International Association of Oil & Gas Producers

REPORT 459-1 | DECEMBER 2021

Life-Saving Rules – Start Work Checks

Acknowledgements

This Report was prepared by IOGP's Safety Committee.

Front cover photography used with permission courtesy of
© iStockphoto and ©2019 bp PLC

About

This guidance document is intended to support companies through their deployment and implementation of the IOGP Start Work Checks (SWCs). It provides a description of the Start Work Check concept, content, and a comprehensive guide based on IOGP Member Company best practices and experiences that covers the foundational steps needed for successful deployment. Additional implementation tools are available from the IOGP website.

Feedback

IOGP welcomes feedback on our reports: publications@iogp.org

REPORT
459-1

DECEMBER
2021

Life-Saving Rules – Start Work Checks

Revision history

VERSION	DATE	AMENDMENTS
1.0	December 2021	First release

Contents

Introduction

In 2018, following rigorous data analysis, IOGP introduced a revised and simplified set of nine Life-Saving Rules to provide workers in our industry with the actions they can take to protect themselves and their colleagues from fatalities (refer to IOGP Report 459 – *Life-Saving Rules*). With this document, IOGP launches the Start Work Checks (SWC), a human performance tool designed to enable organizations to more effectively implement the Rules in the workplace. The SWCs are recommended for companies who have launched, or are planning to launch, the Life-Saving Rules.

The Checks enable frontline workers to confirm that the controls/safeguards designed to prevent fatalities and serious injuries are in place and functioning at the exact location a task is to be done, just prior to starting it. SWCs encourage those who are performing the work to take a Go/No-Go approach, assuring workers will not start work until the controls/safeguards are physically verified.

The Checks are designed to encourage workers to have empowering conversations about what performing a task safely really means, what they need to do, and if those things are present and functioning. If not, it encourages workers to raise issues they encounter with site supervisors. The SWCs are not intended to be a tool that is used to blame workers for any reason, and are not intended to be used in investigations. For this reason, IOGP recommends that organizations decide which records they need to keep to continually improve (e.g., those that help identify systemic trends) rather than keeping records (for example, of every check performed) for evaluation of individual or team performance. Further detail can be found in Section 4 - Data Management.

IOGP also recognizes that implementing organizations will have their own culture, and that cultures may differ from site to site, even within the same organization. Organizations should consider cultural and other contextual factors as they prepare to deploy the Checks throughout their organization, and include the intent and content of the SWC in their communication plans for their workforce including their contractors.

1. Design of the Start Work Checks

1.1 What the SWC cover and their relation to the Life-Saving Rules

IOGP developed thirteen Checks, six of which directly relate to a Rule (Checks 1-6). Seven (Checks 7-13) were developed to address particular aspects of a more generic Rule, to combine multiple Rules into an activity, or for high-risk activities that, historically, have been identified as a cause for oil and gas industry fatalities or serious injuries.

The thirteen Checks are:

1) **Confined Space**
2) **Driving**
3) **Energy Isolation**
4) **Hot Work**
5) **Safe Mechanical Lifting**
6) **Work at Height**
7) **De-isolation and re-energizing**
8) **Excavation**
9) **Man-riding**
10) **Work around mobile equipment**
11) **Energized/live electrical systems**
12) **Work near water**
13) **Rig floor tubular handling**

The Checks and the Rules are different tools: the Rules help with communicating and drawing attention to the most critical and lifesaving actions a worker can have control over. The Checks are a practical tool that assure the worker that the control/safeguards described in the Rules are present and functioning before they go ahead with task. Because of this, the Start Work Checks must be directly relevant for the task about to be performed, and therefore they cannot have a 1-to-1 relationship to the Rules, as some of the Rules (e.g., Line of Fire) are generic. Some of the notable continuities and differences between the Rules and the Checks include:

- The Line of Fire Life-Saving Rule is reflected throughout the Checks, but more obviously present in:
  - Work around mobile equipment
  - Work near water
- Although there is a safe mechanical lifting SWC, a separate Check for Man-riding has been created, as this is a unique activity and only applicable on drilling rigs
- Aspects of the Rules for Confined Space Entry, Line of Fire, and Energy Isolation appear in the Excavation SWC
- Unique Checks for de-isolation and re-energizing, associated with reinstatement after energy isolation, have been created to explain each step more thoroughly.
- For activities that require a Permit To Work (PTW) to be completed, work authorization will be confirmed using the applicable PTW system in place. Having a robust PTW system has been identified as a fundamental requirement that should be in place prior to an organization implementing the LSRs. Therefore, there is no specific SWC for work authorization.

1.2 Purpose

The SWCs are designed to:

- Help reduce human error and its effects
- Protect frontline workers at the point of risk
- Raise workforce awareness of required actionable lifesaving controls/safeguards
- Provide an opportunity for required controls/safeguards to be verified before work starts
- Enable a Go/No-Go decision prior to work starting
- Change focus from workers having the responsibility to "Stop Work" if something is not right, to assuring controls/safeguards are in place and functioning as designed and it is ok to start.
- Engage frontline leaders in providing and implementing the lifesaving control/ safeguards expressed in the SWCs
- Introduce human performance principles in the form of an easily implementable checklist

The SWCs are not intended to:

- Be a 'paper exercise' or 'check the box exercise'
- Be used in any way to blame individuals if something goes wrong
- Replace a company's safe work systems and procedures, such as Permit to Work

1.3 Features

The key features of the SWCs include:

- The Check items: simple statements to confirm that lifesaving controls/safeguards are in place
- A guidance section with best practice and examples describing how confirmation(s) should occur: the guidance text can be modified by the implementing organization to align with their management system, or, for example, the regulatory requirements applicable at a particular location
  - This guidance has, where possible, been based on IOGP Reports (in particular Reports 577 and 365) or other internationally accepted industry best practices (such as guidance from OHSA, Step Change in Safety, and DROPS online)
- Simple, easy to follow diagrams aid user understanding of the steps and should be referenced by workers using the SWCs
- Worker confirmation followed by independent verification for each step provides a dual assurance approach (an extra of set eyes to identify hazards)
- If any step cannot be confirmed or verified, workers should stop and seek help

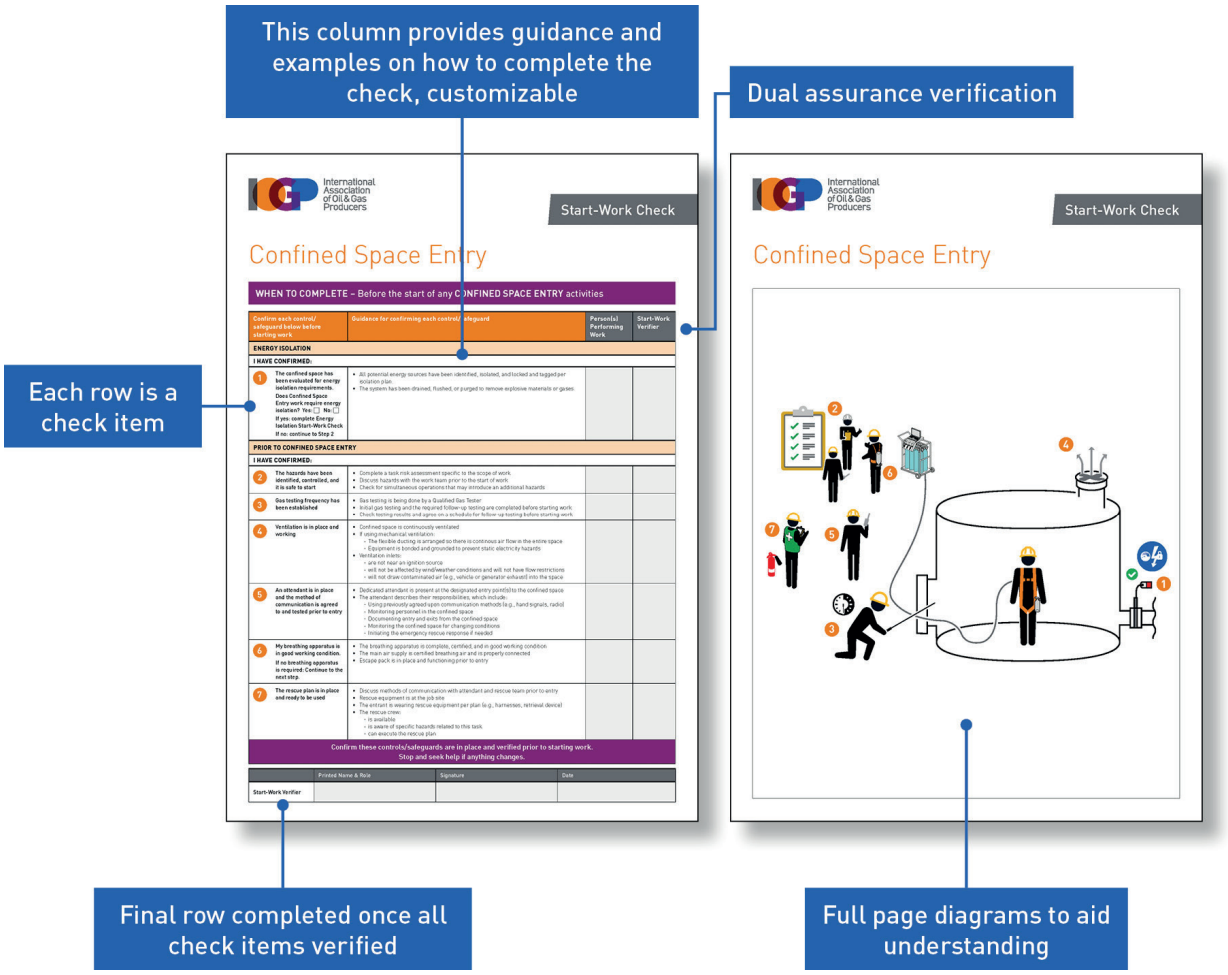


Figure 1: Features of a Start Work Check

1.4 The Start Work Checks – a human performance tool

Human and organizational performance recognizes that people interact with each other, plants, and processes as part of a complex system. Within the system are latent conditions that can make errors more likely. These conditions are undetected deficiencies that may lay dormant in work systems/processes and degrade the integrity of the controls. When multiple latent conditions exist, the result is additive, and can lead to a more complex failure. Since human error will never be eliminated entirely, we try to make sure that our most critical tasks and barriers are resistant to errors.

