Guidelines for Working in Loading Docks

Table of Contents

1.0 INTRODUCTION

Workers can be exposed to a range of high-risk hazards at indoor and outdoor shipping and receiving areas of workplaces, including loading docks (where trucks are loaded and unloaded). Loading docks are busy areas where trucks, trailers, pedestrians, lift equipment, goods, etc., are frequently in motion. Potential serious or fatal injuries can be sustained from loading dock hazards.

Examples of loading dock hazards include, but are not limited to:

- Slips, trips, and falls (e.g., slippery surfaces, falling off the dock, changes in walkway levels, uneven surfaces and slopes, poor lighting, debris, and items stored in pedestrian walkways).
- Pedestrian and vehicle traffic that could result in collisions.
- Improper loading and unloading procedures.
- Hazards associated with being pinned between lifts, loading dock and truck trailer, or being struck or run over by a truck, dock plate or unsecured objects.
- Workers and drivers not familiar with workplace layout, lifting devices, and dock locking systems.
- Materials handling from lifting and moving heavy or bulky items.
- Inadequate lighting.
- Equipment in poor working order.
- Lack of safe working procedures.
- Hazards associated with lifting devices, trucks, doors and other moving equipment and parts.
- Hazard associated with cold and heat stress.

It is important to be able to identify and manage loading dock hazards by implementing control or preventative measures to avoid potential injuries from common loading dock activities.

Scope

This guideline applies to all University staff, faculty, librarian, students and visitors who are required to be in and around loading docks during their work activities.

2.0 RESPONSIBILITIES

In all provincially regulated workplaces, employers and other workplace parties must comply with the Ontario Occupational Health and Safety Act (OHSA) and its regulations. The roles and responsibilities for management, supervisors and workers are documented below.

2.1. Supervisors / Management / Principle Investigators

- Identify workers or work activities where workers may be required to be in loading dock areas.
- Identify, anticipate and develop controls for the loading dock hazards that may be

present.
- Ensure workers comply with the OHSA and its regulations.
- Advise workers of any potential or actual health or safety hazards known by the supervisor.
- Where necessary, ensure that a Job Safety Analysis (JSA) or written work procedure is completed and that they are readily available to workers *(refer to EHS Job Safety Analysis Form: https://ehs.utoronto.ca/wp-content/uploads/2014/06/Job-Safety-Analysis-Form-November-2019.pdf).*
- If prescribed, provide workers with written instructions about measures and procedures to be taken for the workers' protection.
- Ensure controls identified in the JSA or other work procedures are followed for safe work in loading docks.
- Ensure that workers who are working in loading docks are provided with equipment, personal protective equipment (PPE), appropriate training or other resources as identified by the JSA or other.
- Where work is contracted to external parties, equivalent procedures should be followed.

2.2. Workers

- Report any known workplace hazards or contraventions of the OHSA, including any unsafe loading dock practices or damaged equipment, to your supervisor.
- Participate in appropriate training to work safely in loading docks.
- Review and be familiar with applicable JSA or other work procedures before the start of work.
- Work in compliance with the OHSA and its regulations.
- Follow safety procedures and use equipment and/or PPE as defined in the JSA or work procedure.
- Where requested, assist supervisors in identifying situations where there are potential loading dock hazards and participate in the development of the JSA or work procedure.

2.3. Environmental Health & Safety (EHS)

- Provide consultation and assist in loading dock matters as needed.
- Update and maintain online training module on loading dock safety (EHS549 Working in Loading Docks). Supervisors and workers may register via the EHS Training Registration website: https://ehs.utoronto.ca/training/my-ehs-training/.
- Update and maintain these Guidelines on a regular basis and/or when new information becomes available.

3.0 GENERAL CONTROL MEASURES FOR LOADING DOCK HAZARDS

Controls measures for loading dock safety typically follow a hierarchy of control which is described as follows, where A is the most effective and E is the least effective:

A. Elimination – to remove the hazard.
B. Substitution – to replace the hazard with something less hazardous.
C. Engineering Controls – to make modifications to equipment and/or processes to reduce the hazard (i.e., isolate people from the hazard).
D. Administrative Controls – to provide training, education, safe work procedures, job rotation or other administrative changes (i.e., to change the way people work to reduce the hazard risk).
E. Personal Protective Equipment (PPE): to provide equipment such as safety glasses, gloves, safety shoes, etc., to protect the worker from the hazard.

