

# Guide to Best Safety Practices Locks, Approach Walls & Structures



St. Lawrence Seaway Management Corporation





# Overview

1.	Best	Safety Practices	3
2.	General Safety		4
	2.3.	Sign-in Process In Case of Emergency In Case of Evacuation Other Safety Tips	
3.	Personal Protective Equipment		9
	_	PPE - General Guidelines PPE - Mandatory	
4.	Pede	estrian and Vehicle Traffic	12
	4.1.	In Vehicles or On Foot	
<b>5</b> .	Safety on Locks, Approach Walls and Structures		14
	5.1. 5.2.	Identify Yourself at the Locks Danger Zones and Restricted Areas 5.2.1 Lock Wall 5.2.2 Approach Wall 5.2.3 Lock Gates 5.2.4 Bridge Gates 5.2.5 Galleries	
	5.3.	Our Equipment at the Locks 5.3.1. Metal Ship Arrestors 5.3.2. Bascule Bridge 5.3.3. Remotely Controlled Lift Bridges	
<b>6.</b>	Refe	rence documents	<b>27</b>
<b>7.</b>	Core	Values	28
8.	Ackr	nowledgements	29



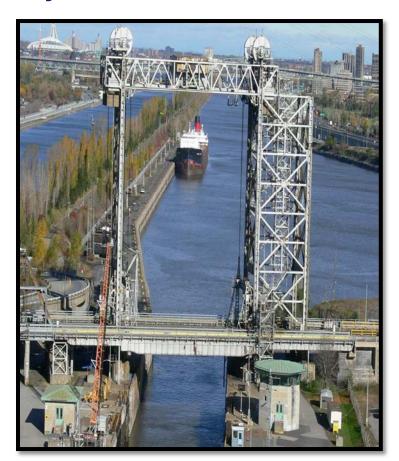
# 1. Best Safety Practices

# Best Safety Practices must be respected and adhered to while visiting or working at any SLSMC location.

This guide was created for:

- Visitors
- All SLSMC employees
- Internal and external service providers

While this is not an exhaustive list of all the hazards you may encounter, it does provide a general overview of our safety rules to keep you safe throughout your experience.





# 2. General Safety







## 2.1. Sign-In process

All visitors must proceed as follows:

- ✓ First, report to the appropriate Administration building.
- ✓ Identify yourself and the reason for your visit.
- ✓ Meet and be accompanied by a SLSMC representative.
- ✓ Review the Guide to Best Safety Practices.
- ✓ Sign the visitor's log and obtain your security pass; you will need to have it readily available throughout your visit.



St. Catharines, ON



Beauharnois, PQ



St. Lambert, PQ



# 2.2. In Case of Emergency

Internal Emergency Phone

**Operations Control Center** 

Niagara – ext. 5911

Maisonneuve & Cornwall: 2232, 2227, 2228

❖ For external assistance: call 911 directly
Follow up with the OCC afterwards so that internal measures can be taken.



#### 2.3. In case of Evacuation

#### **Exit Routes and Fire Alarms**

When attending any of the meeting rooms and/or offices, ensure you familiarize yourself with the location of the nearest exit(s) and exit routes out of the building.



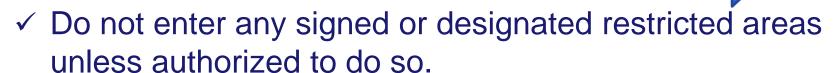


Your SLSMC representative will identify and review the exit routes as well as direct you to the designated meeting areas should an alarm occur.



# 2.4. Other Safety Tips

- ✓ Obey all signs and warnings.
- ✓ Be alert to hazards.
- ✓ Look up **\*\*!** , down **!iik** , look all around.



- ✓ Always use handrails when ascending or descending stairs.
- ✓ Visitors are not allowed to operate any machinery or equipment unless specifically authorized to do so.
- ✓ We are a smoke free facility. Your SLSMC representative
  can provide further details regarding our policy.



