

Behaviour Based Safety Worker Orientation Guide





Focus on the following elements to enhance safety

- **✓ Behaviour toward safety to prevent incidents**
- **✓ Proper personal protective equipment (PPE)**
- Required safety documentation for petroleum sites

POST gratefully acknowledges the following oil companies for their ongoing support and involvement of this program.

Cenovus Energy Shell Canada Limited Suncor Energy Inc.

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PURPOSE OF THIS GUIDE:

This guide is intended as a summary of the requirements for contractors who are working for companies who have adopted a **Behavior Based Safety (BBS)** program. It is not intended to replace the basic requirements of the various occupational health and safety acts that exist in your jurisdiction, but rather it is to describe in summary the basic minimums required of contractors.

If there are any questions with respect to the requirements laid out here, please contact your respective oil company contact, your general contractor or POST for clarification.

Most Important Point:

Owner personnel must ensure that anyone working for the respective companies, whether it is an employee or contractor, is not hurt. There is no task so important that it overrides the need for it to be done safely. To us, **"Nobody Gets Hurt"** clearly catches the meaning of where we stand on the issue of safety; we will not tolerate people getting hurt. To this end, we require certain safety minimums of everyone. This guide highlights those minimums.

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INTRODUCTION: WHY WE REQUIRE YOU TO DO CERTAIN SAFETY ORIENTED ACTIVITIES

Industry experience shows that ...

Safety incidents are a result of a momentary loss of control, which results in an incident. The outcome of the incident is unpredictable. For example, if you were to fall from a short ladder there are many outcomes that could result from this incident. You could land on the ground, cat-like on your feet, and suffer no injury. Equally, you could land awkwardly and twist an ankle, knee, wrist, or fracture a bone or skull. The outcome is a function of circumstances outside your direct control and is often characterized as "luck". Therefore, as we cannot control the outcome of the incident and it is irresponsible to rely on luck, we must work to prevent the incident in the first place. Furthermore, as any incident can result in varying degrees of injury, we must focus not only on preventing certain incidents, but all incidents.



The prevention of <u>all</u> incidents does not happen by itself. It requires deliberate action by you and your management. Management must establish a work environment that provides for your safety (appropriate procedures, safety equipment, employee selection and skill development, critical safety expectations and rules). You must ensure that safety is built into each and every aspect of your behaviour. In other words, *management is responsible for establishing an environment for safe behaviour and the worker is responsible for behaving safely*.

To create an environment where we have better control of our actions or behaviour, **behaviour-based safety tools** were developed. Behaviour based safety tools encourage workers to do effective risk analysis before launching into an activity. They are premised on the belief that a low risk tolerance and a mind engaged on the task will eliminate all incidents. Both conditions, a low risk tolerance and a mind engaged in the task, need to be discussed to better understand both management's and the worker's role in preventing incidents.

Generally speaking, every individual has a different tolerance or acceptance of risk. To some, taking a risk is nothing more than a means to an end and the degree to which this is done varies dramatically. There is no such thing as zero risk. When we breathe, we take risk. However, there is a point beyond which the outcome is has potential to become an unfavourable result. Collectively, we must be smart enough to determine the unfavourable result threshold. Determining this requires deliberate thought and is where the three basic steps of risk management come into play.

Risk management is a simple process where you:

- ✓ **Identify** all the hazards that could occur as a result of the planned activity,
- ✓ Assess those hazards to determine which could easily result in an unfavourable outcome, and
- ✓ Mitigate or prevent those outcomes from happening through deliberate action before the task is started.

Simply stated risk management is *identify, assess* and *mitigate* through **ACTION**. Management must create an environment that ensures that this happens and you must execute your work such that it is happening with each and every action.

The use of behaviour based safety tools is a simple and proven approach to encouraging effective risk assessment. Our behaviour based safety system addresses risk assessment at two levels:

- For routine, generally lower risk activities (activities for which no reasonable person would require a documented procedure)
- For commonly identified, higher risk activities (activities where there is a generally accepted need for more thorough consideration of the risks and how they will be mitigated and better coordination of all parts of the activity)

LAST MINUTE RISK ASSESSMENT (LMRA)

Managing routine, generally lower risk, activities is done through the deliberate use of what is generically called **Last Minute Risk Assessment (LMRA)**. Last minute risk assessment requires that in the last minute before you embark upon an activity, you need to intentionally take a moment to do a risk assessment to ensure that you have identified and mitigated the risks so that there is not an incident. LMRA is a mental process for which there is no documentation required. If the routine activity involves other workers, then the process needs to be discussed (still not requiring documentation). It is to be used before all routine activities and it is a skill that needs to be encouraged and honed.

