven Step Process

1. Secure the Scene
2. Risk Matrix Classification
3. Collect the Facts
4. Description/Develop the Sequence of Events
5. Determine the Cause(s)
6. Corrective Actions
7. Signoff and Final Report

### STEP 1- SECURE THE SCENE

### STEP 2- RISK MATRIX CLASSIFICATION

A B C \*Complete prior to investigation\*

#### Frequency of Task\*

Category	Term	Definition
4	Frequent	Possibility of repeated events (many times over the course of a week)
3	Common	Possibility of isolated events (several times over the course of a month)
2	Occasional	Possibility of event occurring sometime (likely in a year)
1	Remote	Event not likely to occur (occasionally over a course of year)

#### Severity – Consequences\*

Consequence Category		The possibility of the event consequences resulting in:			
		People	Property	Environment	Public Image, Reputation & Disruption
4	Major	Fatality	Impact >\$100,000	Reportable/Damage to Environment	Government Intervention
3	Critical	Permanent, Long-Term Injury or Illness	Impact < \$100,000 but > \$50,000	Reportable Incident/Minimal Environmental Impact	Community Attention
2	Serious	Recordable Injury	Impact < \$50,000 but > \$10,000	Site Conditions Unacceptable	Senior Management Involvement/Project Shutdown
1	Minor	On-site FA Treatment	Impact < \$10,000	No Impact	Individual or None

#### Frequency of Task

		4	3	2	1
Severity	4	16	12	8	4
	3	12	9	6	3
	2	8	6	4	2
	1	4	3	2	1

Risk Category		Definition	Level of Investigative Involvement/Instruction
"A"	High (8-16)	Class "A" Incident: a condition or practice with the potential to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material.	<b>District HSE Manager;</b> DISTRICT MANAGEMENT (OFF-SITE) <i>May include corporate/regional HSE manager</i>
"B"	Medium (4-6)	Class "B" Incident: a condition or practice with the potential to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive.	<b>SUPERINTENDENT/CM/PM;</b> PROJECT MANAGEMENT (ON-SITE) <i>May include district management off site</i>
"C"	Low (1-3)	Class "C" Incident: a condition or practice with the potential to cause minor (non-disabling) injury or illness or non-disruptive property damage.	<b>AS DELEGATED BY SUPERINTENDENT;</b> PROJECT SUPERVISION <i>May include project management and/or district management</i>



CONSTRUCTION

### STEP 3- COLLECT THE GENERAL FACTS:

Project Name*:					Project No.*:						
Client*:					Incident Location:						
Brief Summary of Incident*:											
Company Reporting Incident*:					CCIP Company- US Projects Only*: <input type="checkbox"/> YES <input type="checkbox"/> NO						
Reported To:					Reported By:						
Date & Time of Incident*:		Day DD	Month MM	Year YYYY	Time*:		HH:MM	<input type="checkbox"/> AM <input type="checkbox"/> PM			
Date & Time of Incident Reported*:		Day DD	Month MM	Year YYYY	Time*:		HH:MM	<input type="checkbox"/> AM <input type="checkbox"/> PM			
Weather*:	Indoors	Overcast	Raining	Freezing Rain	Clear	Snowing	Foggy	Sunny	Windy	Underground Work	Hot/ Humid
Temperature:		°F / °C		Wind Speed:		Mph / Km/h		Wind Direction: NW N NE E SE S SW W			
Lighting*:		Daylight		Darkness		Artificial Light		Dusk		Dawn	
Witnesses*: <input type="checkbox"/> YES <input type="checkbox"/> NO					If Yes, How many?						

### COLLECT THE NEAR MISS FACTS

Company Involved with Near Miss*:					CCIP Company- US Projects Only*: <input type="checkbox"/> YES <input type="checkbox"/> NO				
Superintendent Involved with Near Miss*:					Foreman Involved with Near Miss (PCL only*):				
Worker Involved with Near Miss:									
Select what the outcome would have been if it was not a Near Miss*:									
Injury		Illness		Environmental		Environmental Spill		Equipment/Property	
Hours of Employment on the Day of the Near Miss*: FROM- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM TO- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM									
Number of Days in Shift Rotation*: 4/3 5/2 6/1 10/4 14/7 21/7 __/__									
Day in Rotation Near Miss Occurred*: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 __									
PSI Completed*: <input type="checkbox"/> YES <input type="checkbox"/> NO									
Did This Incident Involve Another Trade Contractor? <input type="checkbox"/> YES <input type="checkbox"/> NO									
If Yes, Trade Contractor's Company*:									
CCIP Company*: (US Projects only) <input type="checkbox"/> YES <input type="checkbox"/> NO									
Trade Contractor Superintendent Name:									

\* indicates a mandatory field in the SMC.



<b>Division of Work*:</b>	<input type="checkbox"/> Sitework	<input type="checkbox"/> Wood	<input type="checkbox"/> Specialties	<input type="checkbox"/> Painting
	<input type="checkbox"/> Demolition	<input type="checkbox"/> Waterproofing	<input type="checkbox"/> Conveying	<input type="checkbox"/> Other: _____
	<input type="checkbox"/> Concrete	<input type="checkbox"/> Fireproofing	<input type="checkbox"/> Systems	
	<input type="checkbox"/> Masonry	<input type="checkbox"/> Doors & Windows	<input type="checkbox"/> Mechanical	
	<input type="checkbox"/> Metals	<input type="checkbox"/> Finishes	<input type="checkbox"/> Electrical	
		<input type="checkbox"/> Insulation		

<b>W O R K  A C T I V I T Y</b>	<b>Boilermaking</b>	<input type="checkbox"/> Aligning Sections <input type="checkbox"/> Attaching Rigging <input type="checkbox"/> Installing Boilers <input type="checkbox"/> Maintaining Boilers <input type="checkbox"/> WHMIS / HAZCOM	<input type="checkbox"/> Material Handling <input type="checkbox"/> Updating Components <input type="checkbox"/> Repairing Boilers <input type="checkbox"/> Signaling Crane Operators <input type="checkbox"/> Lockout	<input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Carpentry</b>	<input type="checkbox"/> Building Stairs <input type="checkbox"/> Constructing Wooden Frames <input type="checkbox"/> Cutting Wood <input type="checkbox"/> Erecting Scaffolding <input type="checkbox"/> Framing Walls <input type="checkbox"/> Material Handling <input type="checkbox"/> Building Formwork	<input type="checkbox"/> Installing Doors <input type="checkbox"/> Installing Finish Carpentry <input type="checkbox"/> Installing Millwork <input type="checkbox"/> Installing Windows <input type="checkbox"/> Joining Materials <input type="checkbox"/> Setting Loose Formwork <input type="checkbox"/> WHMIS / HAZCOM	<input type="checkbox"/> Setting Repetitive Formwork <input type="checkbox"/> Stripping Loose Formwork <input type="checkbox"/> Stripping Repetitive Formwork <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Concrete Finishing</b>	<input type="checkbox"/> Building Formwork <input type="checkbox"/> Cleaning Concrete <input type="checkbox"/> Coloring Concrete Surfaces <input type="checkbox"/> Compacting Base Material <input type="checkbox"/> Cutting Concrete <input type="checkbox"/> Fabricating Concrete Beams	<input type="checkbox"/> Finishing Concrete <input type="checkbox"/> Grinding Concrete <input type="checkbox"/> Installing Base Material <input type="checkbox"/> Material Handling <input type="checkbox"/> Mixing Concrete <input type="checkbox"/> WHMIS / HAZCOM	<input type="checkbox"/> Placing Concrete <input type="checkbox"/> Removing Pavement <input type="checkbox"/> Rubbing & Patching Concrete <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Construction Labor</b>	<input type="checkbox"/> Building Formwork <input type="checkbox"/> Disassembling Scaffolds <input type="checkbox"/> Erecting Scaffolds <input type="checkbox"/> Flagging And Signaling <input type="checkbox"/> General Demolition <input type="checkbox"/> Material Handling	<input type="checkbox"/> Housekeeping <input type="checkbox"/> Identifying Building Materials <input type="checkbox"/> Landscaping <input type="checkbox"/> Mixing Concrete <input type="checkbox"/> Operating Machinery <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Operating Man/Material Hoists <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Demolition</b>	<input type="checkbox"/> Asbestos Abatement <input type="checkbox"/> Driving Site Vehicles <input type="checkbox"/> Dust Control <input type="checkbox"/> Flagging and Signaling <input type="checkbox"/> Fall Protection <input type="checkbox"/> General Demolition <input type="checkbox"/> Housekeeping	<input type="checkbox"/> Lead Abatement <input type="checkbox"/> Lockouts <input type="checkbox"/> Manual Lifting <input type="checkbox"/> Operating Crane <input type="checkbox"/> Operating Loading Equipment <input type="checkbox"/> Recycling Material <input type="checkbox"/> Removing Glass	<input type="checkbox"/> Striking an Arc <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Using a Torch <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Drywalling</b>	<input type="checkbox"/> Applying Textured Surfaces <input type="checkbox"/> Cutting Drywall <input type="checkbox"/> Fastening Moldings <input type="checkbox"/> Filling Joints <input type="checkbox"/> Fitting Drywall <input type="checkbox"/> Material Handling	<input type="checkbox"/> Joining Material <input type="checkbox"/> Lifting Ceiling Panels <input type="checkbox"/> Measuring Drywall <input type="checkbox"/> Mounting Tiles or Blocks <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Pressing the Tile	<input type="checkbox"/> Sanding Drywall <input type="checkbox"/> Taping Joints <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____



W O R K  A C T I V I T Y	<b>Electrical/ Instrumentation</b>	<input type="checkbox"/> Calibration <input type="checkbox"/> Commissioning <input type="checkbox"/> Connecting Electrical Systems <input type="checkbox"/> Connecting Wire <input type="checkbox"/> Fastening Electrical Components <input type="checkbox"/> Inspecting All Equipment <input type="checkbox"/> Maintaining Electrical Controls <input type="checkbox"/> Maintaining Electrical Systems	<input type="checkbox"/> Installing Electrical Systems <input type="checkbox"/> Installing Electronic Controls <input type="checkbox"/> Installing Wiring Systems <input type="checkbox"/> Locating Problems <input type="checkbox"/> Material Handling <input type="checkbox"/> Placing Conduit <input type="checkbox"/> Pulling Wires/Cables <input type="checkbox"/> Terminating	<input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Repairing Electrical Equipment <input type="checkbox"/> Rewiring Electrical Systems <input type="checkbox"/> Testing Electrical Systems <input type="checkbox"/> Upgrading Electrical Systems <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____
	<b>Equipment Maintenance</b>	<input type="checkbox"/> Assembling Equipment <input type="checkbox"/> Calibrating Equipment <input type="checkbox"/> Checking Performance <input type="checkbox"/> Cleaning Machinery <input type="checkbox"/> Disassembling Equipment <input type="checkbox"/> Installing New Machinery	<input type="checkbox"/> Lubricating Machinery <input type="checkbox"/> Material Handling <input type="checkbox"/> Performing Repairs <input type="checkbox"/> Preventative Maintenance <input type="checkbox"/> Testing Machinery <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Equipment Operation</b>	<input type="checkbox"/> Digging Trenches <input type="checkbox"/> Driving Site Vehicles <input type="checkbox"/> Flagging and Signaling <input type="checkbox"/> Material Handling <input type="checkbox"/> Inspecting Equipment <input type="checkbox"/> Leveling Activities <input type="checkbox"/> Operating Crane (Tower/Mobile/Overhead)	<input type="checkbox"/> Operating Loading Equipment <input type="checkbox"/> Operating Manlifts <input type="checkbox"/> Operating Paving Equipment <input type="checkbox"/> Operating Pile Driving Equipment <input type="checkbox"/> Operating Surface Equipment <input type="checkbox"/> Operating Excavation Equipment	<input type="checkbox"/> Operating Tamping Equipment <input type="checkbox"/> Repairing Equipment <input type="checkbox"/> Site Grading Activities <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Flooring</b>	<input type="checkbox"/> Cutting Material <input type="checkbox"/> Material Handling <input type="checkbox"/> Heat Taping <input type="checkbox"/> Inspecting The Surface <input type="checkbox"/> Joining Materials <input type="checkbox"/> Removing Materials	<input type="checkbox"/> Sanding Surfaces <input type="checkbox"/> Scraping Surfaces <input type="checkbox"/> Stretching the Carpet <input type="checkbox"/> Trimming Edges <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools	<input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Working With Chemicals <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Glazing</b>	<input type="checkbox"/> Building Extrusions <input type="checkbox"/> Cleaning Glass <input type="checkbox"/> Cutting Glass <input type="checkbox"/> Cutting Marble <input type="checkbox"/> Cutting Plastic <input type="checkbox"/> Flagging and Signaling	<input type="checkbox"/> Material Handling <input type="checkbox"/> Installing Curtain Wall <input type="checkbox"/> Installing Glass Panels <input type="checkbox"/> Installing Materials <input type="checkbox"/> Selecting Glass <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Inspecting</b>	<input type="checkbox"/> Inspecting Bridges <input type="checkbox"/> Inspecting Buildings <input type="checkbox"/> Inspecting Earth Work <input type="checkbox"/> Inspecting Electrical Systems <input type="checkbox"/> Inspecting Lifting/ Conveying Devices <input type="checkbox"/> Inspecting Shoring	<input type="checkbox"/> Inspecting Mechanical Systems <input type="checkbox"/> Inspecting Plumbing <input type="checkbox"/> Inspecting Renovations <input type="checkbox"/> Inspecting Roadway <input type="checkbox"/> Inspecting Sewer Systems <input type="checkbox"/> Inspecting Structural Steel	<input type="checkbox"/> Material Handling <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Insulating</b>	<input type="checkbox"/> Blowing Loose Fill Insulation <input type="checkbox"/> Cutting Insulation <input type="checkbox"/> Fastening Insulation <input type="checkbox"/> Installing Heat Tracing <input type="checkbox"/> Installing Materials <input type="checkbox"/> Securing Insulation	<input type="checkbox"/> Material Handling <input type="checkbox"/> Measuring Insulation <input type="checkbox"/> Protecting Insulation <input type="checkbox"/> Removing Old Insulation <input type="checkbox"/> Spraying Foam Insulation <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Ironwork</b>	<input type="checkbox"/> Assembling Cranes & Derricks <input type="checkbox"/> Bending Bars <input type="checkbox"/> Bolting Steel <input type="checkbox"/> Checking Alignment <input type="checkbox"/> Connecting Beams & Columns <input type="checkbox"/> Cutting Rebar <input type="checkbox"/> Erecting Steel Frames <input type="checkbox"/> Fabricating Structural Metal <input type="checkbox"/> Flagging and Signaling	<input type="checkbox"/> Installing Ornamental Iron/Steel <input type="checkbox"/> Installing Rebar Spacers <input type="checkbox"/> Material Handling <input type="checkbox"/> Placing Iron Or Steel <input type="checkbox"/> Positioning Mesh <input type="checkbox"/> Post Tensioning <input type="checkbox"/> Rigging & Hoisting <input type="checkbox"/> Securing Mesh	<input type="checkbox"/> Setting Rebar <input type="checkbox"/> Tying Rebar <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Welding Steel <input type="checkbox"/> Welding Bars <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____





<b>W O R K  A C T I V I T Y</b>	<b>Masonry</b>	<input type="checkbox"/> Building/ Repairing Chimneys <input type="checkbox"/> Building/ Repairing Fireplaces <input type="checkbox"/> Building/Repairing Floor <input type="checkbox"/> Building /Repairing Partition <input type="checkbox"/> Building/Repairing Structures <input type="checkbox"/> Building Stone Floors <input type="checkbox"/> Building Stone Walls	<input type="checkbox"/> Cutting Block <input type="checkbox"/> Filling Joints Between Stones <input type="checkbox"/> Installing Firebrick Linings <input type="checkbox"/> Installing Wall Panels <input type="checkbox"/> Material Handling <input type="checkbox"/> Repairing Cracks <input type="checkbox"/> Setting Block	<input type="checkbox"/> Smoothing Mortar <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Millwright</b>	<input type="checkbox"/> Replacing, Repairing, Machinery <input type="checkbox"/> Alignment <input type="checkbox"/> Repair & Lubricate Machines <input type="checkbox"/> Assemble & Install Equipment <input type="checkbox"/> Attach Moving Parts <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Layout Mounting Holes	<input type="checkbox"/> Drilling <input type="checkbox"/> Dismantle Machines <input type="checkbox"/> Hoisting and Rigging <input type="checkbox"/> Anchor Installation <input type="checkbox"/> Shipping & Receiving <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Hot Work	<input type="checkbox"/> Working From Heights <input type="checkbox"/> Manual Lifting <input type="checkbox"/> Climbing <input type="checkbox"/> Ladders <input type="checkbox"/> Maintenance of Machine <input type="checkbox"/> Lockouts <input type="checkbox"/> Other: _____
	<b>Painting</b>	<input type="checkbox"/> Abrasive Blasting Surfaces <input type="checkbox"/> Applying Coatings <input type="checkbox"/> Brushing Off Dust <input type="checkbox"/> Climbing Scaffolds <input type="checkbox"/> Erecting Scaffolds <input type="checkbox"/> Filling Holes/Cracks <input type="checkbox"/> Material Handling	<input type="checkbox"/> Mixing Paints <input type="checkbox"/> Painting With A Brush <input type="checkbox"/> Painting With A Roller <input type="checkbox"/> Painting With A Sprayer <input type="checkbox"/> Sanding Rough Spots <input type="checkbox"/> Sanding Surfaces <input type="checkbox"/> Stripping Surfaces	<input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Washing Walls/Trim <input type="checkbox"/> Water Blasting Surfaces <input type="checkbox"/> Working With Chemicals <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Plumbing and Pipefitting</b>	<input type="checkbox"/> Pneumatic Testing <input type="checkbox"/> Aligning Flanges <input type="checkbox"/> Bending Pipe <input type="checkbox"/> Clearing Drains <input type="checkbox"/> Cutting Pipe <input type="checkbox"/> Fitting Pipe <input type="checkbox"/> Bonding Pipe <input type="checkbox"/> Hand Tools	<input type="checkbox"/> Hot work <input type="checkbox"/> Hanging Steel Supports <input type="checkbox"/> Installing Fixtures <input type="checkbox"/> Joining Pipes <input type="checkbox"/> Ladders <input type="checkbox"/> Material Handling <input type="checkbox"/> Preparing and Grading Trenches	<input type="checkbox"/> Preparing Surfaces <input type="checkbox"/> Threading Pipe <input type="checkbox"/> Leak Testing <input type="checkbox"/> Soldering Pipe <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Hydro Testing <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Rigging</b>	<input type="checkbox"/> Assisting Operators <input type="checkbox"/> Attach Loads, Pulleys & Blocks <input type="checkbox"/> Climbing To/From <input type="checkbox"/> Erection/Dismantling <input type="checkbox"/> Equipment Maintenance <input type="checkbox"/> Inspect	<input type="checkbox"/> Fall Protection <input type="checkbox"/> Flagging/Marshalling <input type="checkbox"/> Hand Tools <input type="checkbox"/> Manual Lifting <input type="checkbox"/> Setup & Repair Rigging <input type="checkbox"/> Signal Crane	<input type="checkbox"/> Tagline <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Roofing</b>	<input type="checkbox"/> Damp Proofing <input type="checkbox"/> Hammering/Chiseling Rough Spots <input type="checkbox"/> Installing Insulation <input type="checkbox"/> Installing Roofing Felt <input type="checkbox"/> Installing Shingles	<input type="checkbox"/> Installing Roofs <input type="checkbox"/> Material Handling <input type="checkbox"/> Repairing Shingles <input type="checkbox"/> Repairing Roofs <input type="checkbox"/> Sealing Roof Seams <input type="checkbox"/> Spreading Coating	<input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Water Proofing <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Scaffolding</b>	<input type="checkbox"/> Climbing Scaffolds <input type="checkbox"/> Disassembling Scaffolds <input type="checkbox"/> Erecting Scaffold Frame/Guardrail <input type="checkbox"/> Material Handling	<input type="checkbox"/> Operating Loading Equipment <input type="checkbox"/> Operating Aerial Work Platform <input type="checkbox"/> Planking Scaffold	<input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Other: _____



	<b>Sheet Metal Working</b>	<input type="checkbox"/> Assembling Pieces of Sheet Metal <input type="checkbox"/> Bending Pieces of Sheet Metal <input type="checkbox"/> Building Commissioning <input type="checkbox"/> Cutting Pieces of Sheet Metal <input type="checkbox"/> Drilling Parts <input type="checkbox"/> Fastening Seams and Joints Together <input type="checkbox"/> Hammering Parts	<input type="checkbox"/> Material Handling <input type="checkbox"/> Installing Duct Work <input type="checkbox"/> Making Sheet Metal Parts <input type="checkbox"/> Nailing/Welding Parts Together <input type="checkbox"/> Operating Equipment <input type="checkbox"/> Shaping Pieces of Sheet Metal <input type="checkbox"/> Testing and Balancing <input type="checkbox"/> Using Hand Tools	<input type="checkbox"/> Using Power Tools <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Working With Fiberglass <input type="checkbox"/> Working With Plastic Materials <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Specialty</b>	<input type="checkbox"/> Abatement <input type="checkbox"/> Bolting/Welding <input type="checkbox"/> Beams/Rails <input type="checkbox"/> Construct Scaffolding <input type="checkbox"/> Erecting <input type="checkbox"/> Erecting Containment Areas <input type="checkbox"/> Installing Elevator Cabs <input type="checkbox"/> Installing Elevator Controls <input type="checkbox"/> Installing Lift Equipment	<input type="checkbox"/> Material Handling <input type="checkbox"/> Mold Remediation <input type="checkbox"/> Operating Heavy Machinery <input type="checkbox"/> Packaging Radioactive Materials <input type="checkbox"/> Removing Asbestos <input type="checkbox"/> Removing Lead <input type="checkbox"/> Testing Lift Equipment	<input type="checkbox"/> Using Monitoring Devices <input type="checkbox"/> Using Hand Tools <input type="checkbox"/> Using Power Tools <input type="checkbox"/> Using Sandblasters <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Surveying</b>	<input type="checkbox"/> Collecting Data in the Field <input type="checkbox"/> Holding Vertical Rods <input type="checkbox"/> Material Handling	<input type="checkbox"/> Operating Surveying Instruments <input type="checkbox"/> Taking Physical Measurements	<input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____
	<b>Welding</b>	<input type="checkbox"/> Cutting Metal <input type="checkbox"/> Forming an Inert Gas <input type="checkbox"/> Grinding Metal <input type="checkbox"/> Machine Welding <input type="checkbox"/> Manual Welding	<input type="checkbox"/> Material Handling <input type="checkbox"/> Position Welding <input type="checkbox"/> Repair Welding <input type="checkbox"/> Striking an Arc <input type="checkbox"/> Surface Preparation	<input type="checkbox"/> Tack Welding <input type="checkbox"/> Walking To/From Job Area <input type="checkbox"/> Welding Metal <input type="checkbox"/> WHMIS / HAZCOM <input type="checkbox"/> Other: _____

