











Date Revised:	March 2021	Overall Task Risk Rating:	Before Controls	C	After Controls	C
Description:	Manual material handling is often required for activities performed during the receiving, handling, and storage of materials. It is when you lift, push, pull, carry, move, etc.... anything.					
Location(s):	Office, Shop, Asphalt Plant, Construction Projects					
Associated Documents: Hoisting and Rigging WTS, Hazardous Agents WTS, Housekeeping WTS, Maintenance and Cleaning WTS						

**RED FLAGS (HOLD WORK UNTIL CORRECTED):**

Note:

- If your line of sight is compromised once you have lifted material, do not continue without a spotter
- If an object looks too heavy for you, ask for assistance or find an assistive lifting device before continuing
- If a task looks like it may aggravate a pre-existing condition, do not continue. Discuss alternative methods with your Foreman / Superintendent

**PERSONAL PROTECTIVE EQUIPMENT (CSA APPROVED)**

									
Head Protection	Foot Protection	High-Vis Protection	Hearing Protection	Hand Protection	Eye Protection	Respiratory Protection	Skin Protection	Face Protection	Fall Protection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: No specific PPE required.

- When in the Shop one must adhere to the minimum Shop PPE Requirements: Safety Boots
- When onsite one must adhere to the minimum site requirements (i.e. Safety Boots, Hard Hat & High Visibility Protection. Safety Glasses when necessary)
- Additional PPE such as hand protection (i.e. gloves) may be required depending on the materials to be handled
- Workers must wear all PPE listed in the MSDS / SDS for any hazardous products that they are to handle

**SAFE WORK PRACTICES (SWP)**

General Manual Material Handling Practices:

- Do not rush
- All nails or other materials that may puncture skin should be removed from the object before handling
- Grip the load securely, utilize any handles or lifting devices present
- Workstation design & modifications can be helpful when possible (i.e. a counter so materials don't have to be lifted off of the ground level)
- If your line of sight is compromised once you have lifted material, do not continue with the task until you have determined a safe way to do so (i.e. get assistance, have a spotter, use an assistive lifting device)
- Do not handle material while climbing onto equipment or using a ladder, 3-points of contact must be maintained at all times while climbing
- Ensure you have discussed any pre-existing musculoskeletal conditions with your Foreman/Superintendent. If a lift looks like it may aggravate a pre-existing condition, do not continue with this task. Discus alternative methods with your Foreman/Superintendent
- Shovelling and raking asphalt can result in a Repetitive Strain Injuries (RSI) - when possible workers should rotate between repetitive job tasks

Assess the Surroundings:

- Assess the starting situation, to ensure surrounding objects' stability won't be disturbed with the movement of the material in question
- Asses the path along which you plan to move the material, to ensure there are no slip, trip and fall hazards
- Assess the location of the final placement of the material ensuring that it is accessible and appropriate for the load in question

Mechanical Assistance:

- When a heavy lift is required, consider the use of mechanical lifting devices (i.e. cranes, lift trucks, hand pump trucks, dollies or trolleys)
- Lifting devices are to be used as per the manufacture's recommendations - ensure the load is balanced & secure
- Do not overload lifting devices

- Proper rigging practices shall be used at all times
- If other people are working nearby, notify them of the lift and ensure the area around the equipment is kept clear

#### Suspended Loads:

- Loads shall not be left suspended while the equipment is unattended
- It is strictly forbidden to stand on loads while being lifted
- Personnel shall never go under suspended loads
- Keep hands clear of pinch points – when the lift is in progress do not touch the material, use a tagline for guidance of movement if needed

#### Assistance from another Person:

- If an object appears to be large, awkward in shape or heavy, ask for assistance or discuss alternatives with your Foreman
- When attempting to handle materials with co-workers, talk with each other prior to handling the material about exactly where the material is going and how you plan to work together to get it there

#### Safe Lifting Principles and Posture:

- Keep your back straight
- Bend your knees to allow you to 'lift with your legs'
- Ensure good footing
- Keep objects close to your body
- Turn with your feet – avoid twisting at the waist
- If an awkward posture (i.e. a twist, a bend, etc...) is required to move material, consider other methods (i.e. assistance, assistive lifting devices, moving other things in close proximity to the material for easier access to the material)