Whereas engineering controls aim to reduce or eliminate the loading dock hazard, administrative and PPE controls attempt to reduce the impact of the hazard.

3.1. Engineering Controls

There are various engineering controls that can be applied with respect to loading dock hazards, the following are some common engineering controls:

3.1.1. Vehicle Restraining Systems

There are various vehicle restraining systems that prevent movement of vehicles and trailers during the loading and unloading process, the following are a few examples.

- Wheel Chocks: Wedge-shaped blocks placed in front of the rear wheels of a trailer (refer to Photo 1).
    - Easy to use and accessible when required (i.e., low-profile device that can be stored nearby). Some loading dock areas attach chocks to the outside of the loading dock area, keeping in mind that different sized vehicles need longer attachments for accommodation.
    - Repeated movement (i.e., up, and down) caused by loading/unloading activities and environmental conditions (i.e., exterior surface, dry versus wet) could reduce the effectiveness of wheel chocks and can cause trailer creep and movement.

PHOTO 1: EXAMPLE OF A WHEEL CHOCK

- Hook Restraint Systems (e.g., Interstate Commerce Commission (ICC) bar type): Restraints that hook onto the rear impact guard of a trailer (refer to Photo 2).
    - Consistently effective in preventing trailer movement.
    - Prevent truck drivers from accidentally driving away during loading/unloading activities.

PHOTO 2: EXAMPLE OF A HOOK RESTRAINT SYSTEM

- Wheel Latch Systems (e.g., automatic wheel type): Restraints that automatically attach to the rear wheels of a trailer (refer to Photo 3).
    - Same benefits as a hook restraint system and are typically used when trailers do not have a rear impact guard, or the rear impact guard is damaged.

- Other: For spotted or dropped trailers, the forward landing gear is sometimes reinforced with a portable jack stand to prevent the trailer from tipping forward.

PHOTO 3: EXAMPLE OF A WHEEL LATCH SYSTEM

Wheel chocks are the most widely used vehicle restraint devices and should be used as a minimum during loading/unloading activities, however, if another system is available then it should be utilized.

3.1.2. Dock Levelers/Plates/Ramps

Dock levelers, plates or ramps are devices that are used to bridge the gap between the loading dock and the trailer during loading/unloading activities. This is especially useful as many trailers are not aligned with the height of the dock and the device provides level support. There are multiple types of dock levelers/plates/ramps found at the University such as manual, hydraulic, or elevating docks (built into loading docks themselves) (refer to Photos 4. 5 and 6).

PHOTO 4: EXAMPLE OF A DOCK LEVELER

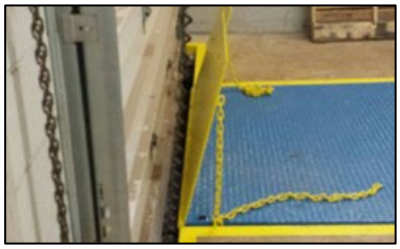

PHOTO 5: EXAMPLE OF A DOCK PLATE

PHOTO 6: EXAMPLE OF AN ELEVATING DOCK LEVELER

3.1.3. Dock Barriers and Bumpers

Stand-alone dock barriers or built-in dock leveler barriers can prevent (a) falling of equipment, people and/or materials off the edge of a loading dock when the dock is empty and (b) collision with the loading dock door.

Dock bumpers can prevent exterior building structure damage from trailers backing into the loading dock.

There are many styles of dock barriers and bumpers available at the University (refer to Photos 7 and 8), it is important that they be regularly inspected to ensure they are in good condition and functional.

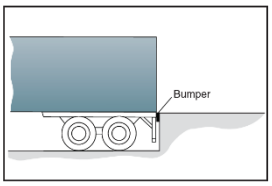

PHOTO 7: EXAMPLE OF A DOCK BUMPER

PHOTO 8: EXAMPLE OF A DOCK BARRIER

3.1.4. Dock Doors and Seals

There are multiple variations of loading dock doors and seals utilized at the University (refer to Photos 9 and 10).

