



# **Wells Worksite Instruction Manual for Contractors**

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# Upstream America Onshore Wells Contractor Operations Manual

## 1.0 SIMPLIFICATION

This manual contains a summary of key standards that are mandatory requirements for the Onshore Well's Contractor Operations. The standards reflected in this manual are deemed as the most critical to deliver safe, efficient Well operations.

Goal Zero (no incidents) is what we all strive to achieve on our worksites and we can **achieve our vision of 'no harm to people' if we all take individual responsibility for our actions**. This manual is part of making those responsibilities clear. This coupled with our expected **Golden Rules** (Comply, Intervene & Respect) and the **Lifesaving Rules** are key tools in achieving a workplace without harm.

Although there are pockets of safety excellence, over the years there have been a number of trends in major incident root causes within Upstream Americas Wells. The most significant trends are non-compliance and lack of operational consistency in standards, safe systems of work and leadership expectations. These, together with ineffective training, have meant the barriers that enable safe work performance are not well understood nor sufficiently valued as key enablers to keep the workforce safe. This manual addresses these areas by making clear what is expected of contractor's operational staff around basic Well Operations and by simplifying key work standards. Additionally, the following key initiatives will enable focused efforts:

- The behavioral observation program employed will be the contractor's.
- Proactive efforts will focus on quality, not quantity.
- CSMP focal point will support the contractors.
- Wells resources will be readily available to support Road Transport, Lifting and Hoisting, DROPS, Temporary Pipework, etc.

## 2.0 EXPECTATIONS

This manual is intended to establish a set of minimum requirements that are non-negotiable and must be implemented, not unlike the Life Saving Rules. Compliance with the content herein is mandatory.

### 2.1 Contractor's

Contractors working for Shell are expected to utilize their own HSE MS along with Shell's Onshore Well's Contractor Operations Manual in executing work on our locations. Our contracting process, when correctly followed, ensures

contractors performing safety critical work, have a verified and complete HSE MS. Where significant gaps exist or where a contractor is not following their own HSE MS, the Shell Representative will assist in compliance as applicable. When necessary, any non-conformance gaps should be escalated to the Superintendent level.

## **2.2 Shell Representative**

The Shell Representative is Shell's senior representative for contractors. The primary responsibilities are:

### **Communicate safety leadership**

- Make Upstream America's Contractor Operations Manual expectations and messages clear.

### **Communicate the key safe systems of work**

This entails communicating these systems to the contractor. The specific safe systems of work to be communicated are:

- Job Safety Analysis
- Permit to Work
- Management of Change

### **Communicate the expectations that contractors execute work according to their HSE-MS along with the following of Shell standards**

The mandatory requirements are laid out for:

- Life Saving Rules
- Incident Management
- Contractor Management
- DROPS
- Emergency Preparedness
- Fitness to Work
- Lifting and Hoisting
- Short Service Employees
- Temporary Pipework
- Asset Integrity (Derrick / Structure)
- Well Control

## **3.0 TRAINING**

Contractors shall ensure that all contractor employees are trained on the mandatory requirements of the Shell's Onshore Well's Contractor Operations Manual prior to any

field assignment. Additionally, contractor management shall review the contents of this manual and set expectations for employees.

#### **4.0 Document Control**

The master copy is controlled as a Onshore Well's web based document. All paper copies are uncontrolled. This is an evergreen document and the intent is that it will be updated when required.

# Life Saving Rules

The Life-Saving Rules set out clear and simple “do’s and don’ts” covering activities with the highest potential safety risk. The Life-Saving Rules do not replace or invalidate the Golden Rules (Comply, Intervene & Respect) or any other business, operational, and safety rules in force.

## The 12 Life-Saving Rules are:

1. Work with a valid work permit when required.
2. Conduct gas tests when required.
3. Verify isolation before work begins and use the specified life-protecting equipment.
4. Obtain authorization before entering a confined space.
5. Obtain authorization before overriding or disabling safety critical equipment.
6. Protect yourself against a fall when working at height.
7. Do not walk under a suspended load.
8. Do not smoke outside designated smoking areas.
9. No alcohol or drugs while working or driving.
10. While driving, do not use your phone and do not exceed speed limits.
11. Wear your seatbelt when driving or riding in a car.
12. Follow prescribed Journey Management Plan.

