SURVIVAL FACTORS GROUP

CHAIRMAN FACTUAL REPORT

ATTACHMENT 10
WA DOT SITE SPECIFIC SAFETY PLAN

Redacted

Bridge Collapse
Mount Vernon, WA; 05/23/2013

HWY-13-MH-012
(57 Pages)

ATKINSON
CONSTRUCTION
a subsidiary of Clark Construction Group, LLC CLARK

Site Specific Safety Plan
(SSSP)

Job Name
Emergency Bridge Repair

Job Number

Date
May 24, 2013

This Project Specific Plan will be implemented by the Project Team

[redacted] 5/24/13

Project Manager Signature Date

Cc: [redacted]

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Attachments:
A - Pacific Pile and Marine Site Specific Safety Plan
B - Global Diving Site Specific Safety Plan

Introduction

The requirements specified in this document have been established to protect the safety and health of Atkinson Construction and subcontractors assigned to EMERGENCY BRIDGE REPAIR. This document has been written to comply with the regulations established by the Atkinson Construction Corporate Safety and Health Programs and DOSH. Each Atkinson Construction employee and subcontractor assigned to the project must abide by these requirements. Whenever a conflict arises between DOSH regulations, and/or the Atkinson Construction safety procedures, the specification most protective of worker safety and health shall prevail (except where specifically noted as an exception). Subcontractors, upon approval by the Project Safety Manager, may use safety and health procedures that are at least as stringent as those contained in this document.

The information contained herein is general in nature and may not be sufficient to address all situations. Job Hazard Analysis' (JHA) will be completed to supplement the information contained in this plan. Further information may be obtained from the Atkinson Construction "Safe Start" documents and various JHA's.

Notice

This Site Specific Safety and Health Plan (plan) has been prepared for use by employees and subcontractors performing a specific, limited scope of work. It was prepared based on the best available information regarding the physical and chemical hazards known, or suspected, to be present on the project site. It is not possible in advance, to discover, evaluate, and protect against all possible hazards that may be encountered during the completion of this project. Adherence to the requirements of this Plan will significantly reduce, but not eliminate, the potential for occupational injury and illness at the project site. The guidelines contained in this Plan were developed specifically for the project site and scope of work described herein, and should not be used at any other site(s) without the review and approval of a qualified health and safety professional. For this Plan, "site" is defined as the area of EMERGENCY BRIDGE REPAIR, including all appurtenances.

The specifications and requirements contained in this Site Specific Safety and Health Plan have been developed to apply to the project work conducted by Atkinson Construction for EMERGENCY BRIDGE REPAIR.

Purpose

Atkinson Construction is committed to providing a safe and healthy workplace for our employees. We consider the prevention of accidents to be an integral part of our operation, and to these ends, we have established a comprehensive Injury and Illness Prevention Program to assure the continued safety of our employees. This program is designed to:

- Identify and evaluate jobsite hazards (JHA).
- Establish methods for correcting unsafe or unhealthful conditions.
- Develop a system to communicate with our employees concerning safety matters and to encourage feedback.
- Establish training and retraining programs for employees.
- Develop an enforcement and disciplinary system to ensure that employees comply with the Injury and Illness Prevention Program.

Personnel

Project Manager	[redacted]
Superintendent	[redacted]
Regional Safety Director	[redacted]
Spill Prevention & Response	[redacted]
Temp Discharge & Dewattering	[redacted]
CSPPC & CESCL Jeff Fellows	TBA

Safety and Health Policy Statement

Atkinson Construction believes that an effective safety and health program is based on a sincere desire to eliminate personal injuries, occupational illnesses, damage to equipment and property, as well as to protect the general public when necessary.

Management and supervision are charged with the responsibility of preventing the occurrence of incidents or conditions that can lead to occupational injuries or illnesses. The ultimate success of a safety and health program depends upon the cooperation of each individual employee. It is management's responsibility to provide effective training and education that will result in a safe place to work, and to ensure that safety and health rules and procedures are adequate and enforced

No employee or subcontractor shall be required to work in an unsafe manner or under unsafe conditions

Atkinson Construction recognizes that safety and health are integral and essential parts of our operations. Our policy is to accomplish work in the safest possible manner consistent with good work practices. Management at every level is charged with the task of translating this policy into positive actions.

Our safety and health philosophy is based on the following principles:

- Employees are an invaluable resource to the company and their safety and well-being are essential to its continued success.
- ALL EMPLOYEES play a role in their own safety and the safety of those working around them.
- Management will be responsive to the expressed safety concerns of employees.
- SAFETY is a value in a successful project.

Accident Investigation

Each accident, incident, and near miss must be investigated and reported as soon as possible by the immediate supervisor who has direct control over the employee or over the condition involved in the accident, incident, and near miss. The Accident/Incident Investigation Report Form must be completed for each accident, incident involving injury or medical treatment. The Accident/Incident Investigation Report Form also is used to investigate damage to equipment or the environment, including subcontractors. All questions on the form must be clearly and completely answered. This form must be sent immediately to the Project Safety Manager.

Written reports of injuries, illnesses, and near misses must be made to the project Safety Manager within 24 hours of the incident. The Atkinson Construction Accident/Incident Report form, or another format that contains the information required by that form, may be used to make the report. An accident investigation will be implemented by the Project Safety Manager to prevent recurrence of the incident.

Secure the accident scene until the Project Safety Manager has arrived. Depending on the severity, limit or prevent activity in the accident scene other than the initial employee protection and rescue. Photographs of the area are taken as soon as possible after the accident occurred.

Accident investigations should include the following information when applicable.

- Name and age of injured.
- Date and time of the accident.
- Equipment being used at the time.
- Witness statements.
- Determine instructions the employee was given prior to starting the job.
- Name of the employee's supervisor.
- Name and telephone number of the hospital.
- Name and telephone number of the doctor.

Accident Response Procedure

Apply first aid procedures when needed for minor injuries. If the injured employee requires additional non-emergency medical attention call the Medcor 24 Hour Triage phone number to speak to a healthcare professional for additional guidance. The **Medcor 24 Hour Triage phone is (800) 775 5866**. Supervision shall transport the injured employee if medical attention is required for non-emergency scenarios to ***US Healthworks*** located at 3223 1st Avenue South, Suite C, Seattle, WA 98134. Please see table of contents for **Clinics**.

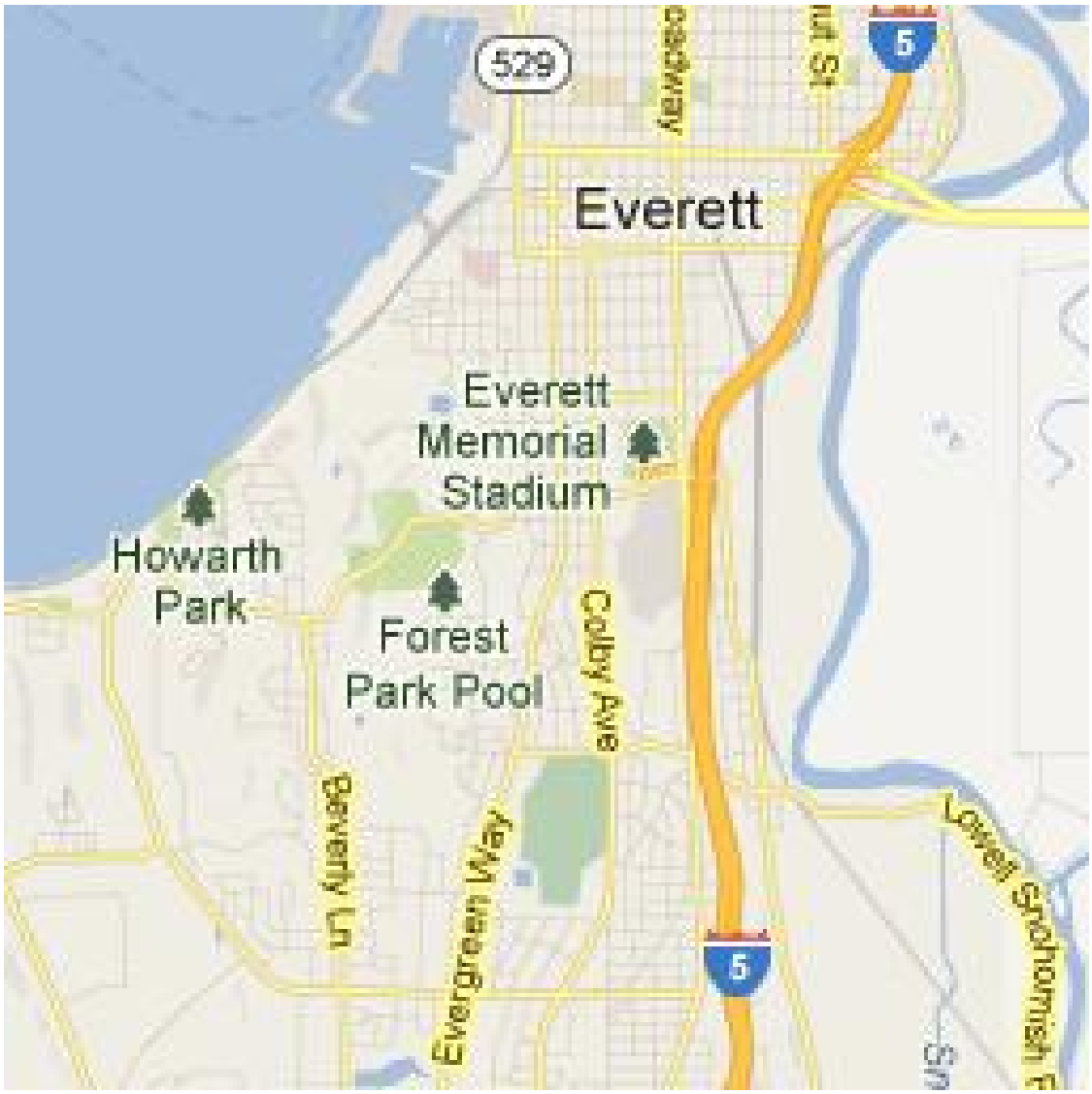
For major injuries immediately initiate the emergency response procedure by first calling 911. The emergency medical responders shall assess the area for hazards. Once the area is deemed safe they shall assess the nature and extent of the injury. Ambulance and hospital personnel shall be advised if contamination exposure is possible.

In the event of bleeding, broken bones, shock, burns, heat exhaustion, heat stroke, seizure, insect stings, etc., the trained personnel on each shift will use Red Cross approved measures for treatment.

Clinics

US HealthWorks - Everett (Map)

3726 Broadway Suite 101 Everett, WA 98201 Phone: (425) 259-0300 Fax: (425) 259-0301	**Hours:** Monday - Friday 7:00am - 6:00pm



Confined Space Entry

1. PURPOSE

To establish the minimum requirements for Atkinson Construction and its subcontractors to perform confined space entry.

2. SCOPE

This procedure applies in its entirety to all Atkinson Construction projects unless a variance from its requirements is granted by the Corporate Director of Safety and Health.

3. DEFINITIONS

(a) Acceptable entry conditions. The conditions that must exist in a permit space to allow entry, and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

(b) Attendant. An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

(c) Authorized entrant. An employee who is authorized by the employer to enter a permit space.

(d) Confined space. A space that: (1) is large enough and so configured that an employee can bodily enter and perform assigned work; and (2) has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and (3) is not designed for continuous employee occupancy.

(e) Entry. The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

(f) Entry permit (permit). The written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in Section 8 of this procedure.

(g) Entry supervisor. The person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section. **NOTE***:* An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also, the duties of an entry supervisor may be passed from one individual to another during the course of an entry operation.

(h) Hazardous atmosphere. An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

1. Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL); airborne combustible dust at a concentration that meets or exceeds its LFL;

   NOTE: This concentration may be approximated as a condition in which the dust obscures vision to a distance of 5 feet (1.52 m) or less.

2. Atmospheric oxygen concentration below 19.5 percent or above 22.5 percent;
3. Atmospheric concentration of any substance for which the permissible dose or exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances of 29

CFR 1926, and which could result in employee exposure in excess of the permissible dose or exposure limit;

NOTE: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, and impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

4. Any other atmospheric condition that is immediately dangerous to life or health. NOTE: For air contaminants for which OSHA has not determined a permissible dose or exposure limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, 29 CFR 1926, published information and internal documents can provide guidance in establishing acceptable atmospheric conditions.

(i) Immediately dangerous to life or health (IDLH). Any condition that poses an immediate or delayed threat to life, or that would cause irreversible adverse health effects, or that would interfere with an individual's ability to escape unaided from a permit space.

NOTE: Some materials (i.e., hydrogen fluoride gas and cadmium vapor) may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by a sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" after recovery from transient effects until the impending collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

(j) Inerting. The displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

NOTE: This procedure produces an IDLH oxygen-deficient atmosphere.

(k) Isolation. The process by which a permit space is removed from service and completely protected against the release of energy and introduction of material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; and blocking or disconnecting all mechanical linkages.

(l) Non-permit confined space. A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

(m) Oxygen deficient atmosphere. An atmosphere containing less than 19.5 percent oxygen by volume.

(n) Oxygen enriched atmosphere. An atmosphere containing more than 22.5 percent oxygen by volume.

(o) Permit-required confined space (permit space). A confined space that has one or more of the following characteristics: (1) contains or has a potential to contain a hazardous atmosphere; (2) contains a material that has the potential for engulfing an entrant; (3) has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or (4) contains any other recognized serious safety or health hazard.

(p) Prohibited condition. Any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

(q) Rescue service. The personnel designated to rescue employees from permit spaces.

