



Каспийский Трубопроводный Консорциум
Caspian Pipeline Consortium
Каспий Құбыр Консорциумы



APPROVED
General Director

N. N. Gorban

CPC Life Saving Rules Implementation Procedure

Revision No 1
STP CPC 38.12.2018

Made effective by Resolution No. Out-B-CPC-0078-2018 *dd. 20.12.2018*
Effective date 20.12.2018

TABLE OF CONTENTS

1.	PURPOSE	3
2.	SCOPE	3
3.	REGULATORY REFERENCES	3
4.	TERMS, DEFINITIONS AND ACRONYMS	3
5.	LEADERSHIP	4
5.1.	MANAGERS/SUPERVISORS	4
5.2.	EMPLOYEES	4
5.3.	PERSONAL COMMITMENT TO SAFETY	4
6.	LIFE SAVING RULES	5
7.	ROLES AND RESPONSIBILITIES	9
8.	STOP WORK AUTHORITY	10
9.	ACCOUNTABILITY	11
10.	REWARDS AND RECOGNITION	11
11.	LIST OF ATTACHMENTS	12
	ATTACHMENT 1 – LIFE SAVING RULES POSTER	13
	ATTACHMENT 2 – CHANGE RECORD	14

1. PURPOSE

This procedure outlines the stages of Life Saving Rules implementation within CPC. The main purpose of Life Saving Rules is to provide simple and clear instructions for prevention of fatalities and serious injuries.

CPC Life Saving Rules incorporates experience gained and lessons learned in Caspian Pipeline Consortium, from CPC Shareholder Companies and across the oil industry.

CPC Life Saving Rules are based on a systematic approach to hazard identification and risk mitigation measures. It is important to note that, these Rules are not all inclusive and should be applied together with relevant RF and RoK legislation requirements, CPC rules and regulations as well as safe practices applicable to the particular type of work.

2. SCOPE

The requirements hereof are compulsory for compliance by all units of the Consortium, contractors engaged at the CPC facilities, regardless of their form of incorporation.

3. REGULATORY REFERENCES

This Procedure contains references to the following regulatory documents:

Table 1. List of Regulatory Documents

No.	Regulatory Documents
1	Internal
1.1	Safety rules at production activity of oil pipeline system of CPC, VRD CPC 111.12.2012
1.2	Guidelines on technical operations of CPC oil transportation system, VRD CPC 09.09.2014
1.3	Application of Road Transportation Safety Standard, CPC-R, TO-P-01-2009
1.4	Application of Road Transportation Safety Standard, CPC-K, TO-K-01-2009
1.5	Instruction No.102 for mechanical/process equipment and piping isolation
1.6	Instruction No.103 for electrical equipment lock out / tag out
1.7	Instruction No.105 for safe hot work arrangements at CPC explosive and inflammable facilities
1.8	Instruction No.107 for safe earthwork at CPC sites
1.9	Instruction No.108 for safe gas-hazardous work at CPC sites
1.10	Regulation on access control, R02-GD-Secur-006
1.11	HSE Requirements to CPC-R protective clothing, safety shoes and other personal protective equipment, STP CPC 19*.09.2018
1.12	HSE Requirements to CPC-K protective clothing, safety shoes and other personal protective equipment, STP CPC 20*.09.2018

4. TERMS, DEFINITIONS AND ACRONYMS

The terms and acronyms used herein are given in Table 2.

Table 2. Terms and Acronyms

No.	Term / Acronym	Definition of Term / Key to Acronym
-----	----------------	-------------------------------------

No.	Term / Acronym	Definition of Term / Key to Acronym
1	Terms	
1.1	Life Saving Rules (LSR)	simple and clear instructions for prevention of fatalities and serious injuries that are mandatory.
2	Acronyms	
2.1	CPC	Caspian Pipeline Consortium

5. LEADERSHIP

5.1. MANAGERS/SUPERVISORS

All Managers/Supervisors acknowledge their leading role in ensuring HSE compliance by consistently and actively participating in work planning, preparation and monitoring and by demonstrating personal leadership and visible involvement in promoting a consistent and compliant health, safety and environment culture.

5.2. EMPLOYEES

All CPC and contractor/subcontractor employees are obliged both to themselves and those around them to ensure that safe practices are adhered to at all times.

