

	LIFE SAVING RULES ALL-HSE-PGM-131	Retention Code: CG01-CA
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1.0 Scope

This Program is applicable to ConocoPhillips Canada employees and fulltime equivalent staff.

2.0 Roles and Responsibilities

2.1. CPC Management

- Ensure process is followed.
- Provide resources.
- Seek to learn and understand the context of the event from the workers perspective beginning at the start of the activity rather than looking retrospectively from the event.
- Review supervisor's recommendations for consistency and fairness.

2.2. CPC Supervisors

- Initiate process.
- Seek to learn and understand the context of the event from the workers perspective beginning at the start of the activity rather than looking retrospectively from the event.
- Facilitate use of Responsibility Flowchart and develop recommendation(s).
- Present recommendation(s) to management.
- Ensuring accuracy of data/information.
- Carryout approved recommendation(s).
- Ensure communication is made with contractor leadership.
- Ensure the process is documented and stored appropriately.

2.3. HSE Operations Specialists

- Assist supervisor with consistency and fairness of the review.
- Support supervisor with working through the Responsibility Flowchart.
- Provide input to supervisor for recommendation.
- Participate in management review of recommendation.
- Complete investigation as required, including capture of initial event data (get all facts).

2.4. Human Resources

- Ensure appropriate use of the disciplinary policy.
- Ensure consistent use of Responsibility Flowchart.
- Collect and store information in personal files if required.

3.0 Life Saving Rules Overview

The Life Saving Rules are a set of companywide rules that focus on eight high potential hazard activities in our industry which, based on analysis, have resulted in hundreds of serious and fatal injuries. Most serious injuries occur when something goes wrong in at least one of these eight areas.

The Life Saving Rules predominantly address personal safety hazards; however, some of these rules also specifically support our increased focus on process safety. These rules also help to strengthen our safety culture, and communicate our expectations to employees, contractors and partners.

While the Life Saving Rules are vital to a worker's last line of defense, with each rule a potential barrier to a fatal or serious injury, they are only one component of the overall Health, Safety and Environment Management System (HSEMS). We have other key barriers in place that support our commitment to safety and facilitate effective implementation of our Life Saving Rules. These associated barriers include the following:

- We require compliance with our substance abuse and other Fit for Duty policies.
- We conduct pre-job risk assessment and safety discussions that are appropriate for the level of risk, including understanding and mitigating Line of Fire hazards.
- We train personnel to ensure that they are competent for the work they perform.
- We provide personal protective equipment (PPE) and verify that it is worn in accordance with the requirements identified by the risk assessment and worksite policies.
- We have a stop work policy in place, which empowers our staff to intervene when unsafe acts, conditions or events are observed. This includes taking 'time out' when there is a change in work conditions to reassess the risks and ensure work can continue safely.
- We promote peer-to-peer intervention and worksite monitoring, assurance and verification to encourage compliance with the eight ConocoPhillips Life Saving Rules.

4.0 Life Saving Rules Verification Process

To support the implementation of the Life Saving Rules within Canada, field verification checklists have been developed to ensure a high level of confidence that our work is always being planned and executed with safety in mind. The verification process gives us an opportunity to coach, learn and continually improve our processes and performance. The checklists directly align with the Life Saving Rules minimum requirements and are intended to encourage and support engagement from both leadership and field personnel.

4.1. Verification Completion

Approved assessors will be identified within each business unit and, once assessed, will be deemed competent in the verification and assessment process within OE. Only competent assessors will complete the field verification process using the approved checklists.

Section 7.0 contains a suggested process flow for the field verification process and guidance on each Life Saving Rule, including:

- The field verification question included on the checklist,
- The associated Life Saving Rule Minimum Requirement that the question maps to,
- Assessor guidance, and
- Proposed actions.

The assessor guidance provides additional detail to help the assessor perform the verification in a consistent manner. When it is determined that one of the verification questions has not been adequately addressed, the proposed actions will guide the assessor in determining the correct action to take.

Typically, identified gaps will be addressed via coaching, mentoring and correction on site at the time of the assessment. These corrections will be noted on the assessment form and tracked to identify possible broader opportunities for learning.

However if the condition found is immediately dangerous to life or health (IDLH), or there is no evidence that a minimum requirement has been addressed, these events must be responded to with an immediate stoppage of work and the initiation of an investigation in accordance with the Incident Investigation Procedure (CPC-ALL-HSE-PRC-437) and the following section.

5.0 Life Saving Rules Event Investigation Process

When a Life Saving Rules event is identified through the verification process or through a near miss or incident, the investigation process that follows will be utilized to ensure that a fair and consistent approach is being applied throughout ConocoPhillips Canada.

All Life Saving Rule investigations will be entered into Impact to ensure corrective actions are assigned and tracked to closure.

5.1 Investigating Life Saving Rules Events

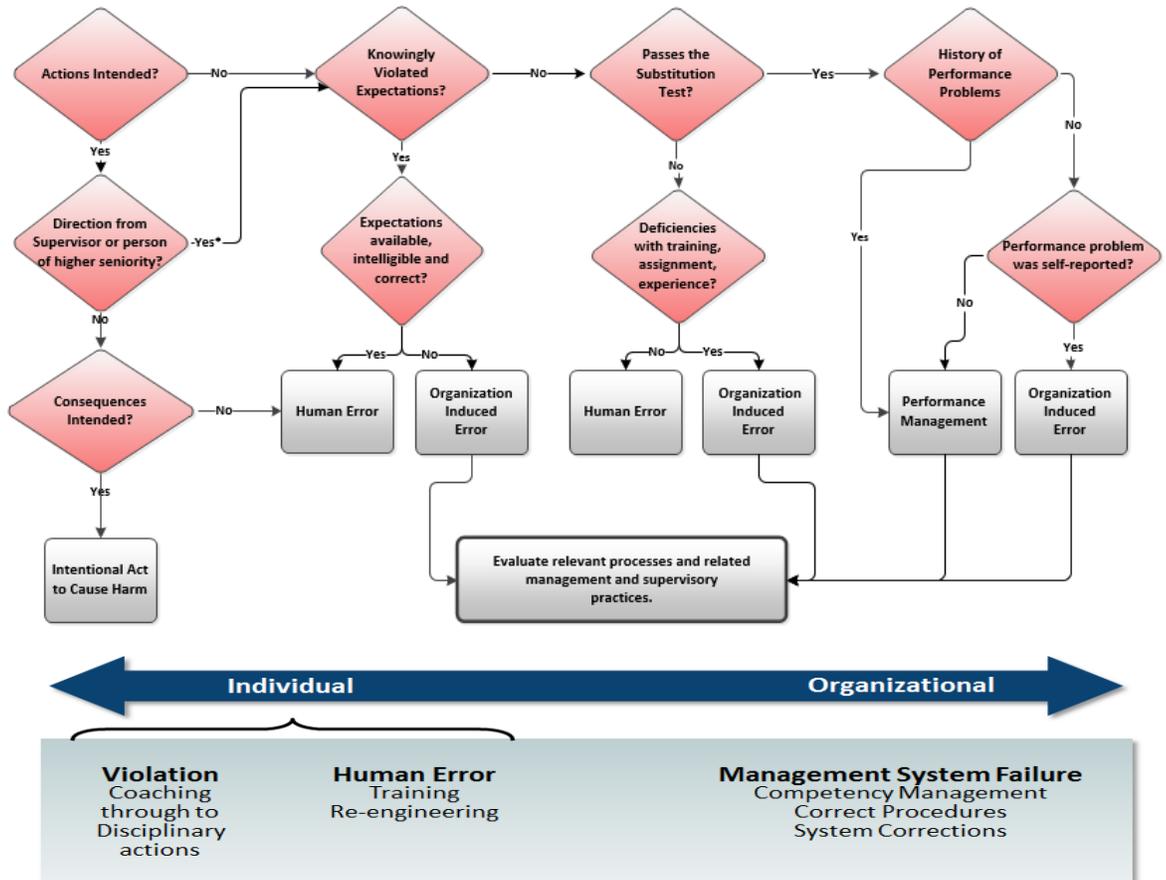
The intention of this procedure is to guide leadership in the understanding of the context of the Life Saving Rule event including the role the workers played. Human error is not the cause of failure, but is a symptom of deeper issues in the involved systems and should be considered the starting point of our investigations rather than taking a retrospective point of view or hind-site.