(r) Retrieval system. The equipment (including a retrieval line and full body harness, wristlets if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

(s) Testing. The process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

NOTE: Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during entry.

4. RESPONSIBILITIES

(a) The Project Superintendent has overall responsibility for establishing and ensuring compliance with this procedure.

(b) The Project Safety Manager is responsible for implementing and/or monitoring activities associated with this procedure.

(c) It is the responsibility of all managers and supervisory personnel to enforce this procedure and of each employee to follow it.

5. GENERAL REQUIREMENTS

(a) The Project Safety Manager will have a competent person who represents the subcontractor conducting the Confined Space work evaluate the workplace to determine if any spaces are permit-required confined spaces.

(b) If the workplace contains permit spaces, the Project Manager shall inform exposed employees (and subcontractors, if applicable) by posting danger signs, or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces.

NOTE: A sign reading DANGER – PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER, or using other similar language, would satisfy the requirement for a sign.

(c) If permit spaces exist in the workplace, and employees will not be permitted to enter permit spaces, the Project Manager shall take effective measures to prevent employee entry into permit spaces. If non-permit spaces are modified or experience any change that causes an increased hazard to entrants, the Project Manager shall reevaluate that space and, if necessary, reclassify it as a permit-required confined space.

(d) If any subcontract employee is to enter a permit space' prior to the initial entry the project manager shall: (1) inform the subcontract employer that the workplace contains permit spaces and that entry must comply with 29 CFR 1910.146; (2) inform the subcontract employer of the elements, including known hazards and experiences from any previous entries into the space, that classify the space as a permit space; (3) inform the subcontract employer of any controls or procedures implemented to protect employees near the subcontractor's work area; (4) coordinate entry operations among client, contractor, and subcontractor personnel when necessary; and (5) debrief the subcontract employer at the conclusion of entry operations regarding the permit space entry program and any hazards or problems encountered during the entry operations.

6. IMPLEMENTATION

(a) Non-Permit Confined Spaces. Entry into non-permit confined spaces will be subject to the following controls:

1. The Project Manager (or designee) and Project Safety Manager shall be informed in advance of the planned entry.
2. The entry shall be coordinated with any work activities near the non-permit space so that hazardous conditions will not be created in or around the space.
3. The buddy system will be used for all entries.

4. Entrants will immediately withdraw upon recognition of any hazardous condition.
5. The Project Manager and Project Safety Manager will be advised of any unanticipated incidents related to the non-permit space entry.

(b) Permit-Required Confined Spaces. Entry into permit-required confined spaces will be subject to the following controls:

1. Unauthorized entries shall be prohibited, and measures will be implemented to prevent such entries. The Project Manager shall develop additional written program controls that will specifically address the permit spaces and entries unique to the individual project scope of work and conditions.
2. Hazards shall be identified and evaluated prior to entry. Hazards to be addressed include:
   - Chemical exposure (via inhalation, ingestion, or dermal absorption) from the contents or residues of previous contents of the space, from chemicals introduced into the space as part of the entry operation, and from chemicals used near the space.
   - Oxygen deficiency or enrichment.
   - Discharge of steam, high-pressure air, water, or oil into the confined space, or against personnel working outside.
   - Structural failure of the space walls, roof, roof support members, swing line cables, or other structural members.
   - Tools, debris, or other objects dropping from overhead.
   - Falls through or from the roof or from scaffolds, stairs, or ladders.
   - Tripping over hoses, pipes, tools, or equipment.
   - Slipping on wet, oily surfaces, or colliding with objects in inadequately lighted interiors.
   - Insufficient or faulty personal protective equipment.
   - Insufficient or faulty operations, equipment, and tools.
   - Noise in excess of acceptable levels.
   - Temperature extremes that may require additional protection or shorter work periods.
3. The Project Safety Manager shall, as part of the written material under 6.b.1 above, develop procedures and practices to ensure safe conduct of entry operations. The following points, at least, shall be fully addressed:
   - Acceptable entry conditions shall be specified (both chemical and physical conditions shall be addressed, and conditions which could arise as a result of operations performed outside the space shall be considered).
   - Procedures to fully isolate the space (this may not be feasible in sewers; see Exhibit B).
4. Isolation of a space shall include the following steps, as applicable:
   - Depressurize the confined space.
   - Prevent accidental introduction into the confined space of hazardous materials through interconnecting equipment such as piping, ducts, vents, drains, or other means.
   - De-energize, lockout, and tagout machinery, mixers, agitators, or other equipment containing moving parts that are in the confined space.
   - Removing a valve, spool piece, or expansion joint in piping to, and as close as possible to, the confined space, and blanking or capping the open end of the pipe leading to the confined space.

- Inserting a suitable full-pressure blank in piping between the flanges nearest to the confined space.
- Closing, locking, and tagging at least two valves in the piping leading to the confined space, and locking or tagging open to atmosphere a drain valve between the two closed valves which shall be checked to ensure that it is not plugged.

  - In all cases, blanks or caps shall be of a material that is compatible with the liquid, vapor, or gas with which they are in contact.
  - The material shall also have sufficient strength to withstand the maximum operating pressure, including surges, which can be built up in the piping.

5. Additionally, all electrical and mechanical devices within or attached to the confined space shall be disconnected or locked and tagged to prevent accidental movement or energizing of such systems.
6. All employees who will be working in the confined space shall be informed of the isolation devices in use at the jobsite during safety meetings.
7. Purge, inert, flush, or ventilate the space as necessary to eliminate or control atmospheric hazards.
8. Provide barriers to protect entrants from external hazards.
9. Verify that conditions in the permit space are acceptable throughout the duration of the entry.
10. The following equipment shall be provided, maintained, and utilized whenever necessary for safe entry operations:
    - Testing and monitoring equipment needed to perform specified atmospheric testing.
    - Ventilating equipment needed to create and maintain acceptable entry conditions.
    - Ventilation of permit spaces shall be performed as follows:
      - Prior to ventilating a confined space, a qualified person shall take positive steps to ensure that no pyrophoric materials that will ignite in the presence of air are present in the confined space.
      - All confined spaces shall be mechanically ventilated to remove and/or prevent the accumulation of hazardous atmospheres.
      - Air or steam driven air movers shall be used to ventilate confined spaces. Use of electric powered ventilators is strictly limited to spaces that have not contained flammable or combustible materials.
      - Oxygen shall not be used to power air-driven ventilators or to ventilate any confined space location.
      - The entry supervisor shall check periodically to ensure that contaminated air from a confined space is exhausted to a location where it presents no hazard.
      - Whenever possible, air movers shall be used with ducting to increase the efficiency of ventilation in the confined space and to prevent recirculation of contaminated air due to ventilation "short circuiting."
      - When two or more air movers are used for ventilation, all such units should be operated in the same flow direction to maximize efficiency, i.e., all in the exhaust mode or all in the supply mode.
    - Communications equipment necessary to permit immediate, understandable communications between the entrant(s) and the attendant(s).

- Personal protective equipment necessary to supplement feasible engineering and work practice controls.
- Lighting equipment necessary for safe operations and emergency exit. Temporary lighting used in confined spaces shall meet the following requirements:
  - All lighting shall be approved for use in Class I, Division I, Groups A, B, C, and D atmospheres.
  - Extension cords used for temporary lighting shall be equipped with connectors or switches approved for hazardous locations.
  - Temporary lighting shall be equipped with adequate guards to prevent accidental contact with the bulb.
  - The lighting shall not be suspended by the electric cords, unless they are designed for this method of suspension.
  - Electric cords shall be kept clear of working spaces and walkways or other locations in which they may be exposed to damage.
  - Temporary lighting and electric cords shall be inspected regularly for signs of damage to insulation and wiring.
  - Specified barriers and shields.
  - Equipment such as ladders needed for safe ingress and egress.
  - Rescue and emergency equipment, unless provided by local rescue services.
  - Any other equipment necessary for safe entry and rescue from permit spaces.

11. Prior to authorizing entry, tests shall be conducted by a competent person to determine if acceptable entry conditions exist. When spaces are not fully isolated due to their size or design (sewers), pre-entry testing will be conducted to the extent feasible, and if entry is authorized, conditions shall be continuously monitored in the work area.

    During the course of entry operations, test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained; and,

    When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.

    NOTE: Atmospheric testing conducted in accordance with Exhibit A would be considered as satisfying these requirements. For permit space operations in sewers, atmospheric testing conducted in accordance with Exhibit A, as supplemented by Exhibit B, would be considered as satisfying these requirements.

12. At least one attendant shall be stationed outside the permit space for the duration of the entry operations.

    NOTE: Attendants may be assigned to monitor more than one permit space provided the duties described in Section 10.b of this procedure can be effectively performed for each permit space that is monitored. Likewise, attendants may be stationed at any location outside the permit space to be monitored as long as the duties described in Section 10.b of this procedure can be effectively performed for each permit space that is monitored.

13. If multiple spaces are to be monitored by a single attendant, include in the permit program the means and procedures to enable the attendant to respond to an emergency affecting one or more of the permit spaces being monitored without

distraction from the attendant's responsibilities under Section 10.b of this procedure.

13. The roles and duties of each person participating in an entry operation (i.e., authorized entrants, attendants, entry supervisors, or persons who test or monitor the atmosphere in a permit space) shall be established and each person shall receive training commensurate with the duties assigned.
14. Procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue shall be developed and implemented.
15. Procedures to coordinate entry operations among multi-employer workforces shall be developed and implemented.
16. The permit space shall be secured and entry-related documentation shall be completed and retained in project files for a period of at least one year.
17. The entry program shall be reviewed and any deficiencies corrected whenever evidence exists that employee protection is inadequate.

    NOTE*:* Examples of circumstances requiring the review of the permit-required confined space program are: any unauthorized entry of a permit space, the detection of a permit space hazard not covered by the permit, the detection of a condition prohibited by the permit, the occurrence of an injury or near-miss during entry, a change in the use or configuration of a permit space, and employee complaints about the effectiveness of the program.

18. The permit-required confined space program shall be reviewed, using the canceled permits retained under Section 7.f of this procedure, within 1 year after each entry and revised as necessary to ensure that employees participating in entry operations are protected from permit space hazards.

    NOTE*:* Employers may perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary.

(c) Alternate Entry Procedure.

1. A simpler, alternate procedure may be followed for permit-required space entry if all of the following conditions are met:
   - The only hazard posed by the permit space is from an existing, or potentially hazardous atmosphere.
   - Continuous forced air ventilation alone is sufficient to maintain the space safe for entry.
2. Monitoring and inspection data supporting the above two conditions is collected and documented. Entries conducted to obtain this data must be conducted according to Section 6.b above.
3. Supporting data must be made available to each employee who enters the permit space under this alternate procedure.
4. The alternate entry procedure shall conform to the following:
   - Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.
   - When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an

accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.

- Before an employee enters the space, the internal atmosphere shall be tested with a calibrated direct-reading instrument for the following conditions, in the order given: (1) oxygen content, (2) flammable gases and vapors, and (3) potential toxic air contaminants.
- There may be no hazardous atmosphere within the space whenever any employee is inside the space.
- Continuous forced air ventilation shall be used, as follows: (1) an employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere; (2) the forced air ventilation shall be directed so as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space; (3) The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.
- The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.
- If a hazardous atmosphere is detected during entry: (1) each employee shall leave the space immediately; (2) the space shall be evaluated to determine how the hazardous atmosphere developed; and, (3) measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.
- The employer shall verify that the space is safe for entry and that the measures required by 6.c have been taken through a written certification that contains the date, the location of the space, and the signature of the person providing the certification.
- The certification shall be made before entry and shall be made available to each employee entering the space.

7. ENTRY PERMIT SYSTEM

(a) Before authorization to enter is granted, the completion of hazard control measures specified in 6.b and 6.c above shall be documented on an entry permit (Attachment 1).

(b) The entry supervisor shall authorize the entry by signing the completed permit.

(c) The signed permit shall be posted or otherwise made available to all authorized entrants so that they may confirm that all pre-entry preparations are in place.

(d) The duration of the permit may not exceed the time required to complete the assigned purpose of the entry.

(e) The entry supervisor will terminate the entry and cancel the permit when either of the following occurs:

1. The operations covered by the permit have been completed.
2. Any condition not allowed under the entry permit occurs in or near the permit space.

(f) Canceled entry permits shall be retained for at least 1 year so that the program review required under 6.b.18 above may be performed. Any problems which occur during an entry shall be noted on the permit.

8. ENTRY PERMIT

(a) The entry permit shall contain the following information:

1. The permit space to be entered.
2. The purpose of the entry.
3. The date and the authorized duration of the entry permit.

4. The authorized entrants within the permit space, by name or by such other means (for example, through the use of rosters or tracking systems), as will enable the attendant to determine quickly and accurately, for the duration of the permit, which authorized entrants are inside the permit space; NOTE: This requirement may be met by inserting a reference on the entry permit as to the means used, such as a roster or tracking system, to keep track of the authorized entrants within the permit space.
5. The personnel, by name, currently serving as attendants.
6. The individual, by name, currently serving as entry supervisor, with a space for the signature or initials of the entry supervisor who originally authorized entry.
7. The hazards of the permit space to be entered.
8. The measures used to isolate the permit space and to eliminate or control permit space hazards before entry. NOTE: Those measures can include the lockout or tagging of equipment and procedures for purging, inerting, ventilating, and flushing permit spaces.
9. The acceptable entry conditions.
10. The results of initial and periodic tests performed under section 6.b.11 of this procedure, accompanied by the names or initials of the testers, and by an indication of when the tests were performed.
11. The rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services.
12. The communication procedures used by authorized entrants and attendants to maintain contact during the entry.
13. Equipment, such as personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment, to be provided for compliance with this section.
14. Any other information whose inclusion is necessary, given the circumstances of the particular confined space, in order to ensure employee safety.
15. Any additional permits, such as for hot work, that have been issued to authorize work in the permit space.