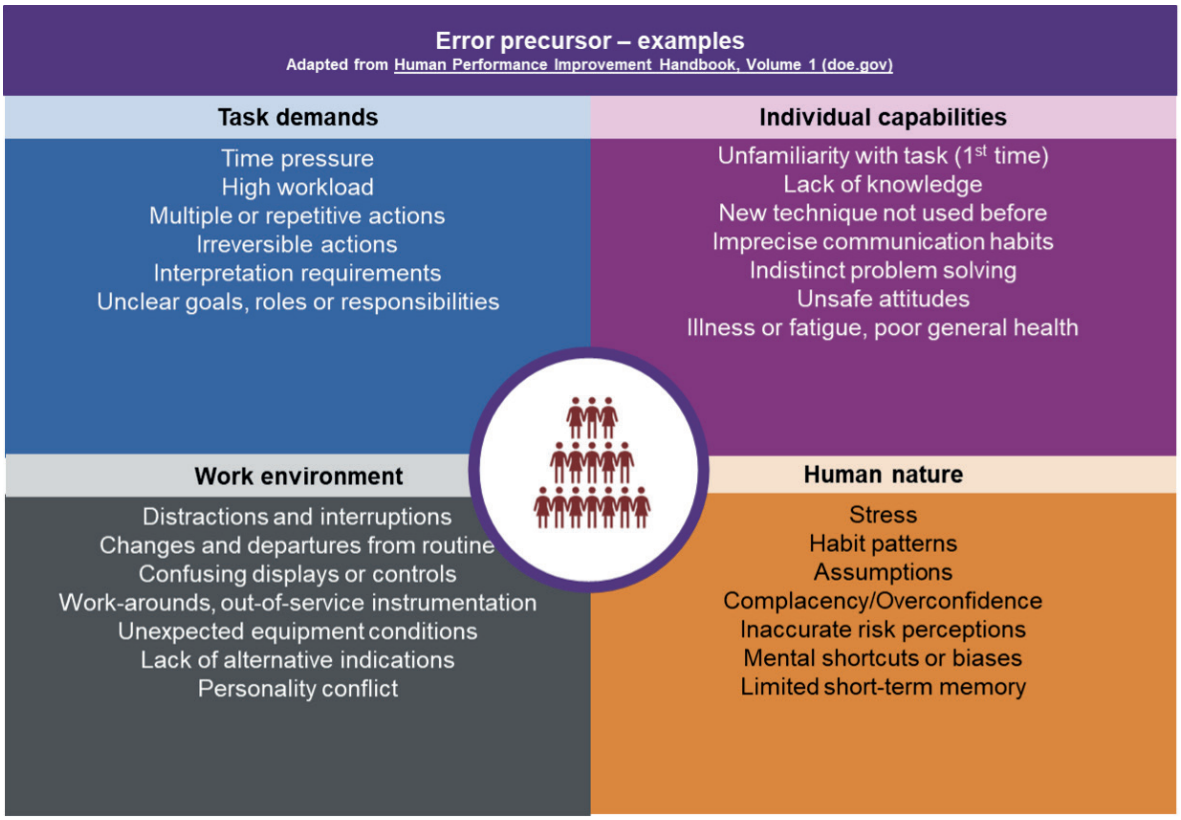


Figure 2: Examples of error precursors

Workers are essential in maintaining our controls and safeguards. They can, and often do, "save the day". They are dedicated to performing their task accurately and efficiently. They are creative problem solvers, who rely on their education and experience to navigate a dynamic working environment. With this ability also comes the opportunity for human error. Actions leading to errors are rarely malicious and usually make sense to them at the time.

If we understand that errors are typically due to latent conditions in the system, and that human error will never be eliminated entirely, then we need to try to make sure that our most critical tasks, controls, and barriers are resistant to error. Error-resistant systems decrease reliance on the workers themselves as controls.

The SWCs have human performance at their core: they give the worker a tool to verify and validate that the system's controls, equipment, and conditions are present as intended and that it is safe to begin work. This proactive verification/validation step acts as an additional layer of protection for frontline workers, helping to make sure that latent conditions haven't surfaced unnoticed. The Checks have three human performance aspects as part of their design:

- Place keeping (by marking each step as complete)
- Peer review (the Verifier role)
- Stop and seek help (the instructions on the form for what to do if something can't be confirmed)

For an effective safety culture, the leadership team must be visible, engaged, and supportive of safety teams and workers as they identify and mitigate hazards. Leadership should encourage communication about potential conditions and have an attitude of learning and listening. With this openness, workers understand the importance of communicating hazards as well as solutions. The Checks should be an enabler of such conversations, empowering workers, and helping to foster a culture of improvement. Leaders at all levels need to understand the intent of the Checks, how they should be used, how they should not be used, and be coached on how to discuss the Checks with their teams.

2. Implementation requirements

Successful implementation of the Start Work Checks requires the following:

- That organization(s) have an existing management system, and have implemented the following supporting policies, processes, and systems:
  - **Work Authorization**/Permit to Work system.
  - Contractor (and subcontractor) management program, including bridging arrangements, if applicable (see IOGP Reports 423 and 432 for further guidance).
  - Journey Management Program (See IOGP Report 365-19 for further guidance)
  - Management of Change
  - Functioning processes for hazard identification and awareness, risk assessment and control/safeguard management
- A leadership and frontline worker commitment that **work does not start** until all individuals involved are aware of and can confirm they have discussed the relevant SWCs
- Everyone is authorized and empowered to intervene or **stop work** without adverse consequences if they are in any doubt about the safety of an activity at any time.
- A pre-job assessment and safety discussion are conducted prior to starting a task.
- Personnel are trained and competent for the work they conduct.
- Equipment is fit for purpose, properly maintained, and in working condition.
- Emergency response plans and resources are in place and periodically drilled/tested to enable effective response.
- Personal protective equipment is provided and worn in accordance with the requirements specified by the risk assessment and worksite policies.
- An understanding of human performance principles; for further guidance, see:
  - IOGP Reports 452, 453, 552 and 621, available from www.iogp.org/bookstore
  - The many resources available through the Human Performance Oil & Gas website - www.hpog.org

3. How to use the Start Work Checks

3.1 Process

What:

All Checks that apply to the task ahead should be used, whether a Permit to Work is required or not.

To enable work crews to implement SWCs, the Checks should be made available in an easily useable format such as paper copies, an erasable hard copy format, electronic formats, (e.g., mobile device app) or a combination of these.

When:

The SWCs create an opportunity for the work crew to walk through and talk through the task to be performed. To be effective, this should be done where the plant or equipment is located, just prior to starting work (i.e., where the task is actually carried out, with the tools and equipment about to be used/worked on). Additionally, the SWC's can be used:

- Anytime the jobsite is left unattended, e.g., after a work break, or for any other reason
- After a shift change
- If work extends beyond a single shift
- If the work crew changes
- If there is a change in personnel within the work crew
- When requested by frontline supervisors
- To reinforce stop work authority if any of the work team have concerns over the status of the controls/safeguards during the task.

Who:

- Person performing work: Member(s) of the specific work crew (or a lone worker) that is about to do the task the Check is relevant for (more details in section 3.2).
- Verifier: Someone other than the worker confirming the SWC steps, who is an experienced person familiar with the activity, and performs a peer-review of the Check (more details in section 3.3)

How:

- The person performing the work visually and/or physically checks the controls/safeguards in each item, marking them as 'checked'.
- If the SWC is to be jointly completed by a work crew, each check item could be confirmed by one individual only (e.g., the same crew member visually/physically confirms all aspects described in one row and marks it 'checked', a second crew member can take the next row and so on). Or an item could be done collaboratively, with multiple crew members confirming aspects together, there may be occasions where this is more practical.

- To complete a SWC, all members of the work crew must agree the check items are in place and fully functioning.
- The verifier then performs a peer-review, going item-by-item and marking them 'verified'.
- If all items in a Check are confirmed and verified – the Check is marked complete and work can start.
- If any item cannot be confirmed or verified, the Check cannot be completed and the person performing work or the verifier stop and seek help.

This process can also enable the crew to identify and discuss:

- Any steps or responsibilities that may be confusing
- Any factors that could make a mistake likely
- Any factors that may make the task difficult to perform
- How to resolve identified issues before starting the task
- When to stop work, what to do and where to seek help

3.2 Person Performing Work role and responsibilities

The 'person performing work' confirms the SWC prior to starting work. If the control/safeguard cannot be confirmed and verified (by a designated 'verifier') the worker should stop and ask for help before starting the task.

The Person Performing Work:

- Knows the requirements of the Life-Saving Rules and the SWC
- Confirms that the identified controls/safeguards are in place and functioning prior to starting the task. This requires:
  - Having the SWC form available during confirmation
  - Physical confirmation that each control/safeguard is in place
  - Marking (e.g., by initialling) the form to indicate each control/safeguard on the Start-Work Check has been confirmed. This may differ based on the implementing company's strategy and exact tools being used
- Stops when a check cannot be confirmed and knows who to contact for help if a control/safeguard cannot be confirmed
- Informs the crew supervisor when SWC requirements are complete
- Waits to start work until all controls/safeguards are verified by the assigned Verifier

The Checks provided by IOGP include a column to mark each step as checked. This can be done in many ways (e.g., by initialling that column, or crossing over the item). Marking each step as 'checked' is recommended by IOGP to make sure Check items aren't missed. Implementing organizations may want to adapt that to their culture or for specific sites.

3.3 Verifier role and responsibilities

The verifier plays an essential role in confirming all SWC controls/safeguards are in place and functioning after the person(s) performing the work have completed their confirmations. The design intent of the Start Work Checks is for the verification to function as a peer review, a secondary confirmation of the LSRs. The verifier role should be performed by someone other than the worker confirming the SWC steps. The role of the verifier adds an additional layer of assurance for controls/safeguards that prevent fatalities and serious injuries.

Organizations should assign the verifier role carefully. Considerations should include:

- Demonstrated competence for the task to be verified, including an understanding of the importance and functionality of the controls/safeguards
- Availability of an assigned verifier to engage with of the work crew prior to the start of the task
- The best verifier is the person who has operational understanding of the task and the effectiveness of the safeguards.

If a PTW is required, the verifier should not be the permit holder. The verifier role does not replace the accountability of a permit holder or person in charge.

The Checks provided by IOGP include a column to mark each step as verified. IOGP considers the use of the verifier role as a good complement to the effective use of the SWCs. However, it is recognized that organizations may have alternative effective methods to assure controls/safeguards prior to work execution. Therefore, organizations may elect to modify this role to suit their business needs.

There may be situations where organizations may determine that the role of the verifier may be performed remotely. Organizations should follow established organizational requirements for verification of activities completed by lone worker(s). Where applicable, remote verification (e.g., phone, email etc.) can be used to allow offsite verification in accordance with company processes.

Responsibilities of Start Work Verifier:

- Visually verifies that the identified controls/safeguards have been put in place by the people performing work prior to the start of work.
  - Has Start-Work Checks in hand during verification
  - Physically verifies each safeguard is in place
  - Marks each safeguard on the Start-Work Checks
- Seeks help when Start-Work Checks cannot be completed.
- Records name, role with signature and date on the Start-Work Check, as required by implementing organization
- Re-verifies Start-Work Checks when:
  - Work scope or conditions change
  - Work extends beyond a single shift or when crews change
  - Work site is left unattended, e.g., after breaks, lunch, or emergencies
  - Requested by the Supervisor

Requirements for Start Work Verifier:

- Understands the work activity, hazards, and controls/safeguards associated with the task and work environment
- Understands the equipment and tools used to conduct the work
- Knows how to use the Start Work Checks
- Knows and can demonstrate what to do or whom to ask when a check cannot be verified
- Worker who is not directly exposed to the hazard, e.g., a worker at height or into a confined space

The Start Work Verifier should verify the Checks involving the work crew and ensure the controls/safeguards are in place and functioning. If any concerns related to the controls/safeguards arise, these should be discussed with the person in charge and the task should not begin until these are resolved.

4. Data Management

Each organization should decide for itself whether to collect data from SWCs. If data is collected, care needs to be taken to use data for the benefit of the workforce to address systemic areas for improvement. The data collected should not normally be used for investigative purposes. The purposes for collecting data should be defined by the organization and communicated to the workforce.

One example of using data to make improvements would be to collect when workers needed to pause work, as that could reveal system-level gaps in the process. For example, if workers continually needed to pause work because they didn't have the correct fall protection equipment, a company could review its standards, training, and processes that lead to incorrect equipment selection/availability.

5. Training

Although the Checks themselves are simple to use, workers need to be trained and competent in the work they conduct, the responsibilities and processes of using the Checks, and have knowledge and training in the Life-Saving Rules. Training in the SWCs should be delivered to the workers using the Checks and/or verifying the work activity. IOGP has made available basic training for the Life-Saving Rules and the use of the SWC, including content, application, and human performance principles. Implementing companies may wish to provide additional training in how the SWCs fit into their management system and business processes. Implementing companies may supplement training with additional coaching to maximize the effectiveness of implementation within their organization for employees and applicable contractors.

6. What does success look like?

Successful implementation should result in:

- Workforce recognition of:
  - IOGP Life-Saving Rules and SWCs as personal lifesaving measures
  - Hazards that can cause serious injuries or fatalities
  - The need for maintaining a sense of vulnerability
- Applicable SWCs are routinely completed prior to starting a task
- Work will not proceed until SWCs controls/safeguards have been confirmed to be in place, functioning, and verified
- Immediate action is taken to address any control/safeguard that is not in place and functioning, before starting work

Organizations can consider audit and assurance activities to verify successful implementation and usage of the SWCs, with a focus on continuous improvement.

