

Shell Contractor HSE Handbook



Shell Upstream Americas

Shell Group
Commitment to Health,
Safety, and the
Environment



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OSS Graphics



Goal Zero

Zero deaths.

Zero injuries.

Zero significant incidents.



Safety is a deeply held value in Shell. Goal Zero means relentlessly pursuing no harm to people and no significant environmental incidents.

HSE Policy

We care...

Royal Dutch/Shell Group
Commitment to Health,
Safety and the Environment

In the Group we are all committed to:

- Pursue the goal of no harm to people;
- Protect the environment;
- Use material and energy efficiently to provide our products and services;
- Develop energy resources, products and services consistent with these aims;
- Publicly report on our performance;
- Play a leading role in promoting best practice in our industries;
- Manage HSSE matters as any other critical business activity;
- Promote a culture in which all Shell employees share this commitment.

In this way, we aim to have an HSSE performance we can be proud of, to earn the confidence of customers, shareholders, and society at large, to be a good neighbor, and to contribute to sustainable development.

Royal Dutch/Shell Group Health, Safety and Environment Policy

Every Shell company:

- has a systematic approach to HSE management designed to ensure compliance with the law and to achieve continuous performance improvement;
- sets targets for improvement and measures, appraises and reports performance;
- requires contractors to manage HSE in line with this policy;
- requires joint ventures under its operational control to apply this policy and uses its influence to promote it in other ventures;
- includes HSE performance in the appraisal of all staff and rewards accordingly.

Endorsed by the Committee of Managing Directors, March 1997, Reviewed 2000

...all of us have a role to play

“Each of us has a right and duty to intervene with unsafe acts and conditions or when activities are not in compliance with this HSE Policy and Commitment.”

Shell HSE Management System

■ LEADERSHIP AND COMMITMENT

- Know and manage HSE risks.
- Demonstrate visible HSE leadership.
- Set personal example/role model.

■ POLICY AND STRATEGIC OBJECTIVES

- Publish and Communicate it.
- Use it as governing principle.
- Align with Shell/Group policies/standards.

■ ORGANIZATION, RESPONSIBILITIES, RESOURCES, COMPETENCY

- Organization, roles & responsibilities.
- Competence, training & awareness.
- Contractor Management.

■ RISK MANAGEMENT

- Identify, Assess, Control, & Recover.
- Reduce Risk to ALARP.
- Maintain Hazards/Risks documentation.

■ **PROCESS, ASSETS AND STANDARDS**

- Support HSE MS implementation.
- Simplify, standardize, and improve.
- Adhere to global standards.

■ **PLANNING**

- Contractor Annual Improvement.
- Emergency Response and Crisis Management planning.

■ **IMPLEMENTATION (REPORTING & MONITORING)**

- Performance Monitoring
- Incident Reporting & Learning.
- Corrective Actions.

■ **ASSURANCE (including MANAGEMENT REVIEW)**

- “Check” part of Plan–Do Check Process.
- Verifies if system is working “right.”
- Identifies weaknesses/sets corrections.

Management Review:

- Quarterly MS Reviews.
- Opportunity to change, update, improve.

Golden Rules



It is your personal responsibility to follow the HSE **Golden Rules:**

You and I:

- Comply with the law, standards, and procedures
- Intervene in unsafe or non-compliant situations
- Respect our neighbors

Personal Responsibility

- ✓ Be trained and competent for the job
- ✓ Be ready to work: alert, rested, good attitude
- ✓ Dress properly: no tank tops/sleeveless shirts/shorts
- ✓ Wear Personal Protective Equipment: head/eye/ears/hands/feet
- ✓ Conduct work professionally: no practical jokes/horseplay or harassment of any type
- ✓ Do not bring on Shell premises illegal drugs/paraphernalia, controlled substances, pornography, and weapons/firearms
- ✓ Comply with jewelry policy (page 66)
- ✓ Comply with Short Service Employee requirements (page 70)
- ✓ Discuss with your supervisor any prescription or over the counter drugs you are taking that might affect your work

Life Saving Rules

What Are They?

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
seat belt

12



Follow
prescribed
Journey
Management
Plan

Rule #1



**Work with a valid
Work Permit
when required.**

**A Work Permit describes what
you must do to stay safe.**

You should

- ✓ Understand the Work Permit and follow it.
- ✓ Confirm that the Work Permit is valid.
- ✓ Confirm with the Supervisor or the Person in Charge of the work that it is safe to start work.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Confirm if a Work Permit is required for this work.
- ✓ Confirm that the workplace has been inspected before work starts.
- ✓ Explain how the Work Permit keeps you safe.
- ✓ Confirm the Work Permit is signed.
- ✓ Confirm that it is safe to start work.
- ✓ Get a new Work Permit when the work or the situation changes.
- ✓ Confirm that the work is completed.