1. Keep your back straight  
Do not twist



2. Bend your knees,  
Keep objects close to your body



3. Release the object in a  
secure position & location

#### Extreme Weather Considerations:

- Additional precautions should be observed during adverse weather conditions i.e. rain, sleet, snow or frost for slipping hazards

#### WHMIS And Material Handling:

- When handling hazardous materials follow the Hazardous Agents WTS and use the controls (ventilation, PPE, etc.) appropriate for the task
- Use appropriate containers with proper labels, for storing, transporting or disposing of hazardous materials

#### Inspections:

- All equipment operators must conduct and record pre-use inspections where required for specific pieces of equipment
- Check that all equipment is in a proper condition - if in doubt, don't use it

#### Training:

- Employee Orientations (including roles, responsibilities, applicable workplace task standards, WHMIS, etc.)
- Workers exposed to, or required to work with WHMIS controlled products/material, must be trained in WHMIS accordingly
- Only people with the proper training are permitted to operate vehicles / machinery / equipment
- All rigging, transportation, material handling and crane operations shall be performed by qualified and / or certified personnel

#### Personal Protective Equipment:

- Full face protection is required when completing tasks that may cause debris / objects to dislodge or become airborne
- All workers using hazardous agents / materials, must wear the required personal protective equipment set out in its SDS
- Depending on the material to be handled gloves can help as they can allow for increased grip, but gloves can also inhibit a firm, secure hold if the gloves are not exactly the right size for your hands, made out of a poor material, or wrong for the job
- Ensure High Visibility vests or clothing is being worn by personnel working near trucks and equipment (loading / offloading)



# MANUAL MATERIAL HANDLING

JOB HAZARD AND RISK ANALYSIS		RISK RATING SYSTEM	
		A	B
TASK HAZARDS	RATING BEFORE CONTROLS	TASK CONTROLS	RATING AFTER CONTROLS
<ul style="list-style-type: none"> <li>Poor Storage Location</li> </ul>	C	<ul style="list-style-type: none"> <li>Never store material under high voltage power lines</li> <li>Access must be maintained to all emergency equipment (i.e. fire fighting or first-aid or electrical equipment, light) and ensure material storage does not obstruct emergency exits</li> <li>All materials are to be stored in an organized manner and in their designated storage area</li> <li>Materials are to be stored such that they will not tip / fall / roll</li> </ul>	C
<ul style="list-style-type: none"> <li>Poor Site Planning &amp; Organization</li> </ul>	C	<ul style="list-style-type: none"> <li>Materials and equipment should be stored, and transported in a manner that will not endanger workers or other material</li> </ul>	C
<ul style="list-style-type: none"> <li>Improper Lifting Techniques</li> </ul>	C	<ul style="list-style-type: none"> <li>Don't manually lift heavy or awkwardly shaped objects</li> <li>Use an assistive lifting device (i.e. a forklift or a crane) or ask for assistance if the load is too heavy / awkward to lift safely</li> </ul>	C
<ul style="list-style-type: none"> <li>Poor Visibility</li> </ul>	C	<ul style="list-style-type: none"> <li>Be sure your view of the intended path of travel is not obstructed while moving material – if it is, use a spotter</li> </ul>	C
<ul style="list-style-type: none"> <li>Improper Lifting Mechanics and Posture – Injury</li> </ul>	C	<ul style="list-style-type: none"> <li>Lift with your legs, not with your back</li> <li>Turn with your feet - do not twist at the waist</li> <li>Keep the load close to your body</li> </ul>	C
<ul style="list-style-type: none"> <li>Lack of PPE</li> </ul>	C	<ul style="list-style-type: none"> <li>Be aware of sharp or jagged container edges. Use gloves if cuts or abrasions are possible, or for increased grip</li> </ul>	C
<ul style="list-style-type: none"> <li>Lack of Training</li> </ul>	C	<ul style="list-style-type: none"> <li>Only those with the proper training are to operate vehicles / machinery / equipment</li> </ul>	C