7. Resources for SWC implementation

Table 1: SWC implementation resources

Name	Description	Audience/Purpose
Zip folder	With pdfs of all the Checks as two versions, one with editable guidance boxes, one without	Core SWCs materials for implementation
Introductory presentation	Slide pack explaining the purpose of the Checks, their design and their use	A first introduction to the Checks aimed at all, but primarily leaders Expandable to become a training deck by implementing organizations
Elevator pitch	Document with an 'elevator pitch' template and example text	Any individual working to implement the SWC, helping explain the SWC project quickly
Role card	2 documents outlining the roles of 'Person performing the work' and 'Verifier'	For implementing companies to use as they communicate the SWCs to their workforce
'At a glance' slides	Short slide pack providing an overview of the SWCs	For individuals who need a very quick overview of the SWCs

Appendix A - Glossary

Term	Defintion
Verifier	The role of confirming all SWC controls/safeguards are in place and functioning after the person(s) performing the work have confirmed their checks.
Dual Assurance	Checking to confirm requirements are in place and functioning and then having these Checks verified by another person (a verifier).
Stop Work Authority	The power given to workers to stop work and intervene if they observe an unsafe activity (in the context of this document, this includes noncompliance with an IOGP Life-Saving Rule or Start Work Check action).
Latent Conditions	Latent conditions are conditions which not easily anticipated or identified by reasonable observation or investigation, such as during an inspection, which may remain hidden even after a considerable amount of time. These conditions may be associated with operational practices, human error and/or the design of facilities, systems, or equipment.
Frontline Worker	Frontline workers are personnel who are directly involved in operational and/or maintenance activities.
Frontline Supervisor	Frontline supervisors are personnel who supervise workers who are directly involved in operational and/or maintenance activities.

From IOGP-IPIECA Report 510 - *Operating Management System Framework for controlling risk and delivering high performance in the oil and gas industry*	
Accountability	An individual's formal acceptance of their obligation to justify decisions, actions, or outcomes. *An accountable person (manager or worker) does not necessarily implement the action or decision, but they should organize the implementation and verify that the action has been carried out as required. OMS accountability includes system ownership. This may involve responsibilities related to policies, governance, systems, administration, implementation, performance monitoring and review at the asset, business or corporate level.*
Activity	Defined work of an asset, business or company that results in specific, measurable outputs. *"Activities" in this guidance is a general term that may include individual tasks or groups of tasks, or it may define entire operations, initiatives or projects of the company. For the petroleum sector, example activities at the company level include oil and gas exploration, drilling, production, and processing, refining, and transport and marketing of products. Activities should also be considered for all periods of the asset or business lifecycle – for example, construction and decommissioning projects.*
Audit	A formal, scheduled evaluation of an activity or asset with pre-determined objectives, criteria and protocols to test compliance against OMS expectations, implementation and/or performance. *Audits vary in extent of independence and impartiality. This depends on whether the assessment is performed locally within an activity or asset based on "self-assessment"; by auditors appointed internally from other parts of the organization; or by third party auditors who are external to the company (imposed, invited).*
Competence/ Competent	The combination of skills, experience and knowledge of a manager or member of the workforce that has been confirmed through assessment. *Competence is assessed for an individual in a post that has a clearly defined profile setting out the job requirements. Competence is regularly re-assessed with a frequency determined by the criticality of the role.*

Term	Defintion
Consequence	A quantitative or qualitative measure of an adverse or beneficial outcome from an activity. *Consequences could include harm to people, impact on the environment, effects on health, societal impacts, non-conformance to quality standard, security breaches, damage to property etc. Consequences may be "actual", resulting from an outcome such as an incident or exposure, or they may be "potential", based on an outcome that could have occurred for the same activity but with a variation in circumstances.*
Continuous improvement	An ongoing effort to achieve better OMS performance by application of a systematic process of planning future activity based on results and feedback from prior plans.
Contractor	An individual or organization performing work for the company, following verbal or written agreement. *"Sub-contractor" is synonymous with "contractor" as applied in this document, so includes an individual or company performing work under contract to either the company or another contractor for the benefit of the company.*
Culture	The product of individual and company values, attitudes, competencies and patterns of behaviour within its organization. *The culture of an organization reflects its commitment and approach to effective risk and operating management.*
Employee	An individual on the payroll of a company, including corporate and management personnel. *An individual employed under a short-term or part-time contract is considered an employee provided they are paid directly by the company.*
Event	An unintended or uncontrolled outcome of an operating activity that has, or could have, contributed to harmful consequences to people, property or the environment.
Exclusion Zone	Barricaded No-go areas where it has been identified a risk for workers to be in the area due to potential harm from items such as dropped objects or lifted materials.
Hazard	An object, physical effect or condition with the potential to harm people, the environment or property.
Implementation	The execution from initiation to completion of a planned activity, action, process or practice to meet an objective.
Incident	An event or chain of events that has resulted in harmful consequences, such as injuries, illnesses, property damage or environmental impact.
Integrity	The consistent design, construction and maintenance of assets and activities to achieve safe and reliable operations and products.
Job	An operating activity or any distinct task within it.
Leader	Any workforce member who influences or directs the actions of others.
Likelihood	The probability of a specified outcome (consequence) of an activity actually or potentially occurring.
Location	A geographical site, area, country or region where an activity is taking place or an asset is situated.
Major incident	An incident that has resulted in multiple fatalities and/or serious damage, possibly beyond the asset itself. *Typically initiated by a hazardous release, but may also result from major structural failure or loss of stability that has caused serious damage to an asset. The definition is intended to incorporate terms such as "major accident" as defined by UK HSE).*

Term	Defintion
Management	The formal control and direction of activities within an organization (also managed).
Management system	A systematic and documented framework of processes used by the managers and the workforce at all levels in a company's organization to plan, direct and execute activities. *Structured and documented set of interdependent practices, process and procedures used by the managers and the workforce at every level in a company to plan, direct and execute activities.*
MoC	The management of change (MoC) process identifies risks arising from changes. It manages these risks before and during execution of the changes, thus ensuring they do not inadvertently increase risk from existing or new conditions, hazards, impacts, exposures or threats. *MoC can apply to process changes (hardware or process conditions), procedural changes and organizational changes. The process includes steps for review and authorization prior to implementation, as well as steps to ensure that the change is communicated and pertinent documents are kept up to date.*
Procedure	A documented sequential description of the requirements to successfully accomplish a designated task or activity.
Process	A defined series of repeatable tasks, methods or actions to systematically achieve a purpose or specific objective.
Resource	Commodity, service, workforce or asset that is sourced or supplied to meet the needs of activities to generate products.
Responsibility	A clearly described requirement of an individual's job.
Risk	The product of the chance that a specific adverse event will occur and the severity of the consequences of the event.
Risk assessment	A process that provides a consistent and comparable evaluation of the relative level of different risks introduced by company activities.
Control/ Safeguard	A barrier implemented within an activity designed to eliminate or mitigate a risk or range of risks. *A risk control may take the form of "hard" barriers based on engineered, physical solutions to prevent or avoid a risk, or "soft" barriers relying on compliance with operating plans, procedures and competence of the workforce. Normally, multiple risk controls or "layers of protection" are implemented to achieve risk acceptance.*
Standard	Documented requirements, rules or instructions that support company policies in relation to specific activities or to address specific risks, threats or impacts.
Task	Specified work undertaken by the workforce that is part of an activity. *Tasks are often specified as part of job requirements or as part of a procedure or plan.*
Vulnerability	An object, condition or circumstance with the potential for an adverse, harmful or damaging outcome. *Vulnerability is a general expression for more specific terms such as a hazard, effect, impact or threat related to activities, assets or projects.*
Worker	An employee or contractor contributing to the overall capability of the company.
Workforce	A collective term for the human resources of the company, including all employees and contractors, and all managers and workers.

Term	Defintion
From IOGP Report 577 - *Fabrication site construction safety recommended practice*	
Permit to Work (PTW)	This refers to the signed document used as part of a Permit to Work system for control of work. Based on IOGP Report 189 - Guidelines on permit to work systems.
Permit to Work system	A Permit to Work system is a formal written system used to control certain types of work which are identified as potentially hazardous. It is also a means of communication between site/ installation management, plant supervisors and operators and those who carry out the work. Based on IOGP Report 189 - *Guidelines on permit to work systems* The essential features of a Permit to Work system are: • clear identification of who can authorize particular jobs (and any limits on their authority) and how is responsible for specifying the necessary precautions • training and instruction in the issue and use of permits • monitoring and auditing to ensure that the system works as intended
From ISO 9001:2015, *Quality management systems — Requirements*	
Verification	Verification is the confirmation, through objective evidence, that specified requirements have been fulfilled.

Appendix B -
The Start Work Checks

International Association of Oil & Gas Producers

Start-Work Check

Confined Space Entry

WHEN TO COMPLETE – Before the start of any **CONFINED SPACE ENTRY** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
ENERGY ISOLATION			
I HAVE CONFIRMED:			
1 **The confined space has been evaluated for energy isolation requirements.** **Does Confined Space Entry work require energy isolation? Yes: ☐ No: ☐** **If yes: complete Energy Isolation Start-Work Check** **If no: continue to Step 2**	• All potential energy sources have been identified, isolated, and locked and tagged per isolation plan. • The system has been drained, flushed, or purged to remove explosive materials or gases.		
PRIOR TO CONFINED SPACE ENTRY			
I HAVE CONFIRMED:			
2 **The hazards have been identified, controlled, and it is safe to start**	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to the start of work • Check for simultaneous operations that may introduce an additional hazards		
3 **Gas testing frequency has been established**	• Gas testing is being done by a Qualified Gas Tester • Initial gas testing and the required follow-up testing are completed before starting work • Check testing results and agree on a schedule for follow-up testing before starting work		
4 **Ventilation is in place and working**	• Confined space is continuously ventilated • If using mechanical ventilation: - The flexible ducting is arranged so there is continous air flow in the entire space - Equipment is bonded and grounded to prevent static electricity hazards • Ventilation inlets: - are not near an ignition source - will not be affected by wind/weather conditions and will not have flow restrictions - will not draw contaminated air (e.g., vehicle or generator exhaust) into the space		
5 **An attendant is in place and the method of communication is agreed to and tested prior to entry**	• Dedicated attendant is present at the designated entry point(s) to the confined space • The attendant describes their responsibilities, which include: - Using previously agreed upon communication methods (e.g., hand signals, radio) - Monitoring personnel in the confined space - Documenting entry and exits from the confined space - Monitoring the confined space for changing conditions - Initiating the emergency rescue response if needed		
6 **My breathing apparatus is in good working condition.** **If no breathing apparatus is required: Continue to the next step.**	• The breathing apparatus is complete, certified, and in good working condition • The main air supply is certified breathing air and is properly connected • Escape pack is in place and functioning prior to entry		
7 **The rescue plan is in place and ready to be used**	• Discuss methods of communication with attendant and rescue team prior to entry • Rescue equipment is at the job site • The entrant is wearing rescue equipment per plan (e.g., harnesses, retrieval device) • The rescue crew: - is available - is aware of specific hazards related to this task - can execute the rescue plan		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Confined Space Entry

International Association of Oil & Gas Producers

Start-Work Check

De-Isolation & Re-Energizing

WHEN TO COMPLETE – Before the start of any **DE-ISOLATION & RE-ENERGIZING** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **Circuit, system, and/ or equipment to be de-isolated/re-energized is the one identified in the isolation plan or drawing**	• Tags or markings identify the circuit, system, and/or equipment to be de-isolated/re-energized **Note**: Confirm circuit, system, and/or equipment is ready to be de-isolated and re-energized (e.g., all work has been completed)		
2 **Isolation devices are removed per the isolation plan or drawing**	• Physically inspect: - Work area to confirm all mechanical, process, and electrical isolations were removed per plan - Bleed and vent points to confirm they are closed/open per plan or procedure		
3 **Any personnel affected by the re-energizing activity have been notified**	• Personnel in/near the work area or affected by the re-energizing of circuit, system, and/or equipment are aware it is ready to be put back in service • Personnel are not in the Line of Fire of re-energized potential hazardous energy sources (e.g., electrical, pressure, hydraulic, mechanical, etc.)		
4 **The circuit, system, and/or equipment is ready to be re-energized per plan or drawing**	• Circuit, system, and/or equipment is ready to be re-energized per the isolation plan or system/equipment operating procedure.		

