

# **SAPIA BEST PRACTICE SHARING: Behavioural Based Safety Tools**

**INTENT:**

This document is a collation of HSSE Industry best Practice from SAPIA members. Its intended use, is for improving HSSE in the workplace and reducing incidents and accidents thereby creating a safe working environment for Employees and Contractors. The contents of this document is not intended to be used for commercial gain.

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**PTW REVIEW FORM**

|                    |                        |         |                   |
|--------------------|------------------------|---------|-------------------|
| Reviewer:          | Area:                  | Date:   | Company Reviewed: |
| Clearance Cert No: | Safety/Fire Permit No: | TRA No: | CSE No:           |

Job Description:

| PTW Part   | Questions   | Yes / No / N/A | Comments |
|--|---|----------------|----------|
| Clearance Receiver Part  | Is the work done clearly described on the Clearance Certificate?  |                |          |
|  | Are tools and equipment to be used clearly described on the Clearance Certificate?  |                |          |
|  | Are the Clearance Receiver and Issuer parts signed?   |                |          |
| Issuer Part (In Control Room)                                    | Is the Work Risk correctly assessed? (Based on Hazard   Work Categories)  |                |          |
|  | Are Control Measures clearly described and communicated to the Clearance Receiver?  |                |          |
|  | Was all necessary PPE identified and prescribed?  |                |          |
|  | LOTO - Is the State of Isolation adequate. LOTO Isolation list completed and all signatures in place (Operator, Artisan (Electrical where applicable), TL and GSI for Medium & High Risk work). |                |          |
|  | Check LOTO Cabinets for Operations and Mechanical LOTO – must correspond with locks in the field.   |                |          |
| Clearance Receiver (Field)                                       | Is the Clearance Receiver and the correct number of people at the work place?   |                |          |
|  | Is the prescribed PPE used?   |                |          |
|  | Are all prescribed Control Measures checked and in place as per Clearance Cert/ Safety Cert/TRA etc.?   |                |          |
|  | Has the LMRA been done? Test this with the workforce.   |                |          |
|  | Ask if the Authorized Clearance Issuer has been to the work site after the clearance was issued.  |                |          |
|  | For intrusive work, check if the Unit Operator has witnessed the 1 <sup>st</sup> opening and signed on the green copy in the field.   |                |          |
|  | Check if Precautions require a Procedure/Work Instruction to be with Console Operator? Follow up with Panel   |                |          |
|  | Is Housekeeping at the workplace acceptable, e.g. cable management, access routes, drip trays, etc.   |                |          |
|  | Has the site been visited by the Supervision? Check for SAPREF people and Service Providers.  |                |          |
| Does the Isolation/Spade list correspond with the marked up EFD? |   |                |          |

**General Comments:**

# BBS – PERMIT TO WORK

## BBS VISION

To promote a culture where Safety of people, facilities, and the environment is at the heart of everything we do

## HOW TO CONDUCT A BBS OBSERVATION

1. Introduce yourself to the supervisor and team performing the job.
2. Explain that you wish to observe them working for 20 minutes to identify good and safe behaviours and discuss any unsafe behaviour identified for the duration of the observation. Remind them that it is an anonymous observation and no names will be written down.
3. Explain that after performing the observation that you will provide feedback to the team about what you observed.
4. If you find behaviour to be at risk, ineffective or answer a question No, please provide a comment and discuss with the team being observed.
5. The focus is on reinforcing positive and safe behaviour to encourage this behaviour in the future.
6. Complete the checklist below and write notes on the observation to feedback to the team performing the work and the BBS committee to address shortcomings and report positive behaviour.

## CONVERSATION STARTERS

1. Was the JSA/TSTI discussed with you before you started the work?
2. In the job that you are currently performing, what could go wrong? (Risk identification/awareness)
3. How can you prevent that from going wrong? (Mitigating factors)
4. How can you prevent injuries whilst performing these tasks?

|                             |  |                             |  |
|-----------------------------|--|-----------------------------|--|
| <b>Date of Observation:</b> |  | <b>Time of Observation:</b> |  |
| <b>Area of Observation:</b> |  |                             |  |
| <b>Observation Team:</b>    |  |                             |  |
| <b>Permit Number:</b>       |  |                             |  |