## Mandatory Requirements for Onshore Well’s Contractors:

1. Review the 12 Life Saving Rules with your employees and know the purpose and application of each Life-Saving Rule and the consequences for non-compliance.
2. Verify that a working process is in place so that employees and sub-contractors on your worksite have been briefed on the Lift Saving Rules and the consequences for non-compliance by:
  - Verify Life-Saving Rule site orientations are be conducted
  - Routinely discuss the importance of Life-Saving Rules
3. Report all non-compliance or potential violation of the Life Saving Rules to the Shell Representative (Focal Point/Champion) of Shell Superintendent immediately.
4. Encourage and support worksite peer-to-peer intervention and observation processes.

# The 12 Life-Saving Rules

Our 12 Life-Saving Rules are the next step in our Goal Zero Journey. They are not new. Most people comply with them every day – but there are still breaches taking place. The Life-Saving Rules set out clear and simple “dos and don’ts” covering activities with the highest potential safety risk. They help to make sure that rules are followed and people are protected.



1. Work with a valid work permit when required



7. Do not walk under a suspended load



2. Conduct gas tests when required



8. Do not smoke outside designated smoking areas



3. Verify isolation before work begins and use the specified life protecting equipment



9. No alcohol or drugs while working or driving



4. Obtain authorisation before entering a confined space



10. While driving, do not use your phone and do not exceed speed limits



5. Obtain authorisation before overriding or disabling safety critical equipment



11. Wear your seat belt



6. Protect yourself against a fall when working at height



12. Follow prescribed Journey Management Plan

# Management of Change (MOC)

The direct and underlying cause of many incidents is failure to properly recognize and/or manage change. The purpose of the MOC process is to provide guidance for managing change at the worksite.

Contractors shall use their MOC process for their equipment, personnel, procedure and software changes. Shell is to be included in the review process for contractors' MOCs.

Types of change that may require an MOC:

1. Physical Change – All changes that are not “replacement in kind” should go through an MOC process regardless of whether the change is temporary or permanent.
2. Procedural Change – Emergency Response, or Medical Emergency Response changes, managed pressure, etc.
3. Personnel Change – All changes to a worksite staffing plan and or personnel roles and responsibilities, including sub-contract personnel. Routine personnel vacancies and replacements, rotations, and shift or tour changes are exempt.
4. Software Change – This includes all modifications to the programming or settings of any computerized systems in Control and Automation Domain.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Be knowledgeable of the MOC process as necessary.
2. Ensure that employees follow their MOC process by reviewing the current MOCs.
3. Provide comment on every change when identified as a reviewer of company or Shell assigned MOC tasks.
4. Verify that employees execute the MOC and close out according to MOC conditions.
5. Ensure execution and close-out of assigned MOC tasks
6. Do not allow changes that require a MOC to be made without adherence to the appropriate process.

# Job Safety Analysis (JSA)

A JSA is a systematic analysis of a job that identifies the hazards, mitigating controls for each step of a job, and ensures responsible parties understand their roles.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Be knowledgeable of your JSA or equivalent process (to include sub-contractors as applicable).
2. Verify JSA preparation to assure quality process implementation. Pay special attention to high risk, non-routine work, new or SSE employees and /or sub-contractors, and routine high exposure activities by:
  - Verifying that all personnel involved in the job are part of the JSA review prior to starting the tasks.
  - Verifying that the proper sequence of the tasks is described.
  - Verifying that the identified hazards are appropriate for the task.
  - Verifying the controls for the hazards and/or personnel assigned to specific tasks.
  - Verifying that all participants involved in the task sign-off on the agreed to JSA.
  - Verifying JSA compliance by observing the task to ensure that controls are properly executed.
3. Do not allow work to begin until verifying compliance with the JSA process. Under no circumstances will work be allowed to take place prior to conformance with JSA process.
4. Communicate expectations to stop work and revise the JSA when the job changes, new personnel join the task or environmental changes occur.
  - Give consideration to incorporation of pre-defined Pauses at critical steps in the JSA or equivalent.