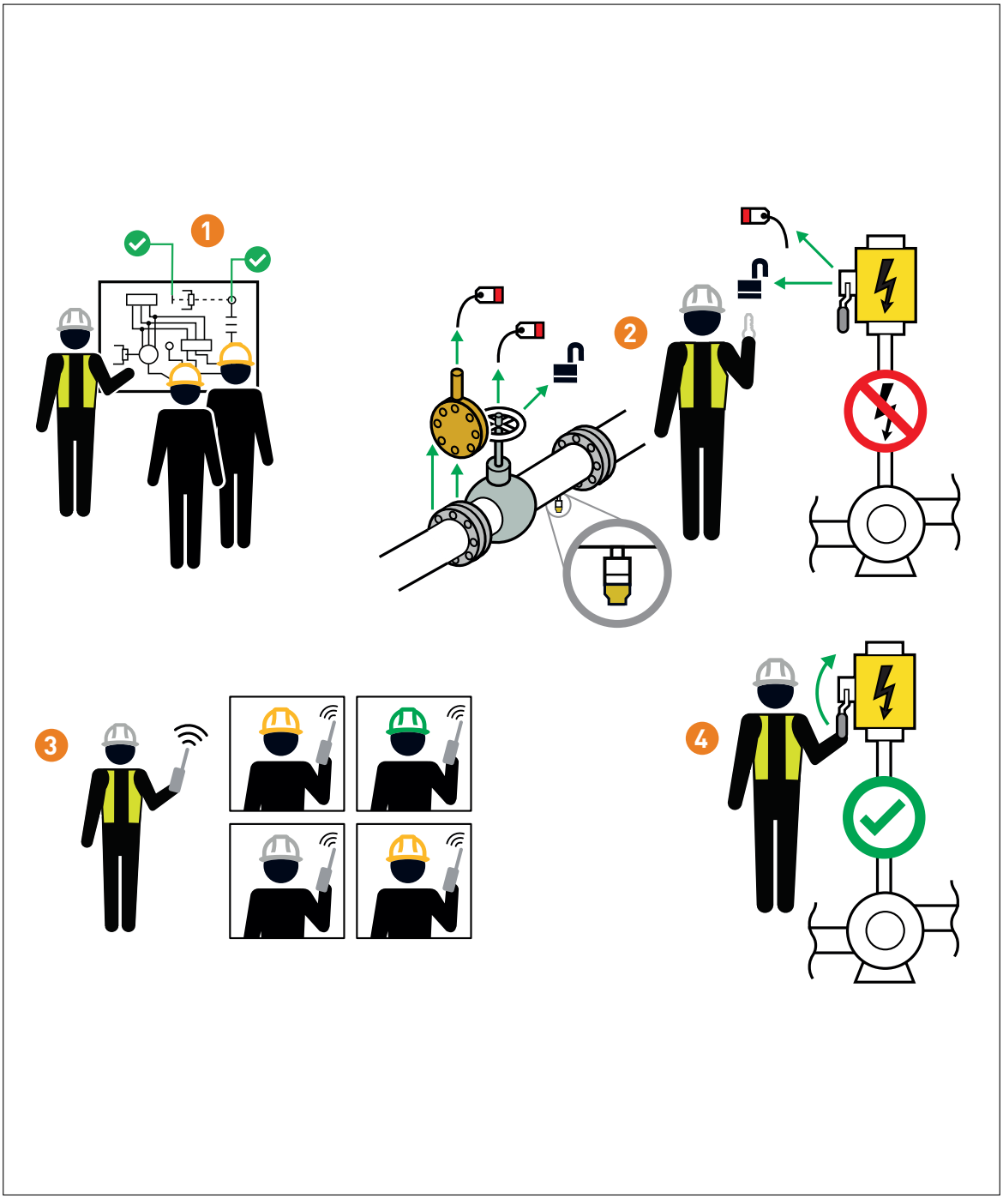
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

De-Isolation & Re-Energizing



International Association of Oil & Gas Producers

Start-Work Check

Driving

WHEN TO COMPLETE – Before the start of any DRIVING activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **A plan is in place to manage the journey hazards**	• Journey Management Plan includes and the driver is aware of: - the destination - route to be taken - local traffic - weather and road conditions - designated emergency contacts • The driver is authorized and has applicable license to operate vehicle type in geographic area • The driver has allocated time in the journey schedule for rest breaks • If the vehicle is equipped with a monitoring system, the system is activated during the journey		
2 **The driver is fit, rested and fully alert**	• The Driver is: - well rested - fit to undertake the journey - not under the influence of drugs, alcohol, or medications that may impair their ability to drive • Controls are in place to manage personal fatigue, including: - maximum driving times - minimum hours of rest prior to driving - if applicable, rest breaks during the journey		
3 **The driver is familiar with local road and driving regulations**	• The driver is familiar with speed limits, local signage, and general communications (e.g., radio channels to be used, if applicable)		
4 **The driver is aware of anticipated road hazards and weather conditions**	• The driver has checked weather (rain, ice, snow, flooding), traffic, and road (pavement, gravel, road works) conditions		
5 **A pre-trip, walk-around inspection has been completed to confirm the selected vehicle is fit for the journey**	• Pre-trip inspection is complete prior to beginning the journey • The vehicle is: - in good working order - fit for the journey - equipped for anticipated weather, road conditions, and emergencies • Perform a 360° walk around to ensure the vehicle is free from hazards prior to movement		
6 **The objects inside and outside the vehicle have been secured prior to the trip**	• Safety or restraint systems are in place and capable of securing the load • Tools, equipment, and other loose objects are removed or secured both inside and outside the vehicle (e.g., in secured toolboxes or with cargo nets) • If applicable, a load securement checklist is completed		
7 **All vehicle occupants are using their seatbelts**	• Seatbelts are in good working order, and are being worn properly (e.g., with a three-point restraint)		
8 **A plan is in place to eliminate or minimize distractions while driving**	• The driver will not interact with a phone or operate a mobile device while driving - Incoming calls are to be diverted while driving - The driver will stop in a safe area to interact with any phone or mobile devices • Digital mapping devices (e.g., GPS/mapping/directional guidance) are programmed prior to the journey		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Driving

International Association of Oil & Gas Producers

Start-Work Check

Energy Isolation

WHEN TO COMPLETE – Before the start of any ENERGY ISOLATION activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **The circuit, system, and/or equipment to be worked on is identified in the isolation plan or drawing**	• Tags or markings identify the circuit, system, and/or equipment indicated by the isolation plan or drawing		
2 **All hazardous energy sources have been identified**	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to starting work • Inspect equipment for potential energy sources (e.g., electrical, pressure, hydraulic, mechanical, etc.) • Identify and mitigate hazards on any nearby energized circuit/systems/ equipment		
3 **Isolation points are identified per the isolation plan and/or drawing**	• All isolations points are in place and tagged or marked (use an isolation diagram, equipment isolation procedure, P&IDs, or process flow diagram)		
4 **Isolation devices are set in the identified position per isolation plan or drawing**	• Valves are open or closed per the diagram and/or plan • Blinds, spades and skillets are: - stamped or certified for the pressure rating of the equipment - installed per the diagram and/or plan • Electrical isolation points are open/switched off or disconnected from power source		
5 **The locks and tags are installed on the equipment/devices per the isolation plan**	• All isolations are in place and tagged or marked (use an isolation diagram, equipment isolation procedure, P&IDs, or process flow diagram) • Lock out tagout devices are on isolation points • Keys are in a designated secure location **Note**: If a lock is unable to be placed, confirm hazardous energy source(s) points are isolated and secured per isolation plan		
6 **Zero energy state has been verified, proven, and demonstrated**	• Demonstrate powered equipment cannot be started • Systems (lines, gauges, etc.) have been tested for residual or stored energy: - Check bleed and vent points are open to release stored energy - Check gauges, measurements, and volt meters **Note**: If zero energy is not possible, **STOP** and: - Confirm controls/safeguards are in place, functioning, operated and maintained to manage the risk from residual energy		

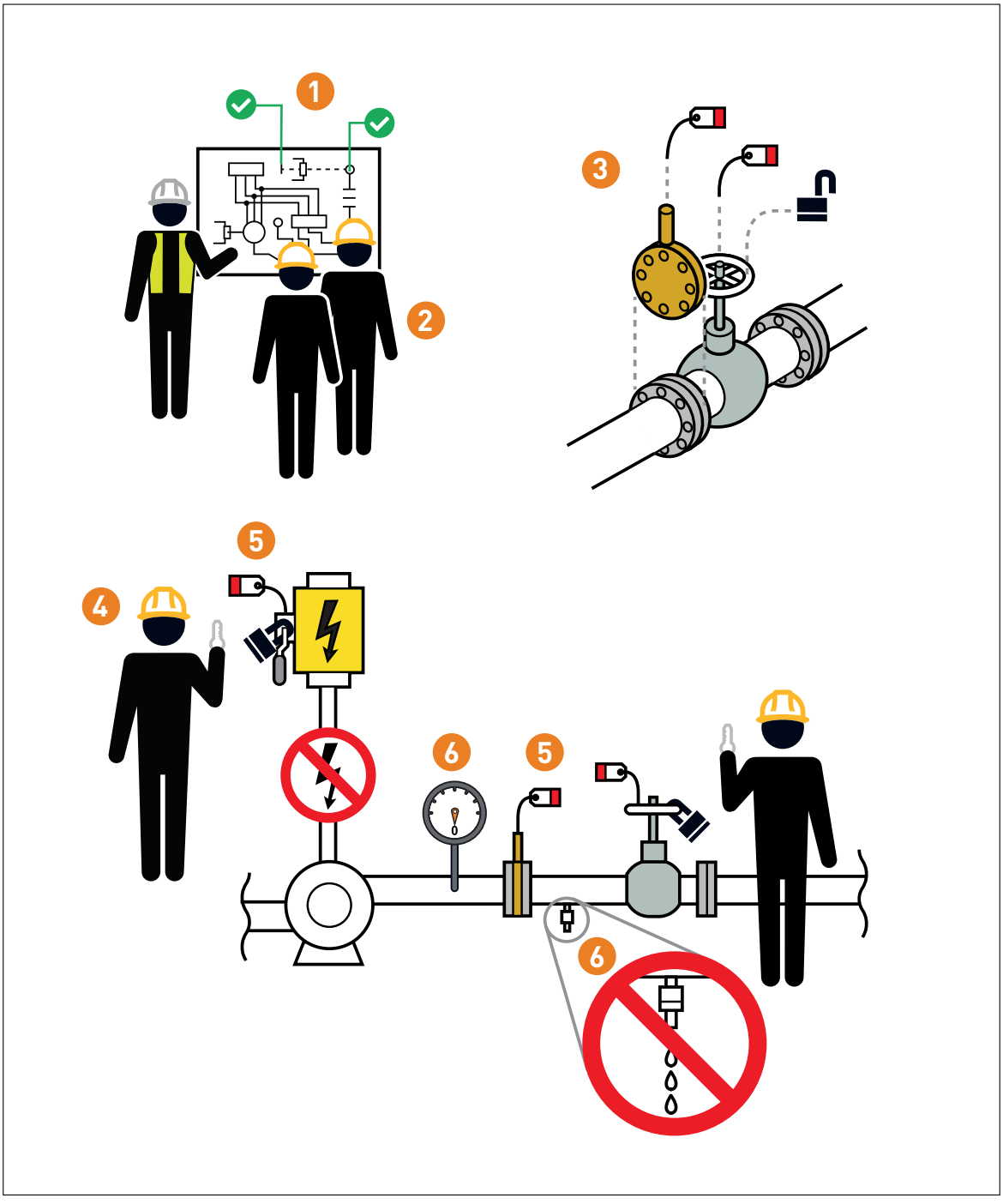
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Energy Isolation