**HAND/SMALL POWER TOOLS**

<input type="checkbox"/> Air Compressor	<input type="checkbox"/> Hoe	<input type="checkbox"/> Pump	<input type="checkbox"/> Square
<input type="checkbox"/> Axe	<input type="checkbox"/> Hoist, Block and Tackle	<input type="checkbox"/> Punch	<input type="checkbox"/> Stapler
<input type="checkbox"/> Banging Tool	<input type="checkbox"/> Hoist, Chain	<input type="checkbox"/> Rake	<input type="checkbox"/> Tamper
<input type="checkbox"/> Battery Charger	<input type="checkbox"/> Hoist, Come-along	<input type="checkbox"/> Regulator, Cmp. Gas	<input type="checkbox"/> Tap and Die
<input type="checkbox"/> Broom	<input type="checkbox"/> Hose	<input type="checkbox"/> Rigging Spreader Bar	<input type="checkbox"/> Tape Measure
<input type="checkbox"/> Cable Puller	<input type="checkbox"/> Impact Gun	<input type="checkbox"/> Rigging	<input type="checkbox"/> Threader
<input type="checkbox"/> Cable Stripper	<input type="checkbox"/> Jack	<input type="checkbox"/> Riveter, Pop	<input type="checkbox"/> Tin Snip
<input type="checkbox"/> Chisel	<input type="checkbox"/> Jack Hammer	<input type="checkbox"/> Rope	<input type="checkbox"/> Torch, Cutting
<input type="checkbox"/> Concrete, Bucket	<input type="checkbox"/> Jointer	<input type="checkbox"/> Router	<input type="checkbox"/> Torch, Soldering
<input type="checkbox"/> Concrete, Vibrator	<input type="checkbox"/> Ladder, Extension	<input type="checkbox"/> Sander	<input type="checkbox"/> Torch, Tiger
<input type="checkbox"/> Conduit/ Pipe Bender	<input type="checkbox"/> Ladder, Step	<input type="checkbox"/> Saw, Band	<input type="checkbox"/> Trowel, Hand
<input type="checkbox"/> Crow Bar	<input type="checkbox"/> Leaf Blower	<input type="checkbox"/> Saw, Chain	<input type="checkbox"/> Tugger
<input type="checkbox"/> Cutter, Bolt	<input type="checkbox"/> Level	<input type="checkbox"/> Saw, Chop	<input type="checkbox"/> Utility Knife
<input type="checkbox"/> Cutter, Pipe	<input type="checkbox"/> Lifeline	<input type="checkbox"/> Saw, Circular	<input type="checkbox"/> Vise
<input type="checkbox"/> Drill	<input type="checkbox"/> Material Lift/Jack	<input type="checkbox"/> Saw, Concrete	<input type="checkbox"/> Welder
<input type="checkbox"/> Drill Bit	<input type="checkbox"/> Nibbler	<input type="checkbox"/> Saw, Cutoff	<input type="checkbox"/> Welding Cable
<input type="checkbox"/> Drill Press	<input type="checkbox"/> Paint Brush	<input type="checkbox"/> Saw, Hack	<input type="checkbox"/> Welding Hose
<input type="checkbox"/> Drill, Magnetic	<input type="checkbox"/> Paint Roller	<input type="checkbox"/> Saw, Hole	<input type="checkbox"/> Welding Screen
<input type="checkbox"/> Extension Cord	<input type="checkbox"/> Paint Sprayer	<input type="checkbox"/> Saw, Jig	<input type="checkbox"/> Wheelbarrow
<input type="checkbox"/> File	<input type="checkbox"/> Pallet Jack	<input type="checkbox"/> Saw, Miter	<input type="checkbox"/> Wire Brush
<input type="checkbox"/> Fish Tape	<input type="checkbox"/> Pick Axe	<input type="checkbox"/> Saw, Radial Arm	<input type="checkbox"/> Wrench, Adjustable
<input type="checkbox"/> Grinder, Floor	<input type="checkbox"/> Pipe, Stand	<input type="checkbox"/> Saw, Reciprocating	<input type="checkbox"/> Wrench, Box
<input type="checkbox"/> Grinder, Bench	<input type="checkbox"/> Planer	<input type="checkbox"/> Saw, Table	<input type="checkbox"/> Wrench, Chain
<input type="checkbox"/> Grinder, Right Angle	<input type="checkbox"/> Pliers	<input type="checkbox"/> Saw, Wet	<input type="checkbox"/> Wrench, Open End
<input type="checkbox"/> Gun, Caulk	<input type="checkbox"/> Plug, Test Ball	<input type="checkbox"/> Scaffold	<input type="checkbox"/> Wrench, Pipe
<input type="checkbox"/> Gun, Grease	<input type="checkbox"/> Pneumatic Fastener	<input type="checkbox"/> Screed, Hand	<input type="checkbox"/> Wrench, Socket
<input type="checkbox"/> Gun, Heat	<input type="checkbox"/> Pocket Knife	<input type="checkbox"/> Screw Driver	<input type="checkbox"/> Wrench, Spud
<input type="checkbox"/> Gun, Soldering/ Iron	<input type="checkbox"/> Porta Power Ram	<input type="checkbox"/> Shop Vac.	<input type="checkbox"/> Wrench, Torque
<input type="checkbox"/> Hammer	<input type="checkbox"/> Pressure Washer	<input type="checkbox"/> Shovel	<input type="checkbox"/> Other
<input type="checkbox"/> Hammer, Sledge	<input type="checkbox"/> Pry Bar	<input type="checkbox"/> Snatch Block	

**LARGE EQUIPMENT/POWER TOOLS**

<input type="checkbox"/> Air Compressor	<input type="checkbox"/> Forklift, RT/Ext. Boom	<input type="checkbox"/> Pile, Casing Clamp	<input type="checkbox"/> Trowel, Power
<input type="checkbox"/> Crane, RT	<input type="checkbox"/> Forklift, vertical mast	<input type="checkbox"/> Pile Hammer, Diesel	<input type="checkbox"/> Truck, Boom
<input type="checkbox"/> Crane, Crawler	<input type="checkbox"/> Generator	<input type="checkbox"/> Pile Hammer, Vibratory	<input type="checkbox"/> Truck, Dump
<input type="checkbox"/> Crane, Gantry	<input type="checkbox"/> Georgia Buggy	<input type="checkbox"/> Pile, Extraction Clamp	<input type="checkbox"/> Truck, Flatbed
<input type="checkbox"/> Crane, Drill Rig	<input type="checkbox"/> Grader, Motor	<input type="checkbox"/> Pipe, Prep/Bevel Mach.	<input type="checkbox"/> Truck, Hiway Tractor
<input type="checkbox"/> Crane, Tower	<input type="checkbox"/> Grader, Wheel Tractor	<input type="checkbox"/> Pump, Concrete	<input type="checkbox"/> Truck, Pick Up
<input type="checkbox"/> Compactor, Plate	<input type="checkbox"/> Scraper	<input type="checkbox"/> Pump, Epoxy	<input type="checkbox"/> Truck, Water
<input type="checkbox"/> Compactor, Roller	<input type="checkbox"/> Heater (LP/Nat. Gas)	<input type="checkbox"/> Pump, Grout	<input type="checkbox"/> Trailer
<input type="checkbox"/> Compactor, Vibratory	<input type="checkbox"/> Light Plants	<input type="checkbox"/> Pump, Dewater	<input type="checkbox"/> Trailer, Lowboy
<input type="checkbox"/> Dozer	<input type="checkbox"/> Loader, Wheeled	<input type="checkbox"/> Screed Truss, Power	<input type="checkbox"/> Trailer, Highboy
<input type="checkbox"/> Excavator, Mini	<input type="checkbox"/> Loader, Skid Steer	<input type="checkbox"/> Screed, Bidwell	<input type="checkbox"/> Trailer, Gravel
<input type="checkbox"/> Excavator, Back Hoe	<input type="checkbox"/> Main Panel/Transformer	<input type="checkbox"/> Sweeper, Walk	<input type="checkbox"/> Trailer, Vans
<input type="checkbox"/> Excavator, Vacuum	<input type="checkbox"/> B Box	<input type="checkbox"/> Sweeper, Ride	<input type="checkbox"/> Welder (gas/diesel)
	<input type="checkbox"/> C Panel		

**DESCRIPTION****Detail description of the Near Miss incident\*.**

*NOTE: If additional space is required to completely describe this incident, please add additional page.*

---

---

---

---

---

---

---

---

---

---



*NOTE: If additional space is required to fully develop the sequence of events, please add additional page.*

[illegible]



## STEP 5-DETERMINE CAUSE(S):

**Add Contributing Cause(s):** Choose at least one Substandard Act and/or Condition and/or Hazard Standard that are the immediate or primary factors that contribute to an incident and lead to the determination of root causes.

Substandard Acts	Substandard Conditions
<input type="checkbox"/> Operating Equipment Without Authority <input type="checkbox"/> Failure To Warn <input type="checkbox"/> Failure To Secure <input type="checkbox"/> Travelling Too Fast Or Rushing To Complete A Task <input type="checkbox"/> Making Safety Devices Inoperative <input type="checkbox"/> Using Defective Equipment <input type="checkbox"/> Compliance With Personal Protective Equipment Requirements <input type="checkbox"/> Improper Loading <input type="checkbox"/> Improper Placement <input type="checkbox"/> Improper Lifting And Hoisting <input type="checkbox"/> Improper Position For The Task <input type="checkbox"/> Servicing Equipment In Operation <input type="checkbox"/> Horseplay <input type="checkbox"/> Under Influence Of Alcohol And/Or Other Drugs <input type="checkbox"/> Using Equipment Improperly <input type="checkbox"/> Failure To Follow Procedures / Policy / Practice <input type="checkbox"/> Failure To Identify Hazard / Risk <input type="checkbox"/> Failure To Check / Monitor <input type="checkbox"/> Failure To React / Correct <input type="checkbox"/> Failure To Communicate / Coordinate	<input type="checkbox"/> Inadequate Guards Or Barriers <input type="checkbox"/> Defective Tools, Equipment Or Materials <input type="checkbox"/> Congestion Or Restricted Action <input type="checkbox"/> Inadequate Warning System <input type="checkbox"/> Fire And Explosion Hazards <input type="checkbox"/> Poor Housekeeping / Disorder <input type="checkbox"/> Noise Exposure <input type="checkbox"/> Radiation Exposure <input type="checkbox"/> Temperature Extremes <input type="checkbox"/> Inadequate Or Excessive Lighting <input type="checkbox"/> Inadequate Ventilation <input type="checkbox"/> Presence Of Harmful Materials <input type="checkbox"/> Inadequate Instructions / Procedures <input type="checkbox"/> Inadequate Preparation/Planning <input type="checkbox"/> Inadequate Communications Hardware / Software Process <input type="checkbox"/> Road Conditions <input type="checkbox"/> Weather Conditions

### Contributing Cause(s), Inspection Hazard Categories and Standards Deficiencies:

Identify contributing causes from the Hazard Categories and Standard's list.

Hazard Category	Hazard Standard



1 - GENERAL PROJECT REQUIREMENTS	
1 - Post PCL policies	11 - Provide common area lighting
2 - Post government documents	12 - Provide appropriate task lighting
3 - Orient everyone before they go to the work site	13 - PCL employee name and company on hard hat
4 - Competent person lists developed	14 - Abate scratch / cut / impalement hazards
5 - Conduct inspections / audits	15 - Project HSE plan is available to workers
6 - Manage trade contractor HSE program	16 - Comply with project HSE plan/HSEOP requirements
7 - Develop/post/implement emergency response plan	17 - Maintain project free of racist, sexist or hostile graffiti
8 - Post signage to establish storage location(s)	18 - Engineering Drawings
9 - Post signage to identify special activity areas	19 - Other
10 - Post signage and identify restricted areas	
2 - PUBLIC SAFETY / SECURITY / SIGNAGE	
1 - Develop security plan	11 - MOT installed per plan & standards
2 - Visitor report to PCL office signage	12 - MOT monitored / inspected per schedule
3 - Post PCL safety/PPE signage	13 - Flaggers face traffic
4 - PCL contact information posted	14 - Monitor MOT devices
5 - Site security established	15 - Implement vehicle site authorization process
6 - Maintain perimeter security	16 - Implement tool/equipment control plan
7 - Post No Trespassing signage	17 - Implement material control plan
8 - Post emergency contact list	18 - Implement key control plan
9 - Maintain safe access and egress with exit signs if route is not obvious	19 - Implement visitor orientation/control system
10 - Maintenance of Traffic (MOT) plan	20 - Other
3 - OCCUPATIONAL HEALTH	
1 - Appropriate first aid kits and log accessible with CPR mask and gloves	12 - Maintain worker awareness of hazardous materials and controls
2 - Identify first aid stations	13 - Identify MSDS location and inventory of hazardous material
3 - Label potable/non potable water sources	14 - Provide an MSDS for material on site
4 - Provide drinking water, cups and a trash receptacle	15 - Label containers with material id, hazard warnings and controls
5 - Provide adequate toilets	16 - Provide adequate waste containers
6 - Where contaminants may be harmful provide hand washing facilities	17 - Use proper lifting technique
7 - No eating or drinking can occur in a contaminated area	18 - Use material handling equipment for heavy loads
8 - Maintain an effective vermin control program	19 - Control silica dust
9 - Provide hearing protection where noise levels exceed 84 DBA	20 - Review MSDS for PPE requirements
10 - Post signs warning of laser in use	21 - Other
11 - Protect workers from exposures exceeding PEL/TLVs	

**4 - ENVIRONMENTAL**

1 - Environmental checklists/scope of work completed	10 - Identify hazmat storage locations
2 - Develop / implement site specific environmental action plan	11 - Develop/implement the project HSE waste management plan
3 - Develop a storm water, erosion & sedimentation control plan	12 - Separate hazardous materials by class
4 - Implement / maintain the storm water, erosion and sedimentation control plan	13 - Recycle per the project HSE plan
5 - Develop/implement a mold response procedure	14 - Implement dust control plan
6 - Provide 110% secondary containment at fuel and hazardous liquid storage	15 - Maintain adjacent streets free of mud/site debris.
7 - Provide adequate spill cleanup kits	16 - Prevent rain/snow contamination at secondary containment vessels
8 - Develop/implement spill response procedure and team	17 - Other
9 - Establish and contain concrete washout	

**5 - PERSONAL PROTECTIVE EQUIPMENT**

1 - Wear appropriate eye protection	11 - Wear fall protection harness/lanyard
2 - Wear a face shield	12 - Attach retractable device snap hook directly to harness d-ring
3 - Wear a hard hat	13 - Wear harness d-ring centered in the back and at shoulder height.
4 - Wear hard hat with welding face shield	14 - Inspect fall protection PPE before each use
5 - Provide appropriate hearing protection	15 - Adjust PPE to fit for its intended use
6 - Wear appropriate gloves	16 - Wear only manufacturer approved headgear under hard hat
7 - Wear appropriate footwear	17 - Provide PPE training to workers
8 - Wear appropriate clothing	18 - Eye wash & showers are required where workers handle acid batteries
9 - Wear fire retardant clothing	19 - Wear high VIZ vests/clothing when required
10 - Wear appropriate properly adjusted flotation device	20 - Other

**6 - FIRE PROTECTION / PREVENTION**

1 - Firefighting equipment is in good condition & accessible	13 - Store flammables away from egress routes / exits
2 - Personnel trained to use the equipment	14 - Clean up / dispose of combustible trash
3 - FE size and class is appropriate for hazard	15 - Maintain access for fire department
4 - Travel distance to FE $\leq$ 100'	16 - Keep weeds and grass from becoming a fire hazard
5 - 1 FE / 3000' of protected building area	17 - Store flammable liquids in approved containers
6 - FE in offices/conexes	18 - Install 20# ABC FE @ >25' & <75' of outdoor flammable liquid storage
7 - Perform FE annual inspection/service	19 - Segregate non compatible materials which create a fire hazard
8 - Document monthly FE inspection	20 - FE on vehicles/cranes/equipment
9 - FE located on each floor at the stairway landings	21 - Implement hot work permit program
10 - Install / energize permanent firefighting equipment ASAP	22 - Store flammable wastes in fire resistant containers
11 - Smoke in designated areas	23 - Other
12 - Post appropriate no smoking signs	


**7 - MATERIAL HANDLING / STORAGE**

1 - Post signs/barriers when dropping waste through holes in deck	7 - Remove nails from used lumber before stacking
2 - Clean-up scrap and waste as work progresses	8 - Store cylindrical materials in racks or blocked to prevent rolling
3 - Equipment/material is stored in a stable/secure condition	9 - Storage areas are free of trip, slip, fire, explosion and vermin hazards
4 - Post safe load limits on storage racks, elevated floors and decks	10 - Establish a CAZ with monitor when dropping material outside a building
5 - Keep route clear for movement of materials/people	11 - Other
6 - Store material far enough back from the edge (6' min) so it can't fall off	

**8 - HAND & POWER TOOLS**

1 - Maintain hand and power tools in a safe condition	10 - Properly dispose of unused powder actuated tool charges
2 - Use guards provided by manufacturer	11 - Loaded powder actuated tools shall not be left unattended
3 - Guard moving or rotating parts	12 - Crib or block a load immediately after jacking it up
4 - Point of operation guarding keeps the operator safe	13 - Use tools and equipment as the manufacturer intended
5 - Keep wooden handles of tools free of splinters and tight in the tool	14 - Tools and equipment will be inspected daily and prior to use
6 - Electric power tools shall be double insulated or grounded	15 - Tag defective tools / equipment and return them for repairs
7 - Secure air supply at hose and tool connections	16 - Store tools/equipment per project standard
8 - Install safety device to reduce air pressure in case of hose failure	17 - Other
9 - Shut off equipment when refueling, servicing or maintaining	

**9 - WELDING AND CUTTING**

1 - Transport/store cylinders upright with valve closed and cap on	11 - Move or protect flammables & combustibles from hot work
2 - Secure cylinders to keep them upright	12 - Prevent sparks and slag from falling onto combustibles or people
3 - Separate fuel and oxygen by 20' or a fire barrier per requirements	13 - Provide a fire extinguisher dedicated to the hot work operation
4 - Do not store fuel gas cylinders in unventilated spaces	14 - Provide a fire watch long enough to ensure no fires occur
5 - Protect cylinders from sparks, hot slag or flames	15 - Shut off the gas at the cylinder when torch is unattended
6 - Train workers in the safe use of fuel gases	16 - Provide sufficient mechanical ventilation to exhaust fumes
7 - Inspect hoses, torches and regulators at the beginning of the shift	17 - Wear sufficient PPE for the hot work performed
8 - Within 10' of the stinger the cable will be free of nicks or repairs	18 - Flashback arrestors are in place
9 - Repair cable with exposed conductors before use	19 - Other
10 - Erect arc welding shields to protect other workers	





10 - ELECTRICAL	
1 - Enclose sparking / arcing electrical parts	15 - Extension cords will be three wire type and designed for hard usage
2 - Manufacturer label on electrical equipment is legible	16 - Don't run extension cords through holes or conceal cords in ceilings or walls
3 - Lock door to unattended electrical rooms with live panels	17 - Energized extension cords will have a grounded plug in a plug receptacle
4 - Post signs restricting access to qualified persons at electrical rooms	18 - Don't hang extension cords with staples, wires or nails
5 - Maintain the polarity of cords & equipment	19 - Keep walking/working areas clear of cords/cables/hoses
6 - All circuits must include ground fault circuit interrupters	20 - Extension cords shall be connected to plugs with strain relief
7 - Portable electric generators more than 5KW shall have GFCI circuits	21 - Nicked, worn or frayed cords/cables shall not be used
8 - Site assured grounding conductor program is implemented/ records filed	22 - Electrical gear and accessories in wet locations will be weatherproof
9 - Wires on poles will be at least 10' above grade or deck	23 - In hazardous locations electrical gear must be rated for the hazard
10 - The path to ground shall be permanent and continuous	24 - Post warnings/wear FRP when arc flash hazards exist
11 - Temporary lighting must be on a separate circuit and hard wired	25 - Inspect temporary power per schedule
12 - Protect light bulbs with cages or sleeves	26 - Maintain clear access to circuit breakers/service components at all times
13 - Don't hang temporary lights from the electric cord	27 - Other
14 - Protect cords/cables/hoses from pinch points/ equipment/ traffic	
11 - SCAFFOLD ERECTION	
1 - Trained scaffold erectors will be supervised by a competent person	13 - Scaffold uprights shall be plumb, level and braced to prevent swaying
2 - 100% fall protection is required for scaffold erectors @ > 6' exposure	14 - Fully plank decks with no more than 1" gaps between planks
3 - Construct the scaffold as the manufacturer / designer intended	15 - Wood planks overhang supports by 6" min
4 - Scaffolding will be designed by a registered P. E. when required	16 - Do not cantilever planks over supports more than 12"
5 - Do not use damaged parts to erect a scaffold	17 - Brace scaffold with push/pull ties at the horizontal member closest to 4:1
6 - Install access for the erection crew as the scaffold is erected	18 - Free standing towers height cannot exceed 3 times their width
7 - Erectors shall not stand on or climb cross braces	19 - Rolling scaffold height cannot exceed 3 times the width
8 - Provide scaffold platform access if the change in elevation is $\geq 2'$	20 - Caster stems, screw jacks and wheel stems shall be secured
9 - Provide cleats on ramps that are steeper than 1:8	21 - Rolling scaffolds shall be braced horizontally to prevent racking
10 - The minimum scaffold platform or walkway surface is 18" (46 cm) wide	22 - Repair, brace or replace damaged scaffold components
11 - Use adequate mudsills and fasten base plates to them	23 - Other
12 - Unstable objects shall not be used to support scaffolds	