PHOTO 9: EXAMPLE OF A DOCK DOOR

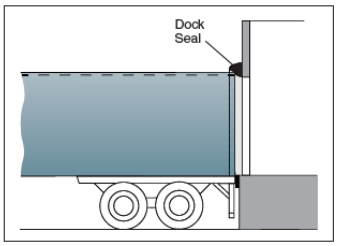

PHOTO 10: EXAMPLE OF A DOCK SEAL

3.2. Administrative Controls

3.2.1. General Loading and Unloading Procedures

The following are general loading and unloading procedures. Specific loading and unloading procedures for a particular dock should be developed based on Job Safety Analysis (JSA) assessments to address equipment, personal protective equipment (PPE) and other hazards present. Note: this is the responsibility of the external contractor, driver, unless it is a University vehicle, staff.

A. Shut off the engine and engage the brakes to make sure the vehicle does not move while loading and unloading. This also minimizes the exposure to vehicle emissions and noise.

B. Before you start unloading the trailer, wheel chocks or another form of vehicle restraint device and dock plates/levelers must be in place.

C. When opening the doors of the trailer, be careful of loads that may have shifted during transport. Falling freight can be a hazard when the doors are opened, so it is important to stand out of the way when opening the trailer.

D. Be wary of trailer creep (also known as trailer walk or dock walk). Trailer creep occurs when the repeated forces exerted by loading and unloading activities (e.g., when a lift truck enters and exists the trailer) causes the trailer to slowly creep or move away from the dock. Periodically check vehicle restraints and plates are still aligned in place.

E. Individuals should wear proper personal protective equipment (PPE) for the job being performed. PPE should be in good condition and fit correctly. PPE used in or around a loading dock can include but is not limited to safety shoes, gloves, eye protection, etc.

F. After unloading, ensure all employees or material lifting devices are cleared, and all vehicle restraints or other engineering controls are placed back in their original location before re-starting the vehicle engine and disengaging the brake.

3.2.2. Loading Dock Housekeeping

Loading docks should be clean and free of obstructions, debris, and stored items. Housekeeping is important to prevent incidents and injury, the following safety considerations should be followed:

- Clean up all spills **immediately**. Oils and grease are particularly hazardous. Place caution signage where needed, cover all grease and oils spills with absorbent then clean it up (refer to https://ehs.utoronto.ca/report-an-incident/emergency-procedures/chemical-spill-procedures/).
- Containers, tools, and other materials should be placed out of walking and driving areas.
- Do not block fire exits, extinguishers or sprinklers, eye wash stations or showers and first aid kits.
- Do not use the loading dock as a storage area.
- Do not eat or smoke in the loading dock area.
- Designated areas should be used to store or dispose of pallets, containers, and garbage. Chemicals, combustible, or flammable materials should only be stored in appropriate locations. Store first aid kits and spill kits in easy to access locations with applicable signage.
- Tools and equipment should be secured to prevent them from falling.
- Waste should be disposed of in the appropriate containers.
- Any electrical outlets near openings in the loading dock should be protected from the weather (rain, snow, ice), effectively grounded, and/or contain ground fault circuit interrupter (GFCI).

- Cracked, broken or uneven floor surfaces and other tripping hazards should be reported.
- In the winter months, the loading dock area should be kept free of snow and ice.

3.2.3. Loading Dock Signage

The following signs or similar should be posted in the loading dock area:

- Slips, Trips and Falls, refer to https://www.ccohs.ca/products/posters/slips_trips/
- Housekeeping, refer to https://www.ccohs.ca/products/posters/slips_trips/
- Manual Material Handling, refer to https://www.ccohs.ca/products/posters/pdfs/mmh.pdf
- Pedestrian Awareness and Vehicle Traffic
- Loading and Unloading Procedures

3.2.4. Loading Dock Inspections

Consider these items during regular inspections:

- ✓ General housekeeping and maintenance practices are being followed.
- ✓ Passageways and stairs are kept free of obstructions.
- ✓ Mirrors are installed at any blind corners.
- ✓ Outdoor areas are kept free of ice or snow in inclement weather.
- ✓ Materials are not stacked too high, and items are stacked properly so that they will not tip over and not blocking emergency equipment or pathways and exits.
- ✓ Manual lifting is avoided or reduced when possible.
- ✓ Inspections are conducted on all pieces of equipment.