9. TRAINING

(a) The Competent Person for the contractor entering any confined space shall assure that all employees assigned to tasks under this procedure have been trained, and have the understanding, knowledge, and skills necessary for the safe performance of their duties.

(b) All training conducted will be documented on appropriate training forms, and copies will be submitted to the General Contractor Project Safety Manager.

(c) Training shall be provided to each employee on the following occasions:

1. Before the employee is first assigned duties under this procedure.
2. Before there is a change in assigned duties.
3. Whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained.
4. Whenever the employer has reason to believe either that there are deviations from the permit space entry procedures required by 6(b) and 6(c) of this procedure, or that there are inadequacies in the employee's knowledge or use of these procedures.

(b) The training shall establish employee proficiency in the duties required by this procedure and shall introduce new or revised practices, as necessary, for compliance with this procedure.

(c) Training required by this section shall be certified. The certification shall contain each employee's name, the signatures or initials of the trainers, and the dates of training. The

certification shall be available for inspection by employees and their authorized representatives.

10. ASSIGNMENT OF DUTIES

(a) Authorized Entrants. The employer shall ensure that all authorized entrants:

1. Know the hazards that may be faced during entry, including information on the mode, signs, or symptoms, and consequences of the exposure.
2. Properly use equipment as required by section 6(c) of this procedure.
3. Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space as required by section 10(b)6. of this procedure.
4. Alert the attendant whenever:
   - The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
   - The entrant detects a prohibited condition.
5. Exit from the permit space as quickly as possible whenever:
   - An order to evacuate is given by the attendant or the entry supervisor;
   - The entrant recognizes any warning sign or symptom of exposure to a dangerous situation;
   - The entrant detects a prohibited condition; or
   - An evacuation alarm is activated.

(b) Attendant. The employer shall ensure that each attendant:

1. Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
2. Aware of possible behavioral effects of hazard exposure in authorized entrants.
3. Continuously maintains an accurate count of authorized entrants in the permit space, and ensures that the means used to identify authorized entrants under section 8.a of this procedure accurately identifies who is in the permit space;
4. Remains outside the permit space during entry operations until relieved by another attendant.

   NOTE: When the employer's permit entry program allows attendant entry for rescue, attendants may enter a permit space to attempt a rescue if they have been trained and equipped for rescue operations as required by Section 11.a of this procedure and if they have been relieved as required by Section 10.b.4 of this procedure.
5. Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space under Section 10.b.6 of this procedure.
6. Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space, and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
   - If the attendant detects a prohibited condition.
   - If the attendant detects the behavioral effects of hazard exposure in an authorized entrant.

- If the attendant detects a situation outside the space that could endanger the authorized entrants.
- If the attendant cannot effectively and safely perform all the duties required under this section.

7. Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
8. Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
   - Warn the unauthorized persons that they must stay away from the permit space.
   - Advise the unauthorized persons that they must exit immediately if they have entered the permit space.
   - Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
   - Performs non-entry rescues as specified by the employer's rescue procedure.
   - Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

(c) Entry supervisor. The employer shall ensure that each entry supervisor:

1. Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
2. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.
3. Terminates the entry and cancels the permit as required by Section 7.e of this procedure.
4. Verifies that rescue services are available and that the means for summoning them are operable.
5. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
6. Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

11. RESCUE AND EMERGENCY SERVICES

(a) The following requirements apply to employers who have employees enter permit spaces to perform rescue services.

1. The employer shall ensure that each member of the rescue service is provided with, and is trained to use properly, the personal protective equipment and rescue equipment necessary for making rescues from permit spaces.
2. Each member of the rescue service shall be trained to perform the assigned rescue duties.
3. Each member of the rescue service shall also receive the training required of authorized entrants under Section 9 of this procedure.
4. Each member of the rescue service shall practice making permit space rescues at least once every 12 months by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from the actual permit spaces or from representative permit spaces. Representative permit spaces shall, with

respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is performed.

5. Each member of the rescue service shall be trained in basic first-aid and in cardiopulmonary resuscitation (CPR). At least one member of the rescue service holding current certification in first aid and in CPR shall be available.
6. When an employer (host employer) arranges to have persons other than the host employer's employees (outside rescuer) perform permit space rescue, the host employer shall ensure that:
   - The outside rescuer can effectively respond in a timely manner to a rescue summons.
   - The outside rescuer is equipped, trained and capable of functioning appropriately to perform permit space rescues at the host employer's facility
   - The outside rescuer is aware of the hazards they may confront when called on to perform rescue at the host employer's facility.
   - The outside rescuer is provided with access to all permit spaces from which rescue may be necessary so that the outside rescuer can develop appropriate rescue plans and practice rescue operations.

(c) To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems shall meet the following requirements:

1. Each authorized entrant shall use a chest or full body harness with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or other point which the employer can establish will ensure that the entrant will present the smallest possible profile during removal.
2. The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.
3. If an injured entrant is exposed to a substance for which a Material Safety Data Sheet (MSDS) or other similar written information is required to be kept at the worksite, that MSDS or written information shall be made available to the medical facility treating the exposed entrant.

12. EXHIBITS/ATTACHMENTS

(a) Procedures for Atmospheric Testing (Exhibit A).
(b) Sewer System Entry (Exhibit B).
(c) Confined Space Entry Permit (Attachment 1). The Confined Space Entry Permit is used for documenting activities associated with this procedure. The completed Permits shall be maintained for a period of 1 year from the date of cancellation, in accord with section 7.f above.

EXHIBIT A – PROCEDURES FOR ATMOSPHERIC TESTING

Atmospheric testing is required for two distinct purposes: evaluation of the hazards of the permit space and verification that acceptable entry conditions for entry into that space exist.

A.1. Evaluation testing. The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity to identify and evaluate any hazardous atmospheres that may exist or arise so that appropriate permit entry procedures can be developed and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data, and development of the entry procedure should be done by, or reviewed by, a technically qualified professional (e.g., certified industrial hygienist, marine chemist, registered safety engineer, certified safety professional, etc.) based on evaluation of all serious hazards.

A.2. Verification testing. The atmosphere of a permit space which may contain a hazardous atmosphere should be tested for residues of all contaminants identified by evaluation testing using permit specified equipment to determine that residual concentrations at the time of testing and entry are within the range of acceptable entry conditions. Results of testing (i.e., actual concentration, etc.) should be recorded on the permit in the space provided adjacent to the stipulated acceptable entry condition.

B.3. Duration of testing. Measurement of values for each atmospheric parameter should be made for at least the minimum response time of the test instrument specified by the manufacturer.

C.4. Testing stratified atmospheres. When monitoring for entries involving a descent into atmospheres that may be stratified, the atmospheric envelope should be tested a distance of approximately 4 feet (1.22 m) in the direction of travel and to each side. If a sampling probe is used, the entrant's rate of progress should be slowed to accommodate the sampling speed and detector response.

EXHIBIT B – SEWER SYSTEM ENTRY

Sewer entry differs in three vital respects from other permit entries. First, there rarely exists any way to completely isolate the space (a section of a continuous system) to be entered; second, because isolation is not complete, the atmosphere may suddenly and unpredictably become lethally hazardous (toxic, flammable or explosive) from causes beyond the control of the entrant or employer; and third, experienced sewer workers are especially knowledgeable in entry and work in their permit spaces because of their frequent entries. Unlike other employments where permit space entry is a rare and exceptional event, sewer workers' usual work environment is a permit space.

B.1 Adherence to procedure. The employer should designate as entrants only employees who are thoroughly trained in the employer's sewer entry procedures and who demonstrate that they follow these entry procedures exactly as prescribed when performing sewer entries.

B.2 Atmospheric monitoring. Entrants should be trained in the use of, and be equipped with, atmospheric monitoring equipment which sounds an audible alarm, in addition to its visual readout, whenever one of the following conditions is encountered: oxygen concentration less than 19.5 percent; flammable gas or vapor at 10 percent or more of the lower flammable limit (LFL); or hydrogen sulfide or carbon monoxide at or above their PEL (10 PPM or 50 PPM, respectively); or, if a broad range sensor device is used, at 100 PPM as characterized by its response to toluene. Normally, the oxygen sensor/broad range sensor instrument is best suited for sewer entry. However, substance specific devices should be used whenever actual contaminants have been identified. The instrument should be carried and used by the entrant in sewer line work to monitor the atmosphere in the entrant's environment, and in advance of the entrants' direction of movement, to warn the entrant of any deterioration in atmospheric conditions. Where several entrants are working together in the same immediate location, one instrument, used by the lead entrant, is acceptable.

B.3 Surge flow and flooding. Sewer crews should develop and maintain liaison, to the extent possible, with the local weather bureau and fire and emergency services in their area so that sewer work may be delayed or interrupted and entrants withdrawn whenever sewer lines might be suddenly flooded by rain or fire suppression activities, or whenever flammable or other hazardous materials are released into sewers during emergencies by industrial or transportation accidents.

B.4 Special Equipment. Entry into large bore sewers may require the use of special equipment. Such equipment might include atmosphere monitoring devices with automatic alarms, escape self-contained breathing apparatus (ESCBA), or other NIOSH approved self rescuer, and waterproof flashlights. May also include boats and rafts, radios and rope stand-offs for pulling around angles.

ATTACHMENT 1 – CONFINED SPACE ENTRY PERMIT

This permit is valid only on the date of issue and for only one shift. Return this permit to the safety department at the end of the shift.

Date_____ Shift_____ Location_____

Purpose for entry_____

Supervisor in charge_____ Contractor _____

Communications ☐ Yes ☐ No Rescue procedure appropriate ☐ Yes ☐ No

Emergency telephone no._____

A check* denotes minimum requirements to be completed and reviewed prior to entering.

REQUIREMENTS	DATE	TIME
☐ Lock out/de-energize and tested	_____	_____
☐ Line(s) broken-capped-blanked	_____	_____
☐ Purge-flush-vent	_____	_____
☐ Ventilation	_____	_____
☐ Secure area (post or flag)	_____	_____
☐ SCBA's	_____	_____
☐ Emergency/Rescue equipment	_____	_____
☐ Emergency retrieval plan	_____	_____
☐ Standby personnel	_____	_____
☐ Full body harness or other	_____	_____
☐ Lifelines	_____	_____
☐ Fire extinguishers	_____	_____
☐ Proper lighting	_____	_____
☐ Personal protective equipment	_____	_____
☐ Welding and/or cutting permit	_____	_____

*For items that do not apply, enter N/A in the date column.

ATMOSPHERE TESTING

Time _____ O_2 _____ L.E.L _____ CO_2 _____ SO_2 _____

Other tests _____

Sign In	Time In/Out	In/Out	In/Out
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Standby person_____

Confined space entry authorized by and atmospheric survey by:_____

Communication of Health and Safety Matters

An initial site-specific orientation will be conducted for all Atkinson Construction employees and subcontractor employees before beginning work on the project. The initial site safety orientation shall be documented and a unique hardhat sticker will be issued to each person completing the initial site-specific orientation on the EMERGENCY BRIDGE REPAIR. Training documents shall be available onsite for review.

Weekly safety meetings shall be conducted during the production progress meetings to address any safety concerns with any parties participating in the project. Safety issues concerning previous, present and future concerns shall be addressed and resolved at this time. Any issues brought up during this meeting shall be documented in the meeting minutes.

Morning Progress (coordination) Meetings

During the morning progress meeting the first topic discussed will be a review of Safety issues. These issues shall be addressed and resolved at this time, or a course of action for resolution is created. Any issues brought up during this meeting shall be documented in the meeting minutes.

Additionally, weekly meetings with subcontractors will include a portion on safety. The Project Safety Manager will communicate concerns and issues to specific subcontractors and subcontractors in general. Subcontractors will have the opportunity to share concerns and issues regarding project safety as well. Subcontractors who continually fail to comply with or correct safety issues may have their payment withheld until compliance with safety issues and procedures is complete. Further, subcontractors may have their contracts suspended and they may be removed from work on this project if chronic failure to comply with project safety procedures continues.

Subcontractor Safety (toolbox) Meetings

Each subcontractor shall conduct weekly safety meetings with his employees at a designated time. The weekly subcontractor safety meeting shall be documented and available onsite for review.

Subcontractor safety audits

Each subcontractor shall conduct weekly safety audits. The weekly subcontractor safety audits shall be documented and available onsite for review.

Job Hazard Analysis (JHA)

Specific activities are identified by the Superintendent requiring additional training and procedures to eliminate hazards. A JHA is created by the Superintendent, assisted by the Project Safety Manager, identifying procedures to minimize and abate hazards associated with each task involved with that activity. The JHA is used for training purposes to orientate employees to the identified task and the procedures required to abate associated hazards.

Track Pad

At the beginning of each shift, a foreman or superintendent shall conduct a daily ***Track Pad*** meeting detailing specific hazards of the work to be performed and safety precautions and procedures for each task to be performed during that workday.

Safety (Toolbox) Meetings

Safety meetings (toolbox meetings) are held weekly at the beginning of the work shift. Topics of discussion include job safety analyses, specific safety items relevant to the day's work activity, new hazards that have been recognized by management or employees, review of recent accidents at this particular jobsite, and other accidents or injuries that have occurred within the company. These meetings provide an open forum for employees to note safety conditions that need attention. In addition, daily safety planning sessions will be held to discuss specific activities for the day, the hazards associated with those activities, and what steps need to be taken to minimize those hazards.