Rule #2



**Conduct gas tests
when required.**

**Air is tested to stop
explosions and/or make sure
you can breathe the
air safely.**

You should

- ✓ Confirm with the Supervisor or the Person in Charge of the work that the air is tested.
- ✓ Confirm with the Supervisor or the Person in Charge of the work it is safe to start work.
- ✓ Stop work if you smell gas.

If you are a Gas Tester you should

- ✓ Understand which tests the Work Permit requires and how often.
- ✓ Use certified equipment for the tests.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Confirm that gas testing is carried out as per Work Permit.
- ✓ Request more gas tests if necessary.
- ✓ Get a new Work Permit when the work or the situation changes.
- ✓ Confirm that it is safe to start work.

Rule #3



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

Isolation separates you from danger, such as electricity, pressure, toxic materials, poisonous gas, chemicals, hot liquids or radiation, to keep you safe.

Specified life-protecting equipment by the Work Permit, such as breathing apparatus, electrical arc flash protection, or chemical resistant suits, protect you from danger.

You should

- ✓ Understand the isolations that protect you from danger.
- ✓ Confirm with the Supervisor or the Person in Charge of the work that isolations are in place.
- ✓ Confirm with the Supervisor or the Person in Charge of the work it is safe to start work.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Confirm isolation is in place, for example, lock switches, separate pipes with spades, or lock access doors.
- ✓ Confirm no stored energy or other dangers remain.
- ✓ Confirm that it is safe to start work.

Rule #4



**Obtain authorization
before entering
a confined space.**

A confined space, such as a vessel, tank or pipe, can contain explosive gas, poisonous air or other dangers such as a lack of oxygen, things that can fall on you or you can fall from. Authorized access keeps you safe.

You should

- ✓ Confirm with the Supervisor or the Person in Charge of the work that it is safe to start work.
- ✓ Confirm with the Attendant that you can enter a a confined space.
- ✓ Follow the requirements of the Work Permit.

If you are an Attendant you should

- ✓ Approve and control access to a confined space.
- ✓ Have means of communication with people in the confined space.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Confirm that the requirements of the Work Permit are in place.
- ✓ Confirm that a qualified Attendant is always present when people are in a confined space.
- ✓ Confirm that gas testing is carried out as per Work Permit.
- ✓ Confirm that it is safe to start work.

Rule #5



**Obtain authorization
before overriding or
disabling safety
critical equipment.**

**Safety-critical equipment must
work correctly to keep you safe.**

Examples of safety-critical equipment include isolation devices/emergency shut down valves, lock out/tag out devices, trip systems, relief valves, fire and gas alarm systems, certain level controls, alarms, crane computers, In-Vehicle Monitoring Systems.

You should

- ✓ Obtain authorization from the Supervisor or Person in Charge before overriding or disabling safety-critical equipment.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Point out the safety-critical equipment in your work place.
- ✓ Confirm the authorization comes from the right level.

Rule #6



**Protect yourself
against a fall when
working at Height.**

Use fall protection equipment to keep you safe when working outside a protective environment where you can fall over 1.8 m (6 ft).

A protective environment includes approved scaffolds, stairs with handrails, and man lifts.

You should

- ✓ Have authorization to work at height outside a protective environment.
- ✓ Be aware of what fall protection equipment to use and how to use it.
- ✓ Check equipment before using it.
- ✓ Always tie off when at height outside of a protective environment.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Confirm that it is safe to start work at height.

Rule #7



Do not walk under a suspended load.

Working or walking immediately under a suspended load is unsafe as the load can fall on you.

A suspended load is an object that is temporary lifted and hangs above the ground.

(Rig floors are excluded from this rule).

You should

- ✓ Never cross a barrier controlling an area with a suspended load without authorization.
- ✓ Follow the instructions of the flagman or the Person in Charge of the Lift.

If you are the Person in Charge of the Lift you should

- ✓ Mark the unsafe area and put barriers in place.
- ✓ Ensure that nobody walks under a suspended load.

Rule #8



**Do not
smoke outside
designated
smoking areas.**

Smoking or use of matches or cigarette lighters could set on fire flammable materials. Designated smoking areas, such as a smoking hut or a smoking room, will keep you safe from causing fire and explosion.

You should

- ✓ Know where the designated smoking areas are.
- ✓ Intervene if you see someone smoking outside a designated area.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Inform people about designated smoking areas.
- ✓ Ensure that designated smoking areas are clearly marked.