- ✓ Docks and the nearby areas are free of loose pavement or potholes.
- ✓ Warning signs are placed in areas where required.
- ✓ Truck engines are turned off when not needed.
- ✓ Combustible materials are properly stored.
- ✓ Spill kits are available and maintained.
- ✓ All staff and drivers are aware of the appropriate procedures and safety rules.
- ✓ All loading dock equipment, electrical fittings and areas should be maintained and inspected in accordance with manufacturer's recommendations and equipment specific requirements. This includes all vehicles, powered and non-powered lifting devices, dock levelers, dock bumpers, etc.
- ✓ Any damaged equipment should be reported and removed from service immediately.
- ✓ Utilize the Loading Dock Safety section of the JHSC Checklist (***Appendix A***) developed for a Joint Health & Safety Committee Inspection on a regular basis to ensure that proper safety precautions are being followed in the loading dock area.
- ✓ All inspection and maintenance documents need to be maintained by the respective department and accessible.

3.2.5. Loading Dock Preventive Maintenance

It is important to establish a regular preventive maintenance program (PMP) for loading dock equipment including dock levelers, restraints, doors, dock bumpers, lights, and communication systems.

A loading dock PMP can include procedures to:

- Repair immediately any damage to flooring reported by workers or identified during workplace inspections.
- Ensure that good housekeeping practices are in place. Clean up spills and leaks immediately and remove and dispose of any packaging materials (cardboard, pallets, plastic, etc.).
- Regularly check dock seals and shelters to ensure they are not leaking, to minimize worker exposure to vehicle exhaust and temperature extremes, as well as minimize deterioration of the building envelope due to weather.
- Regularly schedule professional inspections, maintenance or to certify any hydraulic dock plates, lifts, etc.

3.2.6. Emergency Equipment and Response

Users of the loading dock should know the location of and how to use any emergency equipment that may be in the area such as first extinguishers, spill kits, first aid kits, eye wash stations or showers and alarms. All staging areas or loading/unloading areas should not

interfere with emergency egress routes. Carbon monoxide (CO) monitoring for trucks can also be considered. Monitoring of CO may depend on the JSA assessment and determining the risk of exposure. All monitoring or emergency equipment requires inspection and maintenance.

A list of emergency numbers should be posted in the loading dock area.

Emergency:

St. George Campus

Step 1: Call emergency services at (9) 9-1-1
Step 2: Notify Campus Safety - Emergency: 416-978-2222

Mississauga Campus: 905-569-4333 (UTM)
Scarborough Campus: 416-978-2222 (UTSC)

Reporting of Accidents, Incidents and Occupational Illnesses. Follow the procedures outlined at: https://ehs.utoronto.ca/report-an-incident/

3.2.7. Training

Workers who are required to work in loading docks and their supervisors should take the online training course, EHS549 Working in Loading Docks. Supervisors and workers may register via the EHS Training Registration website: https://ehs.utoronto.ca/training/my-ehs-training/.

Supervisors and managers are required to take the course on Job Safety Analysis (in-person/ virtually on-line). This tool assists supervisors and managers in planning out a job safely from beginning to end. Visit the above EHS Training Registration Website to register for EHS303 Job Safety Analysis where required.

In addition to formal training such as the online course, supervisors can also take the opportunity to review department or work-specific procedures for working in loading docks (or other health and safety requirements) in other forums such as toolbox talks, operations meetings, etc.

Where determined by the JSA, additional training and documentation may be required for work in loading docks, and may include (but not limited to):

- Transportation of Dangerous Goods (TDG) EHS910 TDG – Chemicals
- Workplace Hazardous Materials Information System (WHMIS) for Non-Lab Staff (EHS576)
- Equipment specific training (motorized vehicles, forklift, hand-trucks, etc.)
- Driver safety
- Manual Materials Handling (EHS534)
- Ladder Safety (EHS542)
- Heat Stress: Working in Hot Environments (EHS531)

- Cold Stress: Working in Cold environments (EHS530)
- First Aid https://ehs.utoronto.ca/training/first-aid-training/
- Load Securement (EHS547)
- Some of these courses are available online through EHS or may be instructor-led courses. Contact the EHS office for further information if required, or browse available courses online at the EHS training website at https://ehs.utoronto.ca/training/my-ehs-training/. Alternatively, refer to https://ehs.utoronto.ca/training/admin-facilities-staff/

3.3. Personal Protective Equipment (PPE)

Protective clothing may be needed depending on the type of work activities in the loading dock. As a minimum, safety shoes are required while in loading dock areas.