Near Miss Reporting

The Atkinson Construction ***Near Miss program*** enables and encourages all employees to report hazardous conditions at the jobsite to the project superintendent so that corrective action can be taken. Employees who report such conditions will do so without fear of reprisal. All notifications of potential safety hazards will be thoroughly investigated and if warranted, corrections will be made.

Employees shall be kept informed of the requirements of the IIPP and the Safety and Health Program through the use of safety meetings, written notices, and notices on the company bulletin board and shall be communicated in a manner understandable to all employees.

Postings

All required Federal and State postings for employees are available at main job trailer and where employees have access to see.

Correcting Unsafe or Unhealthy Conditions and Work Practices

All unsafe and/or unhealthy work conditions or work practices identified will be evaluated and corrected.

Unsafe or unhealthy work conditions or work practices will be corrected in a timely manner, as determined by the severity of the hazard. Under no circumstances will personnel be required to, or permitted to, work under conditions that pose a clear or imminent hazard.

The Project Superintendent will be responsible for problems that cannot be corrected immediately. Once corrected, the project superintendent will forward written documentation of the action taken to the Project Safety Manager.

When an imminent danger hazard exists which cannot be immediately corrected without endangering employees and/or property, the following steps will be followed:

- Remove all potentially endangered employees from the area.
- Provide employees responsible to correct the condition with necessary safeguards.
- Correct the problem.
- Document and date the corrective action taken. The documentation is to be completed by the Project Superintendent. Documentation will be maintained at the project site and forwarded to the Project Safety Manager.

Engineering controls are the best way to eliminate or minimize unsafe or unhealthy work conditions and should be used first. If engineering controls are impractical or infeasible, administrative controls will be used. If engineering controls alone, or in combination with administrative controls cannot adequately minimize the hazard, personal protective equipment shall be used.

Cranes

Cranes according to this Site Specific Safety Plan include lattice and hydraulic boom cranes and boom trucks that have a capacity greater then 1-ton. Mechanic trucks are excluded from being considered a crane regardless of their capacity as long as they are used for maintenance purposes only.

Qualified Crane Operator Requirements

Prior to operating any qualified crane covered in this site specific safety plan and under chapter 296-155 WAC, Part L, with the exception of the trainee/apprentice requirements outlined below, the crane operator must:

- Have a valid crane operator certificate, for the type of crane to be operated, issued by a crane operator testing organization accredited by a nationally recognized accrediting agency, example - NCCCO. The operator certification must include a successful passing of a written and practical examination; and

  Note:
  An operator's certificate issued by the accredited testing agency is valid for a five-year period, and must be renewed to ensure operators maintain qualified operator status.

- Have crane hours of experience as shown in Table 1; and
- Pass a substance abuse test conducted by a recognized laboratory (The Atkinson Fitness for Duty program); and
- Document actual experience and crane related experience separated out by crane type and capacity.

Table 1

The 5 Categories of Cranes and their Types	Number of Hours of Actual Crane Operating Experience	Number of Hours of Crane Related Experience
(1) Mobile Cranes		
(a) Lattice Boom Crawler Cranes (LBC)	300 tons and above 1000 Hours	300 tons and above 1000 Hours
	Under 300 tons 500 Hours	Under 300 tons 500 Hours
(b) Lattice Boom Truck Cranes (LBT)	300 tons and above 1000 Hours	300 tons and above 1000 Hours
	Under 300 tons 500 Hours	Under 300 tons 500 Hours
(c) Large Telescopic Boom Cranes (Swing Cab) (TLL)	Over 130 tons 750 Hours	Over 130 tons 750 Hours
	Over 40 tons to 130 tons 250 Hours	Over 40 tons to 130 tons 250 Hours
	40 tons and under 40 Hours	40 tons and under 40 Hours
(d) Small Telescopic Boom Cranes (Fixed Cab) (TSS)	15 tons and above 40 Hours	15 tons and above 40 Hours
	Over 5 tons to 15 tons 20 Hours	Over 5 tons to 15 tons 20 Hours
	5 tons and under 8 hours	5 tons and under 16 hours
(2) Articulating Boom Cranes	20 Hours	20 Hours
(3) Tower Cranes		
(a) Hammerhead	500 Hours	500 Hours
(b) Luffer	500 Hours	500 Hours
(c) Self-Erecting	50 Hours	50 Hours
(4) Overhead Cranes		
(a) Cab Operated	40 Hours	40 Hours
(b) Pendant/Remote	40 Hours	40 Hours
(5) Derricks	20 Hours	500 Hours

Hours of actual crane operating experience . For all cranes: Time while the operator is at the controls of the crane; and/or has direct control of that crane; and/or a combination of operating hours within the same crane type. For mobile cranes: It also includes time while installing/removing boom sections, luffing boom, jib, extending and retracting outriggers/stabilizers, leveling crane, and replacing hoisting rope. For tower cranes: It includes time while jumping (increasing the height of the tower/mast).

Note: Additional actual crane operator experience may account for crane related experience.

Hours of crane related experience : Time as a signalman/bellman, oiler, crane mechanic, crane inspector, formal classroom training, crane simulator operation, and a combination of operating hours on other categories of cranes.

Crane Operator in Training (not a qualified crane operator)

Operators or apprentices in need of hours according to Table 1 above are permitted to operate cranes as part of his/her training providing the following requirements are met:

- The employee ("trainee/apprentice") must be provided with sufficient training of Atkinson Construction's safety requirements prior to operating the crane under limitations established in the following paragraphs.
- The tasks performed by the trainee/apprentice while operating the crane must be within the trainee's ability, as determined by the supervising qualified crane operator.
- While operating the equipment, the trainee/apprentice must be continuously supervised by a qualified crane operator who meets the following requirements:
  - The qualified crane operator is an employee or agent of the trainee's/apprentice's employer.
  - The qualified crane operator is familiar with the proper use of the equipment's controls.
  - While supervising the trainee/apprentice, the qualified crane operator performs no tasks that detract from the qualified crane operator's ability to supervise the trainee/apprentice.
  - The qualified crane operator and the trainee/apprentice must be in direct line of sight of each other. In addition, they must communicate verbally or by hand signal.

- The trainee/apprentice **must not operate** the crane in any of the following circumstances:
  - If any part of the crane, load line or load could get within **twenty feet** of a power line that is up to three hundred fifty kV, or within **fifty feet** of a power line that is over three hundred fifty kV;
  - If the crane is used to hoist personnel;
  - In a multiple-crane lift situation; or
  - Multiple-lift rigging,
  - Critical lifts, as defined by the Atkinson Crane Policy.
- The Crane operator trainee/apprentice must pass a substance abuse test conducted by a recognized laboratory (The Atkinson Fitness for Duty program);
- The Crane operator trainee/apprentice must document his/her actual experience and crane related experience separated out by crane type and capacity.

Crane Certification Requirements

Only WA State recognized and certified crane inspectors may inspect and certify a crane used on Atkinson Construction jobsites in the State of WA. Atkinson Construction requires all cranes used on Atkinson Construction jobsites in WA State to complete the following prior to use:

- Annual inspection – Each crane covered by this site specific safety plan shall have an annual inspection conducted by a WA State Certified Crane Inspector/Certifier including current certificates for the wire rope or cable used on the particular crane; and
- Annual proof load testing in the configuration to be used; and
- Assembly/Disassembly Director shall be identified and shall conduct be in charge of adding or removing components from a crane such as Luffing boom, swing-away jibs, fly sections, jibs at variable offsets and boom sections.
- Lift Director shall be identified for each day a crane is being used. (See Brian Van for additional information)

Identification Inspection Number & Sticker

The Certified Crane Inspector/Certifier will issue a WA State Identification number and sticker specific to each inspected crane that is certified for use. The identification sticker number must be entered on the inspection worksheet submitted to the department by the Certified Crane Inspector/Certifier. Identification stickers may only be removed by a WA Dept. of L&I representative or a WA State Certified Crane Inspector/Certifier.

***Note**: Certified components may be installed without voiding the annual proof load test, providing the component was proof load tested within the prior four-year period.*

Certificates of operation issued by WA State Certified Crane Inspector/Certifiers are valid for one year from the effective date of being issued.

The Certificate of operation issued by a WA State Certified Crane Inspector/Certifier must be posted in the operator's cab or with the operator's manual.

Maintaining required records

Certified Crane Inspector/Certifier's are required to maintain complete and accurate records pertaining to each crane of all inspections, tests and other work performed as well as copies of all notices of crane safety deficiencies, verifications of correction of crane safety deficiencies, and crane certifications issued for the previous **five years** and provide these records to the department upon request. Failure by an accredited crane certifier to maintain required records may result in accreditation suspension or revocation.

Qualified Signal Person

Only qualified signal persons may give signals to an operator using equipment to hoist objects. Qualified signal persons are required under the following conditions:

- The load can't be seen by the operator
- The landing location can't be seen by the operator
- The operator requires a signal person

Qualified Rigger

Only qualified riggers may attach, or direct other employees to attach rigging to an object being hoisted. Qualified riggers are required under the following conditions:

- Applying rigging to equipment being hoisted by cranes, forklifts or dirt moving equipment where a fall zone is created such as lifting overhead, or if your foot could slip under a load.

Crane Personnel (Roles & Duties)

Roles (Title)	When Needed	Duties/Responsibilities
Assembly/Disassembly Director	Required when a crane is assembled or disassembled, or when components are added or removed.	Assembly/disassembly must be directed by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons. Examples - crane operator with a NCCCO certification is a both a qualified and competent person. A crane mechanic with extensive knowledge of the equipment is a competent person.
Site Supervisor	Required when a Crane is on a project or jobsite, regardless if owned or used by Atkinson or by a subcontractor.	The Site Supervisor exercises supervisory control over the worksite and shall also do the following: • Designate the Lift Supervisor • Make certain all inspections and reports are completed and available • Make certain Competent Rigger and Signal Person are identified • Access and ground conditions are known and communicated • Assembly/Disassembly Supervisor is identified • Power Lines are identified in relation to crane work • Make certain Operators are experienced and certified • Make certain Cranes are certified
Lift Director	Needed to oversee Atkinson and Subcontractor crane activities, unless a subcontractor Lift Director is identified for their particular activity.	The Lift Director must: • Being present at the job site and overseeing the lifting operations • Stopping crane operations if alerted to an unsafe condition • Ensuring access and ground conditions are adequate • Ensuring necessary traffic controls is in place • Ensuring that personnel involved in crane operations are qualified and/or trained for their particular role • Assigning qualified signal person(s) and conveying that information to the crane operator • Assigning qualified riggers and conveying that information to the crane operator • Determined if overhead power lines present a hazard • Identifying Critical Lifts and following our Critical Lift procedure
Crane Operator	Only Qualified Crane Operators may cranes on an Atkinson Construction Project. Qualification is a combination of recognized certification, affidavit of experience and passing a drug screen.	• Operating Cranes • Assisting with maintenance • Assisting with assembly and disassembly of crane and/or components of the crane
Qualified Rigger	Only qualified riggers may attach, or direct other employees to attach rigging to an object being hoisted.	Rigging equipment being hoisted by cranes, forklifts or dirt moving equipment.
Qualified Signal Person	Only qualified signal persons may give signals to an operator using equipment to hoist objects.	Signaling operators under the following circumstances: • The load can't be seen by the operator • The landing location can't be seen by the operator • The operator requires a signal person

Additional Crane Personnel (Roles & Duties)

(1) **The site supervisor's duties would include the following**:
- (a) Ensuring that the crane meets the requirements of Part L of this chapter prior to initial site usage.
- (b) Determining if additional regulations are applicable to crane operations.
- (c) Ensuring that a qualified person is designated as the lift director.
- (d) Ensuring that crane operations are coordinated with other job site activities that will be affected by or will affect lift operations.
- (e) Ensuring that the area for the crane is adequately prepared. The preparation includes, but is not limited to, the following:
  - i. Access roads for the crane and associated equipment;
  - ii. Sufficient room to assemble and disassemble the crane;
  - iii. An operating area that is suitable for the crane with respect to levelness, surface conditions, support capability, proximity to power lines, excavations, slopes, underground utilities, subsurface construction, and obstructions to crane operation;
  - iv. Traffic control as necessary to restrict unauthorized access to the crane's working area.
- (f) Ensuring that work involving the assembly and disassembly of a crane is supervised by an assembly/disassembly director. See WAC 296-155-53402.
- (g) Ensuring that crane operators meet the requirements of WAC 296-155-53300.
- (h) Ensuring that conditions which may adversely affect crane operations are addressed. Such conditions include, but are not limited to, the following:
  - i. Poor soil conditions;
  - ii. Wind velocity or gusting winds;
  - iii. Heavy rain;
  - iv. Fog;
  - v. Extreme cold;
  - vi. Artificial lighting.
- (i) Allowing crane operation near electric power lines only when the requirements of WAC 296-155-53408 have been met.
- (j) Permitting special lifting operations only when equipment and procedures required by this part, the crane manufacturer, or a qualified person, are employed. Such operations include, but are not limited to, the following:
  - i. Multiple crane lifts;
  - ii. Multiple load line lifts;
  - iii. Lifting personnel;
  - iv. Pick and carry operations;
  - v. Mobile/articulating cranes operating on barges.
- (k) Ensuring that work performed by the rigging crew is supervised by a qualified rigger. See WAC 296-155-53406.
- (l) Ensuring that crane maintenance is performed by a qualified person. See WAC 296-155-53404.