By utilizing this procedure, ConocoPhillips is able to understand the context of an event from the workers perspective and identify where things went wrong and what steps need to be taken to add defenses to prevent future events. Once facts and timelines are gathered from assessments and all interviews are completed, the results will be used to understand the context of the event and then applied to the Responsibility Flowchart to determine if the situation occurred due to Knowledge, Rule or Skill-based human errors or organizational process weaknesses.

The Supervisor and HSE representative will review the Responsibility Flowchart to develop recommendations for presentation to the appropriate manager, supervisor and HSE leadership. The manager, supervisor, and HSE Leadership will then review the recommendations resulting from the flowchart and determine the path forward. Human Resources (HR) must be involved when the application of discipline involves employees.

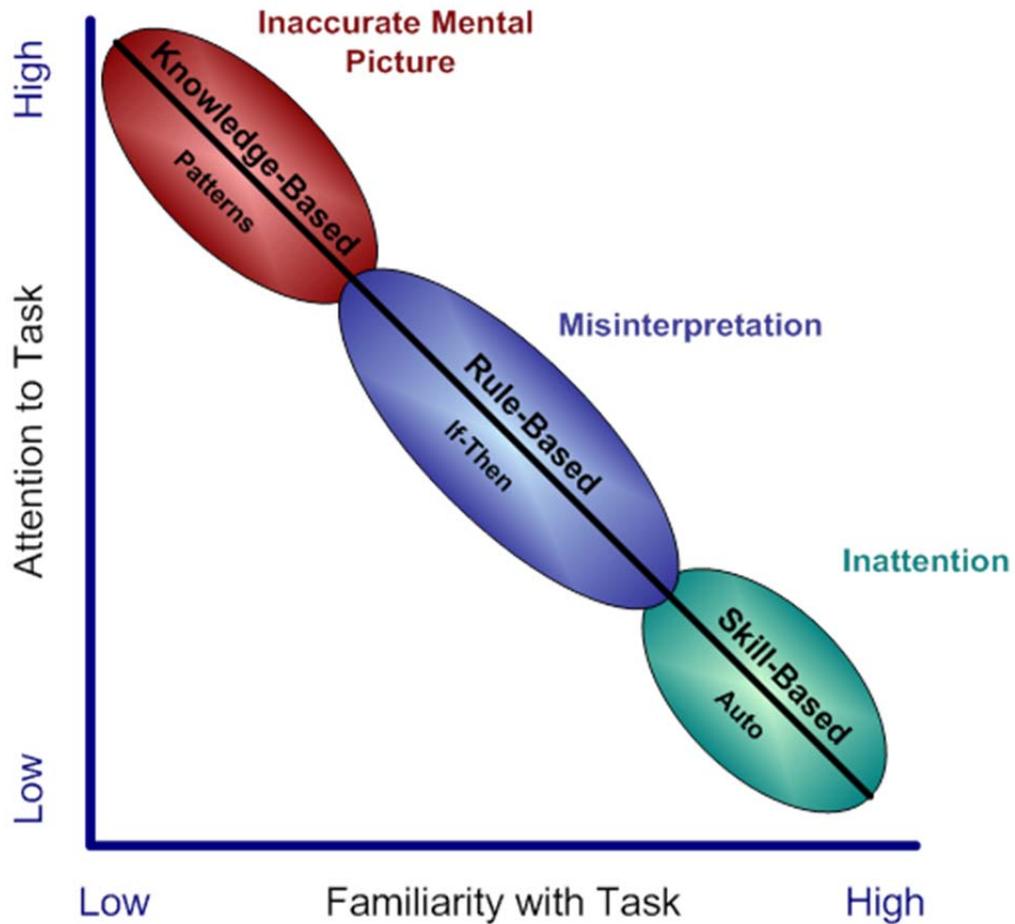
5.2. Responsibility Flowchart

Please see Section 8.0 for additional guidance on using the Responsibility Flowchart.



5.3. Worker Performance Modes

During the investigation, it is important and useful to have an understanding of the context surrounding the event. Understanding the worker performance modes (conscious and automatic behaviors), will help determine what measures are appropriate for addressing individual errors (Skill based, Rule based, or Knowledge based errors).



5.3.1. Knowledge-based Errors

Knowledge-based errors are created by a worker in response to an unfamiliar situation. Individuals, who operate at the knowledge-based level, do not have stored rules or existing knowledge from previous experience to rely on and are relying on intelligent problem solving to work through the task (significant conscious thought is needed). Knowledge-based errors usually occur as a result of incorrect problem solving, work approach, or inaccurate understanding of the situation.

Reducing knowledge based errors requires an analysis of what went wrong and providing adequate training and onsite coaching to the worker in knowledge-based mode. Peer-evaluations are also effective in this instance.

5.3.2. Rule-based Errors

Rule-based errors are created when the worker is unable to recognize or understand the situation or circumstance because of lack of experience. Individuals working at the rule-based level are familiar with the task but do not have the depth of experience needed to perform the task without relying on rules/procedures given to them when trained in the work (significant conscious thought is needed).