International Association of Oil & Gas Producers

Start-Work Check

Excavation

WHEN TO COMPLETE – Before the start of any **EXCAVATION** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
ENERGY ISOLATION			
I HAVE CONFIRMED:			
1 The excavation has been evaluated for energy isolation requirements. Does excavation require energy isolation? Yes: ☐ No: ☐ If yes: complete Energy Isolation Start-Work Check If no: continue to Step 2	• All potential energy sources have been identified, isolated, and locked and tagged per isolation plan • The underground utility has been drained, flushed, or purged to remove explosive materials or gases		
PRIOR TO EXCAVATION ACTIVITIES			
I HAVE CONFIRMED:			
2 Underground utilities are visibly marked (e.g., pipelines, cables, communications, power)	• Local utilities have been consulted about the dig so they can identify their lines (use programmes like Dial Before You Dig (UK) or Call 811 (US)) • Underground utilities are visibly identified with flagging or paint • Depth and width of utilities or structures are known before digging • Before starting mechanical excavation, actions have been taken to locate and expose underground line/utility and structures (e.g., probing, hand digging, soft digging, air knifing, hydro-vac)		
3 Excavation equipment maintains minimum clearances from overhead obstructions	• The exact location, height, and voltage of overhead power lines have been identified - Maintain identified minimum distance between equipment and energy source - To help with this, use flagging or barriers on overhead power lines		
4 Excavation area is secured and barriers are in place to prevent unauthorized access	• Excavation area is visibly identified with caution tape, silt fencing, or other visual identification • Excavation area is secure from unauthorized access • No personnel are in line-of-fire hazards (e.g., swing radius of excavator, discharge side of trencher) • Only essential personnel/crew are in the area where the excavation work is occuring		
5 Soil stability has been assessed and controls/ safegaurds are in place per excavation plan	• A competent person assessed the soil type to define the excavation safeguards • Excavations have a protective system (sloping, shoring, or shielding) in place, as applicable • Storage of excavated material is at least 2 ft (0.61 m) from the edge of excavation • Ensure stability of adjacent utilities/structures potentially affected by excavation through means of shoring, bracing, and underpinning		
6 Equipment stability and potential for unplanned movement have been assessed	• Equipment, load, and ground surface have been assessed for stability • Verify: - load securing - workplace conditions/travel path - equipment capacity • Equipment maintains safe distance from the unprotected edges of excavation or trenches to prevent cave ins		
HOLD POINT Continue if personnel enter excavation			
I HAVE CONFIRMED:			
7 The excavation has been evaluated to determine if it is a confined space. Is excavation a confined space? Yes: ☐ No: ☐ If yes: complete Confined Space Entry Start-Work Checks If no: continue to Step 8	• The excavation has been evaluated to determine if it is a confined space (trench depths greater than or equal to 4 ft (1.2 m) with vertical walls and limited access/egress) • If the excavation is a confined space, follow the organization/company's confined space guidance, local regulations, and complete the Confined Space Entry Start-Work Check		

International Association of Oil & Gas Producers

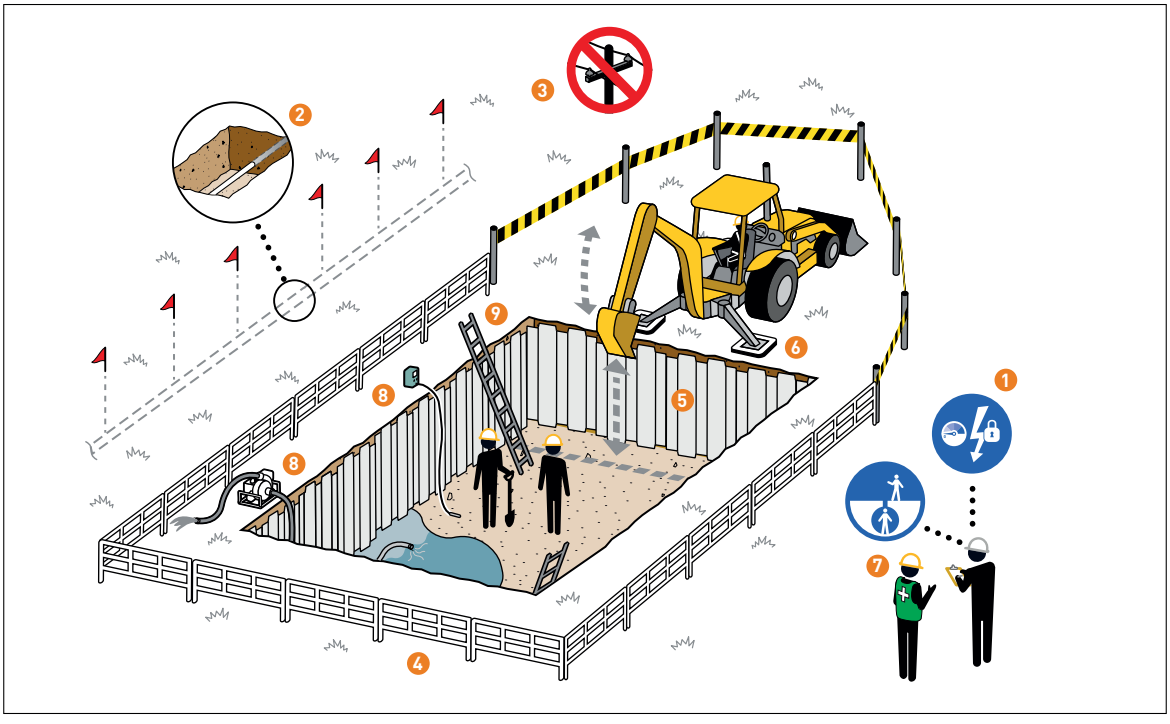
Start-Work Check

Excavation

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
8 **A plan is in place to protect personnel entering the excavation from:** **• cave in** **• hazardous atmosphere** **• water accumulation**	• Excavation has been inspected by the competent person prior to entry, and as conditions change • Protective systems are in place and may include: - bracing - shoring - underpinning - benching • Retaining devices or shield systems in place • Daily inspections are performed to identify hazards and changing conditions • Initial gas testing is conducted by a Qualified Gas Tester • Required follow-up testing frequency is established per the plan • Crew will conduct daily inspections to identify hazards and changing conditions (e.g., contamination, water accumulation, or utilities encountered)		
9 **Excavations deeper than 4 ft (1.2 m) have access and egress**	• There is a safe means of access and egress when entering an excavation greater than 4 ft (1.2 m) in depth, up to 25 ft (6.7 m) of lateral travel. Examples are: - ladders - stairways - ramps - sloping for ingress/egress		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			



International Association of Oil & Gas Producers

Start-Work Check

Hot Work

WHEN TO COMPLETE – Before the start of any **HOT WORK** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
ENERGY ISOLATION			
I HAVE CONFIRMED:			
1 **The Hot Work has been evaluated for energy isolation requirements.** **Does Hot Work require energy isolation?** **Yes:** ☐ **No:** ☐ **If yes: complete Energy Isolation Start-Work Check** **If no: continue to Step 2**	• All potential energy sources have been identified, isolated, and locked and tagged per isolation plan • The system has been drained, flushed, or purged to remove flammable/ explosive materials or gases		
PRIOR TO HOT WORK ACTIVITIES			
I HAVE CONFIRMED:			
2 **The hazards have been identified, controlled, and it is safe to start**	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to the start of work • Check for simultaneous operations that may introduce any additional hazards		
3 **Is the Hot Work in a hazardous area?** **Yes:** ☐ **No:** ☐ **If Yes: Confirm the initial gas test has been completed** **If No: Move to Step 5**	• The initial gas test has been completed by a Qualified Gas Tester: - At all openings below and above the hot work area - At a minimum distance around the hot work area • Gas readings are within the required range **Note**: Confirm gas testing outside of defined hazardous area if required for other reasons. Gas testing should be in compliance with company requirements and applicable regulations.		
4 **The Hot Work atmosphere will be continually monitored**	• Follow-up test frequency is documented (e.g., in the permit) before starting work **Note**: "Continually" monitored means periodic monitoring of the atmosphere with a defined frequency or continuous monitoring throughout the duration of work activities.		
5 **Ignition sources are identified and controlled**	• Barriers are in place to prevent ignition in the hot work area: - Drains, gaps, openings in tanks or piping have been covered/sealed - Vents are isolated/routed away from the area • A trained Fire Watch has been designated and is at the work location • Firefighting equipment is inspected, on site, and fully functional		
6 **Flammable/combustible materials have been removed or isolated**	• All flammable/combustible materials have been removed or, if not removed, measures (e.g., fire blankets) are in place to shield them from ignition sources		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Hot Work

International Association of Oil & Gas Producers

Start-Work Check

Energized/Live Electrical Systems

WHEN TO COMPLETE – Before the start of any **ENERGIZED/LIVE ELECTRICAL SYSTEMS** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **The authorized work scope has been reviewed and agreed to**	• Review work scope per the approved work permit • Discuss stop work considerations if work situation changes		
2 **Circuit/equipment to be worked on is the one identified in the plan**	• Equipment to be worked on is correct using tag numbers or cable markings		
3 **Personnel are wearing PPE rated for:** **• The electrical hazard** **• The electrical voltage prior to entering any access restricted area**	• Crew has knowledge of electrical hazards (e.g., voltage, single phase/three phase, and arc flash) • Personnel are wearing PPE rated for the electrical voltage (e.g., arc flash) prior to entering the restricted approach boundary and it has been inspected and is free from damage		
4 **Restricted access zones have been identified and barricaded**	• Restrict access to defined areas according to company policy and/or applicable regulatory requirements (e.g., NFPA 70E) • Barriers are in place to limit access to the work area • The work area is monitored to prevent unauthorized access		
5 **An electrical standby person is in place during work activities.** **If an electrical standby is not required, continue to the next step.**	• Dedicated electrical person(s) is present at the work area according to company policy and/or applicable regulatory requirements (e.g., NFPA 70E) and their responsibilities include: - Monitor personnel entering the restricted area - Monitor the area for changing conditions - Initiate the emergency rescue response if needed		
6 **Communication plan with the electrical standby person has been agreed to**	• A communication plan has been discussed with qualified electricians • Communication plan has been agreed to and tested with the work crew - Stop work signals - How to initiate emergency response plan		
7 **The insulated tools and testing equipment are:** **• certified** **• inspected** **• free from damage** **• rated for the task**	• Insulating materials such as rubber matting or screening are in place • Only insulated tools that have been rated/certified for the equipment's maximum voltage are used • Conduct a voltage function test prior to using testing equipment		
8 **An emergency response plan is in place and is ready to be used**	• All emergency equipment required by the plan are at the worksite (e.g., electrical safety hooks, insulated gloves, extinguisher for electrical fire etc) • Methods of communication have been discussed with the electrical standby person and rescue team • Rescue equipment is at the job site • The rescue team: - is available - is aware of specific hazards related to this task - can execute the rescue plan		