(2) **The lift director's duties would include the following**:
- (a) Being present at the job site and overseeing the lifting operations;
- (b) Stopping crane operations if alerted to an unsafe condition affecting those operations;
- (c) Ensuring that the preparation of the area needed to support crane operations has been completed before crane operations commence;
- (d) Ensuring necessary traffic controls are in place to restrict unauthorized access to the crane's work area;
- (e) Ensuring that personnel involved in crane operations understand their assigned duties, and the associated hazards;

(f) Addressing safety concerns raised by the operator or other personnel and deciding if it is necessary to overrule those concerns and directs crane operations to continue. In all cases, the manufacturer's criteria for safe operation and the requirements of this chapter and any other applicable safety and health standards must be adhered to;
(g) Assigning qualified signal person(s) and conveying that information to the crane operator;
(h) Ensuring that signal persons assigned meet the qualification requirements located in WAC 296-155-53302;
(i) Allowing crane operation near electric power lines only when the requirements of WAC 296-155-53408 and any additional requirements determined by the site supervisor have been met;
(j) Ensuring precautions are implemented when hazards associated with special lifting operations are present. Such operations include, but are not limited to, the following:
  i. Multiple crane lifts;
  ii. Multiple load line lifts;
  iii. Lifting personnel;
  iv. Pick and carry operations;
  v. Mobile/articulating cranes operating on barges.
(k) Ensuring that the applicable requirements of WAC 296-155-547 through 296-155-55405 are me when lifting personnel;
(l) Informing the crane operator of the weight of loads to be lifted, as well as the lifting, moving, and placing locations for these loads; Obtaining the crane operator's verification that this weight does not exceed the crane's rate capacity;
(m) Ensuring that a crane's load rigging is performed by a qualified rigger as defined in WAC 296-155-53306;
(n) Ensuring that the load is properly rigged and balanced before it is lifted more than a few inches.

Assembly/Disassembly

(1) When assembling and disassembling crane/derrick (or attachments), the employer must comply with all applicable manufacturer prohibitions and must comply with either:
  (a) Manufacturer procedures applicable to assembly and disassembly; or
  (b) Employer procedures for assembly and disassembly. Employer procedures may be used only where the employer can demonstrate that the procedures used meet the requirements in subsection (17) of this section.
(2) Supervision - Competent/qualified person.
  (a) Assembly/disassembly must be directed by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons (assembly/disassembly director).
  (b) Where the assembly/disassembly is being performed by only one person, that person must meet the criteria for both a competent person and a qualified person. For purposes of this part, that person is considered the assembly/disassembly director.
(3) Knowledge of procedures. The assembly/disassembly director must understand the applicable assembly/disassembly procedures.
(4) Review of procedures. The assembly/disassembly director must review the applicable assembly/disassembly procedures immediately prior to the commencement of assembly/disassembly unless the assembly/disassembly director has applied them to the same type and configuration of crane/derrick (including accessories, if any).
(5) Preassembly inspection.
  (a) Prior to assembling crane/derrick components or attachments the assembly/disassembly director must inspect these components and attachments to ensure that they meet the manufacturer's recommendations. This inspection must include a visual inspection to ensure that the components and attachments are of sound physical condition and functional within the manufacturer's recommendations.

(b) Documentation of this inspection must remain at the job site while the crane/derrick is in use.

(6) Crew instructions.

(a) Before commencing assembly/disassembly operations, the assembly/disassembly director must ensure that the crew members understand the following:
   i. Their tasks;
   ii. The hazards associated with their tasks;
   iii. The hazardous positions/locations that they need to avoid.

(b) During assembly/disassembly operations, before a crew member takes on a different task, or when adding new personnel during the operations, the requirements in (a)(i) through (iii) of this subsection must be met.

Assembly/Disassembly Procedure Review

Requirements:

1) An Assembly/Disassembly Director must be identified who will oversee the process when a crane is assembled or disassembled, or when components are added or removed.
2) The Assembly/Disassembly Director must document that he/she reviewed the procedure prior to commencing. This is done by the Assembly/Disassembly Director signing a document stating that he/she has done so with a date and time.
3) The Assembly/Disassembly Director must have a meeting with the crew helping in the process to discuss and coordinate procedures, hazards associated with the procedures and precautions to avoid unsafe situations. This meeting must be documented. (See Forms)
4) A post Assembly/Disassembly Crane Safety Inspection (form found on last page of this document) of the crane must take place and be documented with time and date.

Crisis Management Plan

See Site Specific Crisis Management Plan for EMERGENCY BRIDGE REPAIR

Electrical

All permanent and temporary electrical installations will be in accordance with the National Electrical Code, NFPA, ANSI and applicable DOSH requirements. All electrical cords, electrical tools are inspected, tested and labeled as part of our required Quarterly Assured Grounding Program. In addition, GFCI's are used when needed. All overhead power lines will be marked to warn of the overhead hazard during crane, pump truck and boom type operations. The site specific Lockout/Tagout Procedure must be used when working on or near electrical power.

Emergency Contact List

Project Manager	[redacted]
Superintendent	[redacted]
Regional Safety Director	[redacted]
Spill Prevention & Response	[redacted]
Temp Discharge & Dewattering	[redacted]
CSPPC & CESCL Jeff Fellows	TBA

Emergency Procedures/Evacuation Plans

Each job site, including EMERGENCY BRIDGE REPAIR, has site specific emergency evacuation plans/emergency procedures that include the following:

- Types of emergency warning devices.
- Meeting place in case of an emergency.
- Procedures for evacuation and accounting for personnel.
- Emergency phone numbers.

The emergency procedure/evacuation plan is developed and posted at central locations accessible to employees to see and read. Safety meetings are held to educate employees regarding the procedures. The Emergency procedures / evacuation plan will be posted at the following locations:

- On the jobsite bulletin board.
- Jobsite office.
- Mechanics shop, yard, or storage area

The emergency procedures /evacuation plan is periodically reviewed and updated as necessary.

Employee Compliance and Discipline

All employees are required to follow Atkinson Construction's safety policies and operating procedures. Before starting to work, employees will receive the required safety orientation training and will be provided with task training and any additional training and information, or re-training to maintain their knowledge and ability to do the work safely.

The disciplinary action policy is intended to encourage employee compliance with this Injury and Illness Prevention Program.

Fighting, possession or use of illegal drugs or weapons, or flagrant violations or disregard for project safety rules will result in immediate removal from the project and potential termination.

The project team will determine the best disciplinary action to be taken which best suits the circumstances. The steps to be taken at a minimum shall include the following:

- **Verbal Warning:** As the first step in correcting unacceptable behavior or minor infractions, a verbal warning will be issued to the employee. This verbal warning will be documented.
- **Written Warning:** If the unacceptable performance continues, or the severity of the infractions warrants, the next step will be a written warning. The written warning will clearly state the safety policy that was violated and steps the employee must take to correct it.
- **Suspension/Termination:** If the unacceptable practice continues, or the severity of the infraction warrants, the employee will be given time off without pay.
- **Immediate Termination:** Any employee who commits a serious safety violation may be subject to immediate termination without prior notice in lieu of any prior verbal and/or written warnings.

Project workers who are terminated or permanently removed from this project for disciplinary reasons related to violations of this safety program may not return to this project or any other Atkinson Construction project as an employee of the company they worked for at the time of termination or for any other employer connected with Atkinson Construction.

Excavations

Underground Installations

- The location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be located prior to opening an excavation.
- Utility companies or owners shall be contacted within established or customary local response times, advised of the proposed work, and asked to locate the underground utility installation prior to the start of actual excavation.
- When excavation operations approach the location of underground installations, the exact location of the installations shall be determined by safe and acceptable means.
- While the excavation is open, underground installations shall be protected, supported, or removed as necessary to safeguard employees.

Access/Egress

Trenches (greater in depth then width, up to 15' deep) -

A stairway, ladder, ramp or other safe means of access/egress is required in trenches that are 4 feet (1.22 m) or more in depth so that travel does not exceed 25 feet (7.62 m) of lateral travel between means of access/egress.

Excavations (greater in width then depth)

A safe and reasonable means of access/egress shall be maintained for entering and/or exiting excavations. If ramps are used, make sure cleats, not skid surfaces or other methods are used to prevent slip/trip hazards. Dirt walkways shall be at a reasonably safe angle free of unreasonable slip/trip hazards.

Cave-In Protection

Trenches (greater in depth then width, up to 15' deep) -

Trenches that are 4' or greater in depth requires the following:

- Soil classification; and/or
- Sloping; or
- Trench boxes.

Excavations (greater in width then depth)

Excavations 20' or greater in depth require a Registered Engineer to design and approve a shoring system to be installed prior to employees entering the exposed area.

Warning System for Mobile Equipment

When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs.

Water Accumulation

Employees shall not work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation.

If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operations shall be monitored by a designated person to ensure proper operation.

Confined Space

Excavations 4 feet or greater in depth may fall in the ***Confined Space*** portion of this Site Specific Safety Plan if an Atmospheric Hazard is present. See ***Confined Spaces***.

Inspection

Inspections are only required for excavations that present dangerous environments for those entering. Inspections are required for all trenches when employees are required to enter.

If an inspection is required, daily pre-shift inspections of excavations, the adjacent areas, and protective systems shall be made by the designated person prior to allowing employees to enter.

Where the designated person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

Fall protection

Walkways shall be provided where employees or equipment are required or permitted to cross over excavations. Guardrails which comply with chapter 296-155 WAC, Part K shall be provided where walkways are 4 feet or more above lower levels.

Adequate barriers or physical protection shall be provided at all remotely located excavations that are 6 feet deep or greater. All wells, pits, shafts, etc., shall be barricaded or covered.

Fall Protection

Fall protection on this project follows all applicable WAC 296-155, Part C-1, fall protection requirements at a minimum.

Fall Protection at 4 Feet

Employees working or walking on a "**walking/working surface**", defined as surfaces accessed for working or walking purposes and is 45 inches in all directions, shall be protected by guardrail. Guardrails are required for **walkways 4 feet or greater above a lower surface** spanning a trench, excavation or opening.

Climbing vertical forms and/or rebar requires fall protection when the employee is 4' from the ground.

Fall Protection at 6 Feet

Remaining fall protection scenarios not mentioned above have a trigger height of 6 feet per Atkinson policy.

Guardrail Requirements

A standard guardrail shall consist of top rail, intermediate rail, toe board, and posts. Top rail has a vertical height between 3**9 and 45 inches**. The mid rail is halfway between the top rail and the floor, platform, runway, or ramp. The rail ends shall not extend past the posts except when overhang does not create a projection hazard. The top rail can't deflect more than 3" pushed downward with 200lbs of force.

Toe boards are required when a walking surface is directly overhead of workers below, and there is a possibility of debris and/or material rolling or falling from this surface. A standard toe board shall be 4 inches minimum in vertical height from its top edge to the level of the floor, platform, runway, or ramp. It shall be securely fastened in place and have not more than 1/4 inch clearance above the floor level. It may be made of any substantial material, either solid, or with openings not over 1 inch in greatest dimension.

Fall Protection Equipment

Fall protection is categorized as either fall restraint or fall arrest. Both types of fall protection require a full body harness with back D-ring and an anchorage point capable of holding 5,000 lbs per person attached.

Regarding Fall Restraint, in addition to the full body harness and anchorage point, a lanyard, cable or rope attached to the harness's back D-ring can be used if it allows just enough distance for the worker to reach an unprotected edge but does not allow the worker to actually drop or fall past the unprotected edge. This allows for access to the edge but eliminates the free fall hazard.

Regarding Fall Arrest, in addition to the full body harness and anchorage point, a shock absorbing lanyard with double locking snap hooks shall connect the back D-ring of the harness to the approved anchorage point. Fall Arrest allows a worker to freely access fall hazard areas and will arrest a fall if the worker actually falls past an unprotected edge.

Retractable Lanyards are used in lieu of a shock absorbing lanyard. They may never be used together.

Anchorage points must be capable of holding 5,000 lbs per person attached. The anchorage point may be a single point such as an approved connection, a beam "wrap a-round" strap or a horizontal static line. Never use a cable guardrail as an anchorage point unless it was designed for such use.

Fitness for Duty Program

Drug Testing Program

Atkinson Construction and its subcontractors are required to implement a drug testing program that includes, at a minimum, Pre-Employment, Post Accident/Incident, For Cause, Random and Return to Work testing. Subcontractors will be required to comply with the Atkinson Construction Fitness For Duty program while working on EMERGENCY BRIDGE REPAIR. Pre-employment drug testing for Atkinson employees is facilitated through the Bellevue Braids field office.

Fire Prevention

The Project Safety Manager will contact local fire department officials as soon as practical after the beginning of the project to coordinate a familiarization meeting. This meeting will address access to the project, location of dry standpipes, and other related concerns.

Users of flammable liquids are trained in safe practices that include the hazardous characteristics of the specific flammable liquids they are using. Material Safety Data Sheets (MSDS) will assist with specific training.

"No Smoking or Open Flames" signs are posted and strictly enforced where flammable liquids are being transported, used, or stored.

The use of flammable liquids must be constantly monitored during welding/cutting operations to ensure there are no flammable or combustible hazards in the area.

Work efforts (e.g., painting, solvent cleaning of parts, etc.) and work areas where the potential exists for vapor accumulation shall incorporate fire prevention provisions including engineering and/or administrative controls. These controls are intended to prevent the concentration of any flammable or combustible material from exceeding 10% of the applicable lower explosive limit.

All flammable liquid containers shall be kept away from ignition sources. Even empty containers generally contain flammable vapor-air mixtures.

Flammable and combustible liquids shall be stored at least 10 feet away from stairways, elevators, and exits.

Flammable liquids shall be stored in facilities that have been constructed to meet those requirements and have been approved for flammable liquid storage by the site Project Safety Manager and DOSH.