Rule #9



**No alcohol or
drugs while
working or
driving.**

**Using alcohol or illegal
drugs, or misusing legal
drugs or other substances,
will reduce your ability to do
your job safely.**

You should

- ✓ Always inform the Supervisor or the Person in Charge if you are taking medicine that may have an affect on your performance.
- ✓ If in doubt always check with your Supervisor or the Person in Charge who may seek medical advice.
- ✓ Not use, keep, sell or distribute illegal drugs.
- ✓ Intervene if you see a case of alcohol or drug abuse.

If you are the Supervisor or the Person in Charge of the work you should

- ✓ Only assign work to people who are fit to work.

Rule #10



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

**Speeding or using your
phone while driving
increases the risk of
losing control of your
vehicle.**

If you are a Driver you should while driving

- ✓ Not use a mobile phone or pager, send or read a text message, or use a hands-free mobile phone device.
- ✓ Stay at or below the maximum allowable speed for the road you are driving on as indicated by road signs or journey management instructions.
- ✓ Stay at or below the maximum allowable speed for the vehicle you are driving.
- ✓ Adjust your speed to the prevailing conditions.

If you are a Passenger you should

- ✓ Intervene if a Driver is using a phone in a moving vehicle.
- ✓ Intervene if a Driver is exceeding the maximum allowable speed.

Rule #11



**Wear your
seat belt.**

**A seat belt protects you
from injury in the event
of an incident
while driving and
keeps you safe.**

Wearing seat belts includes safety belts in (rental) cars, taxis, (mini) buses, trucks, cranes, or forklift trucks, and involves person in moving vehicles when engaged on Shell Business.

*Exceptions include vehicles where only lap seatbelts are available or in public transport where seat belts are not available.

You (Drivers and Passengers) should

- ✓ Always use a 3-point seatbelt **(please note exceptions* above).**
- ✓ Check that your seat belt works properly.
- ✓ Keep your seat belt properly fastened while in a moving vehicle.
- ✓ Check that everyone in the vehicle is wearing a seat belt properly before starting to drive.
- ✓ Intervene when your fellow passengers are not wearing seatbelts properly.

Rule #12



**Follow prescribed
Journey
Management Plan.**

A Journey Management Plan is a plan for you as a Driver that will help you to travel and arrive safely.

If you are a Driver you should

- ✓ Confirm if a Journey Management Plan is required before starting the journey.
- ✓ Discuss the Journey Management Plan with the authorized person.

-
- ✓ Understand the Journey Management Plan before starting the journey.
 - ✓ Comply with the duty, driving and rest hours specified in the Journey Management Plan.
 - ✓ Follow the route specified in the Journey Management Plan.
 - ✓ Tell the authorized person immediately if changes occur.

If you are the Supervisor or the Person in Charge you should routinely

- ✓ Check that the Journey Management Plan is in place and is being followed.
- ✓ Check that the Driver understands and complies to the Journey Management Plan.

Consequences of Rule-breaking

- Incidents and rule-breaking will be investigated thoroughly.
- If the violator is aware of the rule or required procedure through training, experience or communication, and did not comply with that rule or procedure, the maximum appropriate disciplinary action will be applied.

Consequences of Rule-breaking *(continued)*

- Failure to comply with any Shell Life-Saving Rule will result in disciplinary action. For employees of contractors or sub-contractors, this means removal from site and disqualification from future Shell work.
- In addition, if a supervisor (Shell or Contractor) sets the conditions for rule breaking or fails to follow through if one is broken, maximum appropriate disciplinary action will apply.

Personal Workplace Hazard Control

Before starting any work,
complete the following:

1. ID hazards/activities in the workplace.
2. Ensure controls are in place to prevent an incident.
3. Obtain all required work permits (if applicable).
4. Use proper job procedures.
5. Stop the job immediately if hazards are not under control.

Major Workplace Hazards and Hazardous Activities

Special attention is required to protect yourself and co-workers from major hazards and certain hazardous activities in the workplace.

Stop work immediately if controls are not in place for the following:

- Driving
- Lifting and Hoisting
- Dropped Objects
- Pressure
- Falls from Heights and Open Holes
- Electricity

Driving



Driving

Understanding the Hazard:

Driving is the single most **dangerous** activity!

Approximately **one third** of Shell fatalities are caused **by road transport accidents.**

Driving includes the safe operation of all trucks, cars, cranes, and ATVs.