Rule-based errors may be corrected through retraining on the specific task. As well, rule-based errors can be proactively caught or mitigated by workers exhibiting a questioning attitude and by calling a time out, or by stopping work when they are unsure. Peer-evaluations are also effective in this instance.

Some recommended actions to reduce Rule based errors:

- Eliminate procedure inconsistencies.
- Clearly define key decision points in a procedure.
- Simplify procedures.
- Train individuals to skill-based mode.
- Eliminate drawing and technical manual errors.
- Practice on transitions between procedures.
- Eliminate use of “rule of thumb”.

5.3.3. Skill-based Errors

Individuals working at the skill-based level are those who are extremely experienced with the task, working in a familiar situation, and able to automatically react to situations because they are working off memory (significant conscious thought is not needed). Skill-based errors usually occur when the work plan was typically adequate, but the action(s) failed to go as planned.

Some recommended actions to reduce Skill based errors:

- Simple job aids and reminders
- Identify the critical steps.
- Increase supervision.
- Improve planning.
- Improve personal experience with the task.
- Eliminate unnecessary time pressure through scheduling.
- Rotate individuals.
- Practice using skills to maintain job proficiency.
- Promote the value of peer checking.

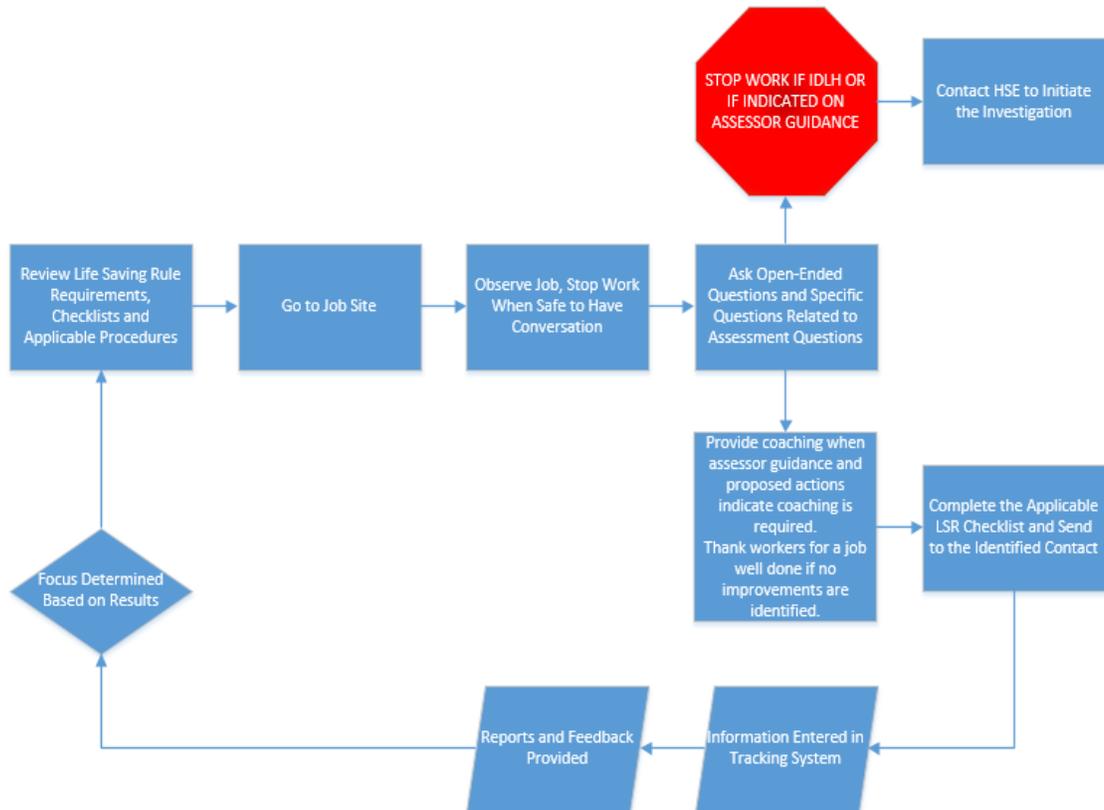
Note: *The above suggested corrective actions for the three performance modes are merely suggestions and are not all inclusive.*

6.0 Communication

Results of investigations, through investigation reports and learning processes (e.g., HSE Bulletins, High Learning Value Event report) must be communicated in accordance with the Incident Investigation Procedure (CPC-ALL-HSE-PRC-437).

7.0 Life Saving Rules Assessor Guidance

7.1. Field Verification Process Flow



7.2. Open-Ended Questions (Examples)

- Can you tell me how you do this task? What pre-job planning happens for this task? (Workers should be able to explain their preparation process for the job (including hazard assessment), precautions taken, technical specifications, etc.)
- Have you recently reviewed the procedures for this job? Do you have them available on site? Can you apply the procedure as written? Is there anything lacking or unclear in the procedure?
- Are there any expectations provided to you by leadership for performing this task? (CPC Leadership and Company Leadership if this is a contractor). If yes, can you tell me what they are?
- Do you feel you are able to comfortably perform the task?
- What could go wrong while performing this task? (Have there been any incidents with this type of job previously, are workers in this area aware of them and have the learnings been addressed?)