Portable Fire Extinguishers

Portable fire extinguishers of the appropriate type shall be located within 75 feet to 50 feet of travel from locations where work is being performed in the proximity of hot work or flammable storage areas. Atkinson Construction portable fire extinguishers are visually inspected monthly to ensure proper charge, condition and location. Each Atkinson Construction portable fire extinguisher is inspected annually by a third party. Both annual and monthly inspections for Atkinson Construction portable fire extinguishers are recorded and records maintained by the Project Safety Manager.

Welding and Flame Cutting

Welding or flame cutting is conducted with the knowledge of the appropriate Atkinson Construction Superintendent.

Transfer and Use of Flammable Liquids

Flammable liquids may be transferred into approved secondary containers (metal safety can or similar device). Containers are to be kept closed except when transfers are being made. When transferring flammable liquids between conductive containers, the containers must be effectively bonded and grounded.

Secondary containers (metal safety can or similar device) of flammable and combustible liquids shall be labeled with the name and hazards of the contents DOSH NFPA regulations for labeling secondary containers.

Extinguishing Small Fires

A small fire is defined as a fire that can be extinguished 10-pound dry chemical fire extinguishers. Individuals using portable fire extinguishers are trained on their proper use, placement and removal. Training may be completed by means of safety meetings (toolbox talks) or other training formats. Attempt to extinguish fire using approved portable fire extinguishers or by smothering with soil. Remove and/or red tag used portable fire extinguishers when finished

Large Fires

In the event of a large fire or a small fire that cannot be extinguished, the following actions are taken:

- Evacuate all unnecessary personnel from the site, preferably to an upwind location.
- Notify the fire department and other emergency response services (police, ambulance, hospital and poison control center) as needed.

Flagging

MUTCD

MUTCD means the Federal High Administration's Manual on Uniform Traffic Control as currently modified and adopted by the Washington State department of transportation.

Flagger Signaling

- Flagger signaling must be with sign paddles approved by WSDOT and conform to guidelines and recommendations of MUTCD.
- Sign paddles must comply with the requirements of the MUTCD.
- When flagging is done during periods of darkness, sign paddles must be retro-reflective or illuminated in the same manner as signs.
- During emergency situations, red flags, meeting the specifications of the MUTCD, may be used to draw a driver's attention to particularly hazardous conditions. In nonemergency situations, a red flag may be held in a flagger's free hand to supplement the use of a sign paddle.
-

High-Visibility Garments for Flaggers

While flagging during daylight hours, a flagger must at least wear, as an outer garment:

- A high-visibility safety garment designed according to Class 2 specifications in the ANSI/ISEA 107-1999, American National Standard for High-Visibility Safety Apparel.
- A high-visibility hard hat that is white, yellow, yellow-green, orange or red in color.
-

Hours of Darkness

For the purpose of this rule, hours of darkness means one-half hour before sunset to one-half hour after sunrise. While flagging during hours of darkness, a flagger must at least wear, as an outer garment:

- A high-visibility safety garment designed according to Class 2 specifications in ANSI/ISEA 107-1999; and
- Coveralls or trousers that have retroreflective banding on the legs designed according to ANSI/ISEA 107-1999 standards.

Flagger Training

Each flagger must have in their possession:

- A valid Washington traffic control flagger card.

Emergency Flagger Situations

Personnel that have not completed a flagger-training course may be assigned duties as flaggers only during emergencies. Emergency assignments are temporary and last only until a certified flagger can be put into the position. Emergency means an unforeseen occurrence endangering life, limb, or property.

Hand and Portable Power Equipment

Hand and portable power equipment is operated in accordance with manufacturer specifications. Markings, guards, grounding devices, and other safety equipment must be fully functional.
Wrenches with cracked work jaws, screw drivers with broken points or broken handles, hammers with loose heads, dull saws, extension cords or electrical tools with broken plugs, improper or removed grounding systems, or split insulation are examples of tools in poor condition. Tools that have deteriorated to these conditions must be taken out of service.

Screwdrivers applied to objects held in the hand, knives pulled toward the body, cutting the ground pin off of electrical equipment, which eliminates the shock safeguard, are all activities that are prohibited. Many accidents have been caused by tools falling from overhead and by knives, chisels, and other sharp tools carried in pockets or left in toolboxes with cutting edges exposed. Powder-activated tools must be secured in a locked container when not in use.

HazCom Program

The Hazard Communication Compliance ("HazCom") Program is established to provide for the safety of all Atkinson Construction employees, while also meeting all DOSH requirements, which include container labeling, material safety data sheets and employee training.

Supervisor's Responsibilities

- Assure job site compliance with this standard.
- Train employees in the requirements of this standard.
- Identify hazardous chemicals found in the work area.
- Assure proper use of personal protection equipment.
- Address special owner/contractor requirements that may arise.

Procedures

The following written HazCom Program will be available at each job site for a review by any employee.

- List of Hazardous Chemicals:
  The job site will post a list of all hazardous chemicals used at the job site. The list will be updated as necessary and will be available to all job site employees. A form for this purpose is attached.

- Container Labeling:
  All containers, including secondary, portable fuel cans, etc, will:
  1. Be clearly marked as to the contents of the container.
  2. Provide the proper hazard warning.
  3. List the name and address of the manufacturer.
  4. Contents known to be carcinogenic, must be indicated as such on the container label.

- Material Safety Data Sheets
  MSDS forms are to be on file at each job site, and available for review by all employees. Incoming MSDS forms are to be reviewed for significant health/safety information and that information is to be passed on to the employees. If a required MSDS is not available, immediately inform the Site Manager.

- How to Read an MSDS:
  The MSDS has been standardized and is divided into multiple sections. The health hazards and precautions sections will generally be most valuable, as these sections list **personal protective equipment** employees are to use to avoid exposure to the hazards of the material.

Employee Training and Information

Before starting work, new employees will attend a New Hire Employee orientation and will receive the following training:

- An overview of the HazCom Program.
- A review of the chemicals present on the job site.
- The location, availability and contents of the Company's HazCom program and MSDS's.
- How to detect the release or presence of hazardous chemicals in the work area.

- Health hazards of the chemicals in the work area.
- How to lessen or prevent exposure to hazardous chemicals.
- Emergency and first aid procedures.
- How to read labels and MSDS's to obtain hazard information.
- The necessity for labeling containers.
- The job title of the person responsible for administering the program in their work area.

After attending the training class, each new employee will sign the Hazard Communication Training Certification form in the new hire packet to verify that they attended the training, received the written materials and understood the HazCom program. Prior to a new chemical hazard being introduced onto the job site, each employee is to be given information as outlined above.

Hazardous Non-Routine Tasks

Prior to starting work each employee will be given information about hazardous chemicals they may be exposed to. This information will include:

- Specific chemical hazards.
- Protective/safety measures the employee is to take.
- Measures the Company has taken to lessen the hazards including ventilation.
- Types of respirators needed.
- Employees standing watch.
- Emergency procedures.

Informing Subcontractors and Other Contractors On-Site

The Company is to provide other contractors on site the following information:

- Identity and location of hazardous chemicals they may be exposed to while on the job site.
- Precautions the Company's employees may take to lessen the possibility of exposure.
- Where MSDS's are located.
- An explanation of the labeling system used on the job site.
- The job titles of the employees responsible for administering the program in various work areas.

Obtaining Information from Subcontractors and Other Contractors On-Site

The Company is to obtain from contractors working at the site, the following information:

- Identity and location of hazardous chemicals the Company's employees may be exposed to while on the job site.
- Precautions the Company's employees may take to lessen to possibility of exposure.
- Where the contractor's MSDS's are located and who to contact to review them.
- An explanation of the labeling system used by other contractors on the job site.

Hazardous Substance Spill

Contact the following entities when becoming aware of a chemical, oil, hazardous substance, or other containment or environmental spill or discharge or release:

- Engineering and Seattle Public Utilities (206) 386-1800
- **NOTE** - If spill is in Lake Union, Ship Canal or Puget Sound, immediately contact:
  - ✓ US Coast Guard (206) 217-6232, or National Response Center (800) 424-8802 (operated 24 hours a day)
  - ✓ Washington Department of Fish and Wildlife (425) 313-5660
  - ✓ Seattle Harbor Patrol (206) 684-4071
- **NOTE** – If spill is in side sewer, sanitary sewer or combined sewer:

- ✓ King County Industrial Waste (206) 263-3000, M-F, 8:00AM to 5:00PM
- ✓ West Point Treatment Plant (206) 263-3801, all other times

- **NOTE** – If spill is into storm drains contact:
  - ✓ Washington State Department of Ecology (425) 649-7000, and
  - ✓ Seattle Surface Water Quality Hotline (206) 684-7587
- **NOTE** – If flammable or hazardous Materials contact:
  - ✓ Seattle Fire Department (911)

Hazardous/Non-Hazardous Waste Protocol

Detection Methods

Visual, Smell.

Action Required

[redacted] will stop work immediately and secure the area. Notify Resident Engineer (RE) of suspected hazardous waste.

Based on analytical results, the waste material will be managed per WAC 173303.

Hazardous Waste Handling

Spills - The first action that should be taken when any type of hazardous waste is spilled, is to contain the spill. After containment, the appropriate Atkinson supervisors must be notified of the spill. The designated supervisor(s) will determine the appropriate method for cleaning and disposing of the spill. Specific methods of handling different types of wastes are as follows:

1. Scrap Metal – This should be washed clean of oily/greasy materials and placed in a scrap metal dumpster. You can wash scrap metal at the bottom of the pit using a hose or clean it at the 6190 decontamination pad. For the dumpsters, contact Ed Park or Glen Lovendahl to arrange to have a scrap metal dumpster on site or haul it to the scrap metal dumpster at the decontamination pad or the truck shop.
1. Non-hazardous PPE – This means any PPE that is not contaminated with solvent, paint or paint thinners. If PPE contains oily or greasy material it is non-hazardous and can be placed in the refuse bin.
2. Waste Lubrication Material - For example oily rags, oily or greasy debris and grease should be placed in 55-gallon drums, labeled as with a Non-hazardous waste" label and write "Waste Lubrication Material" on the label. Once the job is over transport all waste lubrication drums to the mine 6190 level waste pad and log the drums into the log book.
3. Empty Metal Containers (including aerosol cans) – Place plastic lid in refuse bin, puncture the can and drain contents, then place into a scrap metal bin.
4. Non-Metal Container (including aerosol cans) – Remove lid and place in refuse bin, puncture the can and drain contents, then place into the refuse bin.
5. If any of the waste is solvent, they need to set up a can puncture station over a 55-gallon metal drum close to where they are working. The drum should be labeled with a "Hazardous Waste Label" and further labeled as waste solvent. There are no storage time restrictions as long as they accumulate <55 gallons.

Hearing Conservation Program

A hearing conservation program shall be implemented and protection against the effects of noise exposure shall be provided when the noise exposures equal or exceed an 8-hour time weighted average sound level of 85 decibels measured on the A-weighted scale of a standard sound level meter at slow response.

For compliance purposes as regulated by DOSH, an effective hearing conservation program shall include as a minimum:

- Atkinson Construction conducts annual audiometric testing by using Phicore's mobile service for the purpose of establishing a valid baseline audiogram to compare with subsequent annual audiograms.

- Monitoring of the workplace to determine the representative exposure of employees to excessive noise levels.

- A training program for employees exposed to noise levels at or above 85 decibels for an 8-hour TWA is performed in accordance with Atkinson Construction's Hearing Conservation Program during the new hire process and annually thereafter with Phicore's mobile service.

- Workers are provided personal protective equipment when administrative or engineering controls fail to reduce sound levels below 85 decibels for an 8-hour TWA, or when otherwise determined to be required.

Identification and Evaluation of Workplace Hazards

The goal of this "Plan" is to identify and evaluate unsafe working conditions and practices so that accidents, injuries and job related illnesses are minimized, if not completely eliminated.

The principal approach to reducing accidents and injuries is through periodic scheduled and unscheduled inspections. Inspections will be conducted as follows:

The Project Superintendent and/or the Project Safety Manager will conduct daily inspections of the jobsite. Additional inspections will be conducted:

- Whenever new substances, processes, procedures, or equipment are introduced to the jobsite that represent a new occupational safety or health hazard.
- Whenever the jobsite is made aware of any new or previously unrecognized hazard.

The following will be used periodically to further evaluate the jobsite safety:

- Inspections by DOSH Consultation.
- Inspections by the Insurance carrier.
- Records review including workers compensation summaries, accident reports, injury reports, and new Material Safety Data Sheets.
- Employee input from safety meetings and the open door policy.

Job Hazard Analysis (JHA)

The Superintendent and/or Project Manager shall identify tasks requiring a JHA based on the risk level of the activities involved with that task. Each JHA shall detail a step by step procedure required to complete the identified task. Next, hazards associated with each step or identified and discussed. Finally methods of hazard abatement are determined for each risk found particular to the corresponding activity. From this procedure a plan is created called a JHA.

Atkinson Constructions uses the 3 column format shown below:

Project: _____ Location: _____ Author: _____ Date: _____		
Task	Hazards Associated	Methods of Abatement

Orientate employees to the JHA by discussing each step required to mitigate risk and remove the hazards.

The JHA remains as the overall safety plan for a particular operation or set of tasks such working in a confined space or in a trench that is greater than 4' deep.

TRACK forms are used on a daily basis for each daily routine task as well as JHAs for major tasks or activities. The TRACK will show more specific changes in a process or procedure since it is completed for each daily tasks. A TRACK form is essentially a Pre-Task form.