Where determined by the JSA or work instruction, additional PPE may be required, and can include (but not limited to):

- Gloves (manual material handling).
- High visibility vests (high vehicle traffic).
- Hearing protection (noise) (only where assessed/required).
- Eye protection (e.g., safety glasses).
- Hard hat (overhead hazards).
- Emergency eye wash and /or Emergency Deluge shower.

Where applicable, departments are responsible for providing instruction on proper use and maintenance per manufacturer's instructions.

4.0 COMMON LOADING DOCK HAZARDS AND SAFE WORK GUIDELINES

4.1. Hazard: Dock Congestion and Separation from Dock

- Lack of space, poor layout or standard procedures can cause dock areas to be very congested.
- Congestion increases the chance of colliding with other equipment, racking or pedestrians.
- The force created every time a lift truck enters and leaves the trailer may cause the trailer to slowly move away (this is called trailer creep).
- Separation also occurs when the tractor driver pulls away before the trailer is ready.

Safe Work Guidelines

- Develop a traffic management process that reduces congestion
- Make more space by using pallet distributors or storing surplus skids out of the way
- Create separate zones for pedestrian activities
- Pay attention to pedestrian safety rules and safety boot policy
- Encourage truck drivers to stay in safe waiting areas
- Do not allow anyone in the truck when a forklift is working in it
- Do not allow anyone to drive over a collapsed dock leveler
- Move product that contributes to blind corners
- Use a suitable vehicle restraint system (e.g., wheel chocks or dock locking system, see image below, *Figure 1 below and Section 3.1.1 above*)

Figure 1: *Example of a suitable vehicle restraint system in place (left image, green) vs. no restraint system in place (right image, red)*

- Ensure that your dock uses a procedure to prevent trucks from pulling away early (e.g., ask the driver to hand over the keys until you are finished or use a glad hand device (also known as a trailer air brake lock) to lock on the brake lines)

4.2. Hazard: Dock Plates, Dock Ramps and Dock Levelers

- Dock plates, ramps or levelers are devices used to bridge the gap between the dock and the trailer during loading and unloading.
- Lift truck may hit the dock leveler or its frame if the operator does not point the forks up while driving into the trailer.
- The angle of the dock on to an air ride trailer may be too steep, causing the lift truck operator to lose control as the equipment ‘skis’ over the sharp angle.
- Portable dock plates must be lifted by hand and may collapse if they are not secured.

- Levelers may pop up too soon.
- An unbalanced load on the trailer may cause the leveler to lift on one side, throwing the operator off the lifting equipment.

Safe Work Guidelines

- Make sure that the forks on your lift truck are always pointing up and that they are high enough to clear the dock plate or leveler.
- Make sure that your lift truck is checked for hydraulic drift, which can cause forks to point down unexpectedly.
- Make sure that air ride trailers are lowered to reduce the angle of the dock leveler
- Ensure that the dock plate is equipped with anchor stops and signs that indicate the size of load they can handle.
- Make sure that dock levelers are fitted with skirt plates and toe guards so that your feet cannot be trapped.
- Check load capacity prior to use, to ensure that the combined weight of the load, the lifting device and the person moving the load is adequately supported.
- Check the dock plate prior to use; inspect it for signs of wear, corrosion or failure of the materials or welds.
- Position the dock plate so there is at least 8 inches of overlap on each end; make sure it is secured in position before driving or walking over it. Do not assume a plate is anchored; always check it before using it to ensure it will not slip while in use. Some dock plates have a vertical divider to prevent slipping.
- Dock plates should not be dropped into position. It should be placed so that it is flush with the surface to minimize movement and wear at the edges.
- Inspect hydraulic dock plates regularly. A certified person must inspect them at least once a year.
- Hydraulic dock plates should be lowered to ground level when not in use.
- The edges of the plate should be painted and have a lip to prevent mobile equipment and workers from falling from the plate.
- Clean spills, oils, grease, and moisture from the plate immediately.
- Always look behind you that the path is clear.
- Make sure that you report problems with levelers and ask for prompt repair.