Driving facts:

Distance traveled:

60mph = 88 ft per second

Braking:

275 feet = approx. braking distance at 60 mph (under normal conditions)

Causes of Driving incidents:

- ⊕ Loss of vehicle control
- ⊕ Impaired driver
- ⊕ Distracted driver
- ⊕ Driver fatigue
- ⊕ Speeding
- ⊕ Night driving
- ⊕ Inclement weather



Controls to the Driving hazard

<input checked="" type="checkbox"/> Complete required driver training.
<input checked="" type="checkbox"/> Determine if trip is necessary.
<input checked="" type="checkbox"/> Select safest route/time of travel.
<input checked="" type="checkbox"/> Notify supervisor pre-/post-trip (if required).
<input checked="" type="checkbox"/> Be well rested and alert (no drugs/ alcohol) - Fit for Duty.
<input checked="" type="checkbox"/> Select proper vehicle for trip.
<input checked="" type="checkbox"/> Complete pre-trip inspection (tire air pressure, fuel supply, mirrors adjusted, etc.)
<input checked="" type="checkbox"/> Ensure emergency/safety equipment is available as needed.
<input checked="" type="checkbox"/> Fasten seatbelts (all occupants).
<input checked="" type="checkbox"/> Obey speed limits.
<input checked="" type="checkbox"/> Turn off cell phones while driving.
<input checked="" type="checkbox"/> Ensure all loads are secured.
<input checked="" type="checkbox"/> Take frequent planned breaks.





Lifting and Hoisting

Understanding the Hazard:

Lifting and Hoisting activities, if not controlled, are extremely dangerous. A large number of Shell's serious incidents involve Lifting and Hoisting activities.

Equipment includes:

Cranes (winch truck, gin pole truck, boom crane, overhead), aerial platforms, powered industrial trucks, hoists, jacks, winches, beam clamps, fixed lifting points, slings (wire rope, chain, synthetic), lifting devices, spreader bars, clamps, hooks, shackles, eyebolts, turnbuckles, sockets, rigging blocks, cargo containers, racks, frames, pallets, and personnel work baskets.

Causes of Lifting and Hoisting incidents:

- ⊕ Failure to follow procedures
- ⊕ Equipment failure
- ⊕ Improperly secured loads
- ⊕ Exceeding equipment capacity
- ⊕ Inadequate lift plan and/or communication lacking
- ⊕ Inadequate inspection procedures
- ⊕ Side loading of equipment
- ⊕ Inclement weather (high winds, high waves, low temperature)
- ⊕ Improper hand placement
- ⊕ Improper use/lack of tag lines

Lifting and Hoisting

Controls for Lifting and Hoisting

<input checked="" type="checkbox"/> Comply with all work procedures.
<input checked="" type="checkbox"/> Validate work controls are in place.
<input checked="" type="checkbox"/> Ensure testing, inspection, and certification of lifting equipment is complete.
<input checked="" type="checkbox"/> Use a Certified Crane Operator.
<input checked="" type="checkbox"/> Ensure all riggers have completed rigger training class.
<input checked="" type="checkbox"/> Use the Local Lifting Focal Point.
<input checked="" type="checkbox"/> Complete "10 Questions for a Safe Lift" checklist.
<input checked="" type="checkbox"/> Ensure Manlift/Forklift Operators have completed approved training.
<input checked="" type="checkbox"/> Prohibit personnel from standing under overhead loads.
<input checked="" type="checkbox"/> Establish and erect buffer zones and barricades.
<input checked="" type="checkbox"/> Use proper communication and signaling.
<input checked="" type="checkbox"/> Use tag lines to control loads.
<input checked="" type="checkbox"/> Consider completing behavioral-based safety observation.



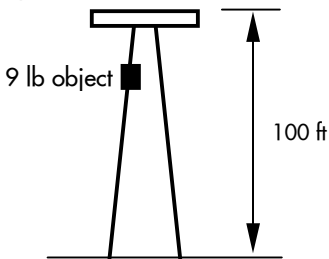
Dropped Objects

Understanding the Hazard:

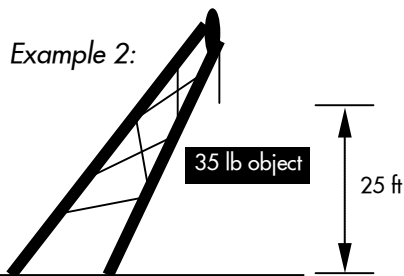
Dropped Objects are a leading cause of fatalities in the Oil and Gas industry.

