

Lambton Construction Safety Partnership

Procedure for use of Barriers and Taping

February 2007

PURPOSE

Barriers are used to restrict and or prohibit unauthorized personnel from accessing areas where potentially dangerous work is being performed or, where an immediate serious hazard (s) exist that could result in overexposure resulting in illness and or injuries.

Scope

The scope of this procedure is limited to the identification and control of hazards using a suitable "barrier" and information tags/signs to restrict or limit access to hazardous locations. (A barrier could be a sign, tape, traffic cone, chain, painted ground markings, sawhorse, gate, etc.)

Barriers can be temporary (such as tape or a traffic cones) or permanent (such as locked gate or chain).

DEFINITIONS

Barricade

A physical barrier structure of rigid construction placed at an appropriate distance around the perimeter of a hazard. Its purpose is to prevent easy access to those unaware of the hazard. Examples include scaffold tubing, wooden sawhorses and 2x4s.

Barrier

Barriers include physical barricades, ropes, chains and barrier tape.

Barrier Tape

Coloured tape strung around the perimeter of a hazard at an appropriate distance and height to provide visual warning of a hazard contained within. The colour coding is as follows:

Red - Danger, Do Not Enter - Red taped areas have an immediate danger to health and safety with potential for serious injury (e.g. high pressure water cleaning, falling objects). Entry is restricted to personnel with permission. Only those involved in the work and aware of the hazards are allowed to enter.

Yellow - Caution. Yellow tape provides a warning that a visible hazard exists in the area, such as hoses laying on ground which could cause a tripping hazard. Yellow tape is used to alert others to have an increased awareness of their surroundings and the hazard.

RESPONSIBILITY

When a hazard is identified or work activities, which would create a potential hazard, a person responsible for the business unit (sometime called “landlord” or area owner) would undertake installation of suitable barriers to prevent or restrict access to the area. Any worker who identifies a potential hazard has this same responsibility to install suitable barriers to prevent or restrict access to that area.

The person responsible for erecting temporary barriers will ensure that:

- The integrity and suitability of the barriers and the size of the perimeter to adequately restrict access and prevent exposure to a hazard. This would also include appropriate information tags.
- When erecting the barrier, all potential access points to restricted area are adequately covered
- Adequate communication is provided to equipment/area owner when and under which conditions the barrier can be crossed during work execution
- Removal of the temporary barriers when no longer needed

Business units/area owners that have permanent barriers are responsible for the:

- Erection
- Maintenance
- Inspection of the barriers. (Periodic inspections will ensure barriers integrity and functionality).
- Records of inspections are maintained.

All employees, including contractors, will be responsible to understand and abide by this procedure. If not sure, qualified individuals responsible for the area must be consulted and permission given before entry into barrier areas. In most plants responsibility for managing this activity is with Operating Technicians.

COMMONLY USED BARRIERS

A-YELLOW TAPE - “CAUTION”. A person may enter the area as long as they are aware of the hazard, understands the risk for the area protected by the yellow tape. He/She may need additional Personal Protective Equipment (PPE) and/or other requirements as stipulated on the Safe Work permit or pre-job-briefing. Danger or Information tags must be attached to the tape communicating hazard(s) and who to contact for access. Examples of hazardous conditions protected by the Yellow Tape are:

- Tripping hazards
- Steam/condensate leaks
- Any other leaks of non-hazardous materials
- Slippery icy conditions
- Minor overhead ice formation
- Overhead lifting for scaffold erection
- Boundary for additional PPE requirements, etc.

B- RED TAPE - “DANGER, DO NOT ENTER”. Indicates the presence of an immediate Health and Safety hazard. No worker can enter the area unless they are directly involved in the job. Access is only permitted via Safe Work Permit or direct permission from the individuals responsible for the barrier area. Danger Information Tags must be attached to the tape communicating the hazard(s) and who to contact for permission to access. Examples of hazardous conditions protected by the Red Tape are:

- Asbestos (could have “Danger Asbestos” wording on tape)
- Excavations
- Spills/leaks of Hazardous Chemicals
- Silica and asbestos work activities
- Crane lift-swing area
- All critical overhead lifts over processing equipment containing hazardous materials
- Holes in the ground and grating, etc.

C– PHYSICAL BARRIERS (Barricades). A barrier constructed from scaffold tubing, wood planks, sawhorses may be used to protect from a hazard. This type of barricading structure should have a correlating tape based on hazard (Yellow or Red) and the information tags indication the type of hazard and the name of a person to contact for permission to access barricaded area.

When protecting floor openings and areas where handrails are removed, barricades for these hazards are to be rigidly constructed with proper load bearing and securely fastened. Examples of hazardous conditions protected by Physical Barriers (barricades) are:

- Handrails temporary removed
- Holes in the floor – grating temporary removed
- Holes in the ground and roadways
- Excavation

D – RADIOGRAPHY ROPES & WARNING SIGNS. These must be used to identify task involving radioactive material such as X-Rays. Ropes must be Yellow and Magenta in colour and have communication tags attached informing of radioactive material hazard.

PROCEDURE

When a condition in an area presents a hazard to individuals entering the area, a suitable barrier shall be erected. A barrier for the purpose of this procedure may consist of but not be limited to:

- a) A barricade structure such as scaffold tubing, wooden saw horses and 2 x 4's;
- b) Barrier tape (yellow - caution; red - restricted entry);
- c) Ropes and chains; and
- d) Portable signs (which indicate the nature of the hazard, e.g. radiation, asbestos stripping) where use is legislated in the Occupational Health & Safety Act.

1. When a hazard is identified (such as spill) or hazardous conditions created by specific activities (such as asbestos stripping) that would present a hazard to individuals entering an area, a suitable barrier, must be installed to protect personnel from the hazard (s).
2. Using advice from qualified individuals in decision making process, persons responsible for the area will decide what kind and type of the barrier would be the most appropriate to protect individuals from the Health and Safety hazards. The person-erecting barrier is responsible for the integrity of the barrier, communication during work execution and for the removal of barrier when no longer needed.
3. Barriers should be erected to ensure the hazard is protected from all potential access points. When it is impractical to barrier the entire area, warning signs will be posted at all regular access routes to the area. For chemical hazards, the barrier tape must be positioned at a sufficient distance to protect personnel against an inhalation exposure. The area should be tested to determine appropriate protection radius from the source.
4. Barrier signs and/or information tags will be used to communicate hazards. Tags/Signs should have following information:
 - A date the barrier was erected and proposed duration it will remain,
 - The description of the hazard,
 - Whether area is No Entry, Enter with Permission or Enter with Caution, and
 - The person's name and telephone number that erected barrier.

In addition to barriers and danger signs, flashing lights could be used for poor visibility situations, such as at excavations close to walkways or roadways slow moving, wide or long loads, etc.

5. Assigned work groups or individuals working within a barrier area will have unlimited access to the barrier area, as directed by the colour of the tape, information signs/tags, additional PPE requirements and/or the Safe Work Permit direction.
6. Once a hazard is eliminated or adequately controlled, the erected barrier has to be removed and properly stored or disposed of by a person with the authority to do so.

Reference

Ontario Occupational Health & Safety Act:

- Regulation For Industrial Establishments
- Regulations for Construction Projects

Applicable Industry Standards & Codes, and

Best Industry Practices

LanXess Barrier Standard

Plant Safety Committee