4.3. Hazard: Dock Barriers and Bumpers

- Stand-alone barriers and barriers built into dock levelers can prevent driving or backing off the edge of the dock when the dock is empty and into the dock door when it is closed.
- Damaged or missing loading dock barriers/bumpers may lead to backing trailers contacting the building and causing structural damage.

Safe Work Guidelines:

- Various versions and models of dock barriers and bumpers are available for installation depending on the dock leveler.
- All dock barriers and bumpers should be inspected regularly to ensure they are functioning as designed.

4.4. Hazard: Incorrectly Installed/ Damaged Dock Doors and Seals

- Dock doors (rolling shutter doors, sectional doors, sliding doors, etc.) should be wide enough to handle all loads and minimize damage.
- Dock seals are designed to be in contact with the trailer as it backs into the loading dock. Dock seals can be used to minimize employee discomfort, energy loss, theft or security concerns, product damage or contamination (dust, insects, etc.), slippery or dangerous conditions (rain, wind, snow, etc.) and loss of temperature control.
- Dock seals should be effective in preventing moisture and debris from entering the dock area.

Safe Work Guidelines:

- Doors and seals should be correctly installed and regularly maintained.
- Seals should provide an effective seal against all types of trailers and not obstruct/interfere with loading and unloading

4.5. Hazard: Pedestrian Awareness and Vehicle Traffic

- Loading docks are a busy workplace setting and involve many types of traffic flow which should be managed to mitigate associated risks.
- Vehicle operators must always look out for pedestrians entering the work area and always drive carefully to avoid striking.

Safe Work Guidelines:

PHOTO 11: EXAMPLE OF CONVEX MIRRORS

- Operators of mobile equipment and vehicles should make eye contact with pedestrians when they are walking through the loading dock area.
- Corner mirrors, convex curved ceiling mirrors (refer to Photo 11), signals or trained signal person should be used in areas with poor visibility/blind spots such as corners, doorways, and angles or curves in the traffic path.
- Walkways should be adequately marked (e.g., painted lines) and properly lit.
- Pedestrians and drivers are not to walk directly in front of the loading dock without ensuring the area is clear of moving vehicles. Generally, walk along the side of the aisle, or marked walkways.
- Wherever possible, vehicles that are backing up should have a trained spotter or signal person to direct the driver. Individuals should always stand to the side of the vehicle when directing the driver, not directly behind it.
- Effective communication, planning, training and understanding of any signals used (hand signals, verbal signals, etc.) must be in place prior to the use of a signal person. The vehicle/equipment operator must maintain visual contact with the signal person (i.e., visual contact in sideview mirror) at all times.
- Pedestrians and unauthorized persons (e.g., students, visitors, etc.) should not be permitted at the loading zone.
- Individuals should stop or slow down at blind intersections and check both directions for moving vehicles or mobile equipment before entering any aisle way or intersection.
- Individuals should not be allowed to walk or stand under a lifting mechanism or ride on a forklift.

4.6. Hazard: Manual Material Handling (MMH) and Lifting Below the Knees and Above the Shoulders

- A common cause of injury in the loading dock area is lifting loads or performing other manual handling tasks.
- Workers must keep bending forward at the waist to put boxes on the lower levels of pallets
- Some loads come in too high and need to have the top rows removed to fit into bin bay
- Muscles tire quickly when you work in a fixed or awkward position, causing higher risk of injury

Safe Work Guidelines

- Make sure that you have receive training on lifting hazards and proper lifting techniques
- Minimize the amount of lifting, twisting, bending, and reaching done above shoulder height.
- Pay attention to the postures you use when working
- Whenever possible, rotate duties so that you can vary your postures
- Use material handling equipment for heavy loads (e.g., lift trucks, dollies, etc.); operators should be properly trained on the equipment, read operating and maintenance procedures before using a vehicle/equipment, inspect vehicles/lifts before and after every shift, report any problems, and perform a circle check (walk-around) equipment prior to use.
- Adjust the height of the forks to get your load to an ideal height
- Use a stable step stool or platform to reach high items and place extra product on raised skids
- Consider using forklift attachments like slip-sheet clamps or carton clamps
- For materials storage, commonly used and heavier items should be stored between knee and shoulder height.

