

# Petroleum and Petrochemical Bulletin

<b>Safe Access and Lighting in Terminals and on Vessels (Onshore and Offshore)</b>	<b>Bulletin 06-05 Rev. 2 - 1</b>
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TIC Council Member Companies wish to make known their position regarding safe access. Our field personnel perform tasks in Refineries, Terminals, and on board Marine Vessels and we regard the safety of our personnel to be our highest priority.

Clear guidelines have been established by regulations and by good practice for the provision of safe access in the workplace and specifically to vessels (ships and barges).

Safe access to vessels is defined as either a gangway, properly trimmed and in good repair, a straight ladder in good repair that, if portable, extends at least three feet above the landing point, or a Pilot’s ladder in good repair that has been rigged to hang without slack from its lashings. Several publications from around the world contain requirements for access to vessels (SOLAS, ISM, ISGOTT, U.K. Statutory Instrument 1988 No. 1637, US 29 CFR Part 1918.21 through 1918.26). These documents all make essentially the same point about vessel access; personnel must be able to board and disembark without risking injury in the course of their duties.

In addition, minimum lighting requirements for the hours of darkness are defined by ISGOTT and some of the other organizations noted above. These requirements should be applied to all areas where our personnel are required to work.

We recommend that our personnel be escorted at all times by facility staff during field operations. At a minimum our personnel should report in and out with facility staff at each operating area.

Our personnel are encouraged to report any unsafe situations to vessel/installation representatives and it is the TIC Council members’ position that any risks identified must be either corrected or an alternate safe solution must be sought and implemented before work can proceed. Should an alternative not be available then our personnel are authorized to implement their Stop Work Authority until a solution is found. The following list provides basic safety check items for access to typical work locations. However, this list is not exhaustive.

Location	Safety Check Items
All Areas	1. Adequate lighting must be provided at all times
	2. Slip hazards due to product spillage or bad weather should be removed/avoided
	3. Physical obstructions preventing / restricting access must be removed
	4. Falling objects – hazardous locations should be avoided
	5. PPE must be worn at all times
	6. Ladders must not be used as walkways
	7. Planks/scaffold boards must not be used as walkways
	8. Domes/hatches/valves must be in good condition
	9. Gangways must not be inclined too steeply (typical maximum 45°)

<u>Revisions/Reaffirmations</u>	
Rev. 0	January 2005
Reaffirmed	October 2012
Rev. 1	September 2018
Rev. 2	August 2021

Location		Safety Check Items
Onshore	Tank Farms	1. Excessive water/mud hazards around tanks should be avoided
		2. Dedicated walkways must be used and should be in good condition
		3. Moving vehicles - awareness - hazardous locations should be avoided
	Shore Tanks	1. Floating roofs are confined spaces and risks should be assessed and avoided
		2. Roof should be in good condition (no damaged / weak areas)
		3. Guardrails should be present and in good condition
		4. Walkways to adjoining tanks should be cleared of obstructions / sliphazards
		5. Checks must be made for pressure build up before sampling / gauging
		6. Mixers and recirculation must be switched off
	Stairways	1. Steps must be in good condition and of anti-slip design
		2. Steps must be of equal height
		3. Handrails must be present and in good condition
	Railcars	1. Blue flag requirements should be in operation
		2. Ladders must be in good condition
		3. Guide rails must be in good condition
		4. Sampling platform must be in good condition
		5. Gantry access should be provided and used wherever possible
	Tank Truck / ISO Containers	1. Wheels must be chocked
		2. Ladders must be in good condition
3. Guide rails must be in good condition		
4. Sampling platform must be in good condition		
5. Gantry access to be provided and used wherever possible		
Jetties and berths	Gangways / Boarding Ladders	1. Equipment must be in good condition
		2. Handrails must be in good condition
		3. Mooring lines of the vessel must be tight
		4. Gangways must be properly secured
		5. A safety net must be placed under the gangway and must extend beyond the width of the gangway
		6. The side rails of ladders should extend at least 36 inches (90 cm) above the top landing surface, unless grab bars or equivalent holds are provided
Barges		1. Walkways must be provided where required

Rough Sea conditions, wind or other adverse weather conditions offshore can present additional risks and challenges to personnel needed to board or depart from vessels. To assist, ships often manoeuvre at low speed to create a lee (a calm area of sea sheltered by the bulk of the vessel itself) to enable safer embarkation/disembarkation.

TIC Council Member Inspectors should only consider embarking or disembarking a vessel which is either stationary or manoeuvring at a significantly reduced speed such that a safe lee is created in order to ensure the safest vessel access/egress condition possible. Under no circumstances should an attempt be made to board or leave a vessel that is proceeding

at more than the lowest speed possible, consistent with creating a stable lee. Any request to attempt any such task shall be declined and, in instances where the circumstances are not fully known before arriving at the vessel, the attending Inspector shall use Stop Work Authority (SWA) and refuse to embark or disembark.

Location	Safety Check Items										
Offshore	<b>TRANSFERS SHOULD NOT TAKE PLACE DURING BAD WEATHER CONDITIONS OR HEAVY SEAS</b>										
	<table border="1"> <tr> <td data-bbox="328 477 501 645" rowspan="3"><b>General</b></td> <td data-bbox="501 477 1402 521">1. Jacob's ladders should not be used</td> </tr> <tr> <td data-bbox="501 521 1402 600">2. Secured Personal Floatation Devices must be worn at all times on the transfer launch and during transfer by basket or pilot ladder</td> </tr> <tr> <td data-bbox="501 600 1402 645">3. Reliable communication with ship and barge crew must be maintained</td> </tr> </table>	<b>General</b>	1. Jacob's ladders should not be used	2. Secured Personal Floatation Devices must be worn at all times on the transfer launch and during transfer by basket or pilot ladder	3. Reliable communication with ship and barge crew must be maintained						
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Reference Information:

1. SOLAS (Safety of Life at Sea), ISM (International safety management), ISGOTT (International Safety Guide for Oil Tankers and Terminals)
2. The IMO Convention for Safety of Life at Sea (SOLAS Chapter V, Regulation 23) sets out the principal requirements for the rigging of pilot ladders.
3. IFIA (International Federation of Inspection Agencies) Guidelines - section 2.5 Health and safety Regulations
4. OSHA (Occupational Safety and Health Administration) Regulations
5. Reference should also be made to any local or national regulations which may apply in the region concerned.
6. TIC Council Bulletin 16-01- Stop Work Authority (SWA)

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**TIC Council Petroleum and Petrochemical Committee**

Rue du Commerce 20-22 B-1000 Brussels Belgium

Tel: +32 2880 21 38

[secretariat@tic-council.org](mailto:secretariat@tic-council.org)

[www.tic-council.org](http://www.tic-council.org)