## OBSERVATION CHECKLIST

|   |     |    |                             |     |    |      |         |
|---|-----|----|-----------------------------|-----|----|------|---------|
| <b>1. Does the PTW require specific PPE to be worn pertaining to the current task being performed?</b>  | Yes | No | <b>2. Is it being worn?</b> | Yes | No | N/A  |         |
| Comments:   |     |    |                             |     |    |      |         |
| <b>3. Are there any factors that could affect the job and PTW conditions, (Wind, Rain, etc.)?</b>       |     |    |                             |     |    | Yes  | No      |
| Comments:   |     |    |                             |     |    |      |         |
| <b>4. Are they working in a safe way or are they at risk of injury?</b>                                 |     |    |                             |     |    | Safe | At Risk |
| Comments:   |     |    |                             |     |    |      |         |
| <b>5. Do the workers in the team know what to do in the event of emergency alarms? Assembly points?</b> |     |    |                             |     |    | Yes  | No      |
| Comments:   |     |    |                             |     |    |      |         |
| <b>6. Is "HOT WORK" or "VESSEL ENTRY" involved - does the PTW adequately cover these activities?</b>    |     |    |                             |     |    | Yes  | No      |
| Comments:   |     |    |                             |     |    |      |         |
| <b>7.1. Will they be performing pressure testing?</b>   |     |    |                             |     |    | Yes  | No      |
| <b>7.2. Do they understand risks and how to mitigate these? (Barricading the area, Specific PPE)</b>    |     |    |                             | Yes | No | N/A  |         |
| Comments:   |     |    |                             |     |    |      |         |

|  |     |    |
|--|-----|----|
| 8. Is a Fire/Safety Watcher present - Valid certification - Breathing apparatus currently certified? | Yes | No |
| Comments:  |     |    |
| 9. Has the TSTI been filled in properly and been signed by every crew member?                        | Yes | No |
| Comments:  |     |    |
| 10. Does the team actively perform housekeeping to keep the working area clean, tidy and safe?       | Yes | No |
| Comments:  |     |    |

**GENERAL COMMENTS AND FEEDBACK**

|                         |
|-------------------------|
| <b>General Comments</b> |
|                         |

|                                   |
|-----------------------------------|
| <b>Feedback for BBS Committee</b> |
|                                   |

# BBS – WORKING AT HEIGHT

## BBS VISION

To promote a culture where Safety of people, facilities, and the environment is at the heart of everything we do

## HOW TO CONDUCT A BBS OBSERVATION

1. Introduce yourself to the supervisor and team performing the job. Assess whether you want the team working at heights to come down for the discussion.
2. Explain that you wish to observe them working for 20 minutes to identify good and safe behaviours and discuss any unsafe behaviour identified for the duration of the observation. Remind them that it is an anonymous observation and no names will be written down.
3. Explain that after performing the observation that you will provide feedback to the team about what you observed.
4. If you find behaviour to be at risk, ineffective or answer a question No, please provide a comment and discuss with the team being observed.
5. The focus is on reinforcing positive and safe behaviour to encourage this behaviour in the future.
6. Complete the checklist below and write notes on the observation to feedback to the team performing the work and the BBS committee to address shortcomings and report positive behaviour.

## CONVERSATION STARTERS

1. Was the JSA/TSTI discussed with you before you started the work?
2. In the job that you are currently performing, what could go wrong? (Risk identification/awareness)
3. How can you prevent that from going wrong? (Mitigating factors)
4. How can you prevent injuries whilst performing these tasks?

|                             |  |                             |  |
|-----------------------------|--|-----------------------------|--|
| <b>Date of Observation:</b> |  | <b>Time of Observation:</b> |  |
| <b>Area of Observation:</b> |  |                             |  |
| <b>Observation Team:</b>    |  |                             |  |
| <b>Permit Number:</b>       |  |                             |  |