JOB SAFETY ANALYSIS (JSA)

Managing higher risk activities requires a more formal and documented risk management process. This process is generically referred to as **Job Safety Analysis or JSA**. A job safety analysis has exactly the same considerations, as does an LMRA (what you are going to do, step by step; hazards that each step creates; and lastly how you are going to prevent the possible harmful/unfavourable outcome from happening). Since the JSA is protecting against a more substantial risk, it needs to be:

- √ documented,
- ✓ discussed with everyone in the work crew involved in the work, and then
- ✓ reviewed by the site supervisor to ensure that the appropriate level of risk management is brought to the task.

JSAs need to consider site, activity, current environment and crew issues. A change in any of these parameters/conditions could introduce a new risk. Therefore, JSAs require review when things change. A JSA can be started from a pre-established document <u>but it must always</u> be tailored to the specific site conditions by the work crew immediately before the activity is started (and renewed on a daily basis). The value of the JSA lies in the quality and thoroughness of the discussion amongst the work crew. Companies that utilize POST require the use of JSAs as a minimum for the tasks outlined on the Project Clearance Certificate (PCC) issued to the contractor by the owner and the Daily Safe Work Permit issued by the contractor to the work crew. If tasks involve a critical procedure (also identified on the clearance certificate/work permit) then an additional checklist/procedures need to be incorporated into the JSA for critical procedures.

Effective use of the above two behaviour based risk management tools, LMRA and JSA, has the potential of eliminating all incidents. As a worker, it is your responsibility to understand and use the tools. It is management's responsibility to ensure that you understand the tools and are using them. In addition to the above two risk management tools; there are two equally simple diagnostic tools that can be used by management to gauge the quality of execution of each of the two risk assessment tools.

The effectiveness of last minute risk assessment is determined through the use of **LMRA testing**. LMRA testing is where a supervisor, manager, owner or any other interested party safely interrupts routine work activity and asks the worker or workers some simple questions. The questions are to determine the quality of the worker(s) understanding of three things:

- √ what the workers are doing,
- ✓ what are the hazards in what the workers are doing and
- √ how are they managing the identified hazards?

From this discussion, anyone can draw conclusions on the quality of the LMRA process as executed by the worker(s). This also allows the evaluation of the worker's attitude to safety in general. Coaching by the tester can be provided after the tester has made an assessment of the test results.

The results of LMRA tests must be collected and used to direct the site and company safety program. It must be emphasised that this is an "ask, listen, learn" process. It is driven by the need to understand the worker's level of engagement in risk assessment and skill, not that of the tester.

The frequency of LMRA testing is driven by the rule-of-thumb: for the average worker to retain the LMRA habits and skills, each worker should be subjected to an LMRA test at least once every 10 working days. This level of contact provides sufficient reinforcement and encouragement to keep the practice alive. Therefore, a company should schedule its LMRA tests such that this standard is met. In a typical work crew of 10 people, this would require the supervisor do an LMRA test of a different worker each day to satisfy the standard. Similarly, in a crew of 2 people, a supervisor (or team leader/lead hand) would have to do an LMRA test of a different worker at least once a week to meet the standard. Contractor ownership and owner personnel visiting the site should also support this activity by doing an LMRA test every time they are on site to encourage the behaviour as well as test the level of engagement in this important risk management process.

It is worth noting that our experience shows that of the incidents that were a result of behaviour failures (which was 80% of the incidents over a 5-year period), 70% could have been prevented through the better application of LMRA. It is important to test and encourage effective use of LMRA.

PLANNED JOB OBSERVATION (PJO)

A PJO is a documented observation process providing a cold-eye review of tasks. In a PJO, the supervisor, manager, co-worker/peer, or any other interested party stands back from the work and observes it in progress. They document their observations and determines, in their opinion whether the worker is safe or at risk in the performance of the work.