5.3. PERSONAL COMMITMENT TO SAFETY

- I will always identify hazards and assess risks prior to the start of each activity.
- I will always follow safe work practices and procedures.
- I will complete all required training and maintain qualifications to ensure I can carry out my duties safely.
- I will seek assistance from my manager and qualified experts if I have any questions about doing a task safely.
- I will always report ALL incidents and near misses.
- I will always perform high hazardous activities in accordance with appropriate Permit to Work.
- I will always wear all PPE as required for the site and conditions.
- I will reassess the hazards and risks with every change of process, procedure, people or natural circumstance.
- I will always watch out for and assist my coworkers (company and contract) to ensure work is performed in a safe manner.
- I will always follow Life Saving Rules (LSR).
- I will exercise my Stop Work Authority when I believe conditions to be unsafe in order to prevent an incident from happening.

6. LIFE SAVING RULES

Rule #1 Follow site access requirements: alcohol free and no smoking policy, restriction of electronic devices use and application of minimum PPE set

- ✓ personnel may be admitted to the site only upon an HSE induction briefing;
- ✓ persons under the influence of alcohol, narcotics or other toxic substances as well as those who have medical contraindications are prohibited to enter the site;
- ✓ smoking is banned at all CPC sites except for designated areas;
- ✓ use of mobile phones and taking photos/videos at CPC sites is strictly prohibited;
- ✓ it is necessary to wear a minimum set of PPE at CPC sites (safety boots, hard hats, safety glasses, fire-retardant special clothes; if necessary - hearing protection, gloves, H2S PPE, chemical protective equipment in accordance with MSDS and other PPE depending on work specifics).



Rule #2 Work with a valid permit to work when required

- ✓ Permits to work and authorizations are critical for safety assurance:
- ✓ work shall not be done without a prior risk assessment;
- ✓ a permit to work shall contain the exhaustive information about the scope of work and used equipment, comprehensive description of hazards, risks and controls;
- ✓ work preparation should include inspection of the work area;
- ✓ additional permits are required for some hazardous work;
- ✓ stop work and reassess risks if conditions change.

Work shall not commence without an effective permit to work/authorization.



Rule #3 Verify isolations and locks before work begins

- ✓ Repair and maintenance of energized equipment (electrical, thermal, hydraulic, pneumatic, mechanical or other energy) should be done subject to the following:
- ✓ all sources of energy have been identified;
- ✓ identified energy has been isolated and pressure has been relieved;
- ✓ all isolation points have been locked out, tagged out and verified;
- ✓ energy isolation is to be inspected periodically;
- ✓ when necessary, equipment double lock-out should be used.
- ✓ De-isolation of equipment and removal of locks and tags shall be performed only by approved and authorized personnel.



Rule #4 Follow road safety requirements

- ✓ seatbelts shall be worn at all times by driver and passengers while the vehicle is in motion;
- ✓ vehicle speed shall commensurate with established speed limits adjusted for traffic, road, weather conditions and road signs;
- ✓ mobile phones and other means of communication including hands-free devices shall not be used while driving;
- ✓ vehicles and heavy equipment are suitable for the intended use, inspected prior to use and appropriately maintained;
- ✓ driver shall undergo pre-shift medical assessment, be medically fit, drug and alcohol free as well as not tired or stressed and free of influence of any substance that may impair ability to operate the vehicle/equipment safely.
- ✓ operating parts, withdrawable, lifting parts of special equipment shall be in transport position whilst driving;
- ✓ transported load shall be appropriately secured and shall not exceed vehicle load capacity;
- ✓ special restrictions apply to access to and traffic in hazardous areas; vehicles shall be equipped with spark arrester;
- ✓ pedestrians shall use dedicated path within process facility, where available, or take additional precautionary measures.