Ladders

Job Made Ladders

- Working length isn't greater than **24 feet**.
- The minimum clear distance between rails is:
  - Uniform throughout the length of climb; and
  - At least:
    - 16 inches but not greater than 20 inches for single-cleat ladders
    - 18 inches but not greater than 22 inches for double-cleat ladders

- If splicing is required to obtain the necessary ladder length, the resulting side rail:
  - Doesn't have more than one splice, located as close to the top point of bearing as possible; and
  - Is equivalent in strength to a one-piece side rail made of the same material
- Cleats are parallel and level when the ladder is in position to be used and evenly spaced throughout the length of the ladder from the base to the top point of bearing.
- The distance from the top of a cleat to the top of an adjacent cleat is at least 8 inches but not greater than 12 inches.
- Cleats are attached to the narrow face of each side rail by three 3 ¼ inch long 12-d common nails, or an equivalent set of fasteners.
- Filler blocks are used between cleats. Side rails aren't cut to inset cleats. Filler blocks are:
  - The same thickness as the cleats
  - Butted tightly against the underside of each cleat
  - Attached to the side rails by three 3 ¼ inch long 12-d common nails, or an equivalent set of fasteners.

Portable Ladders

Portable extension ladders shall extend at least 3 feet past the landing and are secured from slipping or moving when being used. Portable extension ladders are to be set up at a 4:1 angle, or as close as possible when used. Damaged ladders are removed from service.

Portable step ladders shall only be used in the fully opened position. They are not to be use as when they are folded up and leaned against anything. Damaged ladders are removed from service.

Training

Ladder training is conducted in the new hire process and periodically throughout the project via safety meetings and demonstrations.

Lead Painted Surfaces

Scope.
WAC 296-155-176, Lead, applies to all construction work where an employee may be occupationally exposed to lead. All construction work excluded from coverage in the general industry standard for lead by WAC 296-62-07521 (1)(b) is covered by this standard. Construction work is defined as work for construction, alteration and/or repair, including painting and decorating. It includes but is not limited to the following:

1) Demolition or salvage of structures where lead or materials containing lead are present;
2) Removal or encapsulation of materials containing lead;
3) New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
4) Installation of products containing lead;
5) Lead contamination/emergency cleanup;
6) Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and
7) Maintenance operations associated with the construction activities described in this section.

Exposure assessment must be completed. During the exposure assessment, the exposed employees must wear PPE according to the interim exposure rules.

If the exposure assessment shows airborne lead to be below the PEL (permissible exposure limit) employees may work without specific protections as required for those who are exposed to airborne lead at or above the PEL.

During the interim protection requirement, or if exposed above the PEL, the following is required:

1) tyvek suites
2) respirator protection
3) changing facility
4) lead awareness training
5) biological monitoring (if exposed at or above the PEL)
6) warning signs stating lead work in progress
7) control zone around the lead project

Lead contaminated tyvek clothing must be disposed of accordingly due to lead contamination.

Lockout / Tagout Program

- Introduction

  The Lockout/Tagout Program is established to provide for the safety of all Atkinson Construction employees, while also meeting all DOSH requirements, which include Locking out and tagging out procedures and employee training.

- Supervisor's Responsibilities
  A. Assure job site compliance with this standard.
  B. Train employees in the requirements of this standard.
  C. Identify hazards of not using lockout/tagout.

- Procedures

  The following written Lockout/Tagout Program will be available at each job site for a review by any employee.

- When to Lock Out / Tag Out
  1. Electrical

     Whenever work is done on electrical components or equipment, the power to these units must be disconnected or turned off. The disconnects may be blade switches or plug-receptacle combinations. After disconnecting the source of power, the switch should be locked out if possible, if locking out the disconnect switch is not possible, unplug or disconnect the line going to the component or equipment from the power source. In either case, the source of power to the component or equipment should be clearly tagged out, with the reason it is out of service and signed by the responsible person in charge, to prevent someone from trying to energize the equipment by mistake.

     Note: Before doing any repair, try to start the equipment to make sure it is not energized.

  2. Mechanical

     Whenever work is done on mechanical equipment, the power source must be de-energized, so the equipment may not be started or moved. After turning off the source, the starting source should be locked out if possible, if locking out is not possible, the ignition key should be removed. If the equipment is not equipped with an ignition key, if electric start the battery terminals should be disconnected, or with an air start the air bled off. In either case, the piece of equipment should be clearly tagged out, with the reason it is out of service and signed by the responsible person in charge, to prevent someone from trying to start the equipment by mistake.

     Note: Make sure all sources of energy are bled off before starting repairs.

  3. Utility Lines

     Whenever compressed air, water, discharge and material lines are being connected or disconnected they must be shut off at the main source, or a branch valve. After turning off the source, the valve should be locked out if possible, if locking out is not possible, the line should be bled off and the line removed from the valve. In either case, the source or the valve should be clearly tagged out, with the reason it is out of service and signed by the responsible person in charge, to prevent someone from energizing the line by mistake.

     Note: Make sure all sources of energy are bled off before starting the work.

- Procedures for Lock Out / Tag Out

1. Installing and removing the lock
   a. The lock must be identified with the person installing the lock.
   b. The person installing the lock should be the only person with a key, and is responsible for installing and removing the lock.
   c. The person installing the lock is responsible for removing the lock when the job is completed.
   d. A gang lock is used where more than one person is working on the same piece of equipment. The gang locks accommodate more than one lock, and each person working on the same piece of equipment places their lock on the gang lock, which they will remove when they have completed their job.
   e. If a piece of equipment being worked on continues into the next shift, the person coming on shift will install their lock, and the person going off shift will remove their lock.

2. Installing and removing the tag
   a. The tag must be installed in clear vision, warning all personnel.
   b. The tab must clearly identify the reason the component or equipment has been de-energized.
   c. The responsible person installing the tag must date and sign the tag.
   d. If the tag out continues into another shift, the person going off shift must talk to the responsible person coming on shift, relating the situation, then the responsible person coming on shift must counter sign the tag.
   e. The tag must only be removed by the responsible person who signed the tag.

3. Warning Effected Personnel
   a. Warn the effected personnel that a component or piece of equipment will be de-energized.
   b. Before the lock or tag are removed and the component or piece of equipment is energized, make sure all the effected personnel have been warned and that they are in the clear.

Near Miss Reporting

Near Miss Reports are created for incidents that do not result in actual injury or damage, but could have resulted in injury or damage. Forward near miss reports to the appropriate superintendent who then forwards them to the Project Safety Manager. Weekly reports are created detailing near miss reports for jobsite distribution.

Outdoor Heat Exposure

Purpose: The purpose of this addendum is to ensure compliance with the Outdoor Heat Exposure rule, WAC 296-62-095, for employees who are exposed to temperatures at or above Table 1 of the regulation. Employees with only incidental exposure as defined in the rule are not covered.

Table 1

All other clothing	89°
Double-layer woven clothes including coveralls, jackets and sweatshirts	77°
Non-breathing clothes including vapor barrier clothing or PPE such as chemical resistant suits	52°

Scope: The following requirements are only in effect during the months of May through September each year for employees working outdoors according to table 1 above.

Exceptions:
WAC 296-62-095 through 296-62-09560 does not apply to incidental exposure which exists when an employee is not required to perform a work activity outdoors for more than fifteen minutes in any sixty-minute period. This exception may be applied every hour during the work shift.

Outdoor work environment definition:
Outdoor environment means an environment where work activities are conducted outside. Work environments such as inside vehicle cabs, sheds, and tents or other structures may be considered an outdoor environment if the environmental factors affecting temperature are not managed by engineering controls. Construction activity is considered to be work in an indoor environment when performed inside a structure after the outside walls and roof are erected.

Training: Each year when table 1 shown above applies, all employees working in the categories listed above will be provided training on signs and symptoms of outdoor heat exposure and on the company policies to prevent heat-related illness. Additional training will be scheduled for a make-up class as needed. When new employees are hired during the summer months, training will be provided prior to the new employee working in the outdoor environment.

Employee Training Content: Training on the following topics will be provided to all employees who may be exposed to outdoor heat at or above the temperatures listed in WAC 296-62-09510(2) Table 1:

(a) The environmental factors that contribute to the risk of heat-related illness;
(b) General awareness of personal factors that may increase susceptibility to heat-related illness including, but not limited to, an individual's age, degree of acclimatization, medical conditions, drinking water consumption, alcohol use, caffeine use, nicotine use, and use of medications that affect the body's responses to heat. This information is for the employee's personal use;
(c) The importance of removing heat-retaining personal protective equipment such as non-breathable chemical resistant clothing during all breaks;
(d) The importance of frequent consumption of small quantities of drinking water or other acceptable beverages;
(e) The importance of acclimatization;
(f) The different types of heat-related illness, the common signs and symptoms of heat-related illness; and
(g) The importance of immediately reporting signs or symptoms of heat-related illness in either themselves or in co-workers to the person in charge and the procedures the employee must follow including appropriate emergency response procedures.

Supervisor Training Content: Prior to supervising employees working in outdoor environments with heat exposure at or above the temperature levels listed in WAC 296-62-09510(2) Table 1, supervisors will be given training on the following topics:

(a) The information required to be provided to employees listed in subsection (1) of this section;
(b) The procedures the supervisor must follow to implement the applicable provisions of WAC 296-62-095 through 296-62-09560;

(c) The procedures the supervisor must follow if an employee exhibits signs or symptoms consistent with possible heat-related illness, including appropriate emergency response procedures; and
(d) Procedures for moving or transporting an employee(s) to a place where the employee(s) can be reached by an emergency medical service provider, if necessary.

Drinking Water: On days when the temperature is at or above those listed in Table 1 of the regulation, employees will be provided a sufficient quantity of drinking water which is readily accessible at their work location. The water quantity will be sufficient to allow each employee to drink at least a quart or more of water each hour.

It is not necessary to have the entire supply of water available at the beginning of shift as long as the water source is replenished during the work day and is always available for employee access. It is up to the employee to drink water and replenish their water jugs or bottles.

As the temperature increases through the day, additional water will be made available or replaced. It is the responsibility of this employer to ensure that the supply of available drinking water does not run out.

Responding to Signs and Symptoms. Time is critical when people are experiencing heat stress/heat stroke. The quicker any employee experiencing symptoms can be removed from the heat and cooled down, the better the chances are for a full recovery. On days when the temperatures will be at or above those listed in Table 1 of the regulation, the company will:

Never leave an employee who is experiencing heat-related problems by themselves; if they do not respond quickly to cooling attempts, immediately call emergency medical services. If a co-worker is experiencing difficulty, do not hesitate to bring it to the attention of the supervisor or lead worker.

Personal Protective Equipment (PPE)

Employees and subcontractors will be trained using, examining, wearing, and maintaining the appropriate PPE. There may be certain conditions that require additional PPE and training.

The following is the minimum PPE to be used at the EMERGENCY BRIDGE REPAIR:

- Head Protection:
  ANSI Z89 approved hard hat.
- Eye Protection:
  ANSI Z87 approved safety glasses with side shields. Welding and cutting operations require appropriate eye protection.
- Face Protection:
  ANSI Z87 approved face shield, suitable for use.
- Hand Protection:
  Appropriate gloves are used based on the specific task.
- Foot Protection:
  Appropriate leather boots are required.
- High Vis Vests/Shirts:
  High Vis shirts or vests according DOSH rules are required on EMERGENCY BRIDGE REPAIR when in the work area outside of office trailers and parking lot.
- Class 2 Vests and Pants:
  Class 2 reflective vests and pants are required on EMERGENCY BRIDGE REPAIR when working in the Highway Traffic Zone **during night time hours** according to DOSH and MUTCD; and Class 2 reflective vests are required when exposed to regular traffic **during night time hours** according DOSH.

- Respiratory Protection:
  Respirators are required when workers are exposed to respirable hazards that meet or exceed a particular Permissible Exposure Limit (PEL). Fit testing, medical approval and training are provided and recorded for employees using respirators other then filtering face-pieces (dust masks). Employees wearing and using dust masks do so on a voluntary basis for it is Atkinson Construction's policy to require protection greater then a dust mask if a known respirable hazard exists in excess of the PEL of any particular airborne respirable hazard.
- Hearing Protection:
  Hearing protection is available to all Atkinson Construction employees entering the work zone or working environment that meets or exceeds 85 dBA for an 8 hour TWA. Initial hearing protection is provided during the new hire safety orientation and then annually thereafter. Audiometric testing is conducted for Atkinson Construction employees exposed to noise exceeding 85 dBA for an 8 hour TWA and revised annually thereafter. Dosimeter and noise monitoring data is obtain periodically during the course of the job to ensure compliance with the DOSH rule.
- Fall Protection:
  ANSI approved full body harness with a shock absorber or retractable lanyard used with an approved anchorage point is required when exposed to fall hazards of **6 feet** or more, or when working from an aerial boom lift, or when exposed to unprotected edges of a walking working platform (measures 45 inches in all directions) that is **4 feet** or greater from the next lowest surface. Remember that an approved guard rail abates the need for and ANSI approved full body harness and anchorage point except when employees are working from an aerial boom lift where a full body harness and lanyard is required at all times in the bucket.
- Flame/Arc Protection:
  Clothing rated to Hazard Category 2 for all tasks between 481 volts and 600 volts and for throwing covered circuit breakers at or above 601 volts. Clothing rated to Hazard Category 4 for other tasks at or above 601 volts.

Responsibilities

Project Manager

Atkinson Construction has designated a Project Manager as the Responsible Person for this project. It is the responsibility of the Project Manager to ensure overall implementation of the Site Specific Safety and Health Plan ("Plan"). In addition, the Project Superintendent, and the Project Manager have the responsibility for enforcement of the program at the project site.