7.3. Work Permits

Work with a valid work permit when required.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Has a written scope of work (SOW) that identifies key activities and the work location been defined and communicated to all persons involved in the work?	<p>The scope of work has been well defined for the specific work location.</p> <p>The scope of work, permit conditions, and risk assessment have been communicated to all persons involved prior to the start of work as well as to those persons who come to the work site after work has started.</p>		Coaching and correction on-site - initiate discussion with all impacted workers to clarify SOW, hazards and mitigations. Confirm individual understanding of the PJHA and expectations.
Have all those involved in the SOW been proven competent in their roles and do they understand their responsibilities?	All those who are involved in the work permitting process have been trained and proven competent in their roles and responsibilities	There should be evidence that the appropriate training for the task was reviewed during the development of the permit	Potential work stoppage and investigation required if individuals found not to be trained / competent
Have the permit issuer and responsible person identified if any simultaneous operations exist? Are they identified on the permit?	The permit issuer and responsible persons have identified any interactions with other work permits, work tasks, and/or simultaneous operations and these are cross-referenced on the permit		Coaching and correction on-site.
Have all personnel on-site involved in the SOW signed the permit?			Coaching and correction on-site - Work stoppage to ensure all persons understand the content of the permit and accept the conditions identified prior to continuing work.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Is the responsible person who has signed the permit physically on-site supervising the workforce?	Responsible persons have validated hazards mitigation and permit requirements at the work site prior to start of work All required signatures for the permit have been obtained from the designated responsible person	See PJHA SOP for additional guidance - Responsible Person will be the PJHA Receiver / Work Supervisor - Look for evidence that the responsible person has reviewed and validated the permit SOW hazards and mitigations	Coaching and correction with responsible person (on or off site)
Can all personnel involved in the SOW identify job specific hazards and understand the necessary precautions to prevent incidents?	All hazards, including Line of Fire, have been identified and assessed; risks have been mitigated; and the necessary controls have been put in place.		Work stoppage until confident hazards are clearly understood and mitigations are in place. Coaching.
Do all personnel understand their responsibility if there is a change to the SOW or if they recognize a new or changing hazard during permitted work?	Any change in the scope of work is accounted for by stopping the work, reassessing the risk, and reviewing/revising the permit, as appropriate. Changing hazards have been considered, and workers have been trained to recognize changes.	Look for changes in activity against defined SOW or new hazards which may have appeared since permit issue - work stoppage until all hazards identified, mitigated and communicated to impacted parties.	Work stoppage until confident hazards are clearly understood and mitigations are in place. Coaching.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Have the required atmospheric testing, isolations and other hazards been identified, documented and addressed?	<p>All hazards, including Line of Fire, have been identified and assessed; risks have been mitigated; and the necessary controls have been put in place.</p> <p>Changing hazards have been considered, and workers have been trained to recognize changes.</p> <p>Responsible persons have verified the integrity of any isolation required for the work to proceed.</p> <p>Required atmospheric testing has been completed; results have been evaluated and documented; and repeat or continuous testing requirements are part of the permit conditions</p>	The required atmospheric testing has been completed; results have been evaluated and documented; and repeat or continuous testing requirements are part of the permit conditions.	<p>Work stoppage until confident hazards are clearly understood and mitigations are in place.</p> <p>Potential investigation depending on the deficiency.</p>

If this is a continuation of an original permit:

Have handover discussions been conducted and documented?	For ongoing work, handover discussions are conducted between responsible persons of each shift, and the work permit is revalidated, as appropriate.	Looking for evidence of the handover discussion on the permit.	Work stoppage until corrected. Coaching.
Has the work permit been re-validated and all copies updated?	For ongoing work, handover discussions are conducted between responsible persons of each shift, and the work permit is revalidated, as appropriate.	Looking for evidence of re-validation and consistent changes made on all copies of the permit.	Work stoppage until corrected. Coaching.

7.4. Process, Mechanical and Electrical Isolations

Verify isolation before work begins.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Has a specific isolation scheme been developed and approved by a designated competent person?	A designated competent person has risk assessed and authorized the isolation scheme, the method of removing the stored energy and/or hazardous materials, and the reinstatement of the stored energy and/or hazardous materials	Check competency records.	Coaching and correction on site. Work stoppage until properly mitigated. Investigation required if a source of energy is found not to have been effectively isolated.
Are the personnel who are performing the isolation work (removing stored energy or reinstating energy) competent and authorized to do so?	Personnel, who perform isolation work, remove stored energy and/or hazardous materials, and reinstate the stored energy and/or hazardous materials are competent and are authorized to do so.	Check competency records.	Coaching and correction on site. Work stoppage until properly mitigated. Investigation.
Are all required authorized permits and documents showing isolation arrangements available and have the isolation arrangements been communicated to affected personnel?	Any required authorized permits and documents showing isolation arrangements and/or locations have been made available at the work site and have been communicated to affected personnel.		Coaching and correction on site. Work stoppage until properly mitigated.
Are all isolation points clearly identified with approved locks, disabling devices and signed tags?	All isolation points are clearly identified with approved locks, disabling devices, and tags as specified on the required authorized permits, Isolation Certificates, and/or Lockout/Tagout (LOTO) documents.		Coaching and correction on site. Work stoppage until properly mitigated. Investigation required if a source of energy is found not to have been effectively isolated.
Have all the isolation locks and/or keys been logged in appropriate registers and are they strictly controlled?	Isolation locks and keys have been logged in appropriate registers and remain strictly controlled.		Coaching and correction on site.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Have a designated competent person and the responsible person for work execution both verified at the site that all physical isolations and controls are in place prior to work authorization?	A designated competent person and the responsible person(s) for work execution have verified at the site that all physical isolations and controls are in place.	Check records.	Coaching and correction on site. Work stoppage until properly mitigated. Investigation.
Do personnel understand that changes in conditions or work scope require a revalidation and re-verification of the isolation and/or de-isolation scheme before continuing with the work?	Changes in conditions or work scope outside those specified in the authorized permits, Isolation Certificates, and/or LOTO documents require a revalidation and re-verification of the isolation/de-isolation scheme before continuing with the work.	Look for changes in scope or hazards which may have occurred after issue of permit or development of LOTO.	Coaching and correction on site. Work stoppage until properly mitigated.

For Process / Mechanical Isolations:

Before start of work (i.e. first line break), was a test conducted to confirm the absence of stored energy and/or hazardous material?	Before start of work (e.g. first line break), a test has been conducted to confirm the absence of stored energy and/or hazardous material Note: If this is not possible, do not start work. Always stay out of the Line of Fire.	Look for documentation of test.	Work stoppage. Coaching and Correction. Investigation required if there is no evidence of verification of zero energy state.
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For Electrical Isolations:

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
<p>Before working on any electrical equipment, was a metered test conducted to validate the absence of voltage?</p>	<p>A test to validate the absence of voltage is conducted before working on any electrical equipment.</p>	<p>See the definition of “Electrical Work” in the LOTO Procedure for work activities to which this requirement applies.</p> <p>There must be sufficient documented evidence to confirm that an initial metered test was conducted prior to work</p> <p>Isolations for electrical work should include the testing of the control logic, including any permissive’s, to ensure that a change in status will not inadvertently result in a restoration of voltage to the isolated equipment</p>	<p>Work stoppage. Investigation required if there is no evidence that a metered test was conducted to confirm the absence of voltage prior to making contact with potentially energized electrical components</p>
<p>If there was a change in conditions, or after work breaks, was a metered test for revalidation of the absence of voltage conducted and documented?</p>	<p>After a change in conditions or after any worker break, a retest to revalidate the absence of voltage is conducted</p>	<p>See the definition of “Work Break” in the LOTO Procedure.</p> <p>In situations where care and control has not been maintained, or when changing conditions on site or work scope warrant a re-test, there must be sufficient evidence (documented and/or verbal) to confirm that a metered re-test for absence of voltage was conducted prior to re-commencing work.</p>	<p>Work stoppage. Investigation required if there is no evidence that a metered re-test was conducted to confirm the absence of voltage when care and control of the isolation / work site has not been continuously maintained or when changes on site or in the scope of work warrant a re-test</p>
<p>For all energized electrical work, is there a work permit and Energized Electrical Work Permit, with a detailed procedure for the activity, available on site?</p>	<p>Working on 'live' systems is not permitted without written permission from Senior Line Management, as defined by local rules.</p>	<p>See Electrical Work SOP for guidance on documentation, qualifications and approvals required. Review procedure and authorization.</p>	<p>Work stoppage. Coaching and correction. Investigation required if all required work plans, permits, or persons with required qualifications are not available at the work location.</p>