Observations are done against an easy-to-use predetermined checklist provided by POST of typical items to look for and/or against the JSA that was prepared by the work crew for the task in progress.

Once the observations are made and recorded, the observer engages the crew in a discussion of what they observed. It is to be an open, constructive discussion and consideration should be given to the worker's opinions on "safe" or "at risk" assessment as well. The outcomes of PJO can be collected and used to direct the site and company safety program.

As in the case of the LMRA testing, the outcome of the PJO must be collected and used to direct the site and company safety program. A worker/work crew should also be exposed to JSA-based PJO at least once every 10 working days to make this useful reinforcement and to ensure that effective use of JSAs.

It is worth noting that this behaviour based safety approach is focused on adjusting every worker's risk tolerance and improve his or her risk management awareness and skill. We are attempting to change people's habits, no matter where they are working, whether at work or at home.

Promoting off the job safety with the same techniques and discipline as on the job safety reinforces habit creation and works to develop a situation where nobody gets hurt, anywhere.

Planned Job Observation



POST Documents

POST Behaviour-based safety tools were developed to create an environment for better control. These safety tools encourage workers to make an effective risk analysis before launching into an activity. A low risk tolerance and a mind engaged in the task will eliminate all incidents.

POST Safety Tools include:

- ✓ POST Forms and Checklists
- ✓ Last Minute Risk Assessment
- √ Stop & Think

Forms

- Project Clearance Certificate
- Daily Safe Work Permit
- Daily Safety Meeting
- Weekly Safety Meeting
- Job Safety Analysis (JSA)
- Worker / Visitor Registration

Observation/Evaluation

- Planned Job Observation (PJO)
- JSA Quality Assessment Evaluation
- Near Miss Hazard Evaluation Report

Routine Maintenance

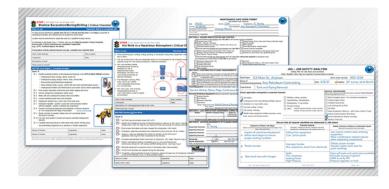
Maintenance Safe Work Permit

Critical Checklists

- Critical Lifting
- Shallow Excavation
- Lockout / Tagout
- Deep Excavation
- Fall Protection / Rescue Equipment
- Heavy Equipment Lifting
- Hot Work
- Integrity of Critical Systems
- Working at Heights
- Vacuum Truck Checklist
- Confined Space Checklist
- Tankfield Sump Entry
- Atmospheric Testing Log Supplemental



POST Worker Document Process Flow



Life Saving Rules

POST has adopted the International Association of Oil & Gas Producer's Life Saving Rules



What are the Life Saving Rules?

The Life Saving Rules are key actions to prevent fatal injuries during higher-risk activities.

They provide workers in the industry with actions they can take to protect themselves and their colleagues, no matter the worksite.

The rules that were relevant and applicable for the entire industry. They consist of 9 Rules with a simple icon, and clear actions for individuals tested with workforce representatives and Human Performance experts.



LIFE-SAVING RULES

Bypassing Safety Controls

Obtain authorisation before overriding or disabling safety controls



- · I understand and use safety-critical equipment and procedures which apply to my task
- · I obtain authorisation before:
- disabling or overriding safety equipment
- deviating from procedures
- crossing a barrier

Confined Space

Obtain authorisation before entering a confined space



- I confirm energy sources are isolated
- · I confirm the atmosphere has been tested and is monitored
- . I check and use my breathing apparatus when required
- · I confirm there is an attendant standing by
- · I confirm a rescue plan is in place
- . I obtain authorisation to enter

Driving

Follow safe driving rules



- I always wear a seatbelt
- I do not exceed the speed limit, and reduce my speed for road conditions
- · I do not use phones or operate devices while driving
- · I am fit, rested and fully alert while driving
- · I follow journey management requirements

Energy Isolation

Verify isolation and zero energy before work begins



- I have identified all energy sources
- · I confirm that hazardous energy sources have been isolated, locked, and tagged
- · I have checked there is zero energy and tested for residual or stored energy