12 - SCAFFOLD USE	
1 - Workers will be trained to recognize scaffold hazards	10 - Scaffold planks should not deflect more than 1/60th of their span
2 - Retrain workers when conditions change or they appear to need it	11 - Fall protection is required on scaffolds if workers could fall 6' or more
3 - A competent person will inspect and tag the scaffold at the start of the shift	12 - Fall protection will be in place before work starts
4 - Cross braces shall not be used as a means of access	13 - Do not remove guardrails w/o wearing fall protection PPE
5 - Do not overload scaffolds	14 - Prevent objects from falling off scaffolds and striking workers below
6 - Do not use unstable objects (i.e. buckets) as work platforms	15 - Do not rest/hang equipment or material on guardrails
7 - Do not use ladders on a scaffold	16 - Lock the wheels when working on a mobile scaffold
8 - Secure/support a scaffold equipped w/ screens against wind loads	17 - Other
9 - Debris shall not be allowed to accumulate on scaffold/AWP decks	
13 - CRANES / HOISTS / LIFTS	
1 - Annual inspection certificate on site	10 - The entire crane is a continuous conductor and grounded
2 - Crane operators shall possess a valid operating certificate	11 - Do not hoist workers without an approved plan
3 - Authorize a signal person and post crane hand signals used	12 - The worker hoist plan must conform to the standard
4 - Operate/inspect/maintain crane per manufacturer instructions	13 - Do not exert any horizontal pull at any angle to the crane jib
5 - Maintain the crane equipment log and crane operators log on the crane	14 - Loads will not be left suspended when the crane is not attended
6 - Post warnings and load charts where operator can see them	15 - Tag lines shall be used unless their use creates an unsafe condition
7 - Prevent worker access to the swing radius of the rear of the crane	16 - All containers that may be hoisted must have the capacity marked on them
8 - If loads must fly over workers, effectively warn them	17 - Other
9 - Maintain adequate distance from power lines	
14 - VEHICLES AND EQUIPMENT	
1 - Develop/implement a preventive maintenance plan	11 - Do not move unstable loads with the fork truck
2 - Document the equipment inspection before use on each shift	12 - Vehicles must have service & parking brakes, brake lights & a horn
3 - Obtain the manufactures' approval before modifying equipment	13 - If visibility is low all vehicles must have 2 headlights & 2 tail lights
4 - Equipment manual/name plates/markings must be in place/legible	14 - All vehicles must have a back-up alarm or only back up with an observer
5 - Each equipment operator will be trained, evaluated & certified	15 - Vehicles with cabs will have a distortion free view
6 - Do not stand under the loaded or empty elevated forks	16 - The operator is authorized to operate the equipment on the site
7 - No passengers allowed on fork trucks unless there is a seat and seat belt	17 - Wear the seat belt
8 - If leaving the fork truck, set brake, lower the forks, put it in neutral	18 - Prevent workers from falling into/onto dangerous equipment
9 - Chock tires if on an incline/at dock/otherwise required	19 - Inappropriate use of cell phone while operating vehicles/equipment
10 - All traffic regulations shall be observed	20 - Other



15 - EXCAVATIONS	
1 - Complete a JHA before starting underground work	13 - Spoil piles, materials and equipment will be at least 3' back from edge
2 - Remove or support surface objects which may become unstable	14 - Protect workers from falling objects / sloughing dirt / stones
3 - Locate underground utilities before excavation starts	15 - Excavation inspection checklist (HSEOP-05-04) completed before entry
4 - Locate utilities by hand when within 3' feet of estimated location	16 - Prevent cave-ins in excavations 5' deep or more
5 - Underground utilities shall protected, supported or removed	17 - Soil analysis/HSEOP-05-02 & 03 documented
6 - Provide safe egress within 25' of workers in an excavation => 4'	18 - Class C soil sloped 1 1/2 to 1
7 - The incline angle of an egress ramp must allow workers to walk out upright	19 - Class B soil sloped at 1 to 1
8 - Install barricades around excavations	20 - Class A soil sloped at 3/4 to 1
9 - Fall protection is required when exposed to a 6' or greater fall	21 - No workers allowed under loads lifted by digging equipment
10 - Test the atmosphere when hazardous gases could be expected	22 - Substantial barricade
11 - Do not work in an excavation holding water	22 - Other
12 - Prevent surface water from draining into the excavation w/ berms	
16 - CONCRETE & MASONRY	
1 - Determine the structures load capacity and then don't exceed it	6 - Install reshoring per engineered drawings
2 - Prevent impalement from workers falling onto or into rebar	7 - Brace or guy reinforcing steel to prevent overturning or collapse
3 - Engineered formwork/shoring drawings will be on site	8 - Establish a CAZ before starting to lay block walls
4 - Inspect shoring prior to, during and immediately after concrete pour	9 - Brace CMU walls over 8' high until support structures are installed
5 - Properly install and secure shore posts	10 - Other
17 - STEEL ERECTION	
1 - Implement written erection and hoisting sequence plan	5 - Provide overhead protection for workers active below erectors
2 - Controlled access zone for erectors only	6 - Perimeter guarding inspected/accepted by GC
3 - Erector fall protection required @ 6' (2M) or more	7 - Connectors training records for procedures used are on site
4 - Falling object protection: Secure material and tools aloft	8 - Other
18 - DEMOLITION	
1 - Complete/implement a written demolition plan prior to starting work	5 - Only workers essential to the demolition are allowed in the area
2 - Cut off or relocate and protect live utilities	6 - A competent person will inspect for hazards as work progresses
3 - Test for and remove hazardous materials before starting demo	7 - Post warning signs/provide PPE where live circuits may be hidden
4 - Provide and secure covers on floor openings	8 - Other



19 - LADDERS	
1 - Provide 2 ladders/25 workers when ladders are used for access/egress	11 - Barricade the ladder in doorways and high traffic areas
2 - Keep ladder access clear to permit free passage	12 - Ladders shall not be moved, shifted or extended while occupied
3 - Job built ladders conform to applicable standards	13 - Open stepladders and lock the spreaders before use
4 - Ladder rungs shall be parallel and uniformly spaced	14 - Do not stand or sit on the top or the top step of a step ladder
5 - Use ladders for the purpose they were designed	15 - Inspect ladders before use and tag if in bad order
6 - Ladder side rails extend 3' (min) above the landing surface	16 - Face ladder and maintain 3 point contact when climbing ladder
7 - Maintain ladders free of slip hazards	17 - Do not carry materials up or down a ladder
8 - Set up angle for manufactured ladders 4:1 and job built 8:1	18 - Train and retrain workers when necessary in ladder use
9 - Set up ladders on stable, level surface	19 - Store ladders per project standard
10 - Secure (tie off) the ladder at top landing	20 - Other
20 - CONFINED SPACE	
1 - Address project confined space hazards in orientation	14 - File records of the training on site
2 - Post danger signs at permit required confined spaces	15 - Training: authorized attendants know their duties
3 - Develop/implement a written confined space permit program	16 - Training: authorized entrants know their duties
4 - Document process determining non-permit required confined spaces	17 - Training: entry supervisors know their duties
5 - Implement continuous forced air ventilation	18 - Provide one attendant outside while the permit space is occupied
6 - Provide proper equipment to entrants	19 - Evaluate challenges and select an appropriate rescue team
7 - Testing of permit space atmosphere witnessed by entrants before entry	20 - Provide training/practice for the rescue team
8 - Supervisors / entrants are trained to use the gas monitor	21 - If feasible facilitate non-entry retrieval rescue
9 - Complete & post the permit & pre entry checklist at the entry portal	22 - Rescue teams conduct practice drills annually (min)
10 - Terminate and file the permit at the completion of the task	23 - Document the review of the annual site confined space program
11 - Document problems on permit	24 - Shut off fuel gas source outside the confined space when not in use
12 - Monitor the space during the task	25 - Remove torches and hoses at the end of the shift
13 - Train the team members to perform their duties	26 - Other



21 - LOCKOUT TAGOUT	
1 - Establish a LOTO plan for each piece of equipment	13 - Document LOTO training
2 - Conduct LOTO training for each piece of equipment	14 - Review the LOTO procedure before each implementation
3 - If a piece of equipment is capable of being locked out, it must be	15 - The LOTO sequence of equipment shutdown will be followed
4 - An attendant must guard a piece of equipment that is only tagged out	16 - Use LOTO device(s) to hold isolating devices in the safe position
5 - LOTO devices will be provided by the employer	17 - Stored energy: relieve all potential or residual energy
6 - LOTO devices shall not be used for other purposes	18 - Verify that isolation/release of stored energy has occurred
7 - LOTO devices: durable, standardized, substantial & identifiable	19 - Inspect the equipment before restarting
8 - Audit LOTO procedures at least annually	20 - Inform affected employees before machine startup
9 - Audit each employee using LOTO annually to verify training retention	21 - Each authorized worker removes his own lock
10 - Document annual audits of LOTO program and worker retention	22 - All employers shall inform each other of their respective LOTO programs
11 - Train authorized users of the LOTO program	23 - Group LOTO shall provide protection equal to individual LOTO
12 - Provided awareness training to workers affected by LOTO	24 - Other
22 - PROCEDURES: PSI, JHA, INFECTION, ACCESS ZONES	
1 - Develop construction hazard assessment	9 - Comply with asbestos abatement control procedures
2 - Develop Job Hazard Analysis (JHA)	10 - Comply with lead based paint abatement procedures
3 - JHA communicated&signed off by project management and workers	11 - Comply with biological/infection control procedures
4 - Implement JHA/SWP/Construction plan	12 - Comply with cadmium control procedures
5 - Workers and supervisors trained in the proper completion of PSI	13 - Limited access zones may only be occupied by authorized workers
6 - Conduct PSI at the start of the shift and when tasks/conditions change	14 - Establish a limited access zone for falling object protection
7 - PSI is signed by workers	15 - Other
8 - Review / initial PSI after breaks and lunch	
23 - RIGGING	
1 - Inspect rigging at start of shift and as used during the day	8 - Use the right number/spacing of U-bolt wire rope clips
2 - Defective rigging equipment shall be removed from service	9 - The U-bolt goes on the "dead end" of the cable
3 - Know the weight of the load and use adequate rigging	10 - Rigging will be protected from kinks/sharp edges
4 - Remove rigging from work area and store properly when not in use	11 - Keep hands and fingers away from between the sling and the load
5 - Capacity tags attached to all rigging	12 - Rigging will be done by trained qualified workers
6 - Makeshift rigging will not be used	13 - Other
7 - Ends of wire rope will be covered or blunted	



24 - STAIRWAYS	
1 - Provide a stair or ladder at elevation breaks of 19" or more	8 - Hand/stair rails are required at 4 rises or 30"
2 - Keep single stairway access and egress open or provide other access	9 - Handrails and stair rails must support 200# imposed down or outward
3 - Provide fall protection at stairways before opening for use	10 - Handrail height is between 36" & 37" to the top of the rail
4 - Temporary stairs: provide a landing 30" long and 20" wide every 12' of rise	11 - Handrails shall provide an adequate handhold that may be grasped
5 - Stairways will be free of snag, puncture or laceration hazards	12 - Unprotected sides of stair landings will have a guardrail system (42" +/- 3")
6 - Eliminate slip/trip conditions on stairs	13 - Other
7 - Temporarily fill pan stairs full width and depth before use	
25 - FALL PROTECTION SYSTEMS	
1 - Top of top rails shall be 42" +/- 3" from the deck	15 - Adjust harness with D ring above shoulder blades and centered
2 - Top rails will support 200# with < 2" deflection	16 - Personal fall protection: a harness, 2 lanyards and a 5000# anchorage
3 - Top rails must be a minimum of 1/4" wire rope and every flagged 6'	17 - Snap hooks: 1/D-ring, not snapped directly to webbing, rope or wire rope
4 - Midrails are 1/2 way between the top rail and the deck	18 - Lifelines are engineered/inspected/used per plan
5 - Screens shall extend from the top rail to the deck	19 - Vertical lifelines: use softeners at sharp edges
6 - Screens/midrails will support 150# pressure down or out	20 - Anchorages shall be capable of supporting 5000# (22.2 kN)
7 - 3 1/2" toe boards with no more than 1/4" gap below or 1" gap between	21 - Rig fall protection to prevent a free fall of > 6' or striking surface below
8 - Toe boards will support 50# pressure down or out	22 - Use a lanyard with and rig positioning devices to prevent a fall >2'
9 - Openings in screens will prevent anticipated material from falling	23 - Warning line systems must be at least 6' back from roof edge
10 - Guardrails are free of puncture, snag or laceration hazards	24 - Warning lines will be flagged and between 34" and 39" above deck
11 - End guardrails at terminal post if projection is hazardous	25 - Leading edge warning line is between 6' and 25' back from leading edge
12 - Covers will support 2X the anticipated load	26 - A warning line parallel to hazard ties to guard rails at both ends
13 - Holes are covered and covers are secured to prevent displacement	27 - A CAZ line is between 39" & 45" and flagged
14 - Covers are marked with a circle and an "X"	28 - Other
26 - FALL PROTECTION	
1 - Worker fall hazard recognition/control training records filed	11 - Install fall restraint system at material landing zones
2 - Conduct fall protection retraining when required	12 - Provide fall protection at holes
3 - Confirm walking working surfaces will support imposed loads	13 - Provide an offset guardrail or gate at ladder access
4 - Develop/implement fall protection plan when exposed to a 6' fall	14 - Fall protection required at wall openings (>30"x18") < 39" above deck
5 - Install fall protection where fall hazards exist before beginning work	15 - Precast erection & leading edge work qualify for fall protection plans
6 - Inspect PPE before each use	16 - Provide/Implement a leading edge fall protection plan
7 - Document formal inspections of fall PPE	17 - Protect workers from falling objects
8 - Store fall PPE properly	18 - Plan and practice fall rescue plans
9 - Do not tie off to guard rail systems	19 - Abate slip / trip conditions
10 - Wear fall protection when removing guardrails	20 - Other



27 - MARINE OPERATIONS	
1 - Post barge/crane load limits within operator view	6 - Maintain gangway free of slip / trip hazards
2 - Secure mobile crane to barge	7 - Maintain barge deck in safe condition
3 - Revise crane capacity chart for barge	8 - Provide fall protection on deck load
4 - Provide safe barge access	9 - Provide Life ring and ladder access to barge
5 - Provide adequate dock and gangway lighting	10 - Other
28 - RESPIRATOR PROGRAM	
1 - A site specific respirator plan is required if workers use respirators	13 - Store respirators to protect them from damage and deformation of face piece
2 - Review respirator hazards for the voluntary use of dust masks	14 - Inspect the respirator before each use
3 - Evaluate the extent of the respiratory hazard, the chemical state and its form	15 - Repair or discard damaged / defective respirators
4 - Select an appropriate respirator to control the hazard	16 - Compressed (supplied air) respirator hoods will be supplied with Grade D air
5 - Provide medical evaluation for workers wearing respirators and file clearance	17 - Monitor the supplied air to ensure it meet Grade D standards
6 - Provide fit testing for negative air pressure respirators	18 - All filters, cartridges and canisters will be color coded and labeled
7 - Wear appropriate respirator	19 - Provide initial training to users and annual refresher training
8 - Facial hair is not allowed if it interferes with the respirator seal	20 - Document the annual program evaluation for implementation and effectiveness
9 - Perform a user seal check each time the respirator is put on.	21 - Recordkeeping: medical clearance, fit testing, respirator type, dates
10 - Do not remove the respirator in the hazardous area	22 - The site specific respirator plan is filed on site.
11 - Clean and maintain the respirator as required	23 - Other
12 - Do not share a respirator unless it has been cleaned	
29 - AERIAL WORK PLATFORMS	
1 - Obtain the manufacturers permission before modifying an aerial lift	9 - Establish a controlled access zone to protect workers from falling objects
2 - Document AWP inspections prior to use with form HSEOP-26-01	10 - Fall protection PPE must not allow worker to strike the ground
3 - AWP: Only authorized persons shall operate aerial lifts	11 - Lower / retract the AWP when traveling
4 - AWP: Do not tie off to adjacent poles, structures or equipment	12 - A rescue plan must be in place when AWP are in use
5 - Keep your feet on the aerial work platform deck	13 - Hook chain / latch access gate to AWP
6 - Tie off to the attachment provided in the basket	14 - Equipment operator's manual / inspection checklist on AWP
7 - Do not exceed the load limit while working in an aerial lift	15 - Other
8 - Adhere to PCL Procedure HSEOP 26-02 to exit / access an elevated AWP	



**Root Cause(s) (A, B Near Miss\*) (C Near Miss is Optional):**

Select the most basic cause that when corrected will prevent recurrence.

<input type="checkbox"/> <b>Orientation and Training</b> <input type="checkbox"/> Not Required <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Established <input type="checkbox"/> Not Current <input type="checkbox"/> Not Available <input type="checkbox"/> Not Compliant <input type="checkbox"/> Not Understood		<input type="checkbox"/> <b>Communication Systems</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant	
<input type="checkbox"/> <b>Hazard Identification and Control</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant		<input type="checkbox"/> <b>Inspection and Audits</b> <input type="checkbox"/> Not Established <input type="checkbox"/> No Action Plans <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Communicated <input type="checkbox"/> Inadequate Frequency <input type="checkbox"/> Current Form/ Checklist Not Used <input type="checkbox"/> No Closure <input type="checkbox"/> Preventive Maintenance <input type="checkbox"/> Not Trended <input type="checkbox"/> Inadequate	
<input type="checkbox"/> <b>Security/Emergency Response</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant		<input type="checkbox"/> <b>Environmental Management</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant	
<input type="checkbox"/> <b>Standard Operating Procedures Practices and Legislation</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Communicated <input type="checkbox"/> Not Enforced <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant		<input type="checkbox"/> <b>Trade Contractor Management</b> <input type="checkbox"/> Not Required <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Established <input type="checkbox"/> Not Compliant <input type="checkbox"/> Not Available <input type="checkbox"/> Pre-qualification/Selection <input type="checkbox"/> Not Understood	
<input type="checkbox"/> <b>Engineering</b> <input type="checkbox"/> Not Required <input type="checkbox"/> No Current Standards Available <input type="checkbox"/> Not Available <input type="checkbox"/> Not Compliant <input type="checkbox"/> Not Understood <input type="checkbox"/> Inadequate		<input type="checkbox"/> <b>Procurement</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Not Timely <input type="checkbox"/> Not Available <input type="checkbox"/> Improper Selection <input type="checkbox"/> Inadequate <input type="checkbox"/> Inadequate or No Specifications <input type="checkbox"/> Not Compliant	
<input type="checkbox"/> <b>Site Specific Safety Plan</b> <input type="checkbox"/> Not Established <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Available <input type="checkbox"/> Not Current <input type="checkbox"/> Not Understood <input type="checkbox"/> Not Compliant		<input type="checkbox"/> <b>HR/PD</b> <input type="checkbox"/> Inappropriate Hire <input type="checkbox"/> Not Competent <input type="checkbox"/> Inappropriate Placement <input type="checkbox"/> Not Available	
<input type="checkbox"/> <b>Leadership and Administration</b> <input type="checkbox"/> Inadequate Accountability <input type="checkbox"/> Inadequate Planning <input type="checkbox"/> Lack of Discipline <input type="checkbox"/> Schedule Pressure <input type="checkbox"/> Lack of Enforcement <input type="checkbox"/> Poor Execution <input type="checkbox"/> Inadequate <input type="checkbox"/> Not Communicated <input type="checkbox"/> Lack of Resources			




**STEP 6- ADD CORRECTIVE ACTIONS:**

Specific	Measureable	Accountable	Realistic	Timely	Effective	Reviewed
<b>What are the corrective actions for substandard acts and conditions?</b>				<b>Assigned To*:</b>	<b>Target Date*:</b>	<b>Date Completed:</b>
1.	<b>Substandard Act/Condition:</b>					
	<b>Corrective Action*:</b>					
2.	<b>Substandard Act/Condition:</b>					
	<b>Corrective Action*:</b>					
3.	<b>Substandard Act/Condition:</b>					
	<b>Corrective Action*:</b>					

<b>What are the corrective actions for hazard categories/ standards deficiencies?</b>				<b>Assigned To*:</b>	<b>Target Date*:</b>	<b>Date Completed:</b>
1.	<b>Substandard Act/Condition:</b>					
	<b>Corrective Action*:</b>					
2.	<b>Substandard Act/Condition:</b>					
	<b>Corrective Action*:</b>					
3.	<b>Substandard Act/Condition:</b>					
	<b>Corrective Action*:</b>					

<b>What are the corrective actions for the root cause?</b>				<b>Assigned To*:</b>	<b>Target Date*:</b>	<b>Date Completed:</b>
1.	<b>Corrective Action*:</b>					
2.	<b>Corrective Action*:</b>					
3.	<b>Corrective Action*:</b>					

**Insert Notes to Incident:**

	<b>Created By:</b>	<b>Created On:</b>


**Documents to consider are:**

- |   |   |  |  |  |
|---|---|--|--|--|
| <input type="checkbox"/> Photos             | <input type="checkbox"/> Certifications | <input type="checkbox"/> Inspections       | <input type="checkbox"/> Training Records      | <input type="checkbox"/> HSE Field Meeting Minutes |
| <input type="checkbox"/> Drawings/Blueprint | <input type="checkbox"/> Sketches       | <input type="checkbox"/> Timecards         | <input type="checkbox"/> HSEOPs                | <input type="checkbox"/> Vendor Agreements         |
| <input type="checkbox"/> JHAs/PSIs          | <input type="checkbox"/> CHAs           | <input type="checkbox"/> Permits           | <input type="checkbox"/> Schedules             | <input type="checkbox"/> Purchase Orders           |
| <input type="checkbox"/> Daily Log          | <input type="checkbox"/> Contracts      | <input type="checkbox"/> Witness Statement | <input type="checkbox"/> Insurance Certificate |  |

**STEP 7- SIGNOFF:** Fax / E-mail Immediately and Forward Original to the HSE Department

<b>Lead Investigator*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>Investigation Team Members*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>Worker Involved with Near Miss*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>Foreman Involved with Near Miss*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>Superintendent Involved with Near Miss*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>PCL Project Superintendent*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>PCL Project Manager*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY
<b>District/General Manager*:</b>	_____ Print _____	_____ Signature _____	<b>Date:</b> _____ DD/MM/YY

**Additional Management Comments: (if required)**


---



---



---



---



---

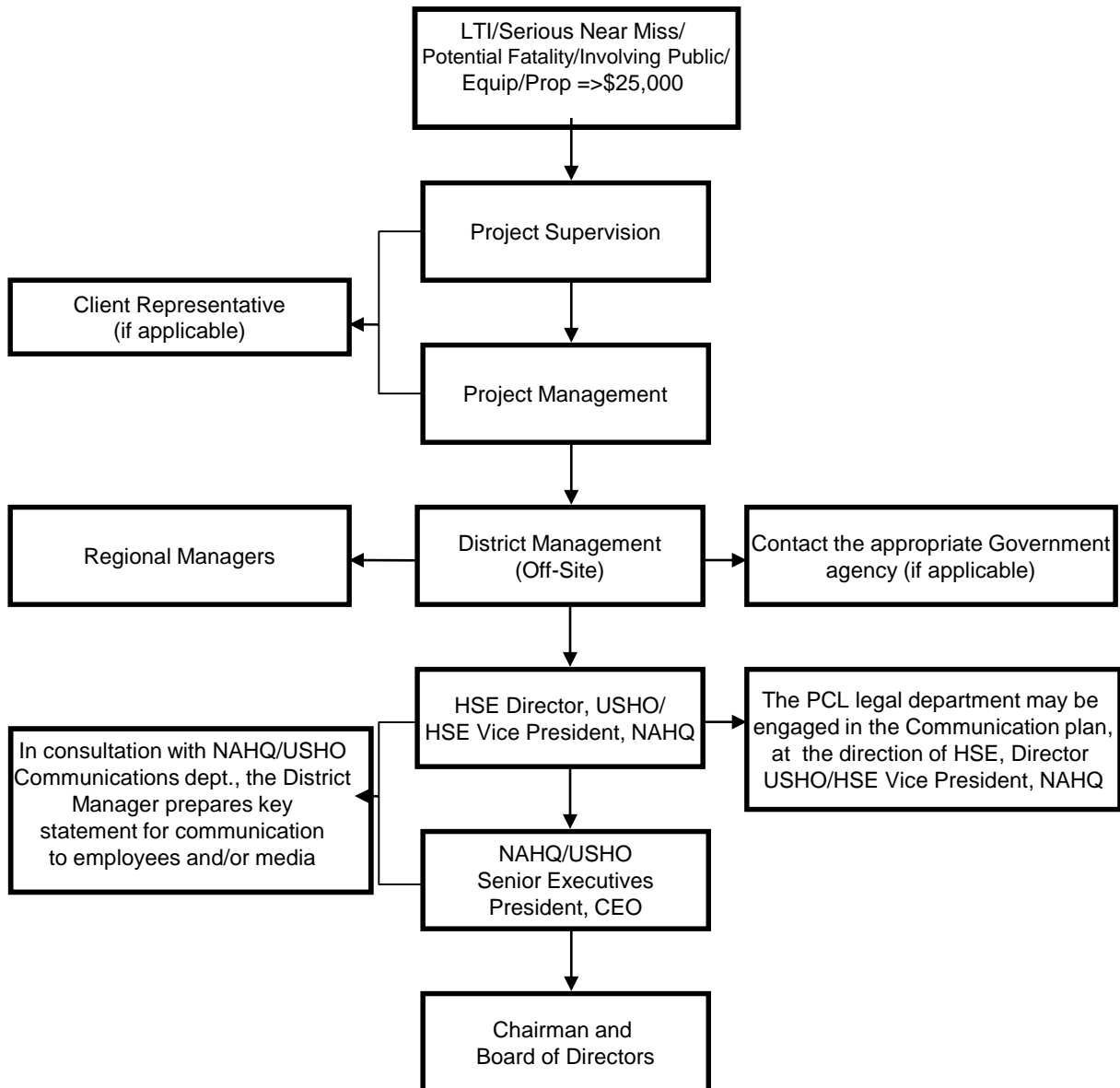




**When completing a statement (or reviewing one), the following must be included:**

- The date and time that the statement was written,
- Name and title of person who wrote the statement
- Who / what the statement is about,
- The sequence of events, in chronological order,
- Very specific and descriptive detail, including:
  - *Times within the details*
  - *Names and titles of people*
  - *Specifics of what was said, rather than general comments*
  - *A sequence of events that are accurate and include all information. The more descriptive the statement the better.*
- Do not include any personal or subjective comments on a statement.