# Permit to Work (PTW)

Permit to Work (PTW) is a job authorization process that includes a systematic approach to identifying task-specific hazards and associated controls, individual responsibilities, and communication to affected personnel. Contractors are expected to have and adhere to a permitting system.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Ensure that employees understand a location-list of jobs that require a permit is posted on a "display board" or equivalent and available for all workers.
2. Verify that location-specific list of jobs requiring a permit is discussed during site-specific orientations and that an appropriate filing system is properly maintained and coordinated.
3. For all contractor issued permits, ensure that adequate planning and time are allowed for effective development, review, issue, execution, and closure of work permits.
4. Review and concur with all issued permits before work begins.
5. As a minimum, Permits must contain:
  - Location where work will be performed
  - Contractor performing the work
  - Supervisor (with company name) responsible for the work group
  - Description for the work to be performed
  - Prerequisites for the work
  - Concurrence and approval for work to start
  - All permits shall have attached Job Safety Analysis (JSA)
  - Pre-job walk through has taken place prior to the permitted work.
  - Actions to ensure the permits are properly closed out.
6. Ensure that permitted activities are conducted as written.

# Contractor Management

Generally, contractors working for Shell are expected to utilize their own HSE-Management System in executing their safe systems of work on our locations. Our contracting process, when correctly followed, ensures approved contractors have a verified effective HSE-Management System.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Responsible for compliance and management of sub-contractors. Consider use of Service Providers already in Shells vendors list. Sub-contractors must comply with Contractor's HSE Management System.
2. Ensure that all employee and sub-contractor personnel complete Shell approved orientations (both general contractor and site specific orientations).
3. Ensure compliance with the SSE requirements.
4. Ensure contractor's HSE Management System is effectively being implemented by validating employees and sub-contractor work practices. Stop work authority shall be exercised when significant gaps are observed.
5. Report significant performance issues to Shell Representative (Focal Point/Champion) or Shell Superintendent.
6. Ensure proper equipment certification and inspections
7. Ensure there is a proper Preventative Maintenance system and the process is followed.

# Short Service Employee (SSE)

**Contractor and sub-contractor** personnel with less than six (6) months in the same job type or with his/her present employer shall be considered a Short Service Employee (SSE).

Contractor's and sub-contractor's SSE programs may be considered if limitations in crew SSE's are comparable to Shell SSE program.

**Note:** Contract personnel pre-approved to temporarily fill job positions for purposes of providing relief shall be managed per the Shell Wells "Out of Position Relief Worker" Recommended Practice.

## Mandatory Requirements for Onshore Well's Contractors:

1. Ensure appropriate SSE forms are submitted to Shell Representative (Focal Point/Champion) or Shell Superintendent prior to SSE's arrival at the worksite.
2. Ensure the proper SSE compliment before arrival on location:

Crew Members	SSE's in Crew	Required Approvals and Notifications
1	0	Single-person crew shall not be an SSE
≤ 4	1	None
≥ 5	≤ 20% of crew	None
≥ 5	20–30% of crew	Superintendent concurrence
≥ 5	≥ 30% of crew	Written variance approval by the WDM

3. Ensure SSE is assigned a competent mentor to closely supervise the SSE and prevent the SSE from performing tasks for which he or she is not properly trained.
4. Ensure SSE is visibly distinguishable from experienced employees (e.g. SSE sticker, color of hard hat).