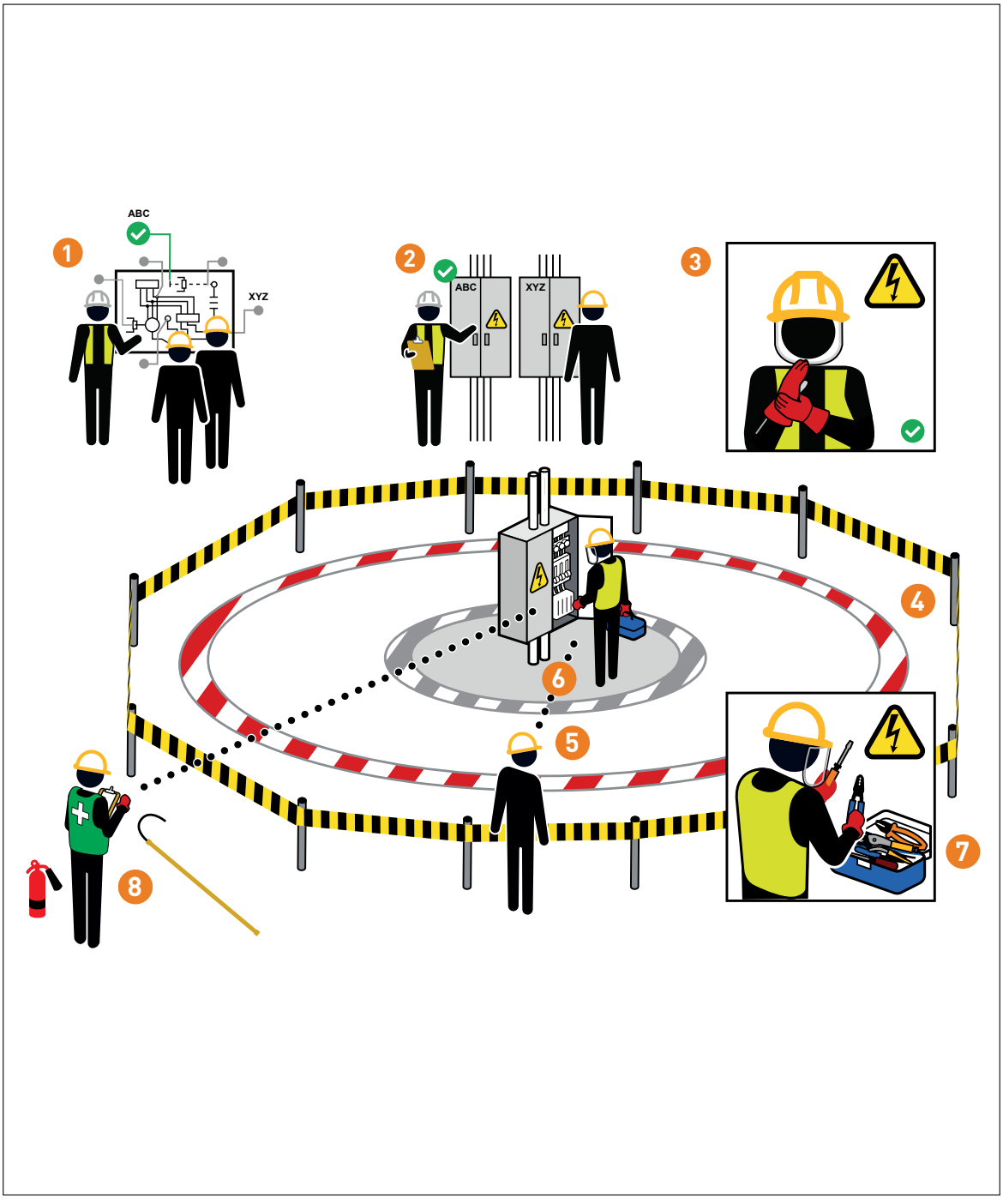
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Energized/Live Electrical Systems



International Association of Oil & Gas Producers

Start-Work Check

Man-riding

WHEN TO COMPLETE – Before the start of any **MAN-RIDING** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **Personnel involved with the man-riding operations are qualified to perform their task**	• Rider, Winch operator, and Spotter have all been trained and can describe their responsibilities		
2 **The man-riding equipment is:** **• certified** **• inspected** **• rated for the task**	• Winches are certified as suitable for man-riding • Rigging equipment, including cable, inspected for wear/defects • Harness inspected per work-at-height requirements • Fall arrest gear, if using, inspected		
3 **All rotating or moving equipment close to man-riding activities are secured to prevent unplanned movement**	• Hoisting and rotating equipment in the immediate area and at different levels are not moving (e.g., set the brake for the traveling block, lock out tag out)		
4 **Communication methods have been agreed to by the workers**	• Communication methods (e.g., hand signals and radios) agreed to and tested for movement of rider - If using hand signals, confirm common understanding of hand signals to be used by the work crew		
5 **The tools/materials being used at height are secured**	• Tools used at heights have securing wire/lanyards/tethers • Materials used at height are secured in storage boxes, pouches, bags etc. • Cover openings to lower levels (e.g., gratings, gaps, etc.) or use debris nets **Note**: Follow the site/company dropped object prevention program (e.g., work at height tool register)		
6 **Barriers and drop/ exclusion zones are in place**	• Establish drop/exclusion zones • Control access to drop/exclusion zones during work at height (e.g., attendant or physical barriers)		
7 **Rescue plan is in place and is ready to be used**	• Confirm the work crew has discussed the rescue plan, including: - How to start the rescue response - Location of rescue equipment and responders • Confirm the rescue crew: - is available - is aware of specific hazards related to this task - can execute the rescue plan		

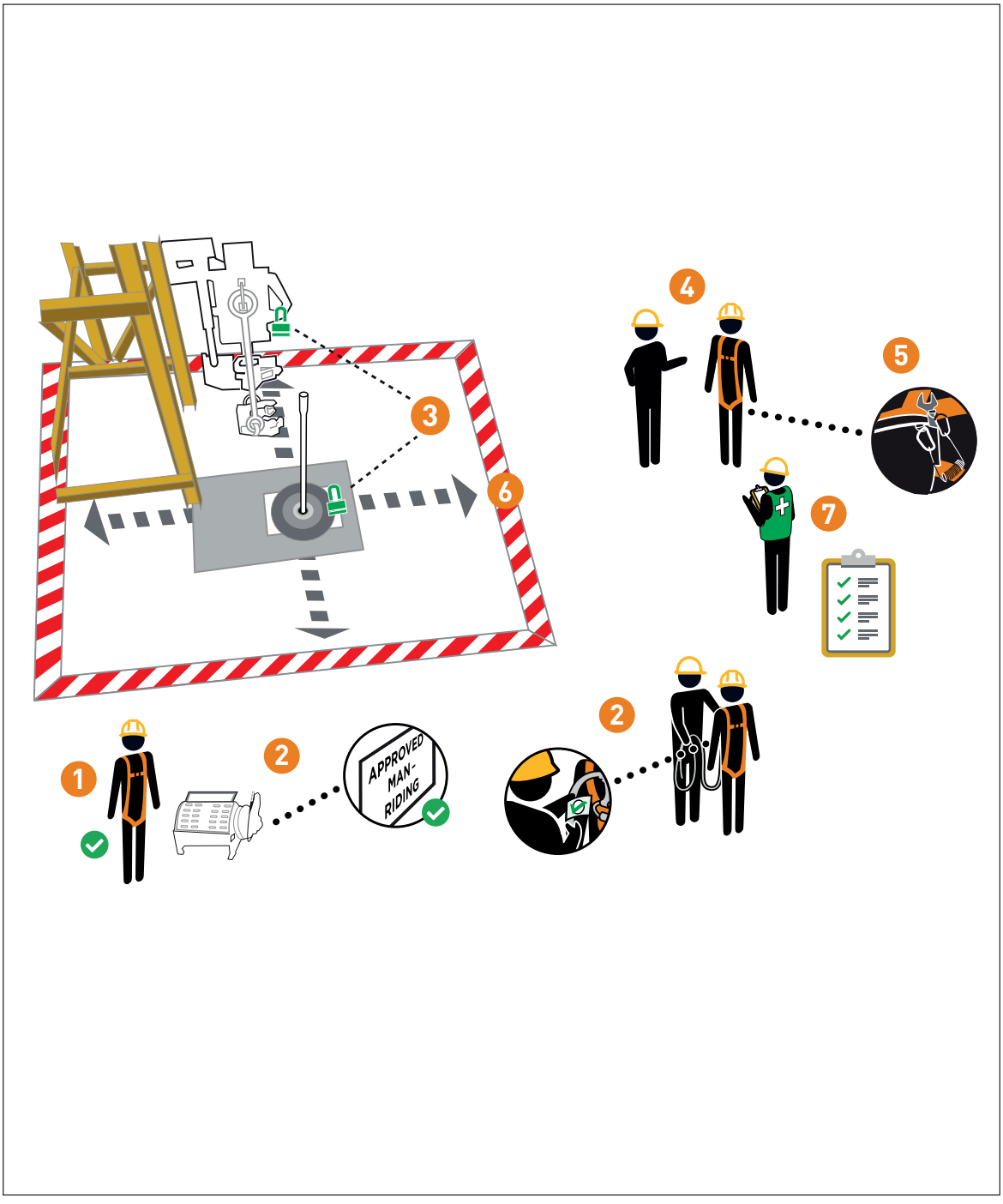
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Man-riding



International Association of Oil & Gas Producers

Start-Work Check

Mechanical Lifting

WHEN TO COMPLETE – Before the start of any **MECHANICAL LIFTING** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			

1 **The lift has been planned**	• The lift method, equipment, and number of people required has been assessed and determined
	• When required, an approved lift plan or procedure is in place and has been evaluated by a competent person
	• The lift has been assessed for:
	  - load weight
	  - load size
	  - center of gravity (e.g., lifting points)
	• The lifting equipment's current capacity and condition has been assessed
	• Equipment operator and lifting crew have discussed the written lift plan prior to lifting		

2 **The hazards are identified and controlled**	• Complete a task risk assessment specific to the scope of work
	• Discuss hazards with the work team prior to the start of work
	• Identify overhead hazards and/or other obstructions (e.g., overhead power lines), making sure to check:
	  - load path
	  - swing radius
	  - overhead hazards
	  - pickup/lay-down zones
	• Check for simultaneous operations that may introduce any additional hazards
	• Discuss stop work considerations if work situation changes including change of weather
	Note: Consider how to apply "hands-free lifting" (e.g., use of push poles and/or taglines)		

3 **Workers involved with the lift are qualified to perform their task**	• Lifting equipment operator and lifting crew are qualified to perform their task **Note**: To be "qualified" may require certification and/or assessment to meet company or applicable legal requirements		

4 **The lifting equipment is stable and potential for unplanned movement has been assessed**	• Lifting appliance is level and/or placed on stable ground
	• Matting has been assessed for stability and is level for the lifting equipment
	• Outriggers are deployed
	• Loads have been assessed for stability, taking into account:
	  - load securing
	  - workplace conditions
	  - travel path
	  - equipment capacity
	• Equipment is operated per OEM requirements (e.g., weather, sea state and temperature)		

5 **The lifting and rigging equipment is:** **• certified** **• inspected** **• rated for the lift**	• Pre-use crane inspection has been completed • Safety and monitoring devices are in place and functioning • Manufacturer's load chart is available • The rigging equipment has been inspected prior to lift • The rigging equipment is rated for the lift **Note**: If load chart does not exist, assume equipment is not rated for the lift; **stop** work and identify alternative lifting equipment that is rated for the load		
6 **A communication plan and responsibilities are agreed to by the lift crew**	• Communication method(s) (e.g., hand signals, radio) have been agreed to and tested • Equipment operator and lifting crew have discussed the emergency response, including what emergency stop signals be used • The person in charge of the lift has been identified as per the lift plan or procedure • The members of the lift crew have agreed to their individual roles and responsibilities for the lift • The signaler for the lift has been identified (banksman/flagman/dogman/spotter)		
7 **The load has been inspected prior to lift**	• Every load has been inspected for integrity and stability (e.g., center of gravity) - The load and its packaging can withstand the forces/motion caused by the lift • Loose objects have been secured or removed prior to lift • Loose and small objects are well packaged or placed in lifting basket		

8 **Barriers and exclusion zones are in place**	• Exclusion zones have been identified and controls are in place to protect people from line of fire hazards, including:
	  - working under suspended loads
	  - moving objects
	  - dropped objects
	• Access to exclusion zones is controlled (e.g., attendant or physical barriers)
	• Escape routes are unobstructed and known by the work crew		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Mechanical Lifting