7.5. Bypassing, Disabling or Inhibiting Safety Devices or Equipment

Obtain authorization before bypassing, disabling, or inhibiting a safety protection device or equipment.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Has a competent person fully assessed the risk of bypassing, disabling or inhibiting safety protection devices or equipment and is the assessment documented?	A competent person fully understands and has risk assessed the implications of bypassing, disabling, or inhibiting safety protection devices or equipment.	Bypassing devices should be the action of last resort. Challenge whether other options were first considered and whether risks are well understood. Competency records should confirm that the responsible person(s) are competent to perform and manage bypasses.	Coaching and correction. Stop the work if bypass condition is deemed unsafe or inadequately assessed. Investigation required if worker is found not to be competent.
Has the risk assessment considered the combined risk of other bypassed, inhibited or defeated safety protection devices or equipment?	Where appropriate, the responsible persons conducting the risk assessment have considered the total combined risk of other bypassed, inhibited, or defeated safety protection devices or equipment.	Review all bypasses in place. Parameters of bypassed equipment should be monitored. Sufficient checks to mitigate the impact of bypassed devices must be in place. If more than one safety device is bypassed in relation to the task at hand, the cumulative risk must be assessed.	Work stoppage and correction.
Has the appropriate level of supervision approved the assessment and provided authorization to proceed?	The appropriate level of supervision/management has provided written authorization based on the assessed risk level.	Ensure sign-offs comply with Safety and Emergency bypass authorization requirements.	Work stoppage until all approvals are in place. Coaching and correction.
Is the worker completing the bypass trained on the bypass procedure and do they understand all the risks and necessary authorizations prior to implementing the bypass?	Operating personnel are trained to easily locate and identify the safety protection devices or equipment that are bypassed, disabled or inhibited.	Operating personnel can demonstrate knowledge of where the bypasses are installed and how the action was achieved.	Coaching and correction. Stop the work if bypass condition is deemed unsafe or inadequately assessed. Investigation required if worker is found not to be competent.
Does a log or register of all bypassed, disabled or inhibited safety protection devices or equipment exist and is it current?	For each Facility (or group of smaller Facilities) a log/register of all bypassed, disabled, or inhibited safety protection devices or equipment has been created and is regularly updated.	Review register or bypass log to ensure it contains a record of all bypasses in place.	Coaching and correction.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Is there a shift communication procedure in place to identify devices or equipment that are bypassed, disabled or inhibited at handover?	Routine communication channels have been put in place to identify which safety protection devices or equipment are bypassed, disabled, or inhibited, including communication at each shift and crew handover.	Review operator logs, as well as alarm disable, fetch, and bypass reports to ensure they are current and have been acknowledged (signed) as required.	Coaching and correction.
Have the Management of Change (MOC) and authorization for long term bypass or out of service requirements have been met?	The Management of Change and authorization requirements have been met.	Risk assessments. MOC, authorizations as required per Bypassing Safety Shutdown Devices must be in place.	Coaching and correction.
Is there a systematic management review process in place for the log or register of all bypasses and/or inhibits?	A routine management review process has been put in place for the log/register of all bypasses/inhibits.	Reviews must be conducted per Bypassing Safety Shutdown Devices procedure.	Coaching and correction.
Where applicable, have all Safety Instrumented System (SIS) bypasses or inhibits been authorized in writing by a competent person?	Only designated competent person(s) with the appropriate written approval have the authorization to bypass, disable, or inhibit a safety protection device or piece of equipment via the Safety Instrumented System (computer/log system).	Competency records should confirm that the responsible person(s) are competent to perform and manage bypasses. Written authorizations and forms should be reviewed.	Work stoppage, coaching and correction.

7.6. Working at Height

Protect yourself against a fall when working at heights.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Have all options to eliminate the need to work at height been considered?	Options to eliminate the need to work at height have been assessed.		Coaching and correction on-site
Have all personnel working at height been trained to recognize the hazards of working at height and how to use the fall protection equipment associated with this task?	Personnel working at height are trained to recognize hazards and to use applicable fall protection equipment.	Users of fall arrest equipment should be able to provide evidence of approved training (typically from a third party vendor)	Work stoppage and investigation required if individuals found not to be trained / competent
Have all fixed or mobile work platforms been equipped with handrails, mid-rails and toe boards, are all platform openings suitably guarded and has a competent person approved the use of these platforms?	Where practical, a fixed or mobile work platform with handrails, mid-rails, and toe boards is used. A competent person must approve these platforms. • Work surfaces, including wall and deck openings on work platforms, are properly protected to prevent falls.		Work stoppage until deficiencies have been addressed. Coaching and correction on-site. May trigger investigation.
Has an approved anchor point(s), preferably above the worker's head, been identified for continuous tie off?	A responsible person has identified and provided sufficiently rated anchor point(s) for continuous tie off, preferably above the worker's head	See SOP for clear direction on pipe size, angle iron use etc.	Work stoppage, coaching and correction on site. May trigger investigation if not evident that workers understand the requirement.
Has the required clearance distance been calculated for effective deployment of fall arrest equipment if needed?		Common finding - have a checklist with calculations for how to set up fall arrest configuration for effective deployment	Not LSR - coaching and correction on site using sheet from SOP. May wish to investigate to determine SOP effectiveness / application
Are full body harnesses with at least one D-ring attachment point being used?	A full body harness with a D-ring attachment point is used.		Work stoppage until correct equipment available. Coach and correct on site. May trigger investigation