## Incident Reporting Diagram





## **Incident Investigation Users' Guide**

The purpose of this users' guide is to assist you with the completion of PCL incident investigation reports contained in HSE-13, Incident Investigation. This users' guide condenses the key information that is needed to understand the PCL incident investigation process. These instructions apply to all incidents and Near Misses.

The first form that should be filled out is HSE-13-01, Incident Investigation Form. Users will begin by identifying the Frequency of the Task and the Potential Severity – Consequences of the incident to determine the risk category and the level of involvement required by PCL. When the incident is entered into the Safety Management Center (SMC) program, the Risk Classification will automatically be determined and should match the determination by the user using form HSE-13-01. In addition to filling out HSE-13-01, Incident Investigation form, the user will need to identify the type of incident that occurred: Injury, Loss, or Environmental, and fill out HSE-13-01-I, HSE-13-01-L, HSE-13-01-E based on that determination. If the incident is a Near Miss, HSE-13-02, Near Miss Form, should be used.

There are 7 steps in the PCL Incident Investigation Process:

1. Secure the scene
2. Risk classification
3. Collect the facts
4. Description/Develop the sequence of events
5. Determine the causes
6. Corrective action
7. Signoff and final report

In the forms, there are fields with astericks (\*) that indicate that this is a required field in the SMC.

### **HSE-13-01, Incident Investigation Form**

#### **Step 1 Secure the scene**

Follow the steps listed in HSE-13, 6.2.4, Secure the Scene.

#### **Step 2 Risk Classification**

The risk matrix depicted below is used to determine risk classification which determines the level of the assigned investigator.

When opening a new incident investigation form in the project's PDC site, the user will make an appropriate selection from the options in the Frequency of Task and the Severity – Consequences charts. The Safety Management Center (SMC) program will automatically determine what the Risk Category for the incident is based on the selections made in the Frequency of Task and Severity Consequences charts.

**A      B      C      \*Complete prior to investigation\***

### Frequency of Task\*

Category	Term	Definition
4	Frequent	Possibility of repeated events (many times over the course of a week)
3	Common	Possibility of isolated events (several times over the course of a month)
2	Occasional	Possibility of event occurring sometime (likely in a year)
1	Remote	Event not likely to occur (occasionally over a course of year)

### Severity – Consequences\*

Consequence Category		The possibility of the event consequences resulting in:			
		People	Property	Environment	Public Image, Reputation & Disruption
4	Major	Fatality	Impact > \$100,000	Reportable/Damage to Environment	Government Intervention
3	Critical	Permanent, Long-Term Injury or Illness	Impact < \$100,000 but > \$50,000	Reportable Incident/Minimal Environmental Impact	Community Attention
2	Serious	Recordable Injury	Impact < \$50,000 but > \$10,000	Site Conditions Unacceptable	Senior Management Involvement/Project Shutdown
1	Minor	On-site FA Treatment	Impact < \$10,000	No Impact	Individual or None

The risk matrix depicted below illustrates the logic used to determine the level of the assigned investigator.

### Frequency of Task

		4	3	2	1
S e v e r i t y	4	16	12	8	4
	3	12	9	6	3
	2	8	6	4	2
	1	4	3	2	1



**A – High - Incident Investigation Report Form ABC**  
Class “A” Incident: a condition or practice likely to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material.

**B – Medium – Incident Investigation Report Form ABC**  
Class “B” Incident: a condition or practice likely to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive.

**C- Low – Near Miss Report Form/Incident Investigation Report Form ABC**  
Class “C” Incident: a condition or practice likely to cause minor (non-disabling) injury or illness or non-disruptive property damage.

The assignment of a lead investigator depends on the classification of the incident as depicted below.

**A – High - Incident Investigation Report Form ABC**  
**DISTRICT HSE MANAGER; DISTRICT MANAGEMENT OR REGIONAL/CORPORATE HSE STAFF (OFF-SITE)**

**B – Medium – Incident Investigation Report Form ABC**  
**SUPERINTENDENT/CM/PM; PROJECT MANAGEMENT (ON-SITE) *May include district management off site***

**C- Low – Near Miss Report Form/Incident Investigation Report Form ABC**  
**AS DELEGATED BY SUPERINTENDENT; PROJECT SUPERVISION *May include project management and/or district management***

The next step will be to choose the type of incident that we are investigating. The choices are:

### Classify the Type of Incident

**HSE-13-01-I: Select one Injury Incident Fact form for each person injured in the incident.**  
**HSE-13-01-E: Select the Environmental/Environmental Spill Fact form for incidents that include damage to the environment.**  
**HSE-13-01-L: Select one Loss Incident Fact form for each owner that suffered a loss.**  
**A selection from the Not Recordable field is used to make a record of an alleged incident in SMC that is not included in SMC reports.**

<b><u>HSE-13-01-I</u></b> <b><u>Collect Injury Incident Facts</u></b>	<b><u>HSE-13-01-E</u></b> <b><u>Collect Environmental/</u></b> <b><u>Environmental Spill Facts</u></b>	<b><u>HSE-13-01-L</u></b> <b><u>Collect Loss Incident</u></b> <b><u>Facts</u></b>	<b><u>Not Recordable</u></b>
First Aid Medical Aid Modified Work Lost Time Fatality	Environmental Environmental Spill	Fire Vehicle Damage Equipment/Property Theft Equipment/Property Damage Third Party/Public	Client Classification Non-Occupational Report Only

Details for entering data into HSE-13-01-E, I, and L will be at the end of this section.

**Note:** A selection from the Not Recordable field is used to make a record in the SMC of an alleged incident.

**Note:** HSE-13-01-E, Collect Environmental/Environmental Spill Facts form will always be filled out in conjunction with HSE-13-01-L, Collect Loss Incident Facts.

**Here is a scenario to help you understand which form should be used:**

Suppose there is an incident where two workers employed by different contractors are driving company vehicles and collide. The workers are injured to different degrees, both trucks are damaged and the gasoline leaks out of one and drains into the river.

The Classify the Incident choices we make to generate this report form will be as follows:

**Injuries:** You would fill out two HSE-13-01-I, Collect Injury Incident Facts, forms for each injured person.

**Losses:** You would fill out two HSE-13-01-L, Collect Loss Incident Facts, forms for the equipment/property damage that occurred when the two trucks were damaged.

**Environmental Spill:** In addition, you also fill out HSE-13-01-E, Collect Environmental/Environmental Spill Facts, form for the environmental spill. Note: HSE-13-01-E, Collect Environmental/Environmental Spill Facts form will always be filled out in conjunction with HSE-13-01-L, Collect Loss Incident Facts.

**Not Recordable:** Fill out HSE-13-01-I when it is a *Non-Occupational, Report Only, or Not Yet Classified* injury. For instance, we know that a worker is injured and that the injury did not happen at work, then that would be *Non-Occupational*. Or if something happened to a worker, but that worker refuses medical aid, then it would be a *Report Only* of the incident and we would file it for our records. If we do not have enough information to choose if the incident is a *Medical Aid, Modified Work or Lost Time*, you could choose *Not Yet Classified*.

If your project is using paper forms, the form may be printed after the Incident Type is classified.

### STEP 3- COLLECT THE GENERAL FACTS:

It is important that the person entering the data into the SMC is provided with all of the information for the required fields. Those fields denoted with an asterisk (\*) are required fields into the SMC.

<b>Project Name*:</b>				<b>Project No.*:</b>						
<b>Client*:</b>				<b>Incident Location:</b>						
<b>Brief Summary of Incident*:</b>										
<b>Company Reporting Incident*:</b>				<b>CCIP Company- US Projects Only*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO						
<b>Reported To:</b>				<b>Reported By:</b>						
<b>Date &amp; Time of Incident*:</b> Day DD		Month MM		Year YYYY		<b>Time:</b> HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM				
<b>Date &amp; Time of Incident Reported:</b> Day DD		Month MM		Year YYYY		<b>Time:</b> HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM				
<b>Weather*:</b> Indoors	Overcast	Rainin g	Freezing Rain	Clear	Snowing	Foggy	Sunny	Windy	Underground Work	Hot/ Humid
<b>Temperature:</b> — °F / °C		<b>Wind Speed:</b> — Mph / Km/h		<b>Wind Direction:</b> NW N NE E SE S SW W						
<b>Lighting*:</b> Daylight		Darkness		Artificial Light		Dusk		Dawn		
<b>Witnesses*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO				<b>If Yes, How many*?</b>						

## STEP 4- DESCRIPTION

In Step 4, briefly write a description of the incident under “DESCRIBE THE INCIDENT”, and then be more descriptive as you “DEVELOP THE SEQUENCE OF EVENTS” using the information collected from the investigation to determine the events prior to, during, and after the incident.

## STEP 5- DETERMINE CAUSE(S):

In “ADD CONTRIBUTING CAUSE(S)”, choose at least one Substandard Acts and/or Conditions and/or Hazard Category/Standard that are the immediate or primary factors that contribute to an incident and lead to the determination of root causes.

Substandard Acts	Substandard Conditions
<input type="checkbox"/> Operating equipment without authority <input type="checkbox"/> Failure to warn <input type="checkbox"/> Failure to secure <input type="checkbox"/> Travelling too fast or rushing to complete a task <input type="checkbox"/> Making safety devices inoperative <input type="checkbox"/> Using defective equipment <input type="checkbox"/> Compliance with personal protective equipment requirements <input type="checkbox"/> Improper loading <input type="checkbox"/> Improper placement <input type="checkbox"/> Improper lifting and hoisting <input type="checkbox"/> Improper position for the task <input type="checkbox"/> Servicing equipment in operation <input type="checkbox"/> Horseplay <input type="checkbox"/> Under influence of alcohol and/or other drugs <input type="checkbox"/> Using equipment improperly <input type="checkbox"/> Failure to follow procedures / policy / practice <input type="checkbox"/> Failure to identify hazard / risk <input type="checkbox"/> Failure to check / monitor <input type="checkbox"/> Failure to react / correct <input type="checkbox"/> Failure to communicate / coordinate	<input type="checkbox"/> Inadequate guards or barriers <input type="checkbox"/> Defective tools, equipment or materials <input type="checkbox"/> Congestion or restricted action <input type="checkbox"/> Inadequate warning system <input type="checkbox"/> Fire and explosion hazards <input type="checkbox"/> Poor housekeeping / disorder <input type="checkbox"/> Noise exposure <input type="checkbox"/> Radiation exposure <input type="checkbox"/> Temperature extremes <input type="checkbox"/> Inadequate or excessive lighting <input type="checkbox"/> Inadequate ventilation <input type="checkbox"/> Presence of harmful materials <input type="checkbox"/> Inadequate instructions / procedures <input type="checkbox"/> Inadequate preparation/planning <input type="checkbox"/> Inadequate communications hardware / software process <input type="checkbox"/> Road conditions <input type="checkbox"/> Weather conditions

In “CONTRIBUTING CAUSE(S), INSPECTION HAZARD CATEGORIES AND STANDARDS DEFICIENCIES”, identify contributing causes using the SMC Hazard List to choose the Hazard Categories and Standards that were violated.

Hazard Category	Hazard Standard

Select the most basic cause that when corrected will prevent recurrence under “ROOT CAUSE(s)”.

## Root Causes

### 1. Orientation and Training

- a. Not Required
- b. Not Established
- c. Not Available
- d. Not Understood
- e. Inadequate
- f. Not Current
- g. Not Compliant

### 2. Communication Systems

- a. Not Established
- b. Not Available
- c. Not Understood
- d. Inadequate
- e. Not Current
- f. Not Compliant

### 3. Hazard Identification and Control

- a. Not Established
- b. Not Available
- c. Not Communicated
- d. Not Understood
- e. Inadequate
- f. Not Current
- g. Not Enforced
- h. Not Compliant

### 4. Inspection and Audits

- a. Not Established
- b. Inadequate
- c. Inadequate Frequency
- d. No Closure
- e. Not Trended
- f. No Action Plans
- g. Not Communicated
- h. Current Form/Checklist Not Used
- i. Preventive Maintenance Inadequate

### 5. Security/Emergency Response

- a. Not Established
- b. Not Available
- c. Not Communicated
- d. Not Understood
- e. Inadequate
- f. Not Current
- g. Not Enforced
- h. Not Compliant

### 6. Environmental Mgt.

- a. Not Established
- b. Not Available
- c. Not Communicated
- d. Not Understood
- e. Inadequate
- f. Not Current
- g. Not Enforced
- h. Not Compliant

### 7. Standard Operating Procedures Practices and Legislation

- a. Not Established
- b. Not Available
- c. Not Communicated
- d. Not Understood
- e. Inadequate
- f. Not Current
- g. Not Enforced
- i. Not Compliant

### 8. Sub/Trade-Contractor Management

- a. Not Required
- b. Not Established
- c. Not Available
- d. Not Understood
- e. Inadequate
- f. Not Compliant
- i. Pre-qualification / Selection

### 9. Engineering

- a. Not Required
- b. Not Available
- c. Not Understood
- d. Inadequate
- e. No Current Standards Available
- f. Not Compliant

### 10. Procurement

- a. Not Established
- b. Not Available
- c. Inadequate
- d. Not Compliant
- e. Not Timely
- f. Improper Selection
- g. Inadequate or No Specifications

### 11. Site Specific Safety Plan

- a. Not Established
- b. Not Available
- c. Not Understood
- d. Inadequate
- e. Not Current
- g. Not Compliant

### 12. HR/PD

- a. Inappropriate Hire
- b. Inappropriate Placement
- c. Not Competent
- f. Not Available

### 13. Leadership and Administration

- a. Inadequate Accountability
- b. Lack of Discipline
- c. Lack of Enforcement
- d. Inadequate
- e. Lack of Resources
- f. Inadequate Planning
- g. Poor Execution
- h. Not Communicated

## STEP 6- ADD CORRECTIVE ACTIONS:

Add corrective action(s) that are S.M.A.R.T.E.R.: Specific, Measureable, Accountable, Realistic, Timely, Effective and Reviewed. At least one corrective action is required for each Contributing Cause identified. The three Corrective Action categories are for substandard acts and conditions, hazard categories/standards deficiencies, and for the root cause. In HSE-13-02, Near Miss Form, you will only be asked to add corrective actions for substandard acts and conditions and for a root cause.

What are the corrective actions for substandard acts and conditions?	Assigned To*:	Target Date*:	Date Completed:
Substandard Act/Condition:		DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:			

What are the corrective actions for hazard categories/standards deficiencies?	Assigned To*:	Target Date*:	Date Completed:
1. Hazard Category/Standard:		DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:			

What are the corrective actions with a root cause?	Assigned To*:	Target Date*:	Date Completed:
1. Root Cause:		DD/MM/YYYY	DD/MM/YYYY
Corrective Action*:			

If you have notes about the incident, add it to the **"INSERT NOTES TO INCIDENT"**.

Note	Created By:	Created On:

When conducting the investigation, consider the following documents to assist in getting more information:

- |   |   |  |  |  |
|---|---|--|--|--|
| <input type="checkbox"/> Photos             | <input type="checkbox"/> Certifications | <input type="checkbox"/> Inspections       | <input type="checkbox"/> Training Records      | <input type="checkbox"/> HSE Field Meeting Minutes |
| <input type="checkbox"/> Drawings/Blueprint | <input type="checkbox"/> Sketches       | <input type="checkbox"/> Timecards         | <input type="checkbox"/> HSEOPs                | <input type="checkbox"/> Vendor Agreements         |
| <input type="checkbox"/> JHAs/PSIs          | <input type="checkbox"/> CHAs           | <input type="checkbox"/> Permits           | <input type="checkbox"/> Schedules             | <input type="checkbox"/> Purchase Orders           |
| <input type="checkbox"/> Daily Log          | <input type="checkbox"/> Contracts      | <input type="checkbox"/> Witness Statement | <input type="checkbox"/> Insurance Certificate |  |

## STEP 7- INSERT SIGNATURES

The following are required to be dated, signed and printed with their name legibly on the incident investigation form:

The Lead Investigator, Investigation Team Members, Injured/Loss Worker, Injured/Loss Worker's Foreman, Injured/Loss Worker's Superintendent, PCL Project Superintendent, PCL Project Manager, and the District/General Manager. The form should be faxed or e-mailed immediately and the hard copy sent to the HSE department. Additional management comments if required may be added below the signatures.

## STEP 3: HSE-13-01-E, Environmental/Environmental Spill Facts

Use this report for environmental or environmental spill incidents. This form will always be filled out in conjunction with HSE-13-01-L, Collect Loss Incident Facts.

<b>Project Environmental Designate*:</b>																						
<b>Name of Product/substance that was spilled/released*:</b>																						
<b>Total quantity involved:</b>					<b>Estimated Quantity spilled/released:</b>																	
<b>Time spill/release started: HH:MM (AM/PM)</b>					<b>Time spill/release stopped: HH:MM (AM/PM)</b>																	
<b>What caused the spill/release?:</b>																						
<b>What was affected by the spill/release (identify surface area, wetlands, rivers/lakes):</b>																						
<b>Describe the measures taken to control the spill/release:</b>																						
<table border="0"> <tr> <td><b>Weather*:</b></td> <td>Indoors</td> <td>Overcast</td> <td>Raining</td> <td>Freezing Rain</td> <td>Clear</td> <td>Snowing</td> <td>Foggy</td> <td>Sunny</td> <td>Windy</td> <td>Underground Work</td> <td>Hot/ Humid</td> </tr> </table>											<b>Weather*:</b>	Indoors	Overcast	Raining	Freezing Rain	Clear	Snowing	Foggy	Sunny	Windy	Underground Work	Hot/ Humid
<b>Weather*:</b>	Indoors	Overcast	Raining	Freezing Rain	Clear	Snowing	Foggy	Sunny	Windy	Underground Work	Hot/ Humid											
<b>Who was contacted:</b>																						
District Manager, District HSE Manager, US HSE Director, NAHQ HSE Vice President, Government Environmental Protection Agency																						
<b>Other Government Agency (who/when):</b>																						

### STEP 3: HSE-13-01-I, Collect Injury Incident Facts

Use this report for *first aid, medical aid, modified work, lost time, fatality, non-occupational, report only* and *not yet classified* injuries. Each person injured in an event will have their own set of Injury Incident Facts.

<b>Injury Incident Type:</b>							
First Aid	Medical Aid	Modified Work	Lost Time	Fatality	Non-occupational	Report Only	Not Yet Classified
<b>Injured Worker's Company*:</b>				<b>CCIP Company- US Projects Only*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>Injured Worker's Superintendent*:</b>				<b>Injured Worker's Foreman (PCL only*):</b>			
<b>Injured Worker's Name*:</b>				<b>(PCL only*):</b> <input type="checkbox"/> Hourly <input type="checkbox"/> Salary			
<b>Birth Date:</b> DD/MM/YYYY				<b>Hire Date (PCL only*):</b> DD/MM/YYYY			
<b>Time Employed by PCL:</b> _____ month(s), _____ year(s)				<b>Duration on Project:</b> _____ month(s), _____ year(s)			
<b>Trade &amp; Trade Status*:</b>				<b>Number of Years in Craft*:</b>			
<b>Hours of Employment on the day of the Incident:</b> FROM- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM TO HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM							
<b>Number of Days in Shift Rotation:</b> 4/3 5/2 6/1 10/4 14/7 21/7 ____/____							
<b>Day in Rotation Injured:</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 ____							
<b>PSI Completed*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO							
<b>Post-incident Alcohol and Drug Testing*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO				<b>If Yes, who was the next level of management consulted? (Canada only*):</b>			
				<b>If No, why not?*</b>			
<b>Did This Incident Involve Another Trade Contractor?</b>				<input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>If Yes, Trade Contractor Name*:</b>							
<b>CCIP Company* (US Projects only)</b> <input type="checkbox"/> YES <input type="checkbox"/> NO							
<b>Trade Contractor Superintendent Name*:</b>							

## Client/OSHA/WCB/MSHA Classification:

If a classification is chosen below, the fields associated with that classification are required to be filled out.