Examples of potentially fatal situations:

Example 1:



Example 2:



Causes of Dropped Objects

- ⊕ Failure to follow procedures
- ⊕ Inadequate maintenance of overhead equipment
- ⊕ Inadequate design of overhead equipment
- ⊕ Inadequately secured equipment/tools
- ⊕ Inadequate training
- ⊕ Poor housekeeping of overhead work areas
- ⊕ Improper storage of overhead equipment/tools

Dropped Objects

Controls to the Dropped Objects hazard

<input checked="" type="checkbox"/> Ensure employees are trained.
<input checked="" type="checkbox"/> Ensure procedures are followed correctly.
<input checked="" type="checkbox"/> Establish a worksite DROPS leader.
<input checked="" type="checkbox"/> Comply with checklist for handling tubulars.
<input checked="" type="checkbox"/> Ensure forklifts that handle tubulars have a pipe clamp device.
<input checked="" type="checkbox"/> Set buffer zones/barricades during overhead or suspended loads work.
<input checked="" type="checkbox"/> Use tethered tools during overhead work.
<input checked="" type="checkbox"/> Conduct all required dropped object inspections.
<input checked="" type="checkbox"/> Prohibit personnel from standing under overhead loads.
<input checked="" type="checkbox"/> Comply with Shell Prevention of Dropped Objects Manual.
<input checked="" type="checkbox"/> Do not use the following: <ul style="list-style-type: none">• "Homemade" lifting devices• Wooden handle hammers (when working at heights)• Wire/welding rods/tie raps (use engineered split pins and safety pins)





Pressure

Understanding the Hazard:

The release of pressure is extremely dangerous and can be fatal!

Never open a piece of equipment that contains any pressure.

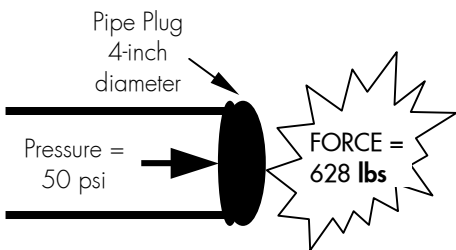
Ensure that both sides of all piping connections are the same diameter, make, and thread type. Many fatalities have occurred due to using mismatched connections.

For hammer unions, validate correct diameter with [Go/No-Go rings](#).

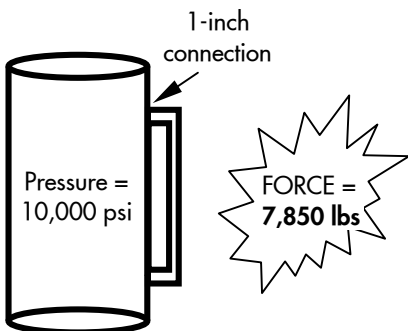
Pressure

Example 1:

This is enough energy to be deadly if standing in the line of fire.



Example 2:



Causes of Pressure incidents:

- ⊕ Failure to follow procedures
- ⊕ Use of mismatched connections (diameter, make, and threads do not match)
- ⊕ Use of defective/damaged/improper hoses and tubing
- ⊕ Failure to depressure equipment before starting work
- ⊕ Failure to isolate pressure [Lock Out Tag Out (LOTO)]
- ⊕ Failure of valves, flanges, and fittings
- ⊕ Relying solely on malfunctioning gauges/instrumentation to determine if pressure is present
- ⊕ Transferring contents of high pressure to low pressure system or container

Controls to the Pressure hazard:

<input checked="" type="checkbox"/> Follow proper work procedures.
<input checked="" type="checkbox"/> Use proper equipment (size, type).
<input checked="" type="checkbox"/> Install physical barriers and buffer zones.
<input checked="" type="checkbox"/> Ensure pressure gages, relief valves, alarms, and shutoffs are working properly.
<input checked="" type="checkbox"/> Ensure proper communication prior to opening valve(s).
<input checked="" type="checkbox"/> Ensure temporary piping is secured.
<input checked="" type="checkbox"/> Install Warning signs if applicable.
<input checked="" type="checkbox"/> Ensure trained and competent workers.
<input checked="" type="checkbox"/> Identify potential job hazards.
<input checked="" type="checkbox"/> Complete permits, checklists, and inspections.
<input checked="" type="checkbox"/> Validate work controls are in place.
<input checked="" type="checkbox"/> Identify and mitigate line-of-fire hazards.
<input checked="" type="checkbox"/> Validate union connections with Go/no-Go Rings .
<input checked="" type="checkbox"/> Prevent the release of energy: use Lock Out Tag Out (LOTO).
<input checked="" type="checkbox"/> Consider completing behavioral-based safety observation.



Falls from Heights and Open Holes

Understanding the Hazard:

Falls are the number two cause of fatalities during construction activities.

(Driving incidents are the number one cause.)