Project Manager Duty includes:

- Identify and evaluate jobsite hazards, including procedures for investigating occupational injuries and illnesses.
- Establish and/or review methods and procedures for correcting unsafe and unhealthful conditions and work practices.
- Ensure that employees receive training on general and specific and safety practices for the company and on each of their job assignments.
- Ensure that there is a procedure for communicating to employees, in an understandable manner, the safety and health rules and procedures.
- Ensure compliance with safety and health work practices.
- Ensure that records on training, inspections, and corrective measures are properly maintained, as required by this Injury and Illness Prevention Program and other MSHA and/or OSHA required programs.
- Ensure that there is a clearly defined and visibly posted notification procedure with key contact information available at the job site for emergency notifications.

Superintendent and Project Safety Manager

The Project Superintendent is responsible for directing the daily activities for this program. These include:

- Job Hazard Analysis (JHA) Assessment
- Preplanning work activities for safety.
- Inspect the project daily.
- Ensure that corrective action is taken when an unsafe act or unsafe condition is brought to their attention.
- Enforcing employee and subcontractor disciplinary policies as described in the Illness and Injury Protection Plan.
- Ensure subcontractor safety compliance.
- Ensure that safety meetings are conducted and documented as described in this program and subcontractor "Safe Start" documents.
- Ensure that every employee completes the safety training and the on-site safety orientation prior to starting work.
- Ensure that proper personal protective equipment (PPE) is available and being used as required.
- Ensure that communication from employees is being acted upon.
- Notifying appropriate entities of an injury / accident requiring medical attention or first aid.
- Investigate all accidents, incidents, and near misses.

Project Safety Manager

The Project Safety Manager shall implement the operational aspects of this Plan, and other applicable requirements and regulations. The Project Safety Manager shall identify and communicate anticipated safety and health requirements to any employee and to any subcontractor(s) at the Subcontractor Safe Start meeting prior to the subcontractor's start of work on the project. Subcontractors shall complete the appropriate Safe Start documents by a date to be determined at the Safe Start meeting.

The Project Safety Manager carries the authority of the Project Superintendent as it relates to matters of project safety and generally carries out the same responsibilities as the Project Superintendent.

The Project Safety Manager is also responsible for the field coordination of the project safety and health plan, and DOSH requirements and other aspects of the Atkinson Construction Safety and Health program.

Specific duties of the Project Safety Manager include:

- Develop a job specific safety and health plan.
- Evaluation of the personal protective equipment program.
- Monitor and provide Atkinson Construction's safety training and retraining programs for employees.
- Monitor the effectiveness of the Atkinson Construction safety meetings and safety audits.
- Consulting with the Regional Health and Safety Director on matters related to the project.
- Conduct regular Safety Audits.
- Conduct Accident Investigations.
- Conduct Subcontractor Safety Audits.
- Manage Jobsite Safety Committee Meetings.
- Manage and audit the effectiveness of the EMERGENCY BRIDGE REPAIR safety program.

Project Team

Project Team members will be familiar with the contents of this Site Specific Safety and Health Plan, and DOSH regulations, the project work plan, and the project quality assurance plan; and will observe all

specifications set forth within those plans, and with further direction they may receive from time to time. No employee may, for any reason, perform an act, or create a condition that may cause harm to themselves, co-workers, or third parties.

All employees shall immediately report unsafe conditions to their immediate supervisor, who will either correct the condition or request assistance from the Project Safety Manager.

Foremen

Project foremen have the following responsibilities:

- Ensure compliance with Atkinson Construction Project and DOSH rules and regulations
- Ensure employees are scheduled for safety training when needed.
- Ensure compliance with the Injury and Illness Prevention Program.
- Examine the work areas and travel ways before the shift starts and during the shift.
- Ensure corrective action is taken when there is an unsafe act or unsafe condition.
- Coordinate with superintendents to ensure work activities are planned in a safe manner.
- Ensure that their crew is wearing the proper personal protective equipment.
- Ensure that their crew is working safely and complying with all rules and regulations.
- Ensure that the concerns of the crew are communicated to the project superintendent.
- Ensure that the crew understands the importance of their working safely.
- Ensure that equipment is being used properly, in a safe manner and is in good condition.
- Assist with accident, incident and near miss investigation when needed.

Employees

Employees have the following responsibilities:

- Arrive to work fit for duty, and have a positive attitude towards safety.
- Have on proper work attire including long pants without cuffs and shirts with sleeves that cover the shoulder, appropriate work boots, hard hats, and safety glasses.
- Have received and understand the required training and site specific orientation .
- Follow Atkinson Construction Project safety rules and MSHA and/or OSHA safety regulations required by the project.
- Comply with the Atkinson Construction HazCom programs rules and regulations.
- Wear the proper PPE that is required by the job and check the equipment to make sure it is in good condition.
- Understand the emergency evacuation plan and warning system.
- Know and understand the transportation and communication system.
- Know the location of and how to use the emergency notification phone list.
- Know the location of the first aid supplies and the fire-fighting equipment.
- Use the tag in / tag out system when entering or leaving the underground work area.
- Make sure they have a brass identification tag on your person for underground work.
- Check the condition of the self rescuer for damage and compliance for underground work.
- Check the condition of the cap lamp for damage and compliance for underground work.
- Do a walk around, before starting or moving any equipment, alert people in the area.
- Wear seatbelts when operating or riding in equipment, never allow anyone to ride on equipment unless a proper seat and seatbelt have been provided.
- Check the work area for hazards and correct or report any unsafe conditions, if an intimate danger exists that cannot be corrected immediately, the area must be secured.

- Do pre-ops on all equipment used and fill out the check sheet, check the fluids, tires, fire extinguisher and general condition, if unsafe conditions are found, the equipment must be tagged out and taken out of service until the unsafe condition has been resolved.
- Evaluate and manage the hazards and risks associated with their assigned job.
- Do not take unnecessary chances or shortcuts which could result in an unsafe act.
- Work in a safe manner as not to cause harm to themselves, fellow employees, equipment, or the environment.
- Have the proper training before doing a job, if not sure ask for help or get more training.
- Have the proper tools, equipment and materials to do the job safely.
- Report all unsafe acts or conditions immediately.
- Immediately report any work-related injury, accident, incident or near miss.
- Work safe and do quality work in a productive manner.
- Horse play will not be tolerated.
- **Be responsible for your own safety.**

Subcontractors

Subcontractors have the following responsibilities:

- Follow project safety requirements, Atkinson Construction project safety requirements, and DOSH regulations.
- Report any unsafe conditions to the Project Safety Manager.
- Provide necessary PPE for their employees and ensure their proper training and compliance.
- Provide and document required Safety training for their employees.
- Have IIPP and HAZCOM Programs on jobsite for review by their employees and project management.
- Attend the Safe Start meeting and comply with requirements.

Visitors

- Must follow project safety requirements, Atkinson Construction project safety requirements and DOSH regulations when coming on-site.
- Will not be permitted in a work area that may present a hazard to the individual.

Respiratory Protection

Respirator use is either voluntary or mandatory use.

Voluntary use of ½ Mask for Full Face-piece Respirators

Provide all voluntary respirator users with the advisory information found in the new hire packet.
Develop and maintain a written program that includes the following:

- Medical evaluations,
- Training on how to properly clean and disinfect respirators,
- Training on how to properly store respirators,
- Training to ensure respirator use does **not** create a hazard.

Voluntary use Dust Masks

Provide all voluntary respirator users with the advisory information found in the new hire packet.

Mandatory Use of Respirators

If respirators are considered a “mandatory use” then the following must be completed:

- Proper Respirator Selection,
- Medical Evaluation,

- Fit-Test Procedures,
- Training that addresses:
  - Hazards encountered during routine activities,
  - Cleaning of equipment,
  - Maintenance,
  - Storage,
  - When to discard respirators
  - A cartridge or canister change schedule

Safety and Health Manual [Corporate Incident Prevention Plan (IPP)]

See "Safety and Health Manual" that contains all of Atkinson Construction's Corporate Safety and Health Policies.

Scaffolding

Make sure that those involved with erecting or dismantling scaffolds are knowledgeable and under the direction of a competent person. The competent person is someone who:

- Is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees; and
- Has the authority to take prompt corrective measures to eliminate them.

The competent person performs daily pre-shift inspections to determine if the scaffold is safe for use or should be tagged "out of service".

Employees who use scaffolds for work access receive training during the new hire process and periodically during the project.

Training, Instruction and Indoctrination

Site-Specific Orientation

An initial ***site-specific orientation*** will be conducted for all Atkinson Construction employees and subcontractor employees before beginning work on the project. The initial site safety orientation shall be documented and a unique hardhat sticker will be issued to each person completing the initial site-specific orientation on EMERGENCY BRIDGE REPAIR. Training documents shall be available onsite for review.

New Employee Orientation (NEO)

Atkinson Construction employees complete NEO training as a pre-requisite for work. NEO education for hourly employees is administered through the Bellevue Braids field office.

Hazard Specific Training

All employees shall receive training and instruction in the following areas:

- General safety and health work practices.
- Specific DOSH required training with respect to hazards unique to the job assignment.
- All training will be documented with copies forwarded to the Project Safety Manager.

Training of employees regarding this Plan shall occur:

1. When the program is first established.
2. To all new employees.
3. To all employees given a new job assignment for which training has not previously been received.
4. Whenever new substances, processes, procedures, or equipment are introduced to the job site and represent a new hazard.
5. Whenever the project is made aware of a new or previously unrecognized hazard.

In accordance with this Plan, the Project Superintendent or his designee will conduct periodic safety training at the jobsite. Additional training will be provided to supervisors to familiarize them with the safety and health hazards to which employees under their immediate direction and control may be exposed.

Maintaining Records

The Project Safety Manager will keep records of the actions taken to implement and maintain this safety program.

Records of scheduled and unscheduled periodic inspections as well as other records including methods used to identify and evaluate jobsite conditions and work practices shall also be retained.

Records relating to the Plan shall include, at a minimum, person(s) conducting the inspection or evaluation; the unsafe conditions and work practices that have been identified; and actions taken to correct the identified condition or work practice.

Records and documentation of safety and health training shall include, at a minimum, the name of the employee and/or the employee's number, date of training, training topic(s), and the name of the instructor.

Continuous Training

Atkinson Construction employees receive additional training as the job progresses in the form of JHA's, All Hands Meetings, Monthly Foreman/Superintendent Mentoring Training, Safety Meetings (tool box talks), and required Atkinson Construction safety training. Required Atkinson Construction training consists of, but is not limited to:

- Speak Up/Listen Up
- On the Front Line
- OSHA 10 for Construction
- First Aid/CPR
- Hazard specific and task specific safety training

Speak Up/Listen Up

Speak Up/Listen Up training is mandatory for all employees to eventually complete within a pre-determined time frame from the date of employment, and every two years thereafter. The EMERGENCY BRIDGE REPAIR management team decides the appropriate time frame for completing this class.

On the Front Line

On the Front Line is Safety Management training for Foreman, Superintendents and selected Project Management personnel. The training is for specified employees within a pre-determined time frame from the date of employment, and every two years thereafter. The EMERGENCY BRIDGE REPAIR management team decides the appropriate time frame for completing this class.

OSHA 10

OSHA 10 is provided for Foreman, Superintendents and selected Project Management personnel. The training is for specified employees within a pre-determined time frame from the date of employment, and every two years thereafter. The EMERGENCY BRIDGE REPAIR management team decides the appropriate time frame for completing this class.

First Aid Training

All Foreman and Superintendents are trained to render first aid in case of an emergency. First aid training is conducted periodically throughout the course of the job to accommodate new employees.

Hazard Specific and Task Specific Training

Additional training topics are provided as needed.

Subcontractor Safe Start

All subcontractors working on this project will meet with the project Safety Manager prior to starting work. The individual(s) representing the subcontractor must include the supervisor who will be responsible for day-to-day operations, generally a superintendent. This meeting will explain the intent of the project safety program as well as communicate the documents that are required to be submitted prior to beginning work and those that must be submitted throughout the subcontractor's scope of work on this project.

The Project Manager will send a letter to the subcontractor's office advising of the requirement for this meeting and identify the Project Safety Manager and telephone number to call to schedule this meeting.

TRACK

TRACK forms are basically Pre-Task form used to identify the risk and hazards involved with each activity, and methods to remove or abate those risks and hazards.

Atkinson Construction uses a form document the TRACK process and to help each foreman be successful with their TRACK process.

Foreman are responsible for completing a TRACK for each daily activity involving risk and safety concerns. The crew shall participate in the TRACK process facilitated by the foreman.

Foreman submit completed TRACK forms at the end of the day to their Superintendent who reviews them and forwards to the Safety Department for monitoring.

Working on or Over Water

WAC 296-155-235

(1) When an employee is employed under conditions which expose them to a risk of drowning, they shall wear a U.S. Coast Guard approved life saving device, unless it can be shown that conditions, such as shallow water, are such that flotation would not be achieved.

(2) Prior to and after each use, the buoyant life saving device shall be inspected for defects which would alter their strength or buoyancy. Defective units shall not be used.

(3) Ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. Distance between ring buoys shall not exceed 200 feet.

(4) At least one lifesaving skiff shall be immediately available at locations where employees are working over or adjacent to water. Each skiff, or skiffs, shall:

(a) Be suitable for conditions where used.

(b) Be equipped with oar locks securely attached to gunwales, oars, one boat hook, and one cork ring buoy with fifty feet of suitable line attached.

(5) Whenever boats or skiffs cannot be used, due to swift currents, life lines close to the water surface shall be provided and, wherever practicable, a line shall be stretched across the stream with tag lines.

(6) Where workers are transported by boat or barge, only such number of persons shall be carried that can be safely accommodated on fixed seats. Capacity showing number of persons shall be plainly marked on vessel.

(7) All workers shall be provided with a U.S. Coast Guard approved buoyant life saving device while transported in open boats and/or barges, and where deemed necessary by the department, workers shall wear same while in transport.