# 1. Risk Assessment for: Dyke patrols

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WORK LOCATION:** |  | **DESCRIPTION OF WORK:** | Patrolling dykes/banks during flood response action | | |
| **COMPLETED BY**: |  | **ASSESSMENT DATE:** |  | **RANKING:** | **Medium** |

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

|  |
| --- |
| **List Task Activity:** Drive to pre-determined creek site(s) to patrol/monitor water levels, erosion activity, undermined trees/walkways, debris build-up etc. in order to report back to Emergency Operations Centre (EOC) for action. |
| **PPE Required:** CSA approved footwear, high-visibility safety vest or jacket |

**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 #** | **HAZARD IDENTIFICATION** | **CONSEQUENCES** | **PROBABILITY** | **EXPOSURE** | **RISK** | **RATING**  **L/M/H** |
|  | Unstable ground banks/dykes (erosion of soils, clays) | 3 | 2 | 3 | 8 | High |
|  | Swift moving water | 3 | 2 | 3 | 8 | Medium |
|  | Biohazards (possible sewage in water, possibility of Weil’s disease) | 2 | 2 | 3 | 7 | Medium |
|  | Wildlife (ex. deer, coyote etc.) | 1 | 1 | 1 | 3 | Low |
|  | Slips, trips and falls (uneven ground, rocks, branches, logs etc.) | 1 | 2 | 3 | 6 | Medium |
|  | Inclement weather (heavy rains, warm temperatures) | 2 | 2 | 1 | 5 | Medium |
| **RISK TOTAL:** | | **2** | **2** | **2** | **6** | **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** |
|  | Work in a team; complete field level risk assessment at each site to determine risk at that specific time/location; keep back from edges; wear high visibility vest; |  |  |  |  |
|  | Stay clear of banks - patrol is to be conducted from adjacent structures (ex. bridge, parking lot); have cell phone or radio readily available; wear high visibility vest; |  |  |  |  |
|  | Wash hands before eating, touching face (avoid cross-contamination); |  |  |  |  |
|  | Scan/survey area before conducting work; if animal hazards exist, assess whether additional precautions must be taken (ex. is it a bear or is it a deer) before commencing patrol |  |  |  |  |
|  | Watch footing/maintain high level of situational awareness; ensure footwear is proper size; don’t rush, take your time |  |  |  |  |
|  | Dress appropriate for the weather conditions; use sunscreen if necessary |  |  |  |  |

**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 led 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.