Falls can be:

- From heights
- Into open holes
- Into equipment or machinery

Falls from Heights and Open Holes

Causes of Falls:

- ⊕ Failure to wear fall protection equipment
- ⊕ Slips on stairs and ladders
- ⊕ Inadequate barricades around deck openings or edges
- ⊕ Failure to keep paths clear of obstacles or clutter
- ⊕ Missing handrails
- ⊕ Uneven work surfaces



Controls for Fall hazard

<input checked="" type="checkbox"/> Comply with all work procedures.
<input checked="" type="checkbox"/> Validate work controls are in place.
<input checked="" type="checkbox"/> Install handrails, guardrails, gates, and ladder cages where needed.
<input checked="" type="checkbox"/> Work from temporary scaffolding that is properly secured.
<input checked="" type="checkbox"/> Use barricades around open holes.
<input checked="" type="checkbox"/> Use personal fall protection equipment when working at heights of 6 ft (1.8 m) or greater.
<input checked="" type="checkbox"/> Maintain three point contact (hands and feet) on all stairs and ladders.
<input checked="" type="checkbox"/> Keep aisles and walkways clear.
<input checked="" type="checkbox"/> Use only trained personnel that are competent in fall protection procedures.
<input checked="" type="checkbox"/> Inspect fall protection equipment prior to using.
<input checked="" type="checkbox"/> Ensure rescue procedures are in place.
<input checked="" type="checkbox"/> Consider completing behavioral-based safety observation.



Electricity

Understanding the Hazard:

Direct contact with 40 Volts or greater can be fatal!

Voltages at Shell locations range from:

Several millivolts to 6,600 volts.

Causes of Electrical incidents:

- ⌘ Driving trucks with oversized loads into electrical overhead power lines
- ⌘ Striking overhead electrical power lines or power poles with equipment (e.g., cranes, gin pole truck, ladders, antennas, etc.)
- ⌘ Failure to use Lock Out/Tag Out procedures
- ⌘ Improper electrical maintenance activities
- ⌘ Failing to identify energized lines during maintenance
- ⌘ Failing to identify energized lines during excavation activities

Electricity

Controls for the Electricity hazard:

<input checked="" type="checkbox"/> Comply with all work procedures.
<input checked="" type="checkbox"/> Validate work controls are in place.
<input checked="" type="checkbox"/> Ensure proper Lock Out/Tag Out procedures are followed.
<input checked="" type="checkbox"/> Maintain required distance from overhead electrical lines.
<input checked="" type="checkbox"/> Plan travel routes to ensure avoidance of overhead electrical lines.
<input checked="" type="checkbox"/> Ensure proper PPE is used.
<input checked="" type="checkbox"/> Verify the location of underground electrical lines before digging.
<input checked="" type="checkbox"/> Ensure the proper grounding of equipment.
<input checked="" type="checkbox"/> Ensure the minimum spacing requirements for electrical equipment are maintained.
<input checked="" type="checkbox"/> Use only competent Electricians.
<input checked="" type="checkbox"/> Ensure electrical Code requirements are followed.
<input checked="" type="checkbox"/> Consider completing behavioral-based safety observation.



Job Safety Analysis (JSA)

A JSA is a process to:

- Document each step of a job
- Identify existing/potential hazards & risks of each step
- Determine best means to eliminate or control the hazards/risks
- Document worker's responsibilities
- Communicate to all workers the following:
 - Job Tasks
 - Job Hazards
 - Job Controls
 - Individual Responsibilities



JSA Checklist

Step:	TASK
1	<input checked="" type="checkbox"/> Specific tasks listed.
2	<input checked="" type="checkbox"/> Individuals assigned tasks.
3	<input checked="" type="checkbox"/> Contingency Plan completed.
	HAZARDS
4	<input checked="" type="checkbox"/> Energy sources identified (Decision Point/Major Hazards).
5	<input checked="" type="checkbox"/> Job specific layout.
6	<input checked="" type="checkbox"/> Climatic Conditions considered.
7	<input checked="" type="checkbox"/> Other activities identified.
8	<input checked="" type="checkbox"/> Loss of containment.
	CONTROLS
9	<input checked="" type="checkbox"/> Engineering Controls
10	<input checked="" type="checkbox"/> Intervention Controls
11	<input checked="" type="checkbox"/> Procedures
12	<input checked="" type="checkbox"/> Permits/Approvals
13	<input checked="" type="checkbox"/> HSE Checklists / HSE Walkthrough
14	<input checked="" type="checkbox"/> Behavioral-Based Safety Observations
15	<input checked="" type="checkbox"/> Training
16	<input checked="" type="checkbox"/> Fit for Duty
17	<input checked="" type="checkbox"/> Job Sponsorship/Supervision
18	<input checked="" type="checkbox"/> Safety Pause
19	<input checked="" type="checkbox"/> SSE / Mentor
20	<input checked="" type="checkbox"/> Feedback at end of day
21	<input checked="" type="checkbox"/> HSE Alerts
22	<input checked="" type="checkbox"/> Compliance
23	<input checked="" type="checkbox"/> Management of Change
24	<input checked="" type="checkbox"/> PPE