4.7. Hazard: Shrink Wrapping

- Worker injuries such as strain from repetitive action of hand wrapping are preventable.
- Wrapping loads by hand requires a worker to circle the load multiple times which can result in dizziness and even cause workers to stray into oncoming equipment and traffic.
- The task of carrying heavy shrink wrap could result in lifting injuries for workers.
- Poorly constructed loads on pallets can collapse, creating lifting hazards or falling on delivery staff or pedestrians.

Safe Work Guidelines

- Whenever possible, use automated wrapping equipment.
- If you wrap by hand, use ergonomically correct tools, and rotate to other jobs so that you do not have to wrap too many loads.
- Order shrink-wrap on spools that have a wide diameter and are light
- Alternate the wrapping direction and techniques.

4.8. Hazard: Strapping

- Shippers often bundle or crate items with strapping. The strapping may break and cause injury, especially to the eye
- Loose strapping that has been cut off bundles becomes a tripping hazard

Safe Work Guidelines

When Adding Strapping:

- Use safety goggles and leather gloves.
- With heavy strapping, use steel-reinforced gloves.
- Cut off excess strapping and sharp or pointed ends and remove any broken or damaged bands with metal snips (cutters).
- Fill in hollow inside of loads with air pillows or use shrink-wrap.

When You Are Working with Strapped Items:

- Face in the direction of the pull
- Stay out of the direct line when the strap is under tension
- Do not lift a package by the strapping

Before You Cut the Strapping:

- Anchor the closest end with a holding device
- Warn other workers, pick up your snips, turn your back to the strapping and stand out of the line of recoil
- Do not remove strapping by breaking it with a hammer, bar, chisel, or other tool

After You Cut the Strapping:

- If the strapping is not made of metal, tie a knot in it
- If the strapping is metal, fold and flatten it
- Throw out waste strapping immediately so it does not create a tripping hazard

4.9. Hazard: Stacking Loads

- In general, lighter loads should be stacked on top of heavier loads. This will keep the center of gravity low and prevent the stack from falling over.
- If you are stacking loads on a pallet, they should be stacked straight centered on each other and not stick out over the sides of the pallet.

Safe Work Guidelines

- Keep aisles and emergency exits clear. Do not stack objects near exit signs or safety equipment such as fire extinguishers or alarms.

- Limit the stacked height of materials especially if workers will be working around the material.
- Never climb a rack or stacked materials.
- If stacking materials near the ceiling, make sure they are at least 18 inches away from sprinkler heads.
- Do not stack incompatible chemicals together, read the Safety Data Sheet (SDS) for any material that you move or stack.
- If drums need to be stacked, they should not be directly centered on each other but positioned like a pyramid no more than three drums in height

4.10. Hazard: Chemical Exposure or Leaking Chemicals

- Sometimes leaks can occur during transport, causing hazardous chemicals to drain to the back of the truck

Safe Work Guidelines

- Before unloading a trailer, confirm the contents with the driver's waybills to ensure that any leaking product is not hazardous.
- Follow EHS Chemical Spill Procedures - Environmental Health & Safety (utoronto.ca) as follows for **Chemical Spill Outdoors:**
  - Contain spill rapidly by diking with suitable material (kitty litter, vermiculite, etc.). Attempt to prevent product from contaminating ground water and sewer system. Cover opening to sewer if able to do so.
  - Immediately call Environmental Protection Services at 416.978.7000 (8:00 am - 4:00 pm Weekdays).
  - After hours call Campus Safety:
    - 416.978.2222 – St. George Campus
    - 416.978.2222 – Scarborough Campus
    - 905.569.4333 – Mississauga Campus
  - Do not leave spill site unattended. Wait until assistance arrives.
  - Report the incident to supervisor and to Environmental Health & Safety by filling out the online Accident/Incident eform: Report an Incident - Environmental Health & Safety (utoronto.ca)

4.11. Hazard: Poor Maintenance

- Rubber wheels on pallet jacks and forklifts can develop flat spots, resulting in unstable loads and poor handling.
- Having urethane wheels with the wrong density on pallet jacks or walkie stackers

can place extra strain on the operator.