<b>OSHA/WCB/MSHA Case Number:</b>					
<b>OSHA Recordable: (US Projects only)</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <b>If OSHA or MSHA, Choose the Classification:</b>					
Hearing Loss	Skin Disorder	Injury	Poisoning	Respiratory Condition	All Other Illnesses
<b>OSHA Injury Description:</b>					
<b>WCB:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <b>If WCB, Choose WCB Classification:</b>					
Pending	Denied	Medical Aid	Lost Time	Modified Work	Fatality
<b>Client Recordable:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO					
First Aid Injury	Medical Aid Injury	Restricted Work Injury	Lost Time Injury	Non-occupational	
<b>Lost Times and Modified Work Dates:</b>					
Lost Time	Start Date: DD/MM/YYYY	End Date: DD/MM/YYYY			
Modified Work	Start Date: DD/MM/YYYY	End Date: DD/MM/YYYY			

The choices investigators make in the Type of Contact, Body Part(s) Injured, Type of Injury, Division of Work, Work Activity, Hand/Small Power Tools and Large Equipment and Power Tools contribute to the establishment and identification of trends.

## Type of Contact

- Caught In/On/Between Or Under
- Contact With
- Environmental Release
- Equipment Damage
- Equipment Failure
- Ergonomic
- Fall To Lower Level
- Fall On Same Level
- Falling Objects
- Overstress, Overpressure, Overexertion, Overexposure
- Product Contamination
- Struck Against
- Struck By
- Other

## Body Part

### 1. Left 2. Right

- |           |               |                   |
|-----------|---------------|-------------------|
| • Abdomen | • Face        | • Leg             |
| • Ankle   | • Foot/Toe    | • Lungs/Bronchial |
| • Arm     | • Groin       | • Mouth           |
| • Back    | • Hand/Finger | • Neck            |
| • Chest   | • Head        | • Nose            |
| • Ears    | • Heart       | • Shoulder        |
| • Elbow   | • Hip         | • Wrist           |
| • Eye     | • Knee        | • Other           |



## Type of Injury

- Abrasion
- Allergic Reaction
- Amputation
- Avulsion
- Blister
- Blood Clot
- Burn
- Bursitis
- Carpal Tunnel Syndrome
- Chemical Exposure
- Concussion
- Contusion / Bruise
- Crush
- Dental Damage
- Dislocation
- Electric Shock
- Epicondylitis
- Foreign Body
- Fracture
- Frost Bite
- Hearing
- Heart Attack
- Heat Stress Symptoms
- Hernia
- Infection
- Inhalation
- Insect Bite
- Laceration
- Multiple
- Nerve Impingement
- Occupational Illness
- Puncture
- Rash
- Repetitive Motion
- Respiratory
- Seizure
- Sprain / Strain
- Stress, Mental
- Stroke
- Tendonitis
- Welders Flash
- Other

Select the Division of Work, Work Activity, Hand/Small Power Tools and Large Equipment/Power Tools – located at the end of this form.

## HSE-13-01-L, Collect the Loss Incident Facts

### STEP 3 - COLLECT LOSS INCIDENT FACTS

<b>Injury Incident Type:</b>							
Fire	Vehicle Damage	Equipment/Property Theft	Equipment/Property Damage	Third Party/Public	Environmental	Environmental Spill	Not Yet Classified
<b>Company with the Loss*:</b>				<b>CCIP Company- US Projects Only*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>Company with Loss Superintendent*:</b>				<b>Company with Loss Foreman (PCL only*):</b>			
<b>Company with Loss Worker's Name*:</b>				<b>(PCL only*):</b> <input type="checkbox"/> Hourly <input type="checkbox"/> Salary			
<b>Hire Date (PCL Only*):</b> DD/MM/YYYY							
<b>Time Employed by PCL:</b> _____ month(s), _____ year(s)				<b>Duration on Project:</b> _____ month(s), _____ year(s)			
<b>Trade &amp; Trade Status*:</b>				<b>Number of Years in Craft*:</b>			
<b>Hours of Employment on the day of the Incident:</b> FROM- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM TO- HH:MM <input type="checkbox"/> AM <input type="checkbox"/> PM							
<b>Number of Days in Shift Rotation:</b> 4/3      5/2      6/1      10/4      14/7      21/7      __/__							
<b>Day in Rotation Injured:</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 __							
<b>PSI Completed*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO							
<b>Post-incident Alcohol and Drug Testing*:</b> <input type="checkbox"/> YES <input type="checkbox"/> NO				<b>If Yes, who was the next level of management consulted? (Canada only*):</b> <b>If No, why not?*</b>			
<b>Did This Incident Involve Another Trade Contractor?</b>				<input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>If Yes, Trade Contractor Name*:</b>							
<b>CCIP Company* (US Projects only)</b> <input type="checkbox"/> YES <input type="checkbox"/> NO							
<b>Trade Contractor Superintendent Name*:</b>							

**Select the Division of Work, Work Activity, Hand/Small Power Tools and Large Equipment/Power Tools – located at the end of this form**

<b>A) Damage to Work Under Construction</b>		
Brief Description of Items Damaged or Stolen:		
<b>B) Equipment Including Small Tools and Rented Equipment</b>		
Equipment and/or Serial No.:		
Brief Description of Items Damaged or Stolen:		
<b>C) Damage or Loss to a Third Party</b>		
Owner of Damaged Property:	Telephone of Owner: (###) ###-####	
Address of Owner:		
Brief Description of Loss:		
<b>D) Licensed Vehicles (Including Rented Vehicles)</b>		
Driver's Name*:	Driver's License No.:	
Is it a PCL Vehicle*: <input type="checkbox"/> YES <input type="checkbox"/> NO	Make of Vehicle	
Year of Vehicle:	Type of Vehicle:	
License Plate No.:	Serial No.:	Equipment No.:
Describe Damage*:		
Registered Owner's Name:	Registered Owner's Address:	
Insurance Company:	Policy No.:	
Insurance Company Address:		
Witness Name*:	Witness Telephone No.	
Witness Address:		
Was There More Than One Vehicle Involved?: <input type="checkbox"/> YES <input type="checkbox"/> NO		
<b>E) Loss Reported to Police</b>		
Was the Loss Reported to the Police?: <input type="checkbox"/> YES <input type="checkbox"/> NO   If Yes, Police Report No.:		
<b>F) Security Company</b>		
Was a Security Company Employed?: <input type="checkbox"/> YES <input type="checkbox"/> NO   If Yes, Name of Security Company Involved:		
<b>G) Is a Sketch Showing the Relationship of the Vehicles Involved Attached?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO		
<b>H) Detailed Description of the Loss:</b>		
<b>I) Estimate of Loss Damage (\$):</b>		
<b>Note: If Environmental Spill or Loss Occurred Include HSE-13-01-E With This Loss Report Form.</b>		

## HSE-13-02, Near Miss Form

The Near Miss Form fields for "COLLECT THE GENERAL FACTS" and "COLLECT THE LOSS INCIDENT FACTS" are the same as HSE-13-01 and HSE-13-01-L respectively. The exception is in the "COLLECT THE NEAR MISS FACTS" where it asks what the outcome would have been if it were not a Near Miss. You will need to infer if it could have resulted in an injury, illness, environmental incident, environmental spill or equipment/property damage.

**Below applies to HSE-13-01- I, HSE-13-01-L, HSE-13-02**

**Division of Work**

- Sitework
- Demolition
- Concrete
- Masonry
- Metals
- Wood
- Waterproofing
- Fireproofing
- Doors& Windows
- Finishes
- Specialties
- Conveying Systems
- Mechanical
- Electrical
- Insulation
- Painting
- Other

**Work Activity**

<b>Boilermaking</b>	Aligning Sections Attaching Rigging Installing Boilers Maintaining Boilers WHMIS / HAZCOM	Material Handling Updating Components Repairing Boilers Signaling Crane Operators Lockout	Using Hand Tools Using Power Tools Walking To/From Job Area Other: _____
<b>Carpentry</b>	Building Stairs Constructing Wooden Frames Cutting Wood Erecting Scaffolding Framing Walls Material Handling Building Formwork	Installing Doors Installing Finish Carpentry Installing Millwork Installing Windows Joining Materials Setting Loose Formwork WHMIS / HAZCOM	Setting Repetitive Formwork Stripping Loose Formwork Stripping Repetitive Formwork Using Hand Tools Using Power Tools Walking To/From Job Area Other: _____
<b>Concrete Finishing</b>	Building Formwork Cleaning Concrete Coloring Concrete Surfaces Compacting Base Material Cutting Concrete Fabricating Concrete Beams	Finishing Concrete Grinding Concrete Installing Base Material Material Handling Mixing Concrete WHMIS / HAZCOM	Placing Concrete Removing Pavement Rubbing & Patching Concrete Walking To/From Job Area Other: _____
<b>Construction Labor</b>	Building Formwork Disassembling Scaffolds Erecting Scaffolds Flagging And Signaling General Demolition Material Handling	Housekeeping Identifying Building Materials Landscaping Mixing Concrete Operating Machinery Operating Man/Material Hoists	Using Hand Tools Using Power Tools Walking To/From Job Area Other: _____
<b>Demolition</b>	Asbestos Abatement Driving Site Vehicles Dust Control Flagging And Signaling Fall Protection General Demolition Housekeeping	Lead Abatement Lockouts Manual Lifting Operating Crane Operating Loading Equipment Recycling Material Removing Glass	Striking An Arc Using Hand Tools Using Power Tools Using A Torch Walking To/From Job Area Other: _____
<b>Drywalling</b>	Applying Textured Surfaces Cutting Drywall Fastening Moldings Filling Joints Fitting Drywall Material Handling	Joining Material Lifting Ceiling Panels Measuring Drywall Mounting Tiles Or Blocks WHMIS / HAZCOM Pressing The Tile	Sanding Drywall Taping Joints Using Hand Tools Walking To/From Job Area Other: _____



<b>Electrical/ Instrumentation</b>	Calibration Commissioning Connecting Electrical Systems Connecting Wire Fastening Electrical Components Inspecting All Equipment Maintaining Electrical Controls Maintaining Electrical Systems	Installing Electrical Systems Installing Electronic Controls Installing Wiring Systems Locating Problems Material Handling Placing Conduit Pulling Wires/Cables Terminating	WHMIS / HAZCOM Repairing Electrical Equipment Rewiring Electrical Systems Testing Electrical Systems Upgrading Electrical Systems Walking To/From Job Area Other: _____
<b>Equipment Maintenance</b>	Assembling Equipment Calibrating Equipment Checking Performance Cleaning Machinery Disassembling Equipment Installing New Machinery	Lubricating Machinery Material Handling Performing Repairs Preventative Maintenance Testing Machinery Using Hand Tools	Using Power Tools Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Equipment Operation</b>	Digging Trenches Driving Site Vehicles Flagging And Signaling Handling Material Inspecting Equipment Leveling Activities Operating Crane (Tower/Mobile/Overhead)	Operating Loading Equipment Operating Manlifts Operating Paving Equipment Operating Pile Driving Equipment Operating Surface Equipment Operating Excavation Equipment Operating Tamping Equipment Repairing Equipment	Site Grading Activities Using Power Tools Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Flooring</b>	Cutting Material Material Handling Heat Taping Inspecting The Surface Joining Materials Removing Materials	Sanding Surfaces Scraping Surfaces Stretching The Carpet Trimming Edges Using Hand Tools Using Power Tools	Walking To/From Job Area Working With Chemicals WHMIS / HAZCOM Other: _____
<b>Glazing</b>	Building Extrusions Cleaning Glass Cutting Glass Cutting Marble Cutting Plastic Flagging And Signaling	Handling Material Installing Curtain Wall Installing Glass Panels Installing Materials Selecting Glass Using Hand Tools	Using Power Tools Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Inspecting</b>	Inspecting Bridges Inspecting Buildings Inspecting Earth Work Inspecting Electrical Systems Inspecting Lifting/Conveying Devices Inspecting Shoring	Inspecting Mechanical Systems Inspecting Plumbing Inspecting Renovations Inspecting Roadway Inspecting Sewer Systems Inspecting Structural Steel	Material Handling Using Hand Tools Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Insulating</b>	Blowing Loose Fill Insulation Cutting Insulation Fastening Insulation Installing Heat Tracing Installing Materials Securing Insulation	Material Handling Measuring Insulation Protecting Insulation Removing Old Insulation Spraying Foam Insulation Using Hand Tools	Using Power Tools Walking To/From Job Area WHMIS / HAZCOM Other: _____



CONSTRUCTION

**PCL HSE MANUAL**  
Incident Investigation  
Standard HSE-13-05

<b>Ironwork</b>	Assembling Cranes & Derricks Bending Bars Bolting Steel Checking Alignment Connecting Beams & Columns Cutting Rebar Erecting Steel Frames Fabricating Structural Metal Flagging And Signaling	Installing Ornamental Iron/Steel Installing Rebar Spacers Material Handling Placing Iron Or Steel Positioning Mesh Post Tensioning Rigging & Hoisting Securing Mesh Setting Rebar	Tying Rebar Walking To/From Job Area Welding Steel Welding Bars WHMIS / HAZCOM Other: _____
<b>Masonry</b>	Building/ Repairing Chimneys Building/ Repairing Fireplaces Building/Repairing Floor Building /Repairing Partition Building/Repairing Structures Building Stone Floors Building Stone Walls	Cutting Block Filling Joints Between Stones Installing Firebrick Linings Installing Wall Panels Material Handling Repairing Cracks Setting Block	Smoothing Mortar Using Hand Tools Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Millwright</b>	Replacing, Repairing Machinery Alignment Repair & Lubricate Machines Assemble & Install Equipment Attach Moving Parts WHMIS / HAZCOM Layout Mounting Holes	Drilling Dismantle Machines Hoisting And Rigging Anchor Installation Shipping & Receiving Walking To/From Job Area Hot Work	Working From Heights Manual Lifting Climbing Ladders Maintenance Of Machine Lockouts Other: _____
<b>Painting</b>	Abrasive Blasting Surfaces Applying Coatings Brushing Off Dust Climbing Scaffolds Erecting Scaffolds Filling Holes/Cracks Material Handling	Mixing Paints Painting With A Brush Painting With A Roller Painting With A Sprayer Sanding Rough Spots Sanding Surfaces Stripping Surfaces	Walking To/From The Job Area Washing Walls/Trim Waster Blasting Surfaces Working With Chemicals WHMIS / HAZCOM Other: _____
<b>Plumbing and Pipefitting</b>	Pneumatic Testing Aligning Flanges Bending Pipe Clearing Drains Cutting Pipe Fitting Pipe Bonding Pipe Hand Tools	Hot Work Hanging Steel Supports Installing Fixtures Joining Pipes Ladders Material Handling Preparing And Grading Trenches Preparing Surfaces	Threading Pipe Leak Testing Soldering Pipe Walking To/From Job Area Hydro Testing WHMIS / HAZCOM Other: _____
<b>Rigging</b>	Assisting Operators Attach Loads, Pulleys & Blocks Climbing To/From Erection/Dismantling Equipment Maintenance Inspect	Fall Protection Flagging/Marshalling Hand Tools Manual Lifting Setup & Repair Rigging Signal Crane	Tagline Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Roofing</b>	Damp Proofing Hammering/Chiseling Rough Spots Installing Insulation Installing Roofing Felt Installing Shingles	Installing Roofs Material Handling Repairing Shingles Repairing Roofs Sealing Roof Seams Spreading Coating	Walking To/From Job Area Water Proofing WHMIS / HAZCOM Other: _____



<b>Scaffolding</b>	Climbing Scaffolds Disassembling Scaffolds Erecting Scaffold Frame/Guardrail	Material Handling Operating Loading Equipment Operating Aerial Work Platform Planking Scaffold	Using Hand Tools Using Power Tools Walking To/From Job Area Other: _____
<b>Sheet Metal Working</b>	Assembling Sheet Metal Pieces Bending Pieces Of Sheet Metal Building Commissioning Cutting Pieces Of Sheet Metal Drilling Parts Fastening Seams And Joints Together Hammering Parts	Material Handling Installing Duct Work Making Sheet Metal Parts Nailing/Welding Parts Together Operating Equipment Shaping Pieces Of Sheet Metal Testing And Balancing Using Hand Tools	Using Power Tools Walking To/From Job Area Working With Fiberglass Working With Plastic Materials WHMIS / HAZCOM Other: _____
<b>Specialty</b>	Abatement Bolting/Welding Beams/Rails Construct Scaffolding Erecting Erecting Containment Areas Installing Elevator Cabs Installing Elevator Controls Installing Lift Equipment	Material Handling Mold Remediation Operating Heavy Machinery Packaging Radioactive Materials Removing Asbestos Removing Lead Testing Lift Equipment	Using Monitoring Devices Using Hand Tools Using Power Tools Using Sandblasters Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Surveying</b>	Collecting Data In The Field Holding Vertical Rods Material Handling	Operating Surveying Instruments Taking Physical Measurements	Walking To/From Job Area WHMIS / HAZCOM Other: _____
<b>Welding</b>	Cutting Metal Forming An Inert Gas Grinding Metal Machine Welding Manual Welding	Material Handling Position Welding Repair Welding Striking An Arc Surface Preparation	Tack Welding Walking To/From Job Area Welding Metal WHMIS / HAZCOM Other: _____



### HAND/SMALL POWER TOOLS

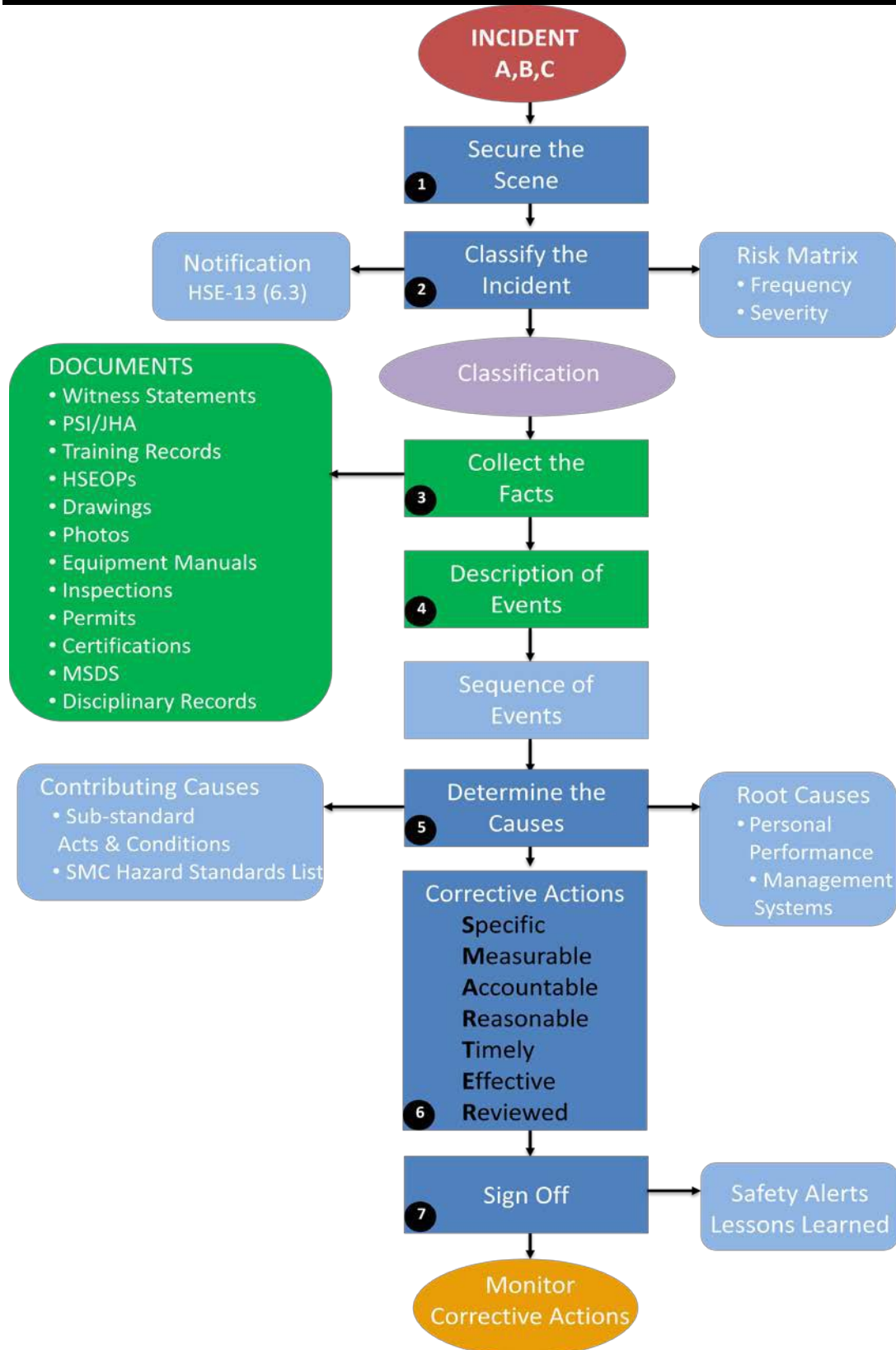
Air Compressor	Hoe	Pump	Square
Axe	Hoist, Block and Tackle	Punch	Stapler
Banding Tool	Hoist, Chain	Rake	Tamper
Battery Charger	Hoist, Come-along	Regulator, Cmp. Gas	Tap and Die
Broom	Hose	Rigging Spreader Bar	Tape Measure
Cable Puller	Impact Gun	Rigging	Threader
Cable Stripper	Jack	Riveter, Pop	Tin Snip
Chisel	Jack Hammer	Rope	Torch, Cutting
Concrete, Bucket	Jointer	Router	Torch, Soldering
Concrete, Vibrator	Ladder, Extension	Sander	Torch, Tiger
Conduit/ Pipe Bender	Ladder, Step	Saw, Band	Trowel, Hand
Crow Bar	Leaf Blower	Saw, Chain	Tugger
Cutter, Bolt	Level	Saw, Chop	Utility Knife
Cutter, Pipe	Lifeline	Saw, Circular	Vise
Drill	Material Lift/Jack	Saw, Concrete	Welder
Drill Bit	Nibbler	Saw, Cutoff	Welding Cable
Drill Press	Paint Brush	Saw, Hack	Welding Hose
Drill, Magnetic	Paint Roller	Saw, Hole	Welding Screen
Extension Cord	Paint Sprayer	Saw, Jig	Wheelbarrow
File	Pallet Jack	Saw, Miter	Wire Brush
Fish Tape	Pick Axe	Saw, Radial Arm	Wrench, Adjustable
Grinder, Floor	Pipe, Stand	Saw, Reciprocating	Wrench, Box
Grinder, Bench	Planer	Saw, Table	Wrench, Chain
Grinder, Right Angle	Pliers	Saw, Wet	Wrench, Open End
Gun, Caulk	Plug, Test Ball	Scaffold	Wrench, Pipe
Gun, Grease	Pneumatic Fastener	Screed, Hand	Wrench, Socket
Gun, Heat	Pocket Knife	Screw Driver	Wrench, Spud
Gun, Soldering/ Iron	Porta Power Ram	Shop Vac.	Wrench, Torque
Hammer	Pressure Washer	Shovel	Other
Hammer, Sledge	Pry Bar	Snatch Block	

### LARGE EQUIPMENT/POWER TOOLS

Air Compressor	Forklift, RT/Ext. Boom	Pile, Casing Clamp	Trowel, Power
Crane, RT	Forklift, vertical mast	Pile Hammer, Diesel	Truck, Boom
Crane, Crawler	Generator	Pile Hammer, Vibratory	Truck, Dump
Crane, Gantry	Georgia Buggy	Pile, Extraction Clamp	Truck, Flatbed
Crane, Drill Rig	Grader, Motor	Pipe, Prep/Bevel Mach.	Truck, Hiway Tractor
Crane, Tower	Grader, Wheel Tractor Scraper	Pump, Concrete	Truck, Pick Up
Compactor, Plate	Heater (LP/Nat. Gas)	Pump, Epoxy	Truck, Water
Compactor, Roller	Light Plants	Pump, Grout	Trailer
Compactor, Vibratory	Loader, Wheeled	Pump, Dewater	Trailer, Lowboy
Dozer	Loader, Skid Steer	Screed Truss, Power	Trailer, Highboy
Excavator, Mini	Main Panel/Transformer	Screed, Bidwell	Trailer, Gravel
Excavator, Back Hoe	B Box	Sweeper, Walk	Trailer, Vans
Excavator, Vacuum	C Panel	Sweeper, Ride	Welder (gas/diesel)









## INJURY MANAGEMENT STANDARD HSE-14


**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-14     INJURY MANAGEMENT**

- 1.0     PURPOSE
- 2.0     SCOPE
- 3.0     RESPONSIBILITY
- 4.0     REFERENCES
- 5.0     DEFINITIONS
- 6.0     STANDARD
- 7.0     ATTACHMENTS

## **1.0 PURPOSE**

The purposes of the Injury Management Standard are to emphasize a proactive approach to managing injuries, to maintain a safe and healthy working environment and to facilitate compliance with workers compensation/insurer requirements.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITIES**

The following sections outline the Injury Management responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Verify that employees and supervisors are trained regarding injury management;
- Develop the process and training to accomplish the goals of the injury management program;
- Verify that modified work programs are implemented within the requirements of the policy and legislative jurisdictional requirements; and
- Be an ongoing liaison with medical practitioners and insurers regarding rehabilitation or return to work plans.

