# 1. Risk Assessment for: Safe Sandbagging

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WORK LOCATION:** | Various areas throughout city | **DESCRIPTION OF WORK:** | Safe sandbagging | | |
| **COMPLETED BY**: | Sarah Josefson | **ASSESSMENT DATE:** | May 16, 2017 | **RANKING:** | **Medium** |

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

|  |
| --- |
| **List Task Activity:** Using a shovel to fill sandbags with sand followed by moving sandbags into place |
| **PPE Required:** CSA approved work boots, safety glasses, gloves, high-visibility apparel if near a roadway (coveralls or vest etc.) |

**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** |
|  | Fatigue (due to high rate of filling sand bags) | 2 | 2 | 1 | 5 | Medium |
|  | Musculoskeletal (MSI) injuries – lower back strain, wrist pain etc. | 2 | 2 | 1 | 5 | Medium |
|  | Sand in eyes | 2 | 2 | 1 | 5 | Medium |
| **RISK TOTAL:** | | **2** | **2** | **1** | **5** | **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 at a steady pace, don’t rush; take micro breaks throughout shift; switch dominant arm periodically; drink fluids; proper nutrition |  |  |  |  |
|  | Use triangular/round-bladed shovel; if needed, handles can be added to shovel to keep back and wrist straighter; use proper technique (see corresponding safe work procedure for detail); switch dominant arm periodically; sandbags should weigh 35 to 45 pounds MAX. |  |  |  |  |
|  | Use proper body position; be mindful of wind direction; don’t rush; wear PPE (safety glasses) to prevent incidental contact; ensure portable eyewash is nearby |  |  |  |  |

**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** |
| May 16/17 | April 20, 2018 | Nathan Peters | OHS Advisor | **Nathan Peters CRSP** |
|  |  |  |  |  |

**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.