International Association of Oil & Gas Producers

Start-Work Check

Rig Floor Tubular Handling

WHEN TO COMPLETE – Before the start of any **RIG FLOOR TUBULAR HANDLING** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **The hazards are identified, controlled, and it is safe to start**	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to the start of work • Check for simultaneous operations that may introduce additional hazards • Check that load path is clear of obstructions • Look for equipment (winches, tuggers, third party equipment, etc.) hanging between rotary and crown in path of top drive/power swivel • Consider wind effect on nearby hoses and cables • Log temporary equipment • If applicable, deploy a safety device designed to prevent the traveling block from striking the crown block, and/or check that rig floor has limits and set points in place to prevent block collisions - Upper limits set and tested for crown saver (crown out) - Lower limits set and tested for floor saver (floor out) - Kickout set points - Should be function tested per company requirements • Ensure the dropped object inspection is current, and conduct a reinspection in the event of: - Excessive vibration or jarring - Collision or dropped object incident - After exceeding maximum working load		
2 **Lifting and hoisting equipment is:** **• certified** **• inspected** **• rated for the task**	• The lifting and hoisting equipment has been inspected per the Original Equipment Manufacturer requirements, including, but not limited to: - Elevators, slips, latches, latch locks, pins, and springs - Lift nubbins, caps, plugs, slings, bails, shackles, cables, etc. • Equipment has not been altered, modified, or field-fabricated • The hoisting equipment (e.g., appliance and lifting accessories) is rated for the lift • Worn or damaged parts are replaced		
3 **Elevator inserts have been measured and are correct size for the tubular**	• Elevator inserts have been measured and are correct size for the tubular and load shoulder being lifted		
4 **The method used to latch/ secure the elevators is understood by work crew**	• The work crew understands: - The method/mechanism used to latch/secure the elevator(manual or hydraulic) - The importance of checking the latching/securing each time the elevators are engaged		
5 **Lift nubbins, caps & plugs are the correct size and fully threaded**	• Lift nubbins, caps, and plugs should: - match the threads of tubular(s) being lifted - be marked to indicate size - be certified for lifting (e.g., not a thread protector) • The work crew understands: - lift nubbins, caps, and plugs should be fully threaded and tightened		
6 **A communication plan and responsibilities are agreed by the work crew**	• Primary and secondary communication methods (e.g., radios, agreed hand signals) have been tested • Emergency stop signals that will be used are agreed • The person in charge has been identified as per plan or procedure • The members of the work crew have agreed to their individual roles and responsibilities		
7 **Restricted zones are identified and access is controlled based on activity**	• Restricted zones have been identified and controls are in place to protect people from line of fire hazards • Access to restricted zones is controlled • Safe zones have been identified and escape routes are unobstructed and known by the work crew		

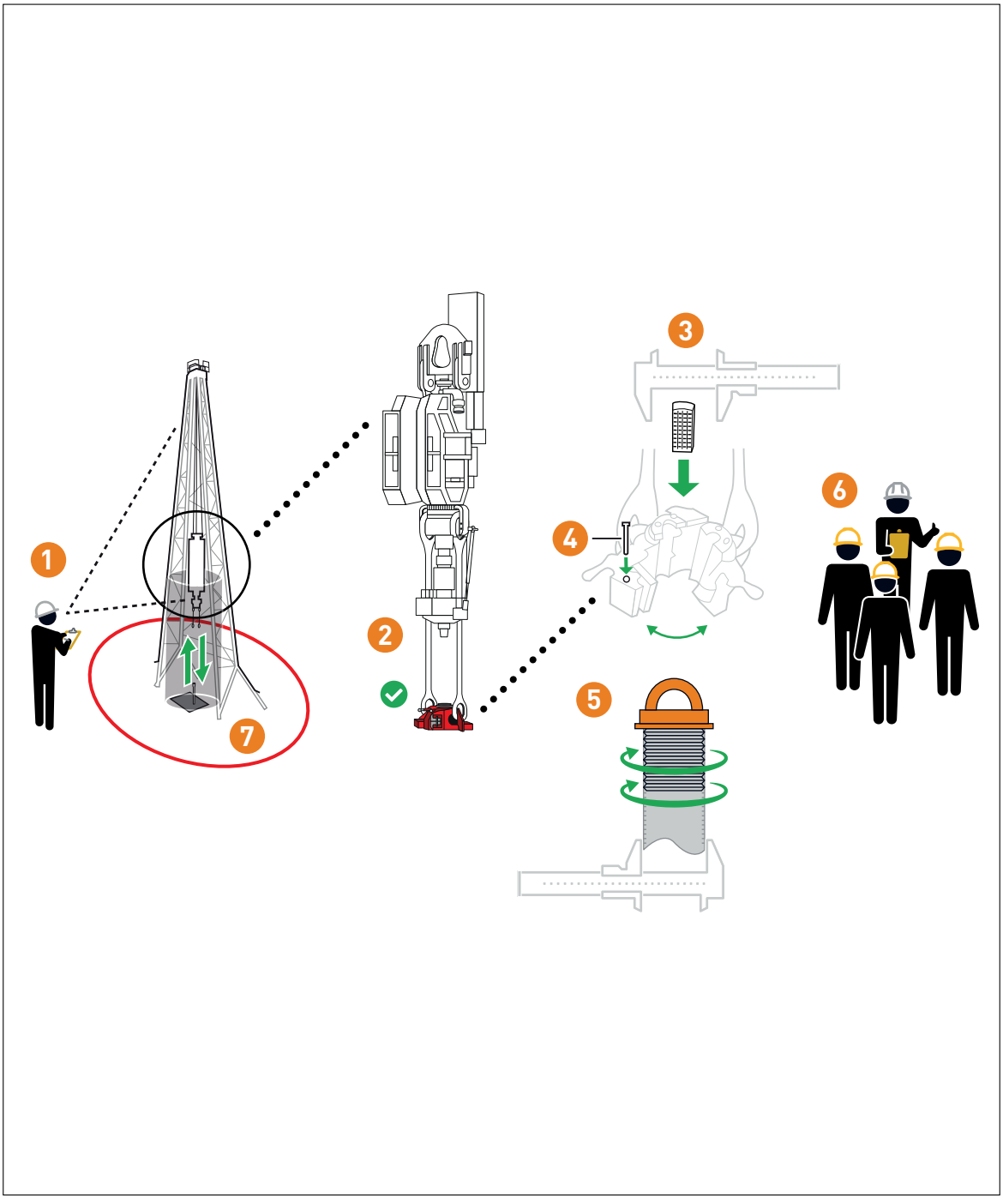
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Rig Floor Tubular Handling



International Association of Oil & Gas Producers

Start-Work Check

Work Around Mobile Equipment

WHEN TO COMPLETE – Before the start of any **WORK AROUND MOBILE EQUIPMENT** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **Mobile equipment parking areas and travel paths have been identified for the work site**	• Mobile equipment has: - designated parking area - lighting in place for night or low visibility prior to movement - side and overhead clearance - clearly posted and enforced speed restrictions		
2 **Controls/safeguards are in place to keep pedestrians away from mobile equipment**	• Interaction between workers and mobile equipment is eliminated or minimized by: - dedicated walkways/paths - signage and barriers to separate pedestrians from mobile equipment paths - clearly defined pedestrian crossing points		
3 **Mobile equipment has been inspected**	• Pre-mobilization and periodic site equipment inspections are conducted and have checked for: - signs of leaks - damage - brake functionality test • Safety devices such as alarms, seats, and backup alarm are functioning • Defective equipment is tagged and removed from operation		
4 **Equipment/load stability and potential for unplanned movement has been assessed**	• Equipment, loads, and ground surface have been assessed for stability, taking into account: - load securing - workplace conditions/travel path - equipment capacity		
5 **Controls/safeguards are in place to prevent impact with workers or objects**	• Mobile equipment is free from hazards prior to movement (e.g., perform a 360° walk around) - Alternatives to reversing have been assessed prior to reverse operation of equipment • Audible warnings are working on equipment for reverse operations • Flagger/spotter/ground guide is positioned out of the line of fire and is able to monitor reversing operations - Use a clear system of signaling agreed with the operator before starting (e.g., hand signals and/or radio communications and emergency stop signals) • Physical barriers are in place in accordance with the activity plan - Define safe distance from mobile equipment and control access to the area **Note**: Before using a flagger/spotter/ground guide, assess the risk that they will be exposed to. Take precautions to protect them. Only use properly trained personnel or technology alternatives (e.g., cameras/proximity sensors).		
6 **Controls are in place to prevent unintentional movement of mobile equipment and/or loads**	• Equipment is located on flat ground where possible • Equipment wheels are chocked when there is potential for movement • Booms, attachments, and accessories are lowered or secured to prevent energy release/movement • Key is removed when the equipment is not in operation		

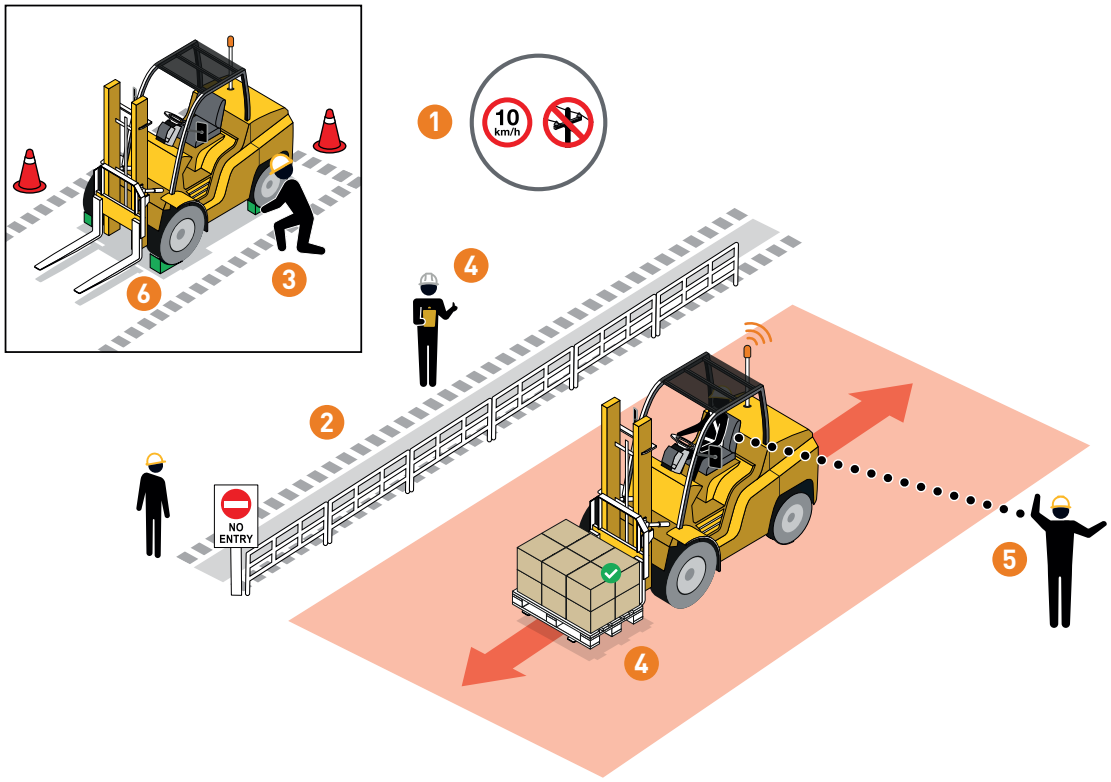
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Work Around Mobile Equipment



International Association of Oil & Gas Producers

Start-Work Check

Work Near Water

WHEN TO COMPLETE – Before the start of any WORK NEAR WATER activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **The hazards have been identified, controlled, and it is safe to start**	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to starting work • Check for simultaneous operations that may introduce additional hazards • Consider the controls/safeguards for working close to an unprotected edge near water: - fall protection equipment (e.g., safety lines, travel restraints, fall arrest) - temporary edge protection (e.g., chains, ropes)		
2 **Exclusions/restricted zones are identified to notify workers of unguarded edge**	• Exclusion/restricted zones are identified (e.g., signage, tape, rope and/or yellow lines) • Authorized access to exclusion/restricted zones is controlled (e.g., attendant or temporary physical barriers)		
3 **Workers authorized to enter the exclusion/ restricted zones are wearing Personal Floation Devices (PFDs)**	• Each PFD is: - approved, maintained, and certified - fit for the user and task • Each PFD has been inspected for: - damage - waterlogging - air leaks		
4 **Walking surfaces are in good condition**	• Trip and slip hazards are controlled: - high-visibility markings - non-slip deck/floor surface (e.g., coating, stick on strips, sand paint) - non-slip footwear for slippery surfaces - walking surfaces are clear of snow and ice - walking surfaces are clear of oil, grease, and chemicals - lighting is in place where needed		
5 **A communication plan is in place and responsibilities agreed**	• Primary and secondary communication methods (e.g., radios, agreed hand signals) have been tested • The person in charge has been identified as per the plan or procedure • The worker(s) have agreed to their individual roles and responsibilities • If applicable, the signaler has been identified		
6 **The rescue plan is in place and is ready to be used**	• The rescue plan has been discussed, including: - How to start the rescue response for person(s) in the water - Location of rescue equipment (e.g., fast rescue craft, pole hooks, life rings) • The rescue crew: - is available - is aware of specific hazards related to this rescue - can execute the rescue plan for the environment (e.g., stationary vs moving vessels, fixed dock/jetty, water flow/current, sea state) • Escape routes are unobstructed		