# Emergency Preparedness

The purpose of Emergency Preparedness is to ensure that plans are in place to respond to and manage emergencies. An emergency is a present or imminent event that requires prompt coordination of actions to protect the health, safety, or welfare of people; limit damage to property and the environment; and minimize impacts on the business and corporate reputation.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Ensure that you know what the required Emergency Response Plans (ERP) are for your site (e.g. well control, H<sub>2</sub>S, SPCC, etc).
2. Ensure that the appropriate Emergency Response Plans are onsite and available to all personnel.
3. Ensure that incident responders are familiar with the Emergency Response Plan and are appropriately trained for the role they will play in an emergency (ie, First Aid/CPR, Bloodborne Pathogens, First Responder, etc.).
4. Ensure that routine Emergency Response exercises and drills are conducted and documented.
5. Ensure that Medical Response requirements are met at the worksite as detailed in the Medical Emergency Response Plan (MER).
6. Ensure that emergency response equipment (ie, well control, fire, eye wash, etc.) is prepared for use and properly maintained in accordance with manufacturer's specifications and regulatory requirements.
7. Activate the Emergency Response Plan, including evacuating the incident area, establishing an Incident Command Post, contacting the necessary support and regulators, and completing an incident report following the emergency.

# Incident Management

The main objective of the Incident Management Standard is to ensure that incidents, near misses, and hazardous situations are reported, investigated, and analyzed in order to prevent recurrence. The Contractor Management / Onsite Representative shall be considered the incident owner unless otherwise notified.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Immediately notify the Shell Representative and Shell HSE Team Lead of possible Recordable or High Potential Incidents (HPI) to ensure proper response and classification.
2. Contractor's senior site representative or designee and/or Shell HSE personnel accompany any injured worker requiring medical attention.
3. Initiate the local Emergency Response Plan (ERP) / Medical Emergency Response (MER) as required.
4. Ensure that an appropriate contractor incident investigation is completed to determine the immediate and basic cause of all incidents.
5. Ensure regulatory reporting as required.

# Lifting and Hoisting

Lifting and Hoisting (L&H) operations are inherently hazardous and Shell has had numerous incidents resulting in severe injury and/or death. L&H operations should be performed in compliance with OPS 0055B, key requirements summarized below.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Ensure a Lift Sponsor has been assigned for the worksite.
2. Ensure that all persons involved in L&H operations are trained and competent per their role (riggers, forklift operation, crane, etc.). Crane operators must have NCCCO certification/ Canadian Regulatory certification or Shell approved equivalent training. Anyone who rigs a load must have Shell approved riggers training.
3. Communicate and ensure the following:
  - The Lift Planning Tool is addressed in a pre-lift Toolbox Talk for all lifts.
    - Example: check that the blocks do not drop during slip and cut operations
    - Example: check crow-o-matic is reset to prevent blocks from hitting the derrick
  - Applicable lift planning requirements are met for all L&H operations classified as routine, critical, or complex.
  - Uncertified home made lifting accessories are prohibited.
  - The design requirements and physical condition of lifting appliances, accessories and equipment are appropriate for intended lifting operations. Special LOTO precautions must be reviewed and utilized prior to use of any forklift attachments. Approval documentation must be submitted and available for review by the Shell Representative.
  - The site Lifting Accessory Register is maintained, including forklift attachments.
  - Lifting Accessories are marked to show the name or trademark of manufacturer, safe working load, proof test date, and an identification number that can be traced back to the Lifting Accessory Register.
  - Lifting Accessories are properly stored.
  - That no personnel walk under suspended loads. Personnel No-Go-Zone/Red Zones shall be properly barricaded and access controlled.
  - Taglines are used when required.
  - Dedicated man-riding winches are labeled and are only used for man riding. Secondary fall protection must be used when man riding.
  - Man-riding is considered a "Critical" Lift and requires:
    - Rescue from Height Plan
    - Safe Work Permit
    - JSA
  - Aerial work platforms

- Ensure each proposed personnel lift is the least hazardous, most practical method for performing the work
  - Only qualified personnel to operate personnel lifting devices
  - All personnel lifting devices are within inspection and testing intervals
4. Along with the Shell's L&H (OPS 0055B) standards training requirements for crane/forklift operators and riggers, at a minimum, OSHA/OH&S requirements, Industry Standards and Best practices must be followed.

# Temporary Pipework

Temporary Pipework Standard ensures the safe use of temporary pipework in operations that use this equipment and the associated pipework connection interfaces.