Definitions for JSA Checklist

Step:

1. Steps required to complete job.
2. Individual(s) assigned responsibility for task.
3. What are the actions during an emergency event? Who is in charge; is there a roster of all personnel; has the muster point been communicated to all employees?
4. Decision Point: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure.
Major Hazards: Driving, Lifting/Hoisting, Dropped Objects, Pressure, Fall from Heights/Open holes, Electrical.
5. Spacing/job site congestion, barriers/caution tape, buffer zones.
6. Adverse weather – snow, rain, wind, visibility, dark, lightning, noise, mud, ice, hot, cold.
7. Other contractors on location: simultaneous operations.
8. Spills prevention considerations.
9. Eliminate/modify equipment.
10. Stop work program.
11. Written procedures.
12. Authorization/permission to perform task.
13. Complete all checklists and inspections.
14. Observation of safe/unsafe work or behaviors.
15. Trained workers.
16. Rested, alert, good attitude, no drugs alcohol.
17. Who is Person in Charge?
18. Scheduled “stop work” to determine if safety can be improved.
19. Short Service Employees/Mentors identified.
20. Review of JSA process.
21. Previous occurrences noted and discussed.
22. Compliance with standards, procedures, guidelines.
23. Has any change occurred?
24. Personal Protection Equipment (PPE) used.

ENVIRONMENTAL

ISO 14001 – is an international standard for environmental management. Shell facilities are ISO 14001 certified. Contractors should follow Shell environmental rules and strive for continuous environmental performance improvement.

Spills – spill control and prevention shall be part of all contractors work practices. You are required to report all spills (oil, chemical, etc.) to a Shell Supervisor.

Waste Management – all waste shall be identified, segregated, and disposed of properly. Waste management should be part of job planning.

Offshore Specific – it is unlawful to dispose of any liquids, solids, or other material overboard (substantial penalties could result).

HEALTH

Hazard communication (HAZCOM) / MSDS program

The purpose of this program is to ensure that all known potential hazards at the workplace are communicated to all employees.

Compliance includes:

- Container labeling
- Maintaining MSDS
- Workplace chemical inventory
- Employee info and training concerning the hazards and controls for safe chemical and product handling

Specific Workplace Hazards:

(see Q&A section for details)

- Naturally Occurring Radioactive Material (NORM)
- Asbestos
- Man-Made Mineral Fibers
- Lead
- Food Handling

Q & A

Q. What are the hazards associated with **asbestos**?

A. Asbestos may be present in insulation, brake pads, and in structural materials (i.e. floor tiles, ceiling panels, roofing). It can be a hazard if not handled properly. Only trained personnel shall handle asbestos.

Q. What is **Confined Space Entry**?

A. Confined Space Entry is entry into a space that:

- is large enough and so configured that a person can bodily enter and perform assigned work; and
- has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits); and
- is not designed for continuous occupancy.

Q. When do I have to wear **Fall Protection** equipment?

A. Fall Protection is required when working at heights of 6 ft (1.8 m) or greater above work surface.

Q. What is Shell's **Fitness to Work Policy**?

A. An employee can only be on duty for 14 hours (U.S. and Brazil) and 12 hours (Canada) during a day. Shell supervision approval is required to work additional hours.

Q & A, Continued

- Q. What hazards are associated with **food handling**?
- A. Food/drink preparation and storage/consumption practices should prevent contamination with workplace chemicals and hazards. Proper storage, preparation, and eating areas are essential to control hazards.
- Q. What is **Hot Work**?
- A. Hot work Category 1 is work that produces a spark or flame, thus creating an ignition source (e.g., welding, grinding, and flame cutting outside the Safe Welding Area; soldering with flame or electrical soldering gun; shrink wrapping using a heat source; welding inside confined space once declared hydrocarbon free).

Hot Work Category 2 is work within a potential source of ignition (e.g., use of the following in a hydrocarbon environment: portable electronic devices, electric power tools, stud guns).

Q & A, Continued

Q. What is Shell's **Incident Notification** policy?

A. All incidents shall be reported to Shell Supervisor immediately.

Q. What is **Journey Management**?

A. Safe Journey Management is a detailed Shell standard that aims to minimize exposure to road transport related risks and to ensure that proper controls are in place for each journey.