### **3.2 District Management (Off-Site)**

- Provide adequate support and resources for all aspects of the injury management program; and
- Determine and publish the district's protocol for escorting injured workers to medical facilities.

### **3.3 Project Management (Site)**

- Provide employees and supervisors training regarding the injury management program; and
- Implement modified work programs within the requirements of the policy and local regulations.

### **3.4 Project Supervision (Site)**

- Report all work-related injuries to the project HSE staff before outside treatment is sought, except in cases of an emergency or where medical treatment is required after work hours; and
- Identify suitable modified work that is deemed both meaningful and worthwhile as an alternative or select duties that do not jeopardize the well-being of the injured worker or the well-being of others.

### **3.5 Project HSE Staff (Site)**

- Monitor return to work programs;
- Assist in the identification of suitable modified work, alternative, or selected duties that do not jeopardize the well-being of the injured worker or the well-being of others; and
- Be the initial liaison with medical practitioners for rehabilitation or return to work plans.

### **3.6 Workers**

- Immediately report all injuries to their supervisor;
- Participate in the modified work program, where medically acceptable;
- Notify treating health care providers that modified work is available;
- Notify project HSE staff and supervisors regarding medications, medical appointments, and medical work restrictions; and
- Notify project HSE staff and supervisors regarding any problems or concerns with the modified work.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Lost Time**

Any injury where the worker is away from work on a day after the day on which the incident occurred, on the advice of a medical professional.

### **5.2 Medical Treatment (Medical Aid)**

An injury or illness-related procedure other than first aid or preventative treatment that is intended to provide a remedy or palliative care.

### **5.3 Modified Work (Restricted Work)**

This refers to work duties that have been modified to accommodate an injured worker who cannot perform their regular work duties as directed by a medical professional.

## **6.0 STANDARD**

### **6.1 General Requirements**

Provided it is safe and practicable to do so, any injured or ill person should be returned to work in the shortest possible time.

#### **6.1.1 Voluntary Medical Questionnaire**

HSE-14-01, Voluntary Medical Questionnaire, may be filled out during orientation for all employees.

#### **6.1.2 Injury Reporting**

Injury response and reporting verifies that there is an immediate start of the claims management process and compliance with legislative requirements.

PCL will:

- Require employees to report all injuries and incidents immediately to their supervisor;
- Make available appropriate medical treatment;
- Comply with legislation regarding first aid requirements;
- Comply with legislation governing the transportation of injured employees;
- Record all incidents;
- Report injuries to the applicable workers compensation body or insurer within the regulated timelines (with a copy sent to the district HSE manager on the same day); and
- Report an employee's return to work to the applicable workers compensation body or insurer.

In all cases of injury, employees involved in the incident will be asked to complete a HSE-14-02, Statement Form, outlining the incident and any injury occurring as a result of an incident.

Where an employee is referred to or is seeking outside medical treatment, the district is to develop an information letter that is to be accompanied by the HSE-14-04, Fitness Form.

#### **6.1.3 Documentation**

All documentation relating to personal information in PCL possession shall be secured in accordance with legislative jurisdictional requirements.



## **6.2 Medical Aid Injuries**

Injuries requiring medical attention must use the following administrative procedures (optional in the US):

- The foreman or project HSE supervisor initiates the HSE-14-03, Medical Treatment Memorandum;
- HSE-14-03, Medical Treatment Memorandum, is sent along with the injured worker to the physician or hospital (optional in the US); and
- The injured worker is accompanied to the medical facility.

## **6.3 Modified Work**

Modified work assists in the rehabilitation and early return to work of ill or injured employees.

PCL will make every reasonable effort to provide suitable (temporary) modified work to any employee unable to perform their regular duties. This may include a modification of the employee's original position, providing an alternate position, providing a training course, or a combination of the above.

Only work that is considered to be suitable, meaningful, and productive shall be considered for use in the modified work program. These jobs must comply with legislative jurisdictional requirements.

The following steps will be undertaken in a restricted work plan:

### **6.3.1 Modified Work Offer (HSE-14-05)**

A written Modified Work Offer will be presented to the employee. This offer will include the following information:

- Specific job duties to be performed;
- Details of any medical restrictions on capacity to return to work;
- Pay rate. Employees will receive the same rate of pay as their pre-incident employment;
- Hours of the employment are important in the case of transitional employment where the hours may vary during the placement;
- Length of placement will be noted and made clear to the employee;
- The name of the person at the workplace responsible for the coordination of the return to work plan;
- Details of any other assistance or services that will be provided to facilitate the person's return to work following an injury;
- Date of next medical follow-up; and
- The employee, supervisor, project HSE staff and the superintendent must sign the offer. A copy of the signed offer must be forwarded to the district HSE manager.

### 6.3.2 Refusal of Offer

Any refusal by an employee to participate in the modified work program will be immediately investigated by interviewing the employee and documenting the reasons for not participating in the modified work program.

### 6.3.3 Monitor Return to Work

Once placed on modified work, the supervisor, superintendent, and project HSE staff will monitor the progress of the employee and immediately address any concerns. The employee and supervisor shall fill out HSE-14-06, Employee Injury Management form.

A daily record will be completed and submitted weekly for employees on modified work as per HSE-14-06, Employee Injury Management Form.

When medical clearance for return to regular duties is received, the injury management coordinator or designate will inform the applicable workers compensation body or insurer. The supervisor will continue to monitor the employee's regular duties.

## 6.4 Case Coordination

To verify that all claims are effectively managed, communication will be maintained regularly with the key stakeholders.

The progress of any employee returning to regular or modified work will be monitored by the project HSE staff and the employee's supervisor in conjunction with the injury management coordinator or designate.

## 7.0 ATTACHMENTS

HSE-14-01	Voluntary Medical Questionnaire
HSE-14-02	Statement Form
HSE-14-03	Medical Treatment Memorandum
HSE-14-04	Fitness Form
HSE-14-05	Modified Work Offer
HSE-14-06	Employee Injury Management Form

## Voluntary Medical Questionnaire

Site: \_\_\_\_\_

The following is a Medical Questionnaire, which will be filled out on voluntary basis by all employees being orientated to this project site.

Once filled out, the Medical Questionnaire allows the company to assure that:

- (1) Existing problems are not aggravated;
- (2) Limitations due to disabilities are considered when assigning duties; and
- (3) It alerts safety or medical staff of conditions or medications, in case a worker is injured and unable to pass this information on to hospital staff him/herself.

Filling out this questionnaire is greatly appreciated and in no way puts a worker's job in jeopardy. This information is strictly confidential.

**Do you suffer from any of the following conditions:**

	<u>Yes</u>	<u>No</u>
1. Asthma, bronchitis	<input type="checkbox"/>	<input type="checkbox"/>
2. High blood pressure	<input type="checkbox"/>	<input type="checkbox"/>
3. Diabetes	<input type="checkbox"/>	<input type="checkbox"/>
4. Epilepsy	<input type="checkbox"/>	<input type="checkbox"/>
5. Nose bleeds	<input type="checkbox"/>	<input type="checkbox"/>
6. Joint pain – i.e. arthritis	<input type="checkbox"/>	<input type="checkbox"/>
7. Frequent headaches	<input type="checkbox"/>	<input type="checkbox"/>
8. Back problems	<input type="checkbox"/>	<input type="checkbox"/>
9. Allergies – chemicals, pollen, etc.	<input type="checkbox"/>	<input type="checkbox"/>
10. Allergies – bee stings	<input type="checkbox"/>	<input type="checkbox"/>
11. Heart problems	<input type="checkbox"/>	<input type="checkbox"/>
12. Hepatitis A, B, C	<input type="checkbox"/>	<input type="checkbox"/>
13. Skin disorders – psoriasis, eczema, rashes	<input type="checkbox"/>	<input type="checkbox"/>
14. Carpal tunnel syndrome	<input type="checkbox"/>	<input type="checkbox"/>
15. Hernias	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered yes to any of the above, are you taking any medication for these conditions?

☐ Yes ☐ No

If yes, please indicate what you are taking and the amount prescribed: \_\_\_\_\_

Do you have any other conditions not listed? ☐ Yes ☐ No

If yes, please indicate the condition and if medication is needed: \_\_\_\_\_

Is there any other medical information that you feel is important? ☐ Yes ☐ No

If yes, please indicate: \_\_\_\_\_

☐ I have chosen not to provide any information.

Print Name

Trade

Company

Employee Signature

DD/MM/YY





**When completing or reviewing a statement, the following must be included:**

- The date and time the statement was written
- Who wrote the statement, including their title
- Who / what the statement is about
- The sequence of events, in chronological order
- Very specific and descriptive detail, including:
  - *Times within the details*
  - *Names and titles of people*
  - *Specifics of what was said, rather than general comments*
  - *A sequence of events that are accurate and include all information. The more descriptive the statement the better*

Do not include any personal or subjective comments on a statement.



CONSTRUCTION

**PCL HSE MANUAL**  
Injury Management  
Standard HSE-14-03

## Medical Treatment Memorandum

**WCB:** ☐ Lost time incident (LTI) ☐ Modified Work (MW) ☐ Medical aid (MA) ☐ Non-occupational  
**Client:** ☐ Lost time incident (LTI) ☐ Modified Work (MW) ☐ Medical aid (MA) ☐ First aid (FA)

### 1. EMPLOYEE INFORMATION:

Name: \_\_\_\_\_ Print \_\_\_\_\_ Date of Birth: \_\_\_\_\_ DD/MM/YY  
 Sex: ☐ M ☐ F Social Insurance #: \_\_\_\_\_  
 Address: \_\_\_\_\_ Trade/Occupation: \_\_\_\_\_  
 Telephone #: \_\_\_\_\_ (###) ###-####  
 Apprentice: ☐ Yes ☐ No Year of Apprenticeship: \_\_\_\_\_  
 If the worker was not injured, when would it be expected that the job would end? \_\_\_\_\_

### 2. SITE INFORMATION:

Project name: \_\_\_\_\_ Foreman: \_\_\_\_\_  
 Superintendent: \_\_\_\_\_ Project Manager: \_\_\_\_\_

### 3. INCIDENT AND INJURY INFORMATION:

- a. Date and time of incident: \_\_\_\_\_, 20\_\_\_\_ at \_\_\_\_\_ a.m./p.m.
- b. Date and time incident reported to employer: \_\_\_\_\_, 20\_\_\_\_ at \_\_\_\_\_ a.m./p.m.
- c. Regular work hours are from: \_\_\_\_\_ a.m./p.m. to \_\_\_\_\_ a.m./p.m.
- d. Provide a **detailed** description of how the injury was caused (include weights, sizes of materials and body positions)  
 \_\_\_\_\_  
 \_\_\_\_\_
- e. What machine, tool, or equipment was the worker using? \_\_\_\_\_
- f. Was the worker referred for further medical treatment? ☐ Yes ☐ No  
 Where? To Whom? \_\_\_\_\_  
☐ Hospital ☐ Medical Centre ☐ General Practitioner  
☐ Physical Therapy Treatments ☐ Chiropractic Treatments ☐ Further Testing (x-rays, CT scan, MRI)
- g. What part of the body was injured? \_\_\_\_\_ ☐ Right ☐ Left
- h. What type of injury is this? (i.e. Sprain, strain, bruise, laceration, etc.) \_\_\_\_\_  
 Was an alcohol and drug test administered? ☐ Yes ☐ No  
 Why was it administered or not administered? \_\_\_\_\_  
 \_\_\_\_\_  
 Was the next level of management consulted? ☐ Yes ☐ No Who? \_\_\_\_\_
- This report was completed by: \_\_\_\_\_ Project #: \_\_\_\_\_





## Fitness Form

Date: DD/MM/YY Project Site Phone: \_\_\_\_\_  
Project Site Fax: \_\_\_\_\_

### Section A – TO BE COMPLETED AT SITE

Name of Worker: Print

Date of Birth DD/MM/YY Date of Injury/Illness: DD/MM/YY

***"I authorize the release of any relevant medical information/records related to my current medical condition to PCL for the purpose of enabling them to develop a written rehabilitation plan to assist me in returning to work."***

Signature of Worker: \_\_\_\_\_ Date: DD/MM/YY

### Section B – TO BE COMPLETED BY PHYSICIAN

Walking/standing ☐ Only short distances ☐ No kneeling/squatting  
Lifting/carrying No more than ☐ 10lbs ☐ 20lbs ☐ 30lbs ☐ 40lbs ☐ 50lbs  
Pushing/pulling No more than ☐ 10lbs ☐ 20lbs ☐ 30lbs ☐ 40lbs ☐ 50lbs  
Manual dexterity ☐ Left ☐ Right ☐ Limited use of hand(s) Not able to: ☐ Write ☐ Sort  
Repetitive motion ☐ Left ☐ Right ☐ Short periods ☐ Self-paced  
Climbing stairs/ladders ☐ No ladder climbing ☐ No stair climbing ☐ Short flights at own pace

Medication causing sedation/drowsiness: \_\_\_\_\_

Misc.: ☐ No working with arms above shoulder level ☐ No operating mobile equipment  
☐ Vision is a potential safety hazard ☐ Ground level work only  
☐ No working near high speed/moving machinery ☐ No bending or twisting  
Not able to work in: ☐ Dust ☐ Cold temperatures

### Worker Status:

Diagnosis: \_\_\_\_\_

### Treatment Provided:

☐ Fit for regular job Estimated date or return to regular work: DD/MM/YY

☐ Fit for modified work Indicate level: ☐ Sedentary ☐ Light ☐ Medium ☐ Heavy

Can this employee safely work overtime? (beyond 40 hours per week) ☐ Yes ☐ No

Can this employee safely work his/her scheduled shift of \_\_\_\_\_ ? ☐ Yes ☐ No

Date of reassessment: DD/MM/YY

Comments: \_\_\_\_\_  
\_\_\_\_\_

Physician's signature: \_\_\_\_\_ Date: DD/MM/YY



## Modified Work Offer

**Duration:** \_\_\_\_\_ DD/MM/YY \_\_\_\_\_ **to** \_\_\_\_\_ DD/MM/YY \_\_\_\_\_

**Name:** \_\_\_\_\_ Print \_\_\_\_\_

PCL will make a reasonable effort to provide you with suitable, meaningful, and productive modified work to assist in your recovery and promote a safe return to your pre-incident employment.

### In keeping with your work restrictions of:

<b>Walking / Standing:</b> <input type="checkbox"/> Only short distances <input type="checkbox"/> No kneeling / squatting	<b>work capacity level:</b>  <input type="checkbox"/> <b>Sedentary:</b> - lifting 10 lbs max. - occasional lifting/carrying - primarily sitting <input type="checkbox"/> <b>Light:</b> - lifting 20 lbs max. - frequent lifting/carrying up to 10 lbs - may require walking/standing <input type="checkbox"/> <b>Medium:</b> - lifting 50 lbs max. - frequent lifting/carrying up to 20 lbs
<b>Lifting / Carrying:</b> No more than <input type="checkbox"/> 10 lbs <input type="checkbox"/> 20 lbs <input type="checkbox"/> 30 lbs <input type="checkbox"/> 40 lbs <input type="checkbox"/> 50 lbs	
<b>Pushing / Pulling:</b> No more than <input type="checkbox"/> 10 lbs <input type="checkbox"/> 20 lbs <input type="checkbox"/> 30 lbs <input type="checkbox"/> 40 lbs <input type="checkbox"/> 50 lbs	
<b>Manual Dexterity:</b> <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Limited use of hand(s) Not able to: <input type="checkbox"/> Write <input type="checkbox"/> Sort	
<b>Repetitive Motion:</b> <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Short periods <input type="checkbox"/> Self-paced	
<b>Climbing Stairs / Ladders:</b> <input type="checkbox"/> No ladder climbing <input type="checkbox"/> No stair climbing <input type="checkbox"/> Short flights at own pace	
<b>Hours of work permitted:</b>	
<b>Other:</b>	

PCL is offering you the following modified work placement. Your specific job duties include:

---



---



---

We will continually review your progress and adjust the length of this placement as required, based on relevant medical information. Your rate of pay will remain the same.

Your next medical follow-up will be on \_\_\_\_\_ DD/MM/YY \_\_\_\_\_ with \_\_\_\_\_

During your modified work placement you will be supervised by: \_\_\_\_\_.

It is the responsibility of you and your supervisor to complete the "Employee Injury Management Form" and submit it to \_\_\_\_\_ in the HSE Department at the end of each week.

It is your responsibility to report any concerns or difficulties *immediately* to your supervisor and \_\_\_\_\_ in the HSE Department.

☐ Offer Accepted

☐ Offer Not Accepted\*

*\*refusal could affect your right to collect benefits*

Employee:	_____ Print _____	_____ Signature _____	_____ DD/MM/YY _____
Supervisor:	_____ Print _____	_____ Signature _____	_____ DD/MM/YY _____
Superintendent	_____ Print _____	_____ Signature _____	_____ DD/MM/YY _____
HSE Department:	_____ Print _____	_____ Signature _____	_____ DD/MM/YY _____





CONSTRUCTION

## Employee Injury Management Form

### PHYSICAL RESTRICTIONS

<b>Walking / Standing:</b>	<input type="checkbox"/> only short distances	<input type="checkbox"/> no kneeling / squatting
<b>Lifting / Carrying:</b> lbs	No More Than	<input type="checkbox"/> 10 lbs <input type="checkbox"/> 20 lbs <input type="checkbox"/> 30 lbs <input type="checkbox"/> 40 lbs <input type="checkbox"/> 50
<b>Pushing / Pulling:</b> lbs	No More Than	<input type="checkbox"/> 10 lbs <input type="checkbox"/> 20 lbs <input type="checkbox"/> 30 lbs <input type="checkbox"/> 40 lbs <input type="checkbox"/> 50
<b>Manual Dexterity:</b> sort	<input type="checkbox"/> left <input type="checkbox"/> right <input type="checkbox"/> limited use of hand(s)	not able to: <input type="checkbox"/> write <input type="checkbox"/>
<b>Repetitive Motion:</b>	<input type="checkbox"/> left <input type="checkbox"/> right <input type="checkbox"/> short periods	<input type="checkbox"/> self-paced
<b>Climbing Stairs / Ladders:</b>	<input type="checkbox"/> no ladder climbing <input type="checkbox"/> no stair climbing	<input type="checkbox"/> short flights at own pace
<b>Other:</b>		

### EMPLOYEE DETAILS

Name:			
Shift:	<input type="checkbox"/> Day	<input type="checkbox"/> Night	
Hours:		a.m. / p.m.	a.m. / p.m.
Supervisor:	Print		

<b>Work Capacity Level:</b>			
<input type="checkbox"/> <b>Sedentary:</b>	Lifting 10 pounds maximum occasional lifting/carrying primarily sitting	<input type="checkbox"/> <b>Light:</b>	Lifting 20 pounds maximum frequent lifting/carrying up to 10 pounds may require walking/standing
		<input type="checkbox"/> <b>Medium:</b>	Lifting 50 pounds maximum frequent lifting/carrying up to 20 pounds

Week Starting	Date	Job(s) Performed	Within Restrictions		Medical Appointment Treatments (Time)	Comments
Monday			yes	no		
Tuesday			yes	no		
Wednesday			yes	no		
Thursday			yes	no		
Friday			yes	no		
Saturday			yes	no		
Sunday			yes	no		

This form is to be completed by the employee and his/her direct supervisor. **Original to be forwarded to project safety**, which will be sent to the district HSE manager at the end of each week. In the event that an employee or supervisor deviates from the restrictions, the injury management coordinator/district HSE manager must be notified immediately. Any changes to the restrictions by the medical professional must be reflected on this form.

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_ DD/MM/YY

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_ DD/MM/YY



## PROJECT SPECIFIC HSE PROGRAM STANDARD HSE-15

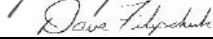
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.







## **HSE-15      PROJECT SPECIFIC HSE PLAN**

- 1.0      PURPOSE
- 2.0      SCOPE
- 3.0      RESPONSIBILITY
- 4.0      REFERENCES
- 5.0      DEFINITIONS
- 6.0      STANDARD
- 7.0      ATTACHMENTS

## **1.0 PURPOSE**

The PCL Project Specific HSE Plan integrates local HSE regulations, owner/client HSE requirements, and PCL HSE standards into a single document that can be easily referenced by project management, project supervision, trade contractors and workers. The purpose of this standard is to set out the requirements for a Project Specific HSE Plan.

## **2.0 SCOPE**

This standard applies to all PCL work sites.