Rule #5 Protect yourself against a fall when working at height

If possible, eliminate the need to work at height. If the need cannot be eliminated ensure that:

- ✓ a task risk assessment is performed, work execution plan, permit-to-work and rescue plan are endorsed;
- ✓ personnel involved in the working at height activity are trained, competent and fit-for-duty;
- ✓ full-body harness is applied in absence of collative protective equipment;
- ✓ 100% tie-off is maintained when using harness and secure anchor point is selected (preferably mounted overhead);
- ✓ all fall prevention systems are inspected (harness, ropes, anchor points etc.) for wear and tear before use;
- ✓ any scaffolding, ladders and mobile platforms are inspected and tagged prior to the work activity, regularly inspected and authorized for intended use by a competent person;
- ✓ no work is performed during adverse weather conditions (15 m/s wind speed, lightning and fog, etc.);
- ✓ tools and equipment are secured to reduce risk of dropped objects.



Rule #6 Obtain permit-to-work before entering a confined space or executing gas hazardous works and conduct gas test

If possible, eliminate the need for confined space entry. Any work where flammable vapors, gases and other substances may be present or build up of, or lack of oxygen is possible, or in vessels, tanks, wells, tunnels, tranches, pits or in similar places cannot be done until the following is conducted:

- ✓ a risk assessment has been completed, a permit to work and an emergency response plan have been approved;
- ✓ all required isolations are in place and locked off;
- ✓ air/gas testing has been conducted and its frequency has been defined;
- ✓ a properly trained watch who has secure communication with workers in the confined space stays at a confined space entry;
- ✓ gas detectors, PPE and safeguards are used as intended, verified and fit for work;
- ✓ at the sites with a risk of H2S exposure rescue equipment in good working condition must be in place.



Rule #7 Obtain permit-to-work before starting hot work and have firefighting equipment available

If possible, eliminate the need for hot work at CPC sites (hot work should be conducted outside gas-hazardous areas). If the need for hot work is still needed the following is required to complete the work in a safe and controlled manner:

- ✓ complete a risk assessment and have a permit to work endorsed;
- ✓ clear hot-work area of flammables and combustibles;
- ✓ adhere to air/gas testing requirements and frequency;
- ✓ place compressed gas cylinders at safe distance from the work area;
- ✓ wear fireproof special clothes and mandatory PPE;
- ✓ have firefighting equipment and, if necessary, a dedicated fire watch on site.



Rule #8 Follow electrical safety rules

If possible, minimize work on live electrical systems. The first choice is to de-energize the equipment.

- ✓ To perform electrical work in a safe way:
- ✓ ensure a risk assessment has been completed and a Permit to Work (PTW) / authorization has been issued;
- ✓ involve only qualified and certified personnel;
- ✓ use applicable arc-flash and shock resistant PPE while working on electrical units;
- ✓ ensure required clearance to energized parts of electrical units;
- ✓ make sure that tools, accessories and safeguards are in good working condition.
- ✓ While using electrical equipment exclude any contact with non-isolated energized parts.



Rule #9 Obtain permit-to-work before starting excavation and identify underground utilities

Before conducting excavation either manually or with the use of machinery ensure that:

- ✓ a risk assessment has been completed and an Excavation Permit to Work has been approved;
- ✓ all underground utility lines (cables, pipelines) have been positively identified, marked and isolated as necessary;
- ✓ safe distances are maintained to underground utilities during mechanical excavation activities;
- ✓ measures preventing soil sliding and cave-ins have been undertaken;
- ✓ an additional authorization for confined space (to work in trenches/pits) with the sufficient number of access/egress points has been issued;
- ✓ removed soil and heavy machinery are placed at least 1 m away from the edge of excavation;
- ✓ barriers and signs have been erected



Rule #10 Follow prescribed work execution plan, permit to work, technological chart during lifting operations

To lift loads by cranes, winches or other lifting equipment in a safe way ensure that:

- ✓ a risk assessment has been conducted and, if necessary, a lifting plan is in place, and a Permit to Work with consideration of the risk of load dropping has been obtained;
- ✓ the load weight should not exceed the maximum capacity of load lifting/gripping equipment;
- ✓ lifting equipment, devices and safeguards shall be in a technically sound condition, examined before use and cleared for operation;
- ✓ all lifting crew personnel have been appropriately trained, operators of cranes and other lifting equipment have been certified as required.
- ✓ barriers and signs have been installed around the work area to exclude entry/ access of unauthorized personnel;
- ✓ the distance from a lifting device/load at its full extension radius to the nearest overhead power line shall not exceed the minimum safe distance depending on the overhead power lines voltage.