## OBSERVATION CHECKLIST

|  |     |    |                             |      |         |     |
|--|-----|----|-----------------------------|------|---------|-----|
| <b>1. Does the PTW require specific PPE to be worn pertaining to WORKING AT HEIGHTS?</b>   | Yes | No | <b>2. Is it being worn?</b> | Yes  | No      | N/A |
| Comments:  |     |    |                             |      |         |     |
| <b>3. Are the workers aware of the height at which Safety Harnesses are mandatory (1.5m)?</b>  |     |    |                             | Yes  | No      |     |
| Comments:  |     |    |                             |      |         |     |
| <b>4. Are they working in a safe way or in an at risk way that could cause injury (E.g. Slipping, Falling, dislodging material, 3 point contact maintained etc.)?</b>  |     |    |                             | Safe | At Risk |     |
| Comments:  |     |    |                             |      |         |     |
| <b>5. Do the workers in the team adjust their PPE whilst working (Safety Harnesses especially) in a safe or at risk way?</b>   |     |    |                             | Safe | At Risk |     |
| Comments:  |     |    |                             |      |         |     |
| <b>6. Are there any external factors that could affect WORKING AT HEIGHTS (Wind speed, Rain, etc.)?</b>  |     |    |                             | Yes  | No      |     |
| Comments:  |     |    |                             |      |         |     |
| <b>7. Is the ground area properly barricaded and warning signs displayed to protect personnel from falling objects?</b>  |     |    |                             | Yes  | No      |     |
| Comments:  |     |    |                             |      |         |     |
| <b>8. Is the scaffold safe to use - with a current Green Tag (Last inspection less than 7 days ago or daily during inclement weather, has the scaffold been modified)?</b>   |     |    |                             | Yes  | No      | N/A |
| Comments:  |     |    |                             |      |         |     |
| <b>9. Does the team actively perform housekeeping to keep the working area clean, tidy and safe? (e.g. Use of fish buckets, toe boards, trap doors closed, raising and lowering tools with rope, strengthened tool bags)</b> |     |    |                             | Yes  | No      |     |
| Comments:  |     |    |                             |      |         |     |

| <b>GENERAL COMMENTS AND FEEDBACK</b> |  |
|--------------------------------------|--|
| <b>General Comments</b>              |  |
|                                      |  |
| <b>Feedback for BBS Committee</b>    |  |
|                                      |  |

**BBS – EYES**

**BBS VISION**

**To promote a culture where Safety of people, facilities, and the environment is at the heart of everything we do**

**HOW TO CONDUCT A BBS OBSERVATION**

1. Introduce yourself to the supervisor and team performing the job.
2. Explain that you wish to observe them working for 20 minutes to identify good and safe behaviours and discuss any unsafe behaviour identified for the duration of the observation. Remind them that it is an anonymous observation and no names will be written down.
3. Explain that after performing the observation that you will provide feedback to the team about what you observed.
4. If you find behaviour to be at risk, ineffective or answer a question No, please provide a comment and discuss with the team being observed.
5. The focus is on reinforcing positive and safe behaviour to encourage this behaviour in the future.
6. Complete the checklist below and write notes on the observation to feedback to the team performing the work and the BBS committee to address shortcomings and report positive behaviour.

**CONVERSATION STARTERS**

1. Was the JSA/TSTI discussed with you before you started the work?
2. In the job that you are currently performing, what could go wrong? (Risk identification/awareness)
3. How can you prevent that from going wrong? (Mitigating factors)
4. How can you prevent injuries whilst performing these tasks?

|                             |  |                             |  |
|-----------------------------|--|-----------------------------|--|
| <b>Date of Observation:</b> |  | <b>Time of Observation:</b> |  |
| <b>Area of Observation:</b> |  |                             |  |
| <b>Observation Team:</b>    |  |                             |  |
| <b>Permit Number:</b>       |  |                             |  |

**OBSERVATION CHECKLIST**

|  |     |    |                             |           |             |     |
|--|-----|----|-----------------------------|-----------|-------------|-----|
| <b>1. Does the permit require specific Eye PPE to be worn?</b>   | Yes | No | <b>2. Is it being worn?</b> | Yes       | No          | N/A |
| Comments: <input style="width: 100%;" type="text"/>  |     |    |                             |           |             |     |
| <b>3. With the PPE currently being worn, are the workers safe or at risk of steam, dust, sparks or grit blowing into their eyes?</b> |     |    |                             | Safe      | At Risk     |     |
| Comments: <input style="width: 100%;" type="text"/>  |     |    |                             |           |             |     |
| <b>4. Are they working in an awkward position that renders the Eye PPE vulnerable?</b>   |     |    |                             | Yes       | No          |     |
| Comments: <input style="width: 100%;" type="text"/>  |     |    |                             |           |             |     |
| <b>5. Do the people in the team adjust/clean their Eye Protection whilst working in a safe or at risk way?</b>                       |     |    |                             | Safe      | At Risk     |     |
| Comments: <input style="width: 100%;" type="text"/>  |     |    |                             |           |             |     |
| <b>6. Do you feel that the Eye PPE is effective for the work they are performing?</b>  |     |    |                             | Effective | Ineffective |     |
| Comments: <input style="width: 100%;" type="text"/>  |     |    |                             |           |             |     |
| <b>7. Does the team actively perform housekeeping to keep the working area clean, tidy and safe?</b>                                 |     |    |                             | Yes       | No          |     |
| Comments: <input style="width: 100%;" type="text"/>  |     |    |                             |           |             |     |