Safe Work Guidelines:

- Make sure that pallet jack and forklifts are maintained regularly to reduce the hand, arm, and finger force you need to operate them.
- Report the early signs of mechanical breakdown.
- Make sure that floors are well maintained and clean.
- After repairs are made, report any difficulties in steering equipment.

4.12. Hazard: Slips, Trips and Falls

- Slips, trips, and falls are one of the most common causes of injuries at loading docks.

Safe Work Guidelines:

- Areas should be kept clean and well maintained, this includes ensuring the spills are cleaned immediately and that flooring that is damaged/deteriorated is repaired
- Floors and dock plates should always be kept dry (from rain, snow, ice, equipment fluid/oils).
- Clean up any spills immediately. Damage to flooring must be repaired.
- Work, loading/unloading and trailer areas should be properly lit and free of obstructions.
- Walk; do not run while in the loading dock area.
- Be aware of and keep a safe distance from the loading dock edges.
- Loading dock doors should be closed when not in use.
- Do not jump onto or off the loading dock. Separate or specific access to the loading dock area should be present and always maintained.
- Protective footwear should be worn.
- Slips, trips, and falls can be prevented by practicing good housekeeping in the loading dock area.

4.13. Hazard: Weather Conditions

- If a truck is parked on a slope outside the building, ice from the roof may slide back towards the bay door and hit a worker/driver on the dock or cause the dock to become slippery.
- Poor delivery conditions can include lack of snow and removal, lack of help to unload bulky or awkward product, poor lighting, slip and trip hazards, and delivery in high traffic areas.

- Workers/drivers may slip when going in and out of the trailer.

Safe Work Guidelines

- Report all unsafe conditions and request for snow removal/ assistance with slippery surfaces due to weather.
  - 416.978.2222 – St. George Campus (for building and grounds emergencies)
  - 416.287.7579 – Scarborough Campus (for facilities management general line)
  - 905-828-5200 – Mississauga Campus (for campus safety)

- Store emergency equipment such as shovels, salt or sand, and flashlights near the loading dock.
- If you are a worker, wear non-slip footwear that has adequate tread

5.0 Resources

University of Toronto Environmental Health and Safety: https://ehs.utoronto.ca/

Loading Docks and Warehouses (wsps.ca)

Public Services Health and Safety Association | Loading Dock Safety (pshsa.ca)

Appendix A: Loading Dock Safety Checklist **(referenced from page 2 of JHSC Workplace Inspection Checklist)**

- □ Clean and in good condition
- □ Not being used as storage area/Free of accumulated cargo
- □ Documented service/maintenance history on lifts/levelers
- □ Dock leveler/plate are in proper working order
- □ Dock leveler/plate has been load tested
- □ Telephone and emergency numbers posted
- □ Passageways are free of obstructions and tripping hazards
- □ Walkways adequately marked (e.g., painted lines) and adequately lit
- □ Restricted access to unauthorized persons to loading zone
- □ A lock box or key control system is used
- □ Mirrors are provided at blind corners
- □ General and task-specific ergonomic training is provided
- □ Dock approaches are free from potholes/deteriorated pavement
- □ Dock bumpers and/or barriers are in good condition
- □ Wheel chocks are available
- □ Warning signs or lights regarding moving vehicles are in use
- □ Truck engines are turned off during loading/unloading operations
- □ Fire extinguishers are fully charged & accessible
- □ Emergency exits are clearly marked
- □ Flammable and combustible materials are properly stored
- □ Equipment to clean spills/oils/grease available
- □ Doors and dock seals are regularly maintained
- □ Workers are wearing proper PPE. Safety shoes at a minimum
- □ First aid kit available, certified first aider information available
- □ Eyewash station available in the vicinity, and the location is posted, if applicable
- □ Dedicated means of access/passageway on/off loading dock (side stairs/side ladder/other)
- □ Signage clearly labeling “Loading Area”
- □ Access ladder properly secured and in good condition
- □ Piping and equipment protected from vehicle traffic
- □ Gas cylinder properly secured and protected from vehicles
- □ Pallets properly stored
- □ Solid waste containers in good condition and not overflowing
- □ Ramps and rails in good condition
- □ Appropriate marking indicating changes in elevation