## Mandatory Requirements for Onshore Well's Contractors:

1. Use the Process Flow Diagram and/or Piping and Instrumentation Diagram furnished by your company or contractor to verify the standard layout for the job being performed.
2. Prior to any pumping or high pressure operations, communicate the following to all crew members in a safety meeting:
  - Test pressures, pressure release hazards, and personnel position during the test (e.g. identify bull, blank plugs and needle valves; position personnel out of the line of fire).
  - Proper pressure isolation points.
  - Ensure that iron or hoses are 100% bled off before hitting any connections.
  - Address the potential need for barrier size to change during the operation in the pre-job safety meeting or Job Safety Analysis before starting work.
3. Before pressure testing, “walk the lines” to ensure conformance to supplied drawings and confirm it is safe to test.
  - Banded to indicate that it is integral or NPST piping has been inspected, and is within the “inspection period.”
  - Restrained by an engineered restraint system that has been assembled correctly per manufactures recommendations, visually inspected prior to use, and is of ample quantity to cover the job. (This includes all temporary piping including liquid only lines).
  - Incapable of being mismatched with like appearing components – use of 1502 union connections only **(NO 602 nor 1002 union connections allowed)**.
  - Suitable for service.
4. Ensure inspection of all hammer unions is done using a “Go-No-Go” (gauge rings) to assure proper match.
8. Ensure that flanged connections are torqued per recommended guidelines.
9. Ensure that personnel exclusion zones are established by physical barriers for pressurized pumping and testing before operations commence, and only removed when rigging down is complete.

# Dropped Object Prevention Scheme (DROPS)

The purpose of DROPS is to set out mandatory requirements to prevent harm to personnel and damage to equipment from dropped objects in the execution of Well's activities. The requirements listed below are intended to encompass all elevated operations in addition to derrick operations.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Ensure that a procedure and Job Safety Analysis (JSA) for pre-mast raising, post-mast raising, and pre-mast lowering inspections is documented and strictly followed.
2. Ensure that the DROPS lead that has been assigned is aware of their Roles and Responsibilities and routine DROPS inspections are being carried out.
3. Ensure that routine DROPS inspections are being carried out.
4. Following jarring of stuck pipe, activities causing excessive vibrations, or severe storms, ensure dropped object inspections are performed.
5. Surface drill screens are prohibited.
6. Ensure that forklifts used for tubular handling are fitted with a pipe clamp to prevent pipe from inadvertently rolling off the forklift.
7. Ensure that all equipment that is not an integral part of the structure has a secondary method of retention to the structure (e.g. safety cables)
8. Ensure that inventories are maintained for all equipment (temporary and permanent) in the derrick, and substructure (e.g. lights, horns, etc)
9. Ensure personnel No-Go/ Red zones and physical barriers are identified and erected.
10. Ensure that all hand tools used when working at height are logged and tethered.
11. Ensure that the contractor MOC Process is initiated prior to mounting fixtures to existing structures or installing new equipment at height.

# Well Control

Well control is an integral part of the well planning process for both drilling and well intervention. This standard applies to both operations. Identification and mitigation of risks shall focus on keeping the well under control during all phases of the operation. Note: local regulatory requirements must be adhered to.

## **Mandatory Requirements for Onshore Well's Contractors in the event of a live well:**

1. Execute Well activities to continuously maintain control as described in the Well intervention program.
2. Ensure that trip sheets are recorded, signed, and dated.
3. Ensure that blowout preventer (BOP) drills are conducted and documented to validate the competency of the crew.
4. Inform the Shell Representative of anticipated threats and associated corrective actions that may affect the ability to maintain well control.  
le. Know where the tool joints are in reference to ram position
5. Ensure that the shut in procedure for closing in the well (BOP and choke manifold) are accurate and available on the rig floor, doghouse, or location.  
le. Ensure shear ram procedures are in place
6. Inspect and validate that the BOP and the choke manifold are correctly configured.
7. Ensure that all pressure and performance testing of surface wellheads and BOP equipment are conducted, documented and current.
8. Inspect and validate that all drill pipe, tubing and/or casing shut-off devices are correctly configured for all connections.  
le. Be aware of the potential of casing wear during drifting operations
9. Establish at least two muster areas on each worksite.
10. Ensure that all required Well Control Certification is current for all essential staff.