# 3. Personal Protective Equipment







#### 3.1. PPE - General Guidelines

- When visiting or working on any of our locks, approach walls or structures, ensure you:
  - ✓ Wear appropriate safety equipment,
  - ✓ Follow the safety rules and procedures.





# 3.2. Mandatory PPE

- 1. A hard hat is mandatory at all times in work areas where there may be an overhead hazard. A hard hat will be supplied if you do not have your own.
- 2. Safety boots; they must be at least 6 inches or 15 cm high.
- 3. Safety glasses must be worn when there is a potential risk of eye injury, and are recommended for protection from dust or other hazards.
- 4. A safety vest is mandatory while on, or near bridges, roads or railways.
- 5. Life jackets must be worn inside of the yellow line. Stay back from the second yellow line at all times.
- 6. Hearing protection is required in designated areas.















# 4. Pedestrian & Vehicle Traffic







#### 4.1. In Vehicles or On Foot

- Be alert for any type of moving equipment, overhead cranes, moving vehicles, and of potential blind spots such as intersections and corners of buildings.
- Use the designated pedestrian walkways where available.
- Your SLSMC representative will review any specific types of moving equipment you may encounter and the proper safety precautions required.





# 5. Safety at Locks, Approach Walls & Structures







# 5.1. Identify Yourself at the Locks

# For security reasons, please wait for the motorized gate to close behind you when entering and leaving the lock.

Make sure you are specific about your whereabouts, communicate any changes and advise us of your departure.

- ✓ Identify yourself to the lock personnel.
- ✓ Sign the workplace log.
- ✓ Always carry the provided security card with you.
- Ensure that you have some way of communicating at all times.
- ✓ Wear your Personal Protective Equipment.











# 5.2. Danger Zones & Restricted Areas







#### 5.2.1. Lock Walls

#### Be careful!

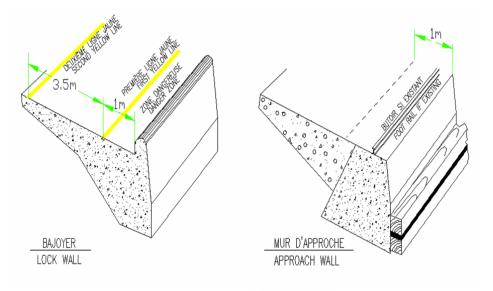
One (1) meter Danger area. This area is identified at each lock where possible, by a line painted in yellow on the lock wall.

When there is a vessel in the lock, everyone except for lock personnel must **remain behind the second yellow line** located 4 ½ m from the edge of the lock wall.

Note: You must receive permission or authorization from lock personnel before entering the 4 ½ m zone if you wish to approach the vessel in the lock.

Reminder - Mandatory PPE: Required at 4.5 m: Hard Hat + Safety Boots

Required at 1 m: Hard Hat + Safety Boots + Life Jacket







# 5.2.2. Approach Walls

- 1. Whether upstream or downstream of the locks, be very careful when you go on the approach walls of all locks.
- 2. You are required to remain a minimum of **4.5 m from the edge**.
- 3. Should you absolutely need to get within 1 m or less of the edge, you must first consult a SLSMC representative and a life jacket must be worn.

Reminder - Mandatory PPE: Safety Boots + Hard Hat (+ Life jacket if you are within the 1 m area)



#### 5.2.3. Lock Gates

#### **Stay Alert!**

If you must cross the lock gates, contact the lock personnel in charge to make sure there will be no movement.

- 1. Pay attention to the watertight joint; there is a gap there and you might stumble.
- 2. Do not cross if gap between gate is greater than 30 cm.







Reminder - Mandatory PPE: Safety Boots + Hard Hat

**Recommended PPE**: Safety Boots + Hard Hat + Life Jacket



#### 5.2.3. Sector Gates

#### Watch your step!

Be careful when you walk on these sector gates; surfaces may be uneven.

In extreme weather conditions surfaces may be wet or covered in ice and may be slippery.