**GENERAL COMMENTS AND FEEDBACK**

**General Comments**

| <b>GENERAL COMMENTS AND FEEDBACK</b> |  |
|--------------------------------------|--|
| <b>General Comments</b>              |  |
|                                      |  |
| <b>Feedback for BBS Committee</b>    |  |
|                                      |  |

## BBS – HANDS & FINGERS

### BBS VISION

**To promote a culture where Safety of people, facilities, and the environment is at the heart of everything we do**

### HOW TO CONDUCT A BBS OBSERVATION

1. Introduce yourself to the supervisor and team performing the job.
2. Explain that you wish to observe them working for 20 minutes to identify good and safe behaviours and discuss any unsafe behaviour identified for the duration of the observation. Remind them that it is an anonymous observation and no names will be written down.
3. Explain that after performing the observation that you will provide feedback to the team about what you observed.
4. If you find behaviour to be at risk, ineffective or answer a question No, please provide a comment and discuss with the team being observed.
5. The focus is on reinforcing positive and safe behaviour to encourage this behaviour in the future.
6. Complete the checklist below and write notes on the observation to feedback to the team performing the work and the BBS committee to address shortcomings and report positive behaviour.

### CONVERSATION STARTERS

1. Was the JSA/TSTI discussed with you before you started the work?
2. In the job that you are currently performing, what could go wrong? (Risk identification/awareness)
3. How can you prevent that from going wrong? (Mitigating factors)
4. How can you prevent injuries whilst performing these tasks?

|                             |  |                             |  |
|-----------------------------|--|-----------------------------|--|
| <b>Date of Observation:</b> |  | <b>Time of Observation:</b> |  |
| <b>Area of Observation:</b> |  |                             |  |
| <b>Observation Team:</b>    |  |                             |  |
| <b>Permit Number:</b>       |  |                             |  |

### OBSERVATION CHECKLIST

|  |     |    |                             |           |    |             |
|--|-----|----|-----------------------------|-----------|----|-------------|
| <b>1. Does the PTW require specific PPE to be worn pertaining to HANDS/FINGERS?</b>  | Yes | No | <b>2. Is it being worn?</b> | Yes       | No | N/A         |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |
| <b>3. Are there any external factors that could affect the HANDS (Pinch points, defective PPE, etc.)?</b>                  |     |    |                             | Yes       |    | No          |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |
| <b>4. Are they working in a safe way or in a way that renders the HANDS at risk to injury? (e.g. Flogging Nut)</b>         |     |    |                             | Safe      |    | At Risk     |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |
| <b>5. Do the workers in the team adjust their hand protection whilst working in a safe or at risk way?</b>                 |     |    |                             | Safe      |    | At Risk     |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |
| <b>6. Do you feel that the PPE is effective for the work they are performing?</b>  |     |    |                             | Effective |    | Ineffective |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |
| <b>7. Are the workers aware of the different types of hand protection available for different applications?</b>            |     |    |                             | Yes       |    | No          |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |
| <b>8. Does the team actively perform housekeeping to keep the working area clean, tidy and safe? (Disposing of Gloves)</b> |     |    |                             | Yes       |    | No          |
| Comments: <input style="width: 95%;" type="text"/>   |     |    |                             |           |    |             |

### GENERAL COMMENTS AND FEEDBACK

**General Comments**

| <b>GENERAL COMMENTS AND FEEDBACK</b> |
|--------------------------------------|
| <b>General Comments</b>              |
|                                      |
| <b>Feedback for BBS Committee</b>    |
|                                      |

**LOCKOUT TAGOUT USAGE/BLINDING AUDIT CHECKLIST**

Equipment Isolated: ..... Checked by: ..... Date: .....  
 .....

| Element: LOTO  | Yes | No | Findings/Comments |
|--|-----|----|-------------------|
| <p><b>OPERATORS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Red Isolation Locks applied to each isolation point</li> <li>2. Yellow "Caution" tags attached to each isolation lock</li> <li>3. Caution tags correctly filled in</li> <li>4. Isolation Locks key on yoke of lockout calliper</li> <li>5. All vent bleeders tagged</li> <li>6. Bleeder tags correctly filled in</li> <li>7. Tear-off strips returned to Ops. Sup. Or OMC</li> <li>8. Section "2" of the permit filled in and signed</li> </ol> <p><b>PERMIT ISSUERS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Black Permit Authority Lock on physical lock out calliper