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Are synthetic shock-absorbing lanyards with dual action self-locking snap hooks at each connection being used?	Synthetic lanyards with shock absorbers or fall limiter devices, all equipped with dual action self-locking snap hooks at each connection, are used.		Work stoppage until correct equipment available. May trigger investigation
Has a visual inspection of the fall arrest equipment and system been completed prior to use and has any equipment found to be damaged been taken out of service?	Visual inspection of the fall arrest equipment and system is completed before each use, and any equipment that is found to be damaged or has been activated is taken out of service.	Annual requirement for inspection of most components and pre-use inspection required.	Work stoppage, coaching and correction on site. May trigger investigation
Are a rescue plan and the appropriate equipment in place to minimize suspension trauma in the event of a fall?	A rescue plan and appropriate equipment are in place to minimize suspension trauma in the event of a fall.		Work stoppage, coaching and correction on site. May trigger investigation
Has all scaffolding been erected, modified, dismantled and inspected by a certified and competent person?	Only trained personnel erect, modify, and dismantle scaffolding. Only competent person(s) inspect scaffolding.	Note: differentiate between 'stick built' and use of pre-built scaffolding.	Work stoppage until all scaffolding has been inspected. Investigation required
Are all tools and equipment used while working at height properly secured from falling?	Tools and equipment used while working at height are properly secured from falling.		Coaching and correction on-site
Are suitable barriers in place to protect others from falling objects or from walking into the "Line of Fire"?	Where work at height could interact with persons working or passing below, suitable barriers are in place to prevent injury from falling objects and walking into potential Line of Fire hazards.		Coaching and correction on-site

7.7. Lifting Operations

Follow safe lifting operations and do not walk under a suspended load.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Has the proposed lift been fully evaluated by a competent person and are the methods and equipment appropriate for the task?	A competent person has assessed the lift method and equipment		Work stoppage until assessment completed. May trigger investigation if individuals found not to be trained or competent.
Does the hazard assessment for the task address changing ambient conditions (i.e. severe weather, wind, fading light) that might affect the ability to conduct the lift safely?	Changing conditions (e.g., weather, winds) have been discussed and prepared for.		Coaching and correction on-site
If the lift has been identified as a "Critical Lift," has a written plan for conducting the lift, complete with lift calculations, been developed, approved by the appropriate level of supervision and is it available for review?	Critical lifts have undergone a risk assessment, and a Lift Plan has been approved.		Work stoppage until assessment completed. May trigger investigation if individuals found not to be trained or competent.
Are all operators of mobile lifting equipment able to provide proof of certification, training or demonstrated competency for the equipment they are operating?	Operators of powered lifting equipment and lifting devices are trained and certified for that equipment.		Work stoppage and investigation required if individuals found not to be trained / competent
Has all lifting equipment been inspected and certified for use within the last 12 months or as required by the regulator having jurisdiction?	Lifting devices and equipment have been certified for use within the last 12 months (at a minimum) or per local regulatory requirements, whichever is more strict.	Each of the provinces has slightly different requirements	Work stoppage until proof of certification can be verified. May trigger investigation
Have all rigging, lifting devices and equipment been installed and visually inspected by a competent person(s) prior to the start of the lifting operation?	A competent person has conducted visual inspection of lifting devices and equipment, including rigging of the load. Appropriately trained and qualified persons supervise rigging.		Work stoppage and investigation required if individuals found not to be trained / competent

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Are all rigging, lifting devices and equipment marked with clear, legible load ratings?	Load limits are clearly and legibly marked on all lifting devices and equipment.		Work stoppage until fitness for service can be verified. May trigger investigation
Has the load weight been verified and communicated to riggers and equipment operators to ensure capacities of the lifting equipment will not be exceeded?	The load weight has been verified to not exceed dynamic and/or static capacities of the lifting equipment.		Work stoppage until assessment completed. May trigger investigation.
Have all pre-use inspections of safety devices been completed and are all devices fully operational?	Prior to lifting, the operator has confirmed that safety devices installed on lifting equipment are operational.	Each of the provinces has slightly different requirements	Work stoppage until fitness for service can be verified. May trigger investigation if devices found not to be functional or evidence of testing (i.e log book) not readily available.
Is an appropriate method (i.e. tag lines, poles) being used to control the load while suspended and are the individuals guiding the load able to stay out of the "Line of Fire"?	Tag lines, poles, or other appropriate means are available as the primary methods to control lifted loads. The person(s) guiding the load into place understand Line of Fire hazards and have an identified means of escape, should the load move.		Work stoppage. Coaching and correction on-site
Has a competent signalperson been designated and has an effective means of communication between the signalperson and equipment operator been established?	Clear communication (including hand signals) is established and can be maintained by all involved parties during the lifting operations. For blind lifts, a competent spotter/signalman uses radio communication and direct visual contact with the lift operator.		Work stoppage. Coaching and correction on-site

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Are suitable barriers in place to protect others from falling objects or from walking into the "Line of Fire"?	For Lifting Operations to commence, barriers have been put in place, including preventing anyone from walking under suspended loads or into the Line of Fire.		Work stoppage. Coaching and correction on-site

7.8. Driving Safely

Wear your seat belt, obey speed limits and do not use any mobile device while driving.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Is the vehicle driver licensed and authorized to operate the vehicle they are driving?	Added by Work Group		Not LSR - coaching and correction on site. May trigger investigation
Is the vehicle type and condition suitable for the anticipated driving conditions?	Added by Work Group		Work stoppage. Coaching and correction on-site
Are all occupants in the vehicle wearing seatbelts that are properly fastened?	All occupants must wear and keep their seat belts properly fastened while in a moving vehicle.		Coaching and correction on-site. Investigation required if willful violation is apparent - personal compliance issue
Is the vehicle driver aware of and compliant with the requirements not to use mobile devices while operating a motor vehicle?	Drivers must not use any mobile device (e.g., phones, tablets, laptops or other digital devices) nor send or read text or other electronic messages while driving. See local rules and regulations and the Company Standard for further clarification.		Coaching and correction on-site. Investigation required - personal compliance issue
Is the driver maintaining speeds below the posted limit and suitably adjusting their driving behavior as appropriate for poor weather or road conditions?	Drivers must observe speed limits at all times. Drivers must adjust their driving to accommodate prevailing weather, terrain, and other environmental conditions.		Coaching and correction on-site

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
If operating in a congested area, is a spotter being used when backing the vehicle?	Added by Work Group	Common finding with high risk near misses	Work stoppage. Coaching and correction on-site
Is the driver aware of the potential for personal fatigue and have they made considerations for taking periodic breaks while on longer trips?	Personnel are not to drive when fatigued; they are encouraged to pull over and take a break when necessary.		Coaching and correction on-site
Has the driver made an assessment of journey management considerations and the potential for "Working Alone" compliance?	Where required by local rules, a Journey Management Risk Assessment has been completed and the agreed journey plan communicated to the driver and to those who may need to react in the event of an incident.		Coaching and correction on-site
Are the passengers in the vehicle aware of the expectations listed above and are they prepared to intervene if necessary?	Vehicle occupant(s) should intervene if any of the Driving Safety rules are not being followed.		Coaching and correction on-site