Rule #11 Follow process safety requirements

To prevent the loss of integrity of process equipment:

- ✓ maintain the integrity of protective systems such as detectors, alarms, shut-ins, relief devices and fire protection systems.
- ✓ follow procedure of overriding and disabling safety critical systems;
- ✓ follow operation and maintenance procedures;
- ✓ address condition changes that may affect process operations and equipment;
- ✓ pay attention to process changes and follow Management of Change procedures when appropriate;
- ✓ follow requirements of Material Safety Data Sheet when handling



- and storing hazardous chemicals;
- ✓ identify abnormal conditions and report them to supervisors, investigate their causes and prevent their recurrence.

Rule #12 Wear a personal flotation device when required

To ensure safe marine operations or safe work near water reservoirs:

- ✓ use individual flotation devices while working near the shoreline, at vessels and trunk pipeline off-shore facilities where required;
- ✓ conduct a risk assessment and prepare a detailed dive plan, a Permit to Work including rescue operations;
- ✓ use only certified and verified lifting, diving and personnel transportation equipment;
- ✓ anchor at the proper distance from pipelines or obstructions;
- ✓ adhere to a boarding/landing plan.



RULE + 1 Safe work acknowledgement

- ✓ recognize safe behaviors;
- ✓ reward Near Miss reporting;
- ✓ celebrate safe performance

The main aim is not to blame employees but to drive a culture of compliance with continuous learning, modifying worker and supervisor behaviors, enhancing personal safety commitment with the end goal of achieving and sustaining zero injuries and fatalities.



7. ROLES AND RESPONSIBILITIES

7.1 CPC, Contractor and Subcontractor Managers and CPC Contract Holders and Administrators

- ✓ provide support and assistance in promotion and roll-out of the Life Saving Rules materials where applicable within the area of responsibility;
- ✓ assign responsibilities to ensure that each Life Saving Rule topic and any supporting materials are cascaded and rolled out to as many employees and contractors as is reasonably possible within the area of responsibility;
- ✓ support the campaign and promote it within the area of responsibility, whenever reasonably practicable by personally encouraging employees and contractors to apply the Life Saving Rules during the work activities and raise issues if an activity is being performed in an unsafe manner;
- ✓ wherever possible be a HSE leader - give presentations, perform HSE Management Tours using Life Saving Rules materials;
- ✓ ensure and verify compliance with Life Saving Rules by recognizing positive behavior and when necessary, applying disciplinary actions in case of intentional LSR violations;
- ✓ ensure Life Saving Rules noncompliance cases are investigated thoroughly to identify the root cause. Share lessons learnt for continuous improvement and prevention of repeated events.
- ✓ demonstrate HSE leadership by delivering LSR presentations, conducting Management HSE site visits, lead through personal example and apply Life Saving Rules at all times.

7.2 HSE Team

- ✓ develop and issue Life Saving Rules promotional materials;
- ✓ assist with the communication and roll-out of the Life Saving Rules requirements;
- ✓ monitor the effectiveness of the communication and implementation of the Life Saving Rules program and any associated improvements in HSE performance;
- ✓ periodically review the Life Saving Rules ensuring they continue to comply with CPC Procedures and best HSE international practices.

7.3 All CPC, Contractors and Sub-Contractors employees performing work on behalf of CPC must

- ✓ Fully understand all principles and requirements of LSR
- ✓ Strict adhere and apply CPC Life Saving Rules
- ✓ Initiate Stop Work Authority, when necessary.

8. STOP WORK AUTHORITY

8.1. Any employee, contractor/subcontractor the authority and responsibility to suspend work tasks when unsafe or risky condition is deemed to be present

8.2. Examples or types of situations where you might need to use Stop Work Authority:

- ✓ unsafe conditions
- ✓ unsafe acts of one employee or working team;
- ✓ unsatisfactory technical condition of equipment, tool or instrument that can lead to injury or an incident;
- ✓ changes in conditions, scope of work or place of work that are not covered by valid Permit to work
- ✓ emergency alarm sounds
- ✓ emergency situation, incident or near-miss occurs



8.3. Stop Work Authority procedure:

- ✓ Stop the unsafe or at-risk act with the person or persons potentially at risk as well as unsafe work conditions, unsatisfactory technical condition of equipment, tool or instrument
- ✓ Notify or involve a leader or supervisor if he or she is readily available
- ✓ Correct/address the issue
- ✓ Resume work once the at-risk situation has been resolved
- ✓ Follow up and share lessons learned



8.4. When an employee perceives unsafe condition or behavior (mistake, inaction or misunderstanding) that pose imminent danger to person(s), equipment or environment he or she shall immediately initiate a stop work intervention with the person(s) potentially at risk or eliminate risk (if possible).