Reminder - Mandatory PPE: Safety Boots + Hard Hat



# 5.2.4. Bridges

#### Pay attention to where you are walking!

- Before climbing the stairs on a bridge, read the access protocol.
- If you must climb the stairs to bridges, be very careful on these stairs, they are very steep.
- Do not climb stairs if you are not comfortable at heights.
- Highway and personnel gates can come down when there is vessel traffic. Stay outside of gates.

Reminder - Mandatory PPE: Safety Boots +

Hard Hat + Safety Vest

**Recommended PPE**: Safety Glasses











#### 5.2.5. Galleries

#### **Communication is essential!**

- Do not enter galleries prior to establishing contact with a SLSMC representative.
- Do not touch any of the equipment. They all have moving parts.



Valve sector gear



# 5.3. Our Equipment at the Locks





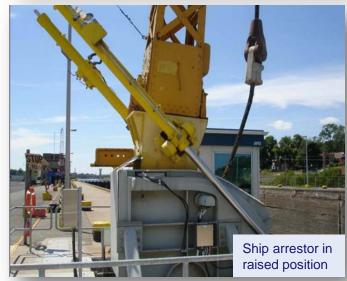


# 5.3.1. Metal Ship Arrestors

# This piece of equipment is movable!

Ensure that you are in a safe location should this equipment be operated by the lock personnel.







# 5.3.2. Bascule Bridge

# Look both ways before crossing!

- ✓ Before going on the bridge, notify the lock leader or the OCC of your destination.
- ✓ If you hear the bridge sirens, move away from the counterweight.
- ✓ If you must go near the edge, stay behind the yellow lines. If not, stay behind the barriers.
- ✓ Keep a safe distance back from highway gates and bridge counterweights.



**Raised Bridge** 



Counterweight



**Security Barriers** 



**Yellow Lines** 



# 5.3.3. Remotely Controlled Lift Bridges

Before getting on the bridge, read the applicable access protocol.

There are 9 lift bridges & 1 Swing Bridge along the St. Lawrence Seaway:

Bridge 5 - St. Catharines, ON

Bridge 11 - Hwy #20, Allanburg, ON

Bridge 21 - Port Colborne, ON

Bridge 10 - Valleyfield, PQ

Bridge 9 - St-Louis, PQ

Bridge 5 - Côte Ste-Catherine, PQ

Bridges 2 & 3 - St-Lambert, PQ

Bridge 12 - Iroquois, ON

Bridge 8 - Swing Bridge, Beauharnois, PQ

Reminder - Mandatory PPE: Safety Boots + Hard Hat + Safety Vest







#### 6. Reference Documents

#### <u>Niagara</u>

- Accident Prevention Notice APN #5: Fall Protection Systems; Hazardous Areas on Lock Walls
- Accident Prevention Notice APN #21: Reporting Presence on Structures

#### <u>Maisonneuve</u>

- Communication
  - Accès et communication aux ponts RM-SS-7c (1.15)
  - Communication lors d'une urgence RM-SS-7c (1.2)
  - Communication opérationnelle RM-SS-7c (1.3)
    - Communication opérationnelle Formulaire registre de présence RM-SS-7c (1.3)
- **❖** EPI
  - Port d'équipement de protection RM-SS-7c (2.1)
- Général
  - Sécurité sur les écluses et aux murs d'approche RM-SS-7c (1.5)



# 7. SLSMC Core Value ~ Safety First Always!



Our values define us and influence everything we do.

We look forward to your collaboration with respect to all safety rules in an effort to ensure a safe and respectful workplace.





# 8. Acknowledgements

This guide was first developed in collaboration with several SLSMC employees. Over the years it has seen several revisions and served as an inspiration for the development of a similar guide for the Niagara Region. Today, it still serves as a valuable model for our *Guide to Best Safety Practices*.

#### <u>Niagara</u>

This presentation was created in collaboration with the following SLSMC employees:

Tim Rutter
Dan Potts
Debbie Riddle

**April 2012** 

#### **Maisonneuve**

This presentation was initially created by Josée L'Hérault, in collaboration with the following SLSMC employees:

Jacques Cormier Sylvain Brossoit Alain Godard

November 2010 March 2011 (revision)



# **Best Safety Practices**



