# 1. Risk Assessment for: Freshset Flooding Working alone

|  |  |  |  |
| --- | --- | --- | --- |
| **WORK LOCATION:**  |  | **DESCRIPTION OF WORK:** | Conducting inspections to identify hazards and damages caused by the 2017 freshet flooding |
| **COMPLETED BY**:  |  | **ASSESSMENT DATE:** |  | **RANKING:** | **Medium** |

**2. WORK ACTIVITIES- (Include PPE Requirements for Quick Reference)**

|  |
| --- |
| List Task Activity: Conducting inspections to identify hazards and damages caused by the 2017 freshet flooding. This task is preferably conducted in pairs, however if solo work is required in some circumstances, certain safety precautions must be taken to ensure the safety of those conducting the task.  |
| PPE and Equipment Required: CSA approved work boots, high-visibility attire, gloves (as required), flashlight (as required), communication device (cell phone) |

**3. HAZARDS & RISK LEVEL RATINGS: SCORE = C + P + E = Rate** 3-4 are L**OW** 5-6-7 are **MEDIUM** 8-9 are **HIGH** priority

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **HAZARD #** | **WORKING ALONE HAZARD IDENTIFICATION** | **CONSEQUENCES** | **PROBABILITY** | **EXPOSURE** | **RISK** | **RATING****L/M/H** |
|  | Working near high, fast moving creeks/waterways (ex. potential to get swept away) | 3 | 2 | 3 | 8 | High |
|  | Possibility of medical emergency (could be due to workplace injury or pre-existing health issue) | 3 | 1 | 3 | 7 | Medium |
|  | Erosion of river banks, unstable trees (potential to fall), lots of debris | 3 | 2 | 3 | 8 | High |
|  | Worker fatigue (working long hours, weekend work etc.) | 2 | 2 | 2 | 6 | Medium |
|  | Slips, trips, falls (uneven ground, rocks, debris etc.) | 2 | 2 | 3 | 7 | Medium  |
|  | Biohazards (ex. needles, flood water, potential for sewer back-up) | 2 | 2 | 3 | 7 | Medium |
| **RISK TOTAL:** | **2** | **2** | **3** | **7** | **Medium** |

 **Add up the individual columns: (Consequence, Probability, Exposure, Risk and divide by number of hazards)**

**4. MATRIX FOR RANKING THE HAZARDS:**

|  |  |  |  |
| --- | --- | --- | --- |
| **SCORE** | **1** | **2** | **3** |
| **CONSEQUENCES:** |  first aid / minor damage |  lost time injury/moderate damage |  fatality / major damage |
| **PROBABILITY:** |  unlikely |  possible |  likely |
| **EXPOSURE:** |  rarely (less than 1/month) |  often ( 3 times/week) |  everyday |

**5. CONTROL MEASURES FOR EACH HAZARD IDENTIFIED IN SECTION 3**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **HAZARD #** | **LIST ALL EXISTING CONTROL MEASURES****(Eliminate, Substitute, Engineering, Administrative, PPE)** | **RECOMMENDATIONS** | **Date required** | **Person Responsible** | **Initial when complete** |
|  | Keep away from creek banks/dikes – do not put yourself in a risky/precarious situation; observe and inspect areas with fast-moving water from a distance (ex. adjacent bridge or structure); have cell phone readily available, wear high visibility vest |  |  |  |  |
|  | Keep cell-phone on you at all times; establish check-in frequency/procedure with EOC risk officer |  |  |  |  |
|  | Assess site for potential threats of erosion, falling trees, undermined walkways/roads before conducting inspection; report hazards accordingly (take photos, notes etc.);  |  |  |  |  |
|  | Look out for each other’s well-being; ensure you’re getting enough food/fluids; ensure adequate sleep/rest when off; ensure proper work/rest cycles (good scheduling) |  |  |  |  |
|  | Watch footing; wear appropriate footwear; maintain high level of situational awareness |  |  |  |  |
|  | Survey/scan surroundings; wear proper PPE; if not trained in safe needle disposal/have proper biohazard container, do not pick-up needles – report location so they can be picked up.  |  |  |  |  |

**6. HIERARCHY OF CONTROL MEASURES: (Must be followed in the order below)**

|  |  |  |
| --- | --- | --- |
| **ORDER** |  **CONTROL** | **DESCRIPTION**  |
| **1** |  **ELIMINATION:** | Can the hazard be removed at the source? Can the task be eliminated entirely? Example: eliminating the need to have a worker enter an excavation by hydro-excavating to expose underground infrastructure. |
| **2** |  **SUBSTITUTION:** | Can a hazard, hazardous process or hazardous material be substituted with one with no hazards? Example: using salt water brine instead of a chemical for deicing the roads. |
| **3** |  **ENGINEERING:** | Engineering controls include isolation, ventilation and equipment modification. These controls focus on the source of the hazard. Example: a guard placed around a saw blade, or a shoring system placed in an excavation. |
| **4** |  **ADMINISTRATIVE:** | Remove or reduce the exposures by reducing the duration, frequency and severity of exposure to hazards. Example: changes to work procedures & practices, scheduling, job rotation, breaks during heat/cold exposure. |
| **5** |  **PPE:** | Personal Protective Equipment does not control the hazard but reduces the effect of exposure to the hazard has on the worker. PPE must always be the last line of defense Example: earplugs, latex gloves, CSA boots, CSA Hard Hats  |

# 7. REVIEWED BY:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DATE** | **REVISION DATE** | **PRINT NAME** | **POSITION** | **SIGNATURE** |
|  |  |  |  |  |
|  |  |  |  |  |

**THE HAZARD IDENTIFICATION AND ASSESSMENT PROCESS**

1. Identify the task to be assessed, determine if the task is **H**igh, **M**edium or **L**ow risk
2. Include workers who have experience in performing the task, ensure the process is lead by someone who has training and experience in

conducting hazard assessments. These individuals must have some type of formal training.

1. Identify hazards associated with the tasks. Consider PHYSICAL, CHEMICAL, BIOLOGICAL, AND PSYCHOLOGICAL
2. Rate the hazards by degree of risk using the following matrix:

|  |  |  |  |
| --- | --- | --- | --- |
|  **SCORE** |  **1** |  **2** |  **3** |
| **CONSEQUENCES:** | first aid / minor damage | lost time injury/moderate damage | fatality / major damage |
| **PROBABILITY:** | unlikely | possible | likely |
| **EXPOSURE:** | rarely (less than 1/month) | often ( 3 times/week) | everyday |

**TOTAL** the three columns: **(T)**

* 3-4 are **low** priority hazards
* 5-7 are **medium** priority hazards
* 8-9 are **high** priority hazards

The **high** priority hazards are addressed first, followed by the **medium** priority hazards. **Low** priority hazards may not require attention at this time, they may simply require monitoring. The Hierarchy of Control Measures must be followed when eliminating or mitigating hazards in the following order:

|  |  |  |
| --- | --- | --- |
| **1** |  **ELIMINATION:** | Can the hazard be removed at the source? Can the task be eliminated entirely? Example: eliminating the need to have a worker enter an excavation by hydro-excavating to expose underground infrastructure. |
| **2** |  **SUBSTITUTION:** | Can a hazard, hazardous process or hazardous material be substituted with one with no hazards? Example: using salt water brine instead of a chemical for deicing the roads. |
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 Hazard Assessments **must be reviewed** in accordance with Hazard Assessment Program Guide.