## **3.0 RESPONSIBILITIES**

The following sections outline the Project Specific HSE Plan responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Coordinate the development of the Project Specific HSE Plan by PCL project management, owner representatives, and joint venture representatives;
- Verify that projects are following the standards contained within the Project Specific HSE Plan through auditing and observation; and
- Review the Project Specific HSE Plan prior to distribution.

### **3.2 District Management (Off-Site)**

- Verify that a Project Specific HSE Plan is developed for each project;
- Verify that projects are following the standards contained within the Project Specific HSE Plan through inspections and observation; and
- Review the Project Specific HSE Plan prior to distribution.

### **3.3 Project Management (Site)**

- Develop and approve the Project Specific HSE Plan prior to mobilization;
- Verify that each trade contractor company owner, company superintendent, on-site foreman, and lead hand have signed HSE-15-01, Project Specific HSE Plan Acknowledgement Form, to signify that they have read and understand the Project Specific HSE Plan; and
- Complete regular revisions of the Project Specific HSE Plan as project conditions change.

### **3.4 Project Supervision (Site)**

- Participate in the development of the Project Specific HSE Plan;
- Review, implement, and maintain the standards in the Project Specific HSE Plan;
- Make workers in his/her area of responsibility aware of the standards in the Project Specific HSE Plan; and
- Attend training and sign off on the Project Specific HSE Plan.

### **3.5 Project HSE Staff (Site)**

- Assist with the development, implementation, coordination, distribution, and communication of the standards in the Project Specific HSE Plan;
- Verify that the Project Specific HSE Plan is current;
- Verify that the Project Specific HSE Plan is communicated to all project workers in orientation;
- Verify that each trade contractor company is provided with a copy of HSE-15-01, Project Specific HSE Plan Acknowledgement Form. Instruct each firm to have the company owner, company superintendent, on-site foreman, and lead hand read and understand the Project Specific HSE Plan and signify that understanding on HSE-15-01, Project Specific HSE Plan Acknowledgement Form, then return the form to the district HSE manager; and
- Coordinate training for project supervision in the content of the Project Specific HSE Plan.

### **3.6 Workers**

- Follow the standards contained in the Project Specific HSE Plan.

## **4.0 REFERENCES**

- Legislative jurisdictional requirements
- PCL Health, Safety and Environment policy statements

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

N/A

## **6.0 STANDARD**

### **6.1 Project Specific HSE Plan**

Each project is required to have a Project Specific HSE Plan. The project management team is responsible for the development and implementation of the Project Specific HSE Plan.

Each trade contractor's company owner, company superintendent, on-site foreman, and lead hand will read and understand the Project Specific HSE Plan and signify that understanding by signing off on HSE-15-01, Project Specific HSE Plan Acknowledgement Form. The trade contractor company will not be allowed to begin work on the project until this form is properly signed and returned.

This plan shall be developed prior to mobilization and will address the following:

**6.1.1 Policies**

- Company HSE policy statement;
- Company Environmental policy statement;
- Prevention of Workplace Violence policy; and
- Fall Prevention and Protection policy statement;
- All other policies as applicable:
  - Alcohol and Drug policy / Substance Abuse Program;
  - Harassment and Discrimination policy; and
  - Electronic Devices policy.

**6.1.2 Leadership and Administration**

- District HSE department (Off-Site);
- District management (Off-Site);
- Project management;
- Project supervision;
- Project HSE staff;
- Worker;
- Trade contractors; and
- Visitors, suppliers, and consultants.
- Enforcement of HSE rules

**6.1.3 HSE Orientation and Training**

- Components of orientation
  - Site specific HSE and project site information;
  - HSE Orientation Video; and
  - HSE Orientation Quiz/Checklist.
- Access to project work site
  - Short Duration Worker HSE Orientation
  - Visitor Site Orientation
  - Minimum requirements for access to site;
  - Project delivery personnel; and
  - Escorting visitors.
- Worker specific training requirements

**6.1.4 HSE Communication Systems**

- Daily HSE Meetings
  - Frequency of meetings;
  - Attendance requirements; and
  - Distribution requirements.
- Project HSE Committee Meetings
  - Number of members;
  - Project Trend Analysis;
  - Scheduled meetings and inspections; and
  - Explanation of committee members' duties.

- HSE Field Meetings
  - Scheduled occurrence;
  - Distribution of Meeting Minutes; and
  - Guidelines for meetings.
- HSE Alerts and Bulletins

#### 6.1.5 Hazard Identification and Control

- Construction Hazard Assessment (CHA);
- Pre-Job Safety Instruction (PSIs);
  - PSI Audits
- Job Hazard Analysis (JHAs);
  - JHA Audits
- Material Safety Data Sheets (MSDSs);
- Hazard reporting procedures; and
- Employee information and training.

#### 6.1.6 Inspections and Audits

- Weekly/monthly inspections;
  - Formal inspections; and
  - Informal inspections.
- Government inspection.

#### 6.1.7 Personal Protective Equipment (PPE)

- Mandatory requirements;
- Project Specific PPE;
  - Service and maintenance logs;
  - Employee owned PPE;
  - Defective/damaged PPE; and
  - Inspection program.

#### 6.1.8 Emergency Response Plan

- General requirements;
- Emergency procedures;
- Roles and responsibilities;
- Emergency contact list;
- Emergency coordination;
- Emergency assistance procedure;
- Emergency evacuation plan;
- Emergency response team;
- Fires;
- Medical Emergency;
- Spills, leaks, and release of hazardous materials;
- Natural disasters;
- Adverse weather conditions;
- Storms;
- Site plot plan;

- First aid kit locations;
- First aid room locations;
- Nearest medical facility and travel routes;
- Map showing/Identifying
  - first aid attendants/services,
  - Fire extinguishers/fire-fighting equipment locations
  - Evacuation Routes
  - Emergency assembly/muster points
  - Media assembly areas,
  - Helicopter landing areas (as required), and
  - Controlled product storage.
- Identify certified first aid personnel;
- Identify trade contractor certified first aid personnel;
- Crisis Communication Plan; and
- Regular and after hours.

#### 6.1.9 Security

- Project Security Plan
  - Public Access
  - Site fencing/access – if applicable;
  - Gates;
  - Arson/fire protection;
  - Open flame heaters (fire watch);
  - Theft and vandalism;
  - Signage including, but not limited to:
    - PPE requirements;
    - Hazard warning signs;
    - Entry identification signs;
    - Emergency contact information;
    - Visitors to report;
    - Restricted area;
    - Authorized personnel only;
    - Hard hat area;
    - No trespassing;
  - Parking;
  - Afterhours activity;
  - Shipping, Receiving, and Material Control;
  - Key Control;
  - Legal requirements;
  - Employee access to parking and vehicles;
  - Lighting; and
  - Tool and equipment control.

#### 6.1.10 Environmental Action Plan

- Project Specific Environmental Action Plan;
- Roles and responsibilities;
- Environmental training;
- Contract review;

- Consultants reports;
- Permits and licenses;
- Project environmental designate;
- Chemical products information;
- Environmental Project Checklist;
- Storage areas;
- Waste management;
- Decontamination facilities/areas
- Communication system
- Emergency plan;
- Erosion, sediment, runoff and seepage control;
- Management of demolished debris and excavated material;
- Vehicle fueling/oil changes;
- Designated substances;
- Environmental incident reporting;
- Environmental inspections and audits
- Environmental records management; and
- Spill Prevention and Response Plan.

#### 6.1.11 Trade Contractor HSE Program

- Acknowledgement of Project Specific HSE Plan;
- Trade contractor's contractual obligations;
- Program promotion and awareness;
- Competent person;
- Competent worker;
- Compliance with PCL's Project Specific HSE Plan;
- Trade contractor's project specific HSE plan and workers;
- PPE
- Incident investigation and reporting;
- Statistical reporting;
- Audits and inspections;
- HSE orientation and training;
- HSE meetings;
- Environmental requirements; and
- Worksite monitoring.

#### 6.1.12 Preventative Maintenance

- Inspections;
- Maintenance schedule;
- Tool and equipment checklists; and
- Manufacturer specifications.

#### 6.1.13 Incident Investigations

- Incident investigation process;
- Outline of companies reporting structure;
- Investigation team;

- Incident investigation kits;
- Incident response;
- Securing the scene;
- Photographs;
- Sketch the scene;
- Witnesses;
- Evidence;
- Documenting and reporting procedure;
- Statistical reporting;
- Injury types – when to report;
- Property damage; and
- Lessons learned reports.

#### 6.1.14 Injury Management

- Roles and responsibilities;
- Training requirements;
- Medical aid injuries;
- Modified Work;
- Opportunities for modified work;
- Medical providers;
- Restricted work plan requirements;
  - Modified work offer;
  - Refusal of offer; and
  - Monitor return to work.
- Case coordination with key stakeholders.

#### 6.1.15 Behavioral Safety Observations, if applicable

- Implementation criteria;
- Selection and assignment of observers;
- Training
- Weekly Behavioral Based Observer Meetings; and
- Safety Management Center.

#### 6.1.16 Safe Work Practices (SWPs) – subject to, but not limited to;

- Floor openings;
- Wall openings;
- Roofs;
- Ladders;
- Scaffolds, general requirements;
- Ramps, runways, and platforms;
- Suspended scaffolds;
- Elevating work platforms;
- Fall Protection;
  - Working from scaffolds;
  - Working from swing stages;
  - Working beside unprotected openings and edges;



- HSE harnesses and shock absorbing lanyards;
  - Lifelines; and
  - Rope grabbing devices.
- Compressed gas – general information;
  - Acetylene;
  - MAPP;
  - Hydrogen ;
  - Oxygen; and
  - Argon, helium, nitrogen, carbon dioxide.
- Compressed gas welding and cutting;
- Cylinder storage;
- Temporary heat;
- Temporary electrical equipment;
- Storage and handling of propane and other chemicals;
- Welding;
- Forklifts;
- Forklifts – operator’s daily checklist;
- Hand tools and power tools;
- Powered hand tools – explosive actuated fastening tools; and
- Noise.

#### 6.1.17 HSE Operating Procedures (HSEOPs)

- See reference manual titled “PCL HSE Operating Procedures”; and
- Trade contractors shall be required to provide job specific SWPs/JHAs and/or HSEOPs or codes of practice. They will be reviewed by PCL prior to implementation.

## 7.0 ATTACHMENTS

HSE-15-01     Project Specific HSE Plan Acknowledgement Form



## Project Specific HSE Plan Acknowledgement Form

Project Name: \_\_\_\_\_

After reviewing the policies and practices as outlined in this plan, the company owner, site superintendent, on-site foreman, lead hands, and all trade contractors are to sign off this sheet. The sign-off sheet must be returned to the PCL Project Manager, before commencement of work-related activities on the jobsite.

***I have read and understand this Project Specific Health, Safety and Environmental Plan and will carry out my work within these guidelines.***

Company Name: \_\_\_\_\_

### Company Owner

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

### Company Superintendent

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

### On Site Foreman

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

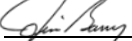


**BEHAVIORAL BASED SAFETY**  
***STANDARD HSE-16***

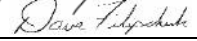
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

**REVISION LOG**

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	First Release





## **HSE-16      BEHAVIORAL SAFETY OBSERVATIONS**

- 1.0    PURPOSE
- 2.0    SCOPE
- 3.0    RESPONSIBILITY
- 4.0    REFERENCES
- 5.0    DEFINITIONS
- 6.0    STANDARD
- 7.0    ATTACHMENTS

## **1.0 PURPOSE**

The purpose of this standard is to specify the minimum requirements for the conduct of behavioral based observations, the coaching of workers by observers, the procedures for documentation and recordkeeping of observation data and directions for the use of trending data gleaned from behavioral safety observations.

## **2.0 SCOPE**

This standard will be implemented on all PCL work sites as directed by the applicable Chief Operating Officer.

## **3.0 RESPONSIBILITY**

The following sections outline the Behavioral Safety Observation responsibilities of a number of groups. Specific responsibilities of individuals in particular positions are set out in HSE-02, Leadership and Administration.

### **3.1 District HSE Department (Off-Site)**

- Verify that project site behavioral based observation (BBO) systems are conducted in accordance with the minimum requirements specified in this standard;
- Provide technical assistance in developing and implementing the BBO system as requested;
- Verify that weekly BBO meetings are conducted on all project sites that implement the system;
- Verify that observation data is entered into the SMC;
- Verify that information gathered from observations is included in project and district trend analyses;
- Monitor trends identified by the observation system and advise the district manager when corrective actions are needed; and
- Verify that the resources are provided to implement the system.

### **3.2 District Management (Off-Site)**

- The COOs will direct the implementation of this standard within their areas of responsibility.
- Review behavioral safety observation trends;
- Take action or monitor the actions necessary to correct adverse trends as warranted; and
- Provide resources as needed for full implementation of the system.

### **3.3 Project Management (Site)**

- Using the implementation thresholds that apply to the project site in paragraphs 6.1.1 and 6.1.2 of this standard, determine if the observation system will be implemented;
- When the system is employed, verify that it is implemented according to procedures herein;



- Verify that observers are trained using the PCL BBO Training Module;
- Provide resources as necessary;
- Maintain awareness of trends identified by observation data; and
- Include the requirement for trade contractor participation in the behavioral safety observation system in all contracts.

### **3.4 Project Supervision (Site)**

- Attend BBO training to understand the system that their workers will be implementing;
- Select at least one worker from each craft and trade contractor and verify that they are trained and are conducting at least four observations per week;
- Support the participation of workers assigned as observers; and
- Implement corrective actions identified in inspections of their work areas.

### **3.5 Project HSE Staff (Site)**

- When the system is employed, conduct the required weekly observer meetings;
- Conduct or verify the conduct of behavioral safety observation training for all workers selected as observers;
- Verify that observation data is entered in the SMC and trended;
- Provide assistance to project management in the implementation of corrective actions; and
- Periodically assess the effectiveness of the observation checklist(s) employed on the project site.

### **3.6 Workers**

- Accept observations and assist the observer in making them meaningful; and
- When selected as an observer, accomplish four observations per week and attend the weekly observer meeting.

## **4.0 REFERENCES**

- PCL Health, Safety, and Environment policy statements
- Legislative jurisdictional requirements

## **5.0 DEFINITIONS**

**The following defined terms are used in this standard. Additional defined terms are provided in HSE-17, Glossary.**

### **5.1 Behavioral Based Observations**

Using effective observation techniques, coworkers observe each other and give constructive one-on-one feedback to their peers to reinforce safe work behaviors and discourage at-risk behaviors.

## **5.2 Behavioral Safety**

A pro-active incident prevention approach that focuses on at-risk behaviors that can result in injuries as well as the safe behaviors that can contribute to injury prevention.

## **5.3 General Observation Form**

HSE-16-01, General Observation Form, contains a list of the critical behaviors used by the observer to record findings during a behavioral safety observation.

# **6.0 STANDARD**

## **6.1 Implementation Criteria**

The following implementation criteria are a guide only. The appropriate Chief Operating Officer (COO) will direct when the observation system is to be implemented.

If both of the following criteria are met, the BBO system must be implemented on a project.

### **6.1.1 Worker Population**

The observation system will be implemented on all project sites where more than 50 workers, on average, are assigned. That number includes trade contractor workers and PCL supervisors, managers and hourly workers. At their discretion, the project manager may implement the observation system when fewer workers are assigned.

### **6.1.2 Project Duration**

The observation system will be implemented on all project sites where work is scheduled to be ongoing for more than four months, unless the project manager determines that implementation should take place on a project of lesser duration.

## **6.2 Selection and Assignment of Behavioral Based Observers**

### **6.2.1 Workers**

The HSE coordinator will coordinate with project supervisors to identify workers who have good craft skills, safe attitudes, a willingness to assist with the safety effort and a good work ethic. Those workers will be requested to serve as behavioral safety observers.

On projects with fewer than 200 workers on average, one observer will be assigned from each PCL craft and will be trained in the PCL BBO Training Module, which is maintained up-to-date in the HSE Team Site.

When there are between 200 and 400 workers assigned to a project, two observers for each craft will be trained and assigned. The project manager will determine the number of trained observers when there are over 400 workers on the project site. When the worker population exceeds 750 workers, a third set of observers will be trained and assigned.

When the system is implemented, an observer from each trade contractor who has an average of 20 employees or more on the project site for four months will be trained and required to complete behavioral safety observations.

Workers (including trade contractors) assigned and trained as observers will complete four behavioral safety observations each week using HSE-16-01, General Observation Card, or site critical behaviors checklist(s).

#### **6.2.2 Assignment Duration of Worker Observers**

Observers should be periodically rotated. The reason for rotating observers is to give others the opportunity to learn more about safety and provide a fresh perspective during behavioral observations. However, PCL employees and trade contractors will serve at least 90 days as an observer before being replaced.

At the discretion of the project manager, observers who have served for at least 90 days will be designated as Graduate Observers and will only be tasked to conduct one observation per week. They are not required to attend the weekly observer meeting.

#### **6.2.3 PCL Safety Observer Hard Hat Decal**

After receiving the PCL Behavioral Safety Observation Training Module, the worker will be given the PCL Safety Observer hard hat decal and asked to place this on their hard hat. Graduate safety observers will replace that decal with one that indicates their graduate status.

### **6.3 General Observation Card**

The 10-item form HSE-16-01, General Observation Card, is used to identify at-risk behaviors and compile the results of the observation to enter into the SMC for trending. Periodically, this form may be changed and updated to reflect PCL trends.

For those projects that have access to a Scantron card reader, the General Observation Card designed for that purpose must be used.

**INSTRUCTIONS**

1. PRINT CLEARLY / NO HANDWRITING
2. CHOOSE N/A FOR QUESTIONS THAT DO NOT APPLY
3. COMMENTS MUST BE ENTERED FOR AT-RISK EVALUATIONS
4. CORRECTLY MARK ☐ OR ☒
5. ONLY MARK AN AT-RISK OBSERVATION AS A DIAMOND IF IT MEETS EITHER DEFINITION BELOW

**DIAMOND IN THE ROUGH**

AN "AT RISK" OBSERVATION RESULTING IN AN INTERVENTION WHICH PREVENTED A POSSIBLE HIGH POTENTIAL INCIDENT WITH SEVERE CONSEQUENCES FROM OCCURRING.

A "SAFE" OBSERVATION DEMONSTRATING WORKERS GOING ABOVE AND BEYOND THE NORM TO ENSURE THE SAFETY OF THEMSELVES AND OTHERS.

Question# For Comment

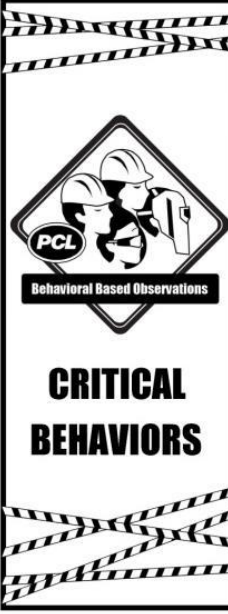
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐

Diamond ☐

Comment:

Action Taken:



**CRITICAL BEHAVIORS**

FEED INTO SCANNER THIS DIRECTION

Page 1 of Scantron General Observation Card

DATE (MM/DD/YYYY)

PROJECT NUMBER

OBSERVER FIRST NAME

OBSERVER LAST NAME

OBSERVER COMPANY

SUB-CONTRACTOR COMPANY OBSERVED

**CRAFT OBSERVED**

<input type="checkbox"/> Baker	<input type="checkbox"/> Glazier
<input type="checkbox"/> Carpenter	<input type="checkbox"/> Laborer
<input type="checkbox"/> Cement Mason	<input type="checkbox"/> Millwright
<input type="checkbox"/> Drywall	<input type="checkbox"/> Operator
<input type="checkbox"/> Electrician	<input type="checkbox"/> Plumber/Pipefitter
<input type="checkbox"/> Iron Worker	<input type="checkbox"/> Scaffold
<input type="checkbox"/> Insulator	<input type="checkbox"/> Welder

**AREA OBSERVED**

<input type="checkbox"/> Area 1	<input type="checkbox"/> Area 2	<input type="checkbox"/> Area 3
<input type="checkbox"/> Area 4	<input type="checkbox"/> Area 5	<input type="checkbox"/> Area 6
<input type="checkbox"/> Area 7	<input type="checkbox"/> Area 8	<input type="checkbox"/> Area 9
<input type="checkbox"/> Area 10		

**CRITICAL BEHAVIORS**

1. Line of fire/obstacle in the path	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
2. Eyes on task/focused on task	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
3. Body position (e.g. ergonomically correct, unnatural stress on body position)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
4. Hand position	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
5. Balance, traction or grip (proper footwear, proper gloves and firm level footing)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
6. Rushing (to move, out, and perform activities at a rapid pace that may cause deviation to the plan)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
7. Use of PPE (e.g. proper use and lack of poor condition)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
8. Use of tools (e.g. proper tool, modified, good condition and inspected)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
9. Use of equipment (e.g. competent, inspected and annual inspection)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A
10. Work/life environment (e.g. are controls in place for identified hazards)	<input type="checkbox"/> SAFE	<input type="checkbox"/> AT RISK	<input type="checkbox"/> N/A

Page 2 of Scantron General Observation Card

## 6.4 Behavioral Safety Observation Training

- Prior to implementation on a project site, the entire workforce will be introduced to the Behavior Based Observation (BBO) system, its purpose and the implementation process.

- All observers are required to complete the Behavioral Based Observation Training Module before conducting an observation. The latest version of this training is found on the HSE Team Site.
- All project supervisors will be trained on the BBO system using the Behavior Based Observation Training Module.
- In addition to the required module, observers should be trained in hazard recognition.

## **6.5 Weekly Behavioral Based Observer Meeting**

6.5.1 Each worker who is assigned as an observer is required to attend the weekly meeting to review the previous week's observations. The mandatory agenda must consist of these items:

- Recording of attendance on an attendance roster;
- Review of the previous week's observations;
- Review of pertinent SMC reports;
- Highlights of positive observations and selection of workers for recognition;
- A report from observers on any difficult situations that arose during an observation;
- A discussion of action plans that are necessary to address adverse observation trends;
- A ten-minute training refresher on a hazard recognition topic; and
- Inputs from observers on ideas for continual improvement.

## **6.6 Safety Management Center (SMC)**

- All data will be compiled on HSE-16-01, General Observation Card, or on a mobile device and entered in the SMC.
- Data in the SMC will reflect the number of observations and the BBO Critical Behaviors percent safe and unsafe.
- Data from observations will be entered into the SMC for use at the subsequent weekly observer meeting.

## **7.0 ATTACHMENTS**

HSE-16-01	General Observation Card
HSE-16-02	Specific Observation and Coaching Steps



## **Specific Observation and Coaching Steps**

### ***A Key to Successful Behavioral Safety Observations***

Prior to conducting a behavioral safety observation, workers and supervisors will become aware of the project site observation, inspection and incident trends so they may target tasks, crafts and behaviors that may be more likely to cause an incident on the project site. This awareness can be gained from worker observers attending the weekly behavioral safety observation meeting and understanding inspection and incident trends that are published by the site HSE coordinator. Supervisors gain awareness of the trends at staff meetings, weekly safety meetings and by reviewing trending information posted on the safety bulletin board.