Hot Work

Control flammables and ignition sources



- · I identify and control ignition sources
- · Before starting any hot work:
- I confirm flammable material has been removed or isolated
- I obtain authorisation
- . Before starting hot work in a hazardous area I confirm:
- a gas test has been completed
- gas will be monitored continually

Line of Fire

Keep yourself and others out of the line of fire



- · I position myself to avoid:
- moving objects
- vehicles
- pressure releases - dropped objects
- · I establish and obey barriers and exclusion zones
- I take action to secure loose objects. and report potential dropped objects

Safe Mechanical Lifting

Plan lifting operations and control the area



- . I confirm that the equipment and load have been inspected and are fit for purpose
- . I only operate equipment that I am qualified to use
- · I establish and obey barriers and exclusion zones • I never walk under a suspended load

Work Authorisation

Work with a valid permit when required



- · I have confirmed if
- a permit is required . I am authorised to perform the work
- . Lunderstand the permit
- . I have confirmed that hazards are controlled and it is safe to start
- · I stop and reassess if conditions change

Working at Height

Protect yourself against a fall when working at height



- I inspect my fall protection equipment before use
- · I secure tools and work materials to prevent dropped objects
- . I tie off 100% to approved anchor points while outside a protected area

POST Philosophy

POST outlines the basic responsibilities of Owners, Supervisors and Workers. There is also an expectation that Site Operators / Retailers understand these responsibilities.

WHAT WE REQUIRE OWNER/GENERAL CONTRACTOR TO DO:

- ✓ Provide Project Clearance Certificate
- ✓ Ensure that the required activities are effectively occurring such as kick-off meetings, safe work permits, safety meetings, site conditions, PPE
- ✓ Test for compliance to required BBS activity
- Review JSA quality and test through both informal and formal planned job analysis to ensure that job safety analyses are being effectively done and executed against
- ✓ Do last minute risk assessment testing to get a feel for the level of BBS proficiency at the site
- ✓ Do safety assessments to measure the proficiency of the contractor and how he manages safety overall
- ✓ Provide feedback to the contractor on what we see and learn (on site visits, in contractor safety forums and in one-on-one risk mitigation plans discussions)
- ✓ Help guide and support our contractor community in learning and continuously improving our mutual approach to safety management



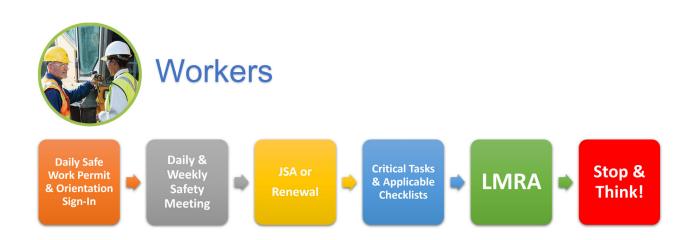
WHAT WE REQUIRE THE SUPERVISOR TO DO:

- Enforce and reinforce safety rules and the use of PPE
- ✓ Execute the required safety procedures expected
- ✓ Orientation of both workers and visitors to the site (kick-off meeting, Daily Safe
 Work Permits, emergency procedures, safety meetings)
- ✓ Actively participate in your Behaviour Based Safety activity
- ✓ Do your last minute risk assessment testing, review and approve job safety analyses and do your planned job observations
- ✓ Learn and improve the way work gets done
- ✓ Apply the "learnings" developed towards improving the safe behaviour of workers and improving the manner in which work is done at the site



WHAT WE REQUIRE THE WORKER TO DO:

- ✓ Actively participate in Behaviour Based Safety activities
- ✓ Get in the habit of doing Last Minute Risk Assessments before every routine activity (Stop and Think before you act)
- ✓ Understand, get involved in and use the Job Safety Analysis process as a means of formally planning how you are going to manage the safe execution of your work
- ✓ Follow site rules and procedures designed to keep all people on and around the site safe



FIT FOR DUTY

Fit for duty means that an individual is in a physical, mental, and emotional state which enables the employee to perform the essential tasks of his or her work assignment in a manner which does NOT threaten the safety or health of oneself, co-workers, property, or the public at large.

It is the duty of both the supervisor and the worker to ensure the worker is fit for duty.