7.9. Ground Disturbance

Obtain authorization before starting ground disturbance or excavation activities.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Has a designated ground disturbance supervisor with the appropriate level of certification been assigned to manage the disturbance?	Competent person(s) have conducted a worksite risk assessment and have communicated the assessment to all affected persons. Responsible persons have authorized the excavation to begin. See local rules and regulations for specific authorization requirements.		Work stoppage and investigation required if individuals found not to be trained / competent
Are all licenses, permits and crossing agreements available at the work location and have all conditions of approval been met prior to starting the disturbance?	Responsible persons have authorized the excavation to begin. See local rules and regulations for specific authorization requirements.	Consider "First Call" in all three provinces and other sources (drawings, PL100, surface signage, clearings, etc.).	Work stoppage until effective communication completed. Coach and correct on site. May trigger investigation if no understanding of jurisdictional or SOP requirements.
Has the ground disturbance supervisor approved, in writing, the method(s) of excavation and the minimum distances from existing underground facilities that must be observed throughout the disturbance activity?	Responsible persons have authorized the excavation to begin. See local rules and regulations for specific authorization requirements.	Specific requirements referenced in Ground Disturbance training and SOP	Work stoppage until effective communication completed. Coach and correct on site. May trigger investigation if no understanding of jurisdictional or SOP requirements.
Have the approved excavation method(s) and minimum distances been effectively communicated to all individuals involved in the disturbance?	Responsible persons have authorized the excavation to begin. See local rules and regulations for specific authorization requirements.	Specific requirements referenced in Ground Disturbance training and SOP	Work stoppage until effective communication completed. Coach and correct on site. May trigger investigation if no understanding of jurisdictional or SOP requirements.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Has the ground disturbance supervisor completed a site risk assessment, the ground disturbance checklist and conducted a pre-job safety meeting?	Competent person(s) have conducted a worksite risk assessment and have communicated the assessment to all affected persons.		Work stoppage until all appropriate assurance documentation is complete and effective communication completed. Coach and correct on site. May trigger investigation.
Have all underground facilities in the work area been located, identified, exposed and marked?	All underground services have been identified, located, and if required isolated before the start of work.		Work stoppage until locations of underground facilities can be verified. Investigation required if evident that no / minimal efforts made to locate and mark existing underground facilities.
Have underground facilities at risk of accidental contact been isolated if necessary?	All underground services have been identified, located, and if required isolated before the start of work.		Work stoppage until risk is assessed. Coach and correct on site. May trigger investigation if no consideration evident for active facilities in work area.
Are all surface markers visible and being maintained throughout the ground disturbance activity?	Markings have been made visible and are maintained for use during work.		Work stoppage until locations of underground facilities can be verified. Coach and correct on site to re-establish any unmaintained markers. Investigation required if found that no / minimal efforts were made to establish surface markings.

If the excavation is to be entered by personnel:

Has it been classified as either a confined or restricted space and has a confined space entry permit been completed?	Excavation has been assessed to determine whether a confined space entry permit is required, and if applicable, a permit has been issued.		Work stoppage until assessment completed and all deficiencies have been addressed. May trigger investigation if individuals found not to be trained or competent.
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Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Have the sides of the excavation been sloped, benched or shored as required by jurisdictional requirements to prevent ground movement?	Ground movement has been controlled and potential collapse has been prevented by effective shoring, sloping, benching, soil placement, or other appropriate means.		Work stoppage until assessment completed and all deficiencies have been addressed. May trigger investigation if individuals found not to be trained or competent.
Has the ground disturbance supervisor inspected the excavation prior to entry and designated individuals to monitor for changing conditions?	A competent person has inspected the excavation before entry of personnel. Ground movement and environmental conditions have been and continue to be regularly monitored and inspected for change by a competent person.		Work stoppage until assessment completed and all deficiencies have been addressed. May trigger investigation if individuals found not to be trained or competent.
Have rescue, communication and site security plans been developed and communicated to all individuals associated with entry to the excavation?	Access to the work area remains controlled. Where required, a rescue plan and emergency egress arrangements have been put in place and tested. If required, an attendant is present at the excavation site for the sole purposes of maintaining communication with entrants and raising an alarm in the event of an emergency.		Work stoppage until effective communication completed. Coach and correct on site. May trigger investigation if no consideration evident for controlled access or effective rescue or communication
If the excavation is to be left unattended, are there signage and effective barriers in place to prevent accidental access to the excavation?	Access to the work area remains controlled.		Coaching and correction on site. May trigger investigation if no efforts made to establish barriers.

7.10. Confined Space Entry

Obtain authorization before entering a confined space.

Note: The confined space verification must be combined with a Permit to Work Verification.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Have all energy isolation points been physically verified by the responsible person and signed-off on?	Pre-entry preparation and inspection have been completed to verify that all appropriate controls and isolations are in place and verified	Check documents for evidence.	Work stoppage until corrected. Investigation if a source of energy is found not to have been effectively isolated. Coaching on site or off site for administrative (paperwork) gaps found.
Have all blinds been identified, confirmed installed and are they properly "rated" as per the approved isolation scheme?	Pre-entry preparation and inspection have been completed to verify that all appropriate controls and isolations are in place and verified		Work stoppage until corrected. Investigation if a source of energy is found not to have been effectively isolated.
Are all steps of preparation for entry documented, effectively communicated and verified?	Pre-entry preparation and inspection have been completed to verify that all appropriate controls and isolations are in place and verified		Work stoppage until corrected. Coaching on site.
Do all personnel designated as "Entry Supervisor," "Entrant" or "Safety Watch" understand their roles and responsibilities and have they been proven competent?	Only confined space trained personnel are allowed to enter and work in the confined space An attendant is present whose sole responsibility is to maintain communication with entrants and to raise an alarm in the event of an emergency. The attendant understands the assigned duties and knows not to enter the confined space for any reason.	See Confined Space Code of Practice for descriptions of roles, expectations and training requirements.	Potential work stoppage and investigation required if individuals found not to be trained / competent