CPC	Life Saving Rules Policy	Revision No. 1
-----	--------------------------	----------------

8.5. If an unsafe act/ behavior is observed, the observed employee should be involved in discussion (when it is safe to do so) to explain the risks and possible consequences

8.6. This should be done in a safe, positive manner, so the person being stopped does not get hurt when you intervene. Briefly introduce yourself and start by saying, “I am using my Stop Work Authority because ...”

8.7. If the situation cannot be resolved immediately, the work must remain suspended until proper resolution is achieved. When opinions differ as to the validity of the stop work issue or adequacy of resolution actions, final decision shall be made by Site/Department responsible Manager/representative.

8.8. Stop-work interventions should be documented to determine the quality of follow-up, identify opportunities for improvement, and facilitate sharing what we have learned with others.

8.9. If it is required to perform investigation and further follow-up appropriate Company incident investigation and notification procedures shall be used.

9. ACCOUNTABILITY

9.1. Employees not following Life Saving Rules expose themselves or others to a higher risk of injury or fatality.

9.2. All human-factors and error cases will be investigated thoroughly for continuous improvement and prevention of repeated events.

9.3. If the rule violation was intentional, the maximum appropriate disciplinary action will be applied. For employees of contractors or sub-contractors, this will include removal from site and disqualification from future Company work.

9.4. If a supervisor sets the conditions for rule breaking or fails to follow through if one is broken, appropriate disciplinary action will apply.

10. REWARDS AND RECOGNITION

10.1. Provide proposals for personnel recognitions for demonstrating consistent safe behaviors, using Stop Work Authority in case of unsafe behavior/condition, reporting Near Misses, displaying initiatives and implementing additional measures to ensure safety.

10.2. Strict compliance with Life Saving Rules is one of the criteria for evaluating an employee HSE performance during the reporting period.

11. LIST OF ATTACHMENTS

The list of attachments hereto is given in Table 3.

Table 3. List of Attachments

Attachment	Title
1.	LIFE SAVING RULES POSTER
2.	CHANGE RECORD














ATTACHMENT 1 – LIFE SAVING RULES POSTER



Каспийский Трубопроводный Консорциум
Caspian Pipeline Consortium
Каспий Құбыр Консорциумы



ЖИЗНЕННО ВАЖНЫЕ ПРАВИЛА КТК

<p>GENERAL SITE REQUIREMENTS</p>  <p>Follow site access requirements: alcohol free and no smoking policy, restriction of electronic devices use and application of minimum PPE set</p>	<p>HOT WORKS</p>  <p>Obtain permit-to-work before starting hot work and have firefighting equipment available</p>
<p>PERMIT TO WORK</p>  <p>Work with a valid permit to work when required</p>	<p>ELECTRICAL SAFETY</p>  <p>Follow electrical safety rules</p>
<p>ENERGY ISOLATION</p>  <p>Verify isolations and locks before work begins</p>	<p>EXCAVATION</p>  <p>Obtain permit-to-work before starting excavation and identify underground utilities</p>
<p>DRIVING SAFETY</p>  <p>Follow road safety requirements</p>	<p>LIFTING & RIGGING</p>  <p>Follow prescribed work execution plan, permit to work, technological chart during lifting operations</p>
<p>WORKING AT HEIGHT</p>  <p>Protect yourself against a fall when working at height</p>	<p>PROCESS SAFETY</p>  <p>Follow process safety requirements</p>
<p>CONFINED SPACE & GAS HAZARDOUS WORKS</p>  <p>Obtain permit-to-work before entering a confined space or executing gas hazardous works and conduct gas test</p>	<p>MARINE OPERATIONS & WORKS NEAR WATER</p>  <p>Wear a personal flotation when required</p>
	<p>SAFE WORK ACKNOWLEDGEMENT!</p>