There are many sources or causes of workplace impairment including alcohol, prescription and non-prescription drug use, fatigue or stress.

Workers that are unable or unfit to perform their work safely may introduce a hazard to the workplace as well as to themselves or to their co-workers.

Workers must notify their supervisor if they feel they, or a co-worker, are not fit for duty and could pose a hazard to themselves or others.

Please refer to your employer's health and safety policy. It may be reasonable for the company to address impairment in the workplace in the policy. This policy may include the risks identified for the company and what measures are taken to eliminate or control these risks.

Many employers have also developed a workplace drug and alcohol policy, where appropriate.

There are also training programs available for employees to help them identify impairment in the workplace. The training may also include guidelines and checklists to assist personnel in evaluating workers for impairment.

When completing the Daily Safe Work Permit, the supervisor must confirm that all workers are fit for duty. Workers also confirm they are fit for duty by signing the Daily Safe Work Permit.

Last Minute Risk Assessment Testing also includes fit for duty criteria for supervisors while performing these assessments (see the LMRA Testing section for more info).



SMOKING IN DESIGATED AREAS

(includes tobacco, vaping, e-cigarettes)

If smoking is permitted onsite, it must be in a clearly designated smoking area. The designated smoking area must be at least 5 metres away from any flammable or combustible materials and doorways. The smoking area must have a non-combustible, covered receptacle for the disposal of waste smoking materials (e.g. cigarette butts).

Workers must abide by their company's policy for smoking on worksites.

Workers must follow all local or national fire code, laws, and regulations including any guidance for safe distancing from fuel transfer and or storage areas.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

At a minimum, <u>all</u> people on site must wear personal protective equipment (PPE) as required by the local OH&S regulations.

Basic PPE

- ✓ CSA approved Hard Hat (appropriate Type I or Type II) TYPE I Hard Hat: Tested for Top impact and penetration. TYPE II Hard Hat: Tested for Top and Lateral impact and penetration
- ✓ CSA approved safety glasses
- ✓ Visi-Vest fitted or tear-away
- ✓ CSA approved boots above the ankle
- ✓ Gloves on your person fit for use
- ✓ Long pants
- ✓ Shirts with sleeves (short sleeves acceptable)



Supplemental PPE

Additionally, the work activity may require the wearing of the following PPE. The contractor must ensure that the necessary PPE is on site and the workers are trained in its use.

- √ Face Protection
- ✓ Respiratory Equipment
- ✓ Hearing Protection
- ✓ Fall Protection Gear
- ✓ Fire Retardant Clothing
- ✓ Other



Work at heights

All work over 1.8 m (6 feet) *feet to ground* is to be considered "work at height" as governed by all relevant regulations

POST WEBSITE & ONLINE COMMUNITY

The POST website encourages workers and contractors to visit often for the latest industry updates and safety bulletins.

The site is a complete resource center for online safety training, a searchable contractor database of POST certified companies and POST documents and forms all to help your company maintain a safe work environment.

For more information visit www.POSTtraining.ca



POST - BEHAVIOR BASED SAFETY ORIENTATION

POST ONLINE COURSE

The POST online course is available at www.POSTtraining.ca

- ✓ Each year the worker must receive a behavior based safety orientation.
- ✓ Once orientated, the worker will receive a hard hat decal and wallet card of proof of orientation
- ✓ The worker will/may be asked questions to validate orientation when entering a new job site



Validation Questions

- ✓ What is a JSA (job safety analysis)?
- ✓ What is LMRA (last minute risk assessment)?
- ✓ What does Behavior Based Safety mean to you?

ONSITE ORIENTATION

Under circumstances where the worker is unable to complete the POST online orientation course, the Supervisor on site may perform onsite orientation with the worker using this guide as a reference.

The onsite orientation the worker receives is only valid for the duration the worker is on the specific site they received orientation for.

Onsite orientation is not intended to replace the online orientation course and be used for special circumstances only.

Companies can use the log on the next page to log workers who received onsite orientation.

POST – WORKER ONSITE ORIENTATION LOG *Refer to onsite orientation guidelines on page 12*



DATE	WORKER NAME	SITE LOCATION	SUPERVISOR NAME

This is a fillable pdf form