# Fitness to Work

The purpose of the Fitness to Work Standard is to promote the enhancement of employee health and safety by ensuring that the state of workers' fitness does not pose a threat to themselves, others, the environment, and assets.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Ensure worker fitness for duty and notify the Shell Representative of situations that indicate an employee is not fit for work (e.g. impaired, sleep deprived, etc).
2. Ensure that workers with regulatory-driven fitness requirements and/or those participating in tasks that require medical evaluation of Fitness to Work adhere to required testing (e.g. substance abuse screening, H<sub>2</sub>S, respiratory fit test, etc).
3. Ensure that no one is scheduled to work for more than the maximum allowable limits and seek approvals as required for extended work periods.
  - 14 consecutive hours which can be extended to 17 hours, 2 days in a row at the Shell Representative (Focal Point/Champion) discretion
  - 28 consecutive days or where regulatory limits are stricter
4. Ensure that the driving duty hours requirements are met for drivers leaving the worksite.
5. Ensure that injured or ill workers returning to duty have appropriate medical clearance.

# Rig Move Operations

Rig move operations are inherently hazardous and Shell has had numerous incidents resulting in severe injury and/or extensive asset damage. Rig move roles & responsibilities are summarized below.

All lifting and hoisting operations conducted in execution of rig move operations should be performed in compliance with OPS 0055B Rev1.1 and WWIMS Lifting & Hoisting requirements.

## **Mandatory Requirements for Onshore Well's Contractors:**

1. Ensure that a route assessment has been executed and the route is suitable.
2. Ensure that the transport company follows proper securement practice according to the drilling company's requirements.

## **Communicate and ensure the following:**

- a) Ensure that a rig move plan is in place, that it clearly meets the Lifting & Hoisting requirements for all critical lifts and it is reviewed with all involved .
- b) Changes to the rig move lifting plan instigates a work shut down and a re-evaluation of the associated hazards.
- c) All loads are clearly marked/stamped with the load weight.
- d) Lifting Accessories are marked to show the name or trademark of manufacturer, safe working load, proof test date, and an identification number that can be traced back to the Lifting Accessory Register. Tags showing this information should be on all slings.
- e) The design requirements and physical condition of lifting appliances, accessories and equipment (including pad eyes) are appropriate for intended lifting operations and meet the requirements outlined in OPS 0055B Rev.1.

### Rig Move Responsibilities

Action	Execution	Quality Control
Ensure adherence to highway regulations	Transport Contractor	OSR
Route planning	Transport Contractor/ Drilling Contractor	OSR
Communications	Operator (Comms. Dept)	OSR
Load distribution	Transport Contractor	OSR
Escort and move supervision	Transport Contractor	OSR
High load	Transport Contractor	OSR
Driver fatigue	Transport Contractor	OSR
Reporting incident/accident	Transport Contractor/ Drilling Contractor	OSR

### Lifting and Hoisting Responsibilities

Action	Execution	Quality Control
Load Weights clearly marked	Drilling Contractor	OSR/ LLFP
Appropriate Load Lifting Points	Drilling Contractor	OSR/LLFP
Rig move lifting plan is completed	Crane Contractor	OSR/LLFP
Identification of Critical Lifts	Crane Contractor	OSR/LLFP
Lifting & Hoisting operations	Crane Contractor	OSR/LLFP

# Wells Process Safety

Process Safety is about the prevention of major industrial incidents caused by unintended release of energy or hazardous substances. Process Safety is distinct from Personal Safety in that Process Safety incidents may have catastrophic potential such as multiple injuries and fatalities, and massive economic, property and environmental impact. In Wells, Process Safety Incidents (WPSI) are related to Well control and Wellbore integrity.