When an observer is selecting a craft or task to observe, they must consider their knowledge of the craft and task and review the checklist for potential risks that might be observed. A review of the pertinent HSEOP may improve the value of the observation.

Each observer must review how they will approach the worker(s) to be observed and:

- Resolve to talk with workers, not down to them;
- Remember to focus on two-way communication;
- Be prepared to stop the work or seek revisions to the PSI if necessary;
- Be positive with your feedback;
- Make decisions that indicate that you care about the welfare of the workers;
- Be friendly and constructive; and
- Strive for solutions to at-risk situations.

Each worker who is designated as a safety observer must do four observations each week and turn in the HSE-16-01, General Observation Card, used to conduct the observation and record the results.

### **Conducting an Observation:**

To conduct an observation, approach the worker(s) and do the observation using these techniques:

- Be familiar with the task that you will observe.
- Verify that you have HSE-16-01, General Observation Card, or a checklist approved by the project site.
- Wear the required PPE for the project site and the area you will enter.
- Before approaching the worker(s) to do the observation, look around to verify that it is safe for you to be in their area. If the area is red-barricaded, get permission from a worker in the area before you enter.
- Introduce yourself and explain that you will do a job observation. In some instances, the observer will need to explain the benefits of the observation process.
- Ask to review the PSI with the worker(s) you will observe.
- If corrections or additions are needed to the PSI, coordinate with the worker(s) and if necessary, the foreman. If corrections are needed to the worker's PSI, they will be made prior to beginning the observation.
- Review any permits and consider looking at the JHA as well.





- Ask the worker(s) to continue their task and that you will discuss the observation when you are finished.
- Pick a location where the observer can see the work but not get in the way of the worker being observed.
- Be mentally prepared to stop the work if you see a hazard or unsafe acts that could cause imminent danger to the worker(s). Examples are:
  - Using a broken or unsafe tool;
  - Failing to use fall protection when needed;
  - Not tying off an extension ladder;
  - Neglecting to isolate an energy source; and
  - Failing to wear required PPE if the risk is deemed serious; but for example, someone who does not have a reflective vest on may not be in danger in the area where they are working. Another example would be someone who is kneeling on concrete but not wearing knee pads; the prudent action would be to wait until after the observation to remind the worker that wearing knee pads is a good practice.
- Avoid interrupting or distracting the co-worker unless absolutely necessary;
- Check the appropriate blocks on HSE-16-01, General Observation Card, and list comments as necessary, especially the positive observations;
- Never record the names of the persons that are observed;
- Carefully consider the inclusion of positive comments since one of the purposes of the observation system is to make sure that workers are recognized for safe task performance;
- Complete the reverse side of the card with the information requested.
- Brief the worker on positive and negative aspects of their task performance. It is always a good technique to ask "Can you think of a safer way to do this task?"
- Provide feedback to the co-worker and obtain his/her agreement, if possible, on the action necessary to correct unsafe behavior or conditions;
- End the observation on a positive note; and
- Submit the observation card to the site HSE coordinator daily (A box should be maintained in several project locations on large projects for deposit of the cards by the observers and supervisors).

During the observation, the safety observer must communicate immediately to supervision if:

- An unsafe act or behavior is repeated;
- Excessive resistance occurs during the coaching process;
- There is refusal to correct a behavior, unsafe act or condition; and
- Immediate danger to life and health exists.

Should it become necessary for the observer to ask for assistance from supervision for reasons such as those listed above and for any reason the supervisor is not cooperative or does not make the necessary correction, the safety observer must immediately inform the next higher level of supervision and ask for their assistance in correcting the behavior or condition.

Remember that observations are tools used for increased awareness, learning and coaching.



### **Additional Duties of the Safety Observer:**

While an observer is doing their normal craft duties, or if actively doing a planned observation, if he/she sees a worker performing in an at-risk manner, they must immediately stop the worker from performing the at-risk behavior and correct the worker through coaching. The safety observer will introduce themselves and inform the worker as to why the work was stopped and what will be necessary to continue the work safely. It is of utmost importance that the coaching process remains positive. If at any time the worker resists or argues, it is preferred that you consult the foreman.

Similarly, if the safety observer witnesses a hazard or an unsafe condition, the observer and co-workers must correct the condition and positively coach the worker(s) to correct the at-risk behavior that led to the condition. Again, praise and/or thanks shall be given for cooperation in eliminating the hazard, condition and at-risk behavior. The safety observer may choose to document coaching activities on pocket note pads, in notebooks, or loose paper when convenient and transfer to the observation card later if they were not planning to do an observation at that time.

Trained and designated observers attend the weekly meeting on the project to discuss the observations completed during the past week.

Completed observation cards are to be forwarded to the site HSE coordinator or their designee for data entry into the SMC. Each project will establish a method to obtain the cards from their observers. Observations will be categorized to identify areas for improvement, possible training needs and behavioral trends. Safety observers will share their prior day's observations with supervision and coworkers during the daily safety (PSI) meeting and/or weekly safety meetings.

The observer will perform their normal duties while serving as a designated safety observer unless specific direction is given by their supervisor for continuous observation and coaching of workers because of an increase in personnel or identification of a high hazard task.

While a safety observer will be required to turn in a minimum of four observations per week, the observer must make an effort not to do all the observations on one day.

Once a safety observer has attained graduate status after three months, or as determined on the project, he/she will be required to turn in a minimum of one safety observation per week and continuously coach workers for safety.

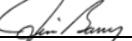


## GLOSSARY *STANDARD HSE-17*

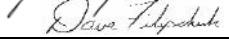
**DEPARTMENT:** Safety

**PREPARED BY:**  (Review Committee)

**DATE:** January 2021

**REVIEWED BY:**  (J. Barry)

**DATE:** January 2021

**APPROVED BY:**  (D. Filipchuk)

**DATE:** January 2021

### REVISION LOG

Revision Number	Revised By	Date	Approved By	Issue Date	Description
Rev 04	JSB	December 2012	PGD	April 2013	Revisions made and reissued
Rev 03	JSB	December 2010	PGD	January 2011	Revisions made and reissued.
Rev 02	JSB	August 2009	PGD	September 2009	Revisions made and reissued.
Rev 01	JSB	June 2008	RAG	July 2008	Revisions made and reissued.
Rev 00	JSB	November 2007	RAG	November 2007	Reissued in generic format.





## **HSE-17      GLOSSARY**

- 1.0      PURPOSE
- 2.0      SCOPE
- 3.0      RESPONSIBILITY
- 4.0      REFERENCES
- 5.0      DEFINITIONS
- 6.0      STANDARD
- 7.0      ATTACHMENTS

## **1.0 PURPOSE**

The purpose of the Glossary Standard is to serve as a quick reference for those looking for definitions and acronyms used throughout this manual.

## **2.0 SCOPE**

This scope applies to all PCL work sites.

## **3.0 RESPONSIBILITY**

N/A

## **4.0 REFERENCES**

N/A

## **5.0 DEFINITIONS**

### **5.1 Administrative Controls**

Administrative 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.

### **5.2 Audit**

Audits are much more detailed than inspections and focus on the overall HSE process or management system. This includes such items as communication, administration, documentation, HSE education, training, practices, and procedures. When supported within a framework of frequency statistical analysis and HSE inspections, this system is very efficient and effective in terms of HSE performance measurement.

### **5.3 Behavioral Based Observations**

Using effective observation techniques, coworkers observe each other and give constructive one-on-one feedback to their peers to reinforce safe work behaviors and discourage at-risk behaviors.

### **5.4 Behavioral Safety**

A pro-active incident prevention approach that focuses on at-risk behaviors that can result in injuries as well as the safe behaviors that can contribute to injury prevention.

## **5.5 Board of Directors**

When used in this manual, board of directors refers to the board of directors of PCL Construction Holdings Ltd.

## **5.6 Class A Hazard**

See hazard classification A.

## **5.7 Class B Hazard**

See hazard classification B.

## **5.8 Class C Hazard**

See hazard classification C.

## **5.9 Competent Person / Competent Worker / Qualified Worker**

One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them or as otherwise defined by applicable legislation.

## **5.10 Construction Hazard Assessment (CHA)**

A Construction Hazard Assessment (CHA) is an assessment of potential hazards on a project that is completed at the outset of the project and used to develop a Project Specific HSE Plan. See HSE-05.

## **5.11 Contributing Cause**

Substandard acts and/or conditions that are the immediate or primary factors that contribute to an incident and lead to the determination of root causes.

## **5.12 Corporate Services Executive Committee (CSEC)**

CSEC is a subcommittee of the board of directors. Its responsibilities include review of HSE policies.

## **5.13 Crew**

A group of workers working together and engaged in a portion of the construction activities on a project site.

## **5.14 Crisis**

A significant disruption of one or more PCL companies' normal activities that may stimulate media coverage and/or public scrutiny.

### **5.15 Critical/Major Incident**

An incident that results in one or more of the following:

- A permanent, long-term injury or illness;
- Property damage between \$50,000 and \$100,000;
- Reportable environmental incident with minimal environmental impact; or
- Community attention.

### **5.16 District HSE Committee**

The committee developed and operated pursuant to section 6.3.4 of HSE-04.

### **5.17 District HSE Department (Off-Site)**

Throughout each standard of this HSE Manual, the term “district HSE department (off -site)” refers to:

- HSE director, USHO/HSE vice president, NAHQ;
- Regional HSE manager;
- District HSE manager; and
- HSE administrative assistant.

### **5.18 District Management (Off-Site)**

Throughout each standard of this HSE Manual, the term “district management (off -site)” refers to:

- Chief operating officer/president;
- Vice president;
- District/general manager;
- Operations manager;
- Senior finance and administration manager;
- Chief estimator;
- Procurement/materials manager;
- District HSE manager;
- Purchasing manager;
- Yard manager; and
- Shop manager.

### **5.19 Elimination/Substitution**

Elimination is the process of removing a hazard from the worksite and using an alternative means to reach the same goal. Substitution occurs when a less risky chemical or substance is used instead of an existing riskier chemical or substance.



## **5.20 Emergency Assembly/Muster Point/ Emergency Meeting Points**

Emergency assembly/muster points/emergency meeting points are predetermined locations where workers will gather in the case of an emergency or evacuation and to meet responding emergency response crews.

## **5.21 Employee**

Throughout each standard of this HSE Manual, the term “employee” refers to all individuals employed by PCL or a member of the PCL family of independent companies. This person is also considered a worker on PCL worksites.

## **5.22 Engineering Controls**

Engineering controls help reduce risk to potential hazards either by isolating the hazard or removing it from the work environment. They include mechanical ventilation, sound-dampening materials to reduce noise levels, permanent railings, or substitution of less hazardous materials.

Engineering controls are usually preferred to other control measures such as the use of personal protective equipment.

## **5.23 Environmental Action Plan**

A component of the Project Specific HSE Plan that addresses environmental issues on the project and is completed in accordance with section 6.7 of HSE-10.

## **5.24 First Aid**

Any one time treatment and subsequent observation(s) of minor, superficial injuries (i.e. minor scratches, cuts, burns, abrasions and splinters or foreign objects embedded only in surface tissue) that do not require the professional medical care by a medical professional even though such an individual may have delivered the care.

## **5.25 Formal Inspection**

Formal inspections are documented visual tours of the work place which identify hazards and hazardous conditions. Items inspected include, but are not limited to, all 29 items identified on the back of HSE-06-01, HSE Inspection Checklist.

## **5.26 Formal Training**

Formal training is a structured instruction that must be documented. It will be provided by a competent trainer for a specific skill, task, or understanding.

## **5.27 General Observation Form**

HSE-16-01, General Observation Form, contains a list of the critical behaviors used by the observer to record findings during a behavioral safety observation.

#### **5.28 Hazard Classification A**

A condition or practice likely to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material.

#### **5.29 Hazard Classification B**

A condition or practice likely to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not excessive.

#### **5.30 Hazard Classification C**

Condition or practice likely to cause minor (non-disabling) injury or illness or non-disruptive property damage.

#### **5.31 Health, Safety, and Environment Orientation**

The procedures set out in section 6.1 of HSE-03.

#### **5.32 High Risk**

High risk is the chance that a person will be harmed or experience an adverse health effect if exposed to a hazard. It may also apply to situations with property or equipment loss.

#### **5.33 HSE Operating Procedures (HSEOPs)**

The following procedures or such other similar procedures adopted by HSEUG:

- HSEOP-01: Introduction;
- HSEOP-02: Tower Cranes;
- HSEOP-03: Mobile Cranes, Personnel Baskets and Rigging;
- HSEOP-04: Personnel and Material Hoists;
- HSEOP-05: Trenching and Excavation;
- HSEOP-06: Hazcom and WHMIS;
- HSEOP-07: Control of Hazardous Energy;
- HSEOP-08: Compressed Gases;
- HSEOP-09: Swing and Non-Swing Type Earthwork Equipment;
- HSEOP-10: Hot Work;
- HSEOP-11: Cutting and Welding;
- HSEOP-12: Respiratory Protection;
- HSEOP-13: Confined Space Entry;
- HSEOP-14: Commercial Diving;
- HSEOP-15: Scaffolding;
- HSEOP-16: Asbestos Abatement;
- HSEOP-17: Lead Abatement;
- HSEOP-18: Waste Management (Canadian Operations);
- HSEOP-19: Bloodborne Pathogens;
- HSEOP-20: Demolition;
- HSEOP-21: Silica Protection;

- HSEOP-22: Mould Guidelines (Canadian Operations);
- HSEOP-23: Preventing Violence at the Workplace (Canadian Operations);
- HSEOP-24: Fall Protection;
- HSEOP-25: Grinders;
- HSEOP-26: Aerial Work Platforms;
- HSEOP-27: Hydrotesting;
- HSEOP-28: Heat Stress Prevention;
- HSEOP-29: Working in Cold Environments;
- HSEOP-30: First Line Breaks;
- HSEOP-31: Electrical Safety;
- HSEOP-32: Flammable & Combustible Liquid Storage & Handling; and
- HSEOP-33: Flagging and Barricades.

#### **5.34 Incident**

An incident is an undesired event that results in harm to people, loss of process, environmental interference, property damage or liability.

#### **5.35 Incident Classification A (Class A Incident)**

An event that results from a condition or practice that has the potential to cause permanent disability, loss of life or body part, or extensive loss of structure, equipment or material. Based upon the risk assessment set out on HSE-13-01, the district HSE manager and district management (off-site) are required to oversee the investigation, and may include the HSE director, USHO/regional HSE manager.

#### **5.36 Incident Classification B (Class B Incident)**

An event that results from a condition or practice that has the potential to cause serious injury or illness, resulting in temporary disability or property damage that is disruptive but not extensive. Based upon the risk assessment set out on HSE-13-01, on-site project management is required to oversee the investigation, but district management (off-site) may also participate.

#### **5.37 Incident Classification C (Class C Incident)**

An event that results from a condition or practice that has the potential to cause minor (non-disabling) injury or illness or non-disruptive property damage. Based upon the risk assessment set out on HSE-13-01, the investigation team is established at the discretion of project superintendent and project supervision, but project management and district management may also participate.

#### **5.38 Informal Inspection**

Informal inspections include the daily, visual inspection of workplace conditions.

**5.39 Informal Training**

Informal training passes on knowledge, skill, and understanding from one employee to another or from a supervisor to an employee.

**5.40 Job Hazard Analysis (JHA)**

An analysis of high-risk activities completed by the project team in accordance with Section 6.2.2 of HSE-05.

**5.41 Jobsite**

A location where PCL engages in construction activities and is responsible for care and control of the physical space.

**5.42 Lagging Indicators**

Lagging indicators identify trends in incidents that have occurred within the workplace and may include the number of first aids, medical aids, modified works, and lost time injuries, time and place of incident, type of injury, etc.

**5.43 Leading Indicators**

Leading indicators are conditions and activities that precede and affect the occurrence of workplace injuries and illness. They measure the level of safety on a jobsite, even when no injuries have occurred. For example, evidence obtained from an HSE audit relating to the proportion of workers using gloves on a PCL Project Site is a leading indicator related to the risk of hand injuries.

**5.44 Legislative Jurisdictional Requirements**

Applicable laws within the jurisdiction where PCL performs work.

**5.45 Loss of Process**

Loss of process is an undesired incident that results in the disturbance of normal construction operations caused by an incident, damage to property, equipment, or the environment.

**5.46 Lost Time Incident (LTI)**

An injury where the worker is away from work on a day after the day on which the incident occurred, on the advice of a medical professional.

#### **5.47 Major Incident**

An incident that results in one or more of the following:

- Fatality;
- Property damage more than \$100,000;
- Reportable/damage to environmental; or
- Government intervention.

#### **5.48 Medical Treatment (Medical Aid)**

An injury or illness-related procedure other than first aid or preventative treatment that is intended to provide a remedy or palliative care.

#### **5.49 Minor Incident**

An incident that involves one or more of the following:

- An injury that only requires on-site first aid;
- Property damage less than \$10,000;
- No impact to the environment; and
- Does not otherwise affect the public or PCL's reputation.

#### **5.50 Modified Work (Restricted Work)**

This refers to work duties that have been modified to accommodate an injured worker who cannot perform their regular work duties as directed by a medical professional.

#### **5.51 Near Miss**

A near miss is an unplanned, unwanted event that might have resulted in personal harm or property damage.

#### **5.52 Non Life Threatening Incident**

Any incident that causes a medical aid, modified work, or first aid.

#### **5.53 Other Workers**

Workers of other contractors not under direct contractual control of PCL and/or the general public/owners and suppliers.

#### **5.54 Personal Protective Equipment (PPE)**

Personal protective equipment includes all clothing and other work accessories designed to create a barrier against workplace hazards. Examples include safety goggles, blast shields, hard hats, hearing protectors, gloves, respirators, aprons, and work boots.

#### **5.55 Pre-Job Safety Instruction (PSI)**

The assessment of potential hazards completed pursuant to section 6.2.3 of HSE-05.

#### **5.56 Project HSE Committee**

The committee developed and operated pursuant to section 6.3.3 of HSE-04.

#### **5.57 Project HSE Staff**

Throughout each standard of this HSE Manual, the term “project HSE staff” refers to:

- Project HSE manager;
- Project HSE supervisors; and
- Project HSE coordinators.

#### **5.58 Project Management**

Throughout each standard of this HSE Manual, the term “project management” refers to:

- Construction manager and manager, special projects;
- Project manager;
- Project director;
- Field engineer;
- Project coordinator; and
- Project HSE manager/supervisor.

#### **5.59 Project Site**

See job site.

#### **5.60 Project Specific HSE Plan**

See HSE-15.

#### **5.61 Project Supervision**

Throughout each standard of this HSE Manual, the term “project supervision” refers to:

- Superintendent;
- District yard supervisors;
- General foreman;
- Foreman; and
- Lead hand.

#### **5.62 Right to Refuse**

A worker's right, in accordance with local legislative jurisdictional requirements, to refuse to perform a particular task because the worker believes that such as task involves an unacceptable risk of injury or damage and the employer's obligation is to honor the refusal, investigate, correct if warranted and communicate the results to the worker in a timely manner.

#### **5.63 Root Cause**

The most basic *cause* that can *reasonably* be identified that management has control to *fix* and, when fixed, will prevent recurrence.

#### **5.64 Safe Work Practice (SWP)**

A written set of guidelines which establish a standard of performance for an activity.

#### **5.65 Safety**

Safety is the process of reducing or eliminating behaviors and/or conditions that have the potential for causing an incident.

#### **5.66 Safety Management Center (SMC)**

The Safety Management Center (SMC) is a web based software solution that facilitates the collection and analysis of safety statistics and provides real time safety trend analysis data and graphs.

#### **5.67 Serious Incident**

An incident that results one or more of the following:

- A recordable injury;
- Property damage between \$10,000 and \$50,000;
- Site conditions that do not trigger a reporting obligation to an environmental agency but PCL considers unacceptable; or
- Involvement of senior PCL management or a shutdown of the project.

#### **5.68 Shall, Must and Will**

"Shall", "must" and "will" indicated in a standard, practice or procedure is mandatory.

#### **5.69 Short Duration Worker**

For the purpose of this standard, short duration worker refers to a worker performing work on a PCL work site for a period of less than two business days that is not repetitive or anticipated to be repeated through the duration of the project.

**5.70 Table Top Exercise**

A table top exercise is an emergency simulation exercise conducted in a classroom or office setting instead of an actual evacuation exercise in the field.

**5.71 Total Hurt Incident Rate (THIR)**

All injuries including first aids, medical aids, modified works and lost times which are multiplied by 200,000 and then divided by the work hours.

**5.72 Visitor**

A visitor is an individual (i.e. employee, worker, or other) who is not assigned to the worksite, office, or permanent facility.

**5.73 Worker**

Throughout each standard of this HSE Manual, the term “worker” refers to all individuals working on a PCL work site (includes, without limitation, employees and individuals who work for trade contractors, suppliers, consultants, and other third parties).

**5.74 Work Site**

A location where PCL engages in construction activities and is responsible for care and control of the physical space.



### **Acronyms**

BBO- Behavior Based Observation  
 BBS- Behavior Based Safety  
 CHA – Construction Hazard Assessment  
 CPR – Cardiopulmonary Resuscitation  
 CSA – Canadian Standards Association  
 CSTS – Construction Safety Training System  
 DL – Days Lost  
 EAP – Environmental Action Plan  
 ERP – Emergency Response Plan  
 FA – First Aid  
 FRC – Fire Retardant Clothing  
 HAZWOPER – Hazardous Waste Operations and Emergency Response  
 HSE - Health, Safety, and Environment  
 HSEOP – HSE Operating Procedure  
 HSEUG – Health, Safety, and Environment User Group  
 JHA – Job Hazard Analysis  
 JWHSC – Joint Worksite Health and Safety Committee  
 LTFR – Lost Time Frequency Rate  
 LTI – Lost Time Incident  
 MA – Medical Aid  
 MSDS – Material Safety Data Sheet  
 MW – Modified Work  
 NAHQ – North American Headquarters  
 NM – Near Miss  
 OEL – Occupational Exposure Limit  
 PPE – Personal Protective Equipment  
 PSI – Pre-Job Safety Instruction  
 QUEST – Quality Workmanship, Understanding the Customer, Employee Involvement, Service Exceeding Customer Expectations, Teamwork & Partnerships  
 SMC – Safety Management Center  
 SWP – Safe Work Practice  
 TDG – Transportation of Dangerous Goods  
 THIR- Total Hurt Incident Rate  
 TLV – Threshold Limit Value  
 TRIR – Total Recordable Incident Rate  
 USHO – US Head Office  
 WHMIS – Workplace Hazardous Materials Information System

## **6.0 STANDARD**

N/A

## **7.0 ATTACHMENTS**

N/A