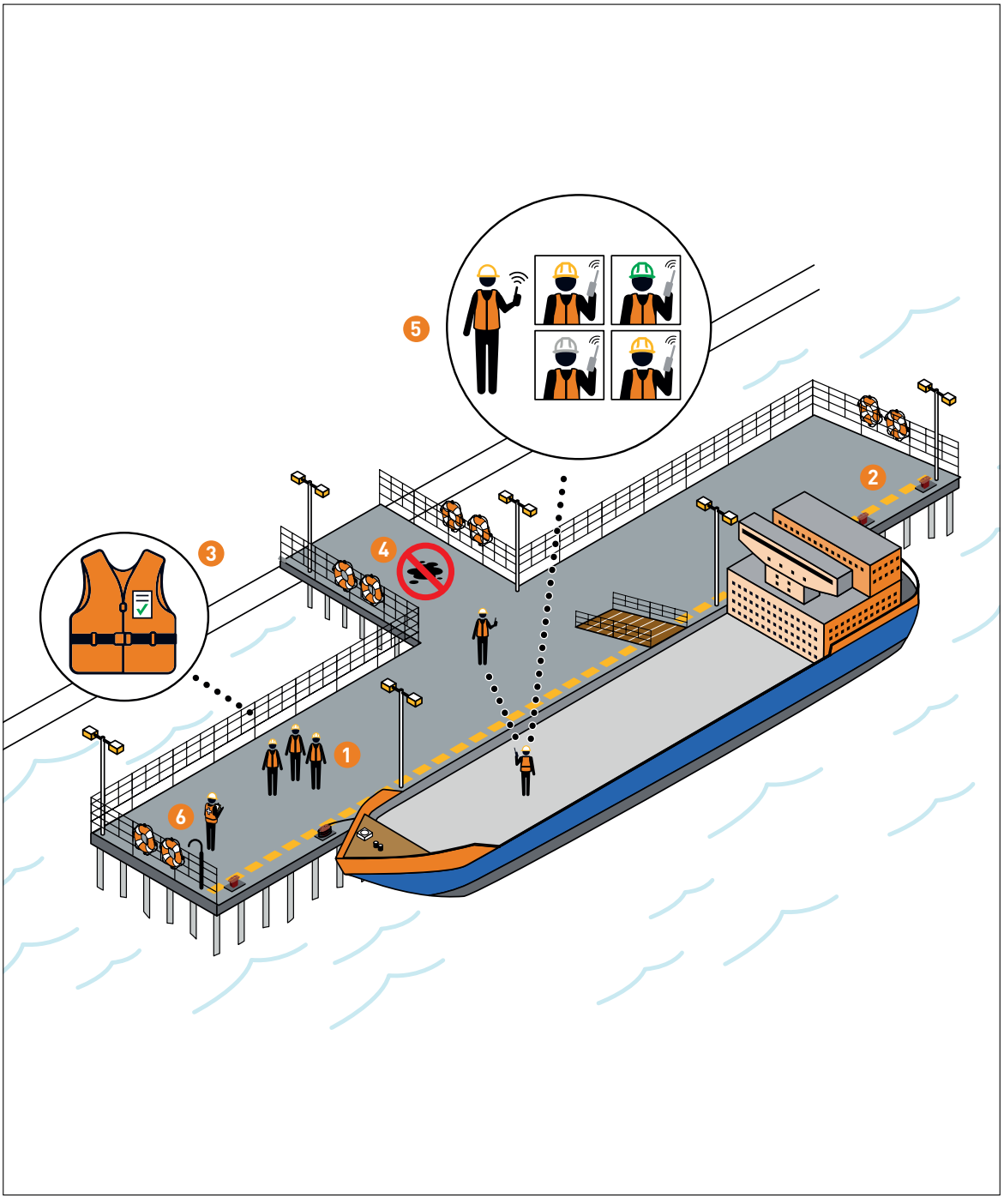
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Work Near Water



International Association of Oil & Gas Producers

Start-Work Check

Working at Height

WHEN TO COMPLETE – Before the start of any **WORKING AT HEIGHT** activities

Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:			
1 **The hazards are identified, controlled, and it is safe to start**	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to the start of work • Check for simultaneous operations that may introduce additional hazards		
2 **My fall protection equipment is:** **• certified** **• inspected** **• rated** **• fit for the task**	• Fall protection equipment includes fall arrest and/or fall restraint systems • Full body harness is load rated to support the weight of the worker • Check every strap, buckle, fitting, and/or grommet for signs of wear on fall protection harness • Fall arrest system contains a self-retracting lifeline or shock absorbing lanyard • Fall restraint contains a fixed lifeline configured to prevent the worker from reaching the edge and falling • Fall arrest is shorter than the potential fall distance **Note**: Stop and notify supervisor if the fall protection equipment has excessive wear/damage/ mechanical malfunction or is not fit for the task		
3 **The fall protection harness is adjusted to fit**	• Only full body harnesses are used • Harness straps are not twisted • Harness body straps are adjusted for close body fit (i.e., no slack) **Note**: Use of body belts is not allowed		
4 **The approved anchor point(s) are in place for 100% tie off**	• 100% tie off can occur outside of protected areas (such as an elevated work area not enclosed by hand rails) • The anchor point meets regulatory/company requirements • The position(s) of anchor points allow for 100% tie off • The number of anchor points available allow for 100% tie off • Pull on the connecting device to test if attachment is secure **Note**: Confirm anyone working at height is 100% tied off at all times (e.g., at least one hook must be anchored at all times)		
5 **If a fall occurs, the fall path is clear**	• Fall protection is fit for purpose to protect the worker if they fall • Fall arrest distance is shorter than fall distance to first obstruction • If the worker is likely to swing, check that the path is free of obstructions • Mobile obstructions have been removed from fall path		
6 **The tools/materials being used at height are secured**	• Tools used at heights have securing wire/lanyards/tethers • Materials used at height are secured in storage boxes, pouches, bags, etc. • Cover openings to lower levels (e.g., grating, gaps, etc.) or use debris nets **Note**: Follow the site/company dropped object prevention program (e.g., work at height tool register)		
7 **Barriers and drop/exclusion zones are in place**	• Identify drop/exclusion zones • Control access to drop/exclusion zones during work at height (e.g., attendant or physical barriers)		
8 **The rescue plan is in place and is ready to be used**	• The work crew has discussed the rescue plan, including: - How to start the rescue response - Location of rescue equipment and responders • The rescue crew: - is available - is aware of specific hazards related to this task - can execute the rescue plan		

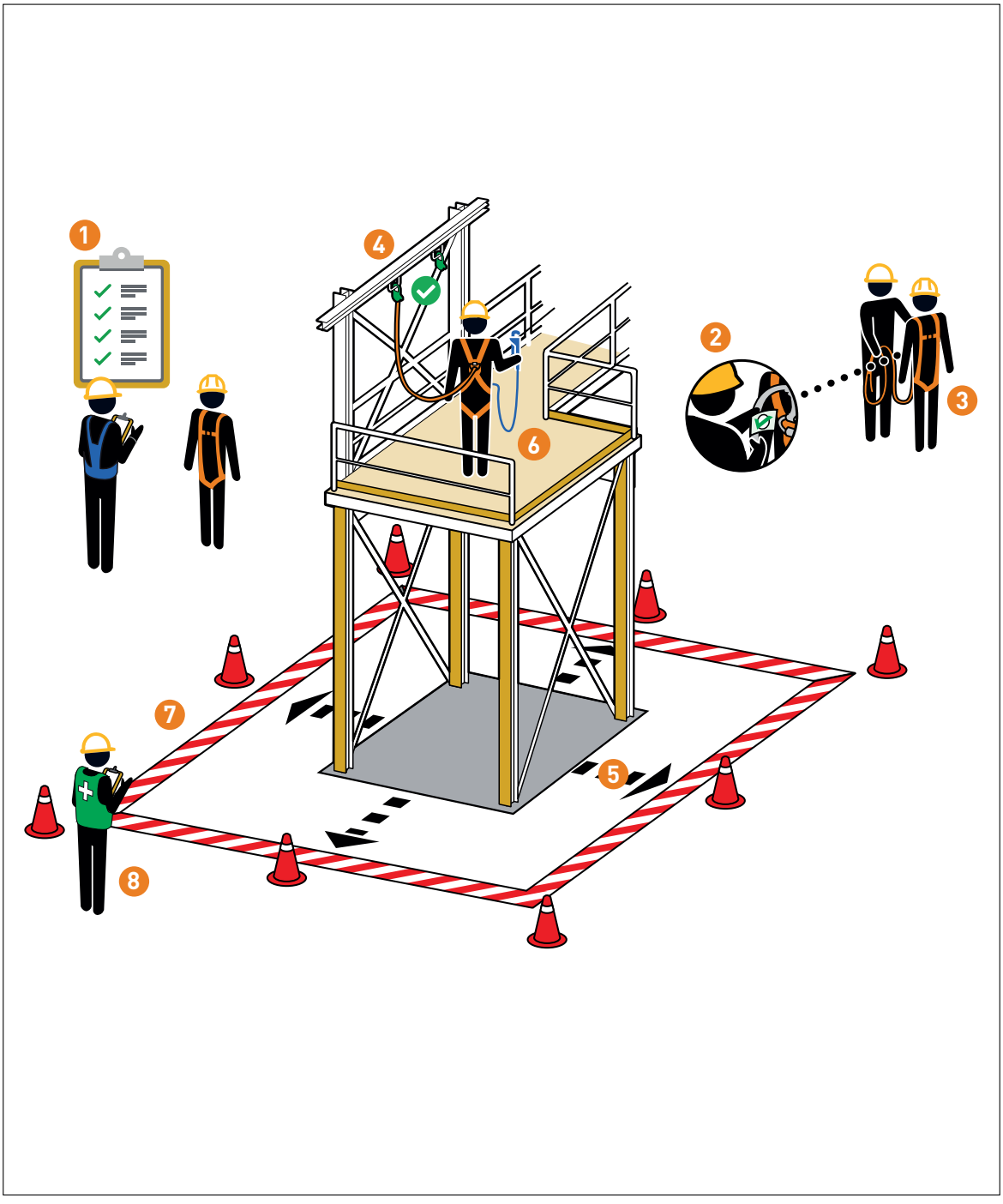
Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

International Association of Oil & Gas Producers

Start-Work Check

Working at Height



London Office

City Tower, Level 14
40 Basinghall Street
London EC2V 5DE
United Kingdom

T +44 (0)20 3763 9700
reception@iogp.org

Brussels Office

Avenue de Tervuren 188A
B-1150 Brussels
Belgium

T +32 (0)2 790 7762
reception-europe@iogp.org

Houston Office

15377 Memorial Drive
Suite 250
Houston, TX 77079
USA

T +1 (713) 261 0411
reception-americas@iogp.org

www.iogp.org

Follow us on Twitter:
@iogp_news

Connect with us on LinkedIn:
www.iogp.org/linkedin

Follow us on Facebook:
www.facebook.com/IOGPNews

This guidance document is intended to support companies through their deployment and implementation of the IOGP Start Work Checks (SWCs). It provides a description of the Start Work Check concept, content, and a comprehensive guide based on IOGP Member Company best practices and experiences that covers the foundational steps needed for successful deployment.