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Signatures on the permit?	The permit has been issued and authorized with all responsible persons' signatures and has been posted at the confined space entrance	Review permit	Coaching and correction on site.
Aware of the confined space hazards?	Hazard analysis has been conducted to verify that all hazards associated with the entry have been recognized and mitigated.	All hazards have been documented, assessed, and effectively mitigated.	Coaching and correction on site. Work stoppage until hazards are properly mitigated.
Aware of the necessary respiratory protection required?	Hazard analysis has been conducted to verify that all hazards associated with the entry have been recognized and mitigated.	Respiratory protection required is clearly identified and properly used. See the Respiratory Protection Code of Practice for guidance.	Coaching and correction on site. Work stoppage until hazards are properly mitigated. Investigation required if there is no evidence that workers understand the requirements or are not trained in the use of respiratory protective equipment.
Has all required atmospheric testing been completed, results documented and is the testing being repeated as prescribed?	Required atmospheric testing has been completed; results have been evaluated and documented; and testing is repeated as described by the permit conditions	The required atmospheric testing has been completed; results have been evaluated and documented; and repeat or continuous testing requirements are part of the permit conditions	Coaching and correction on site. Work stoppage until hazards are properly mitigated. Investigation required if there is no evidence that pre-entry atmospheric testing was completed or periodic testing is being done as required.
Are all personnel involved in the SOW aware of the emergency notification and alarm procedures in the event of an incident involving a "man down" in the confined space?	Emergency rescue procedures and resources have been put in place and tested	Records of emergency exercises are available. Alarm tests have been documented. Protocols are documented and available.	Work stoppage until properly mitigated.
Is a documented confined space rescue plan in place?	Emergency rescue procedures and resources have been put in place and tested	Records of emergency exercises are available. Alarm tests have been documented. Protocols are documented and available.	Work stoppage until properly mitigated.

Field Verification Question	Life Saving Rule Minimum Requirement	Assessor Guidance	Proposed Actions
Are effective controls (i.e. signs, barricades, security) to prevent unauthorized access in place at all times while the space is attended and unattended?	Controls to prevent unauthorized access are in place at all times		Coaching and correction on site.

8.0 Reference Table – Responsibility Flowchart

Decision	Instructions
Actions Intended?	If the person made a conscious decision to take the action in question, then the answer is “YES”. If the action in question was inadvertent, habitual or unplanned, then the answer is “NO”.
Consequences Intended?	If the actions were as intended, but the consequences were not, then the error was most likely a mistake or violation (knowledge-based errors). If the answer to this question is “NO”, then proceed to the next section. If “YES”, you are probably not dealing with an error at all, rather an intentional act - consult your management.
Knowingly Violated Expectations?	Reasonable expectations consist of guidance communicated through procedures, policies, work practices, verbally, or just local industry practices. Once again, it is necessary to establish the “intent” of the individual being evaluated. If it is established that the individual was aware of the expectations, but consciously elected not to conform to those expectations, then the answer would be “YES.” If the answer is “YES”, proceed to the next section. If “NO”, proceed to the substitution test.
Expectations Available, Intelligible and Correct?	<p>The availability, workability, and accuracy of reasonable expectations are important concepts. Again, this must be evaluated from the perspective of the immediate user. Gaining an understanding of the worker’s perception on this matter is important. If it is established that the reasonable expectations were readily available, workable, intelligible and correct, then the answer would be “YES.”</p> <p>If it is established or suspected that non-compliance has become more or less automatic (as happens in the case of routine short-cuts) you should question the accuracy of the expectations. In this situation the answer is “NO”.</p> <p>Violations generally involve a conscious decision on the part of the individual to bend or break the rules. If in establishing the intent (or motive) of the violation it can be argued that “the individual was attempting to achieve the proper desired outcome but the situation at hand rendered the expectations unsuitable”, then the answer will most likely be “NO” to this question.</p> <p>If the answer to this question is “YES”, then there was a possible reckless violation. If the answer was “NO” or cannot be established, then the error or violation may have been system induced.</p> <p>If it is determined that the violation may have been system induced, consider moving to the substitution test. You must also consider another error or violation at this point. The expectation to stop and seek additional guidance in situations like these (unworkable procedures) is generally understood by workers. Failure to adhere to this and other expectations of this nature should be evaluated as separate acts.</p>

Decision	Instructions
Passes the Substitution Test?	<p>This is probably the most critical, and difficult evaluation to conduct. To evaluate this question we need to perform the following mental test. Substitute the individual involved with someone else coming from the same domain of activity, possessing comparable qualifications and experience. Then, ask the following question, “In the light of how events unfolded and were perceived by those involved in real time, is it likely that this new individual would have behaved any differently?” If the answer is “probably not”, then assigning blame has no material role to play.</p> <p>One method of conducting the substitution test is to ask several of the individual’s peers, “Given the circumstances that prevailed at the time, could you be sure that you would not have committed the same or similar unsafe act (error).”</p> <p>If the answer to the substitution test is “YES”, then the error is most likely blameless and you should proceed to the section addressing whether or not the individual has a history of unsafe acts.</p> <p>If the substitution test is not passed, proceed along the “NO” path and evaluate the next section.</p>
Deficiencies with Training, Assignment, Experience?	<p>If it is established that there were no deficiencies in the individual’s training, assignment or experience, then possible human error must be considered.</p> <p>In other words, should this task have been assigned to this person in the first place?! If there are questions about the person’s training, qualifications or selection for the task, then there is a good likelihood that the unsafe act was a largely system induced error. In this instance, proceed with investigation and corrective actions.</p>
History of Performance Problems	<p>For the purpose of determining a “history”, one would only consider the formal performance issues and review involving this individual in the previous six months. If the person in question has a history of unsafe acts or errors, it does not necessarily bear upon the responsibility of the error committed on this particular occasion. However, it does indicate that the necessity for corrective training or other intervention to reinforce desired performance and take full advantage of lessons learned.</p> <p>Absentmindedness has nothing to do with ability or intelligence. Someone who continually commits errors along these lines would obviously require some individual assistance in overcoming these tendencies. The emphasis here is on improving this individual’s performance in their current position or considering other career options that they may be more suited to. Discipline must not be an automatic response. It should only be implemented after carefully considering all options, and in response to a specific problem.</p>
Self-Reported error or event?	<p>Workers should be encouraged to self-report errors that occur and not have a concern for negative consequences. Workers shall be treated as blameless unless the activities of the worker were deemed through investigation to be criminal in nature.</p> <p>When an individual self-reports or acknowledges that an error was made, the worker needs to be encouraged to assist in any improvement efforts to make the systems and defenses more stable.</p>

9.0 Document Retention

The Document Controller must store all documentation associated with the newest version of the document. Documentation (with risk assessment information, if appropriate) associated with old revisions and cancelled documents must be kept in compliance with corporate retention schedules.

Record	Owner	Classification	Retention
Incident Investigation Reports	Investigator	HE03 – CA	Permanent

Appendix A – Revision Record

Page#	May 6, 2015	Previous Information	Risk Assessment
14	Added clarification for verification of electrical isolations (absence of voltage requirements and work break requirements).	Information not provided.	Low – provides guidance for assessors to consistently and accurately assess isolation requirements.