Q. What is Shell's policy on wearing **jewelry**?

A. Except for watches, exposed jewelry such as rings, neck chains, wrist chains, key chains, and exposed jewelry associated with body piercing must not be worn when working around operating equipment or when engaged in manual labor. Wristwatches are allowed, but only if pins are used to connect the watch to the band.

Q. What are the hazards associated with **Lead**?

A. Lead is typically found in paints and coatings. The hazard is primarily ingestion or inhalation. Exposure can occur when welding, cutting, sandblasting, and burning painted or coated surfaces. Proper controls shall be in place to perform these activities.

Q & A, Continued

Q What are the **“Ten Questions for a Safe Lift”**?

A. A checklist that is completed and discussed in the Safety Meeting prior to Lifting and Hoisting operations.

Q. What is **Lock Out/Tag Out (LOTO)**?

A. LOTO refers to specific practices and procedures to safeguard employees from the unexpected energization or startup of machinery and equipment, or the releases of hazardous energy during service or maintenance activities. The Lock Out device prevents machines from starting or energy (i.e. electricity or pressure) releases to occur. Tag Out refers to putting warning tags on equipment to warn and prevent employees from energizing equipment.

Q. What are **Man-Made Mineral Fibers (MMMF)**?

A. MMMF's include fiberglass, mineral wool, refractory ceramic fiber and is used in heat and acoustical insulation. It is primarily an inhalation hazard. Only trained personnel should handle MMMF.

Q & A, Continued

Q. What are **mismatched unions**?

A. Threaded pipe connections are assembled by hitting the connectors with a hammer. Mismatching can occur if the threads on the connections are not the same diameters. Always validate diameter in the field with Go/No-Go Rings.

Q. What is a **Go/No-Go Ring**?

A. A cylindrical ring in which the inside diameter is used for checking the external diameter of a threaded pipe connection. Field use is essential to validate the proper pipe connection.

Q. What is **NORM**?

A. Naturally Occurring Radioactive Material is present in the earth and can be found sometimes as scale that sticks to the walls of piping and equipment that comes in contact with produced water. NORM is primarily an inhalation and ingestion hazard. All employees should be trained on working with NORM.

Q & A, Continued

Q. What is the **Permit to Work** process?

A. A standard process for ensuring that work is planned and executed to protect people, assets, environment, and reputation of Shell by incorporating these in all tasks:

- A work permit
- Risk Assessment Matrix (RAM)
- Job Planning Matrix (JPM)
- Hazard recognition
- Job Safety Analysis (JSA)
- Job safety planning
- Shared learning opportunities
- The Job Sponsor role

The Work Permit provides proper communication, planning, documentation, and approval for the day-to-day permitted work activities at all work locations.

Q. What is **Personal Protective Equipment (PPE)**?

A. The required personal safety equipment (i.e. safety glasses w/side shields, hardhat, steel toed boots, etc.).

Q. Concerning **security**, what should I do if I observe suspicious individuals or activities while working for Shell?

A. Record the specific location, date and time, and a description of the event. Report the incident to a Shell representative.

Q & A, Continued

Q. What is a **Short Service Employee (SSE)**?

A. An employee that has been working for a company 6 months or less. It also means an employee that has taken a new position within a company. There is required paperwork to be completed prior to mobilization. Check with your supervisor to ensure you are complying.

Q. Where can I **smoke**?

A. You can only smoke in site-specific Designated Smoking areas. Inquire with local Shell Supervisor.

Q & A, Continued

Q. Can Shell **search** my property?

A. Shell reserves the right to carry out searches of individuals and their personal effects, including vehicles, when entering the premises, while on the premises, and when leaving the premises.

Q. What are examples of actions that could cause **immediate removal** from a Shell location?

A. A violation of a Lifesaving Rule. Being under the influence of drugs or alcohol. Smoking in unauthorized areas, violation of Shell's/your company's safety standards procedures, harassment, possession of firearms, fighting, or horseplay.



**Working together,
we shall reach it.
We can live with it.**

**Remember, everyone has an
obligation to stop work that
is unsafe.**

Contractor HSE Handbook

I hereby acknowledge that:

- (1) I have received a copy of and read this handbook.
- (2) I understand the handbook.
- (3) I agree to work under all provisions contained in this handbook.
- (4) I am physically capable of performing the job.
- (5) I understand that the requirements in this book will be **strictly enforced!** Consequences for violations (up to and including termination from Shell property) will be enforced.

Signature:

Name (Printed):

Date: _____

Contract Company:

This form shall be filed at the Shell local office.