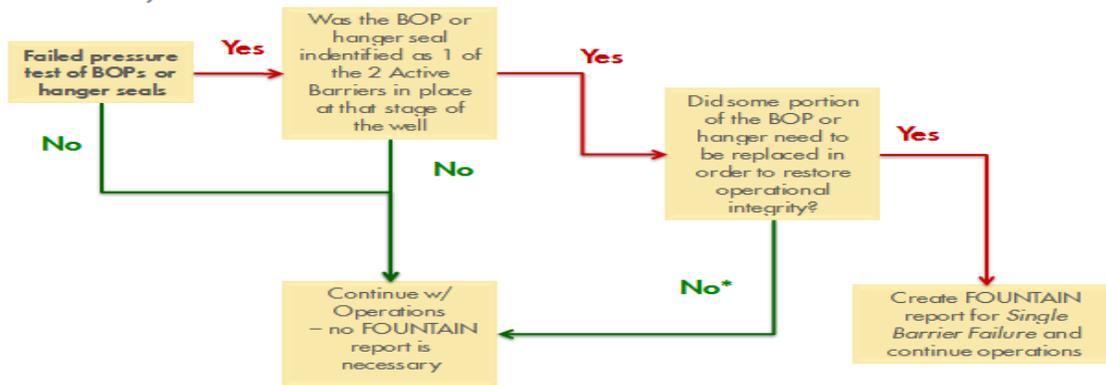
A Single Barrier Failure (SBF) is defined as the failure of a well barrier to fulfill its function during well operations *even* when a second barrier remains intact.

- *A barrier is defined as ...“any tested system or device that can be used to contain pressure within the confines of the well to the surface external environment during construction and intervention operations”.*
- *All **active** barriers (and active barrier elements) will be identified for each well operation by the Well and CWI engineering teams for each asset. Barriers that are not yet active need not be reported as SBFs.*

## **1. Mandatory Requirements for Onshore Well’s Contractors:**

2. Ensure the equipment on site is listed correctly in “eWCAT”.
  - Verify that the OSR is made aware of any corrections or deficiencies
3. Verify that each Driller or Rig Manager has their appropriate IWCF or IADC Well Cap certification.
4. Ensure that for BOP Equipment failures (including BOP Control System) including failures experienced during operating or while pressure and function testing of the equipment once initial integrity has been established on the well (I.e. once they are active barriers) is reported to the OSR.
5. Ensure that a SBF of the BOP system is reported to the OSR when back up equipment/systems providing equivalent functionality are unavailable.
6. Ensure any reduced functionality of the BOP system should be treated as a change in work scope and the Management of Change (MOC) process should be followed.

■ What if my BOP test fails?

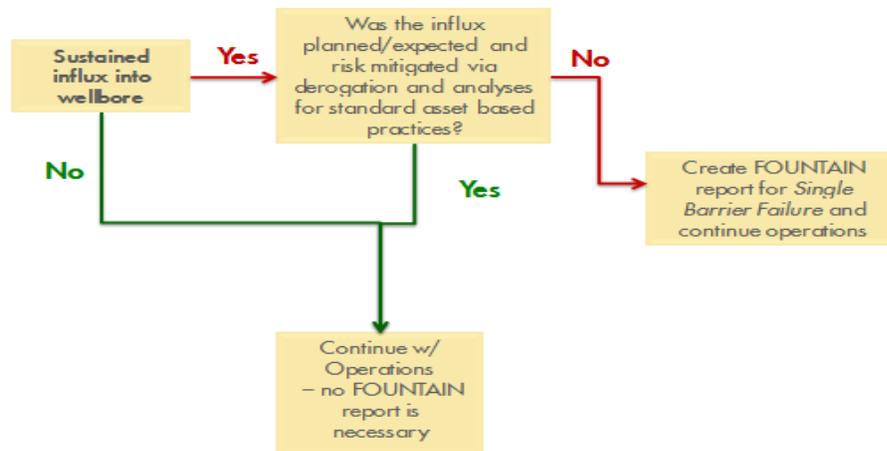


\*Example: open and closed rams again and subsequently got a good test

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RESTRICTED

■ What if I have an influx?



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RESTRICTED

**Making Wells Safer**

**EP2002-1500 Pressure Control Manual for Drilling, Completion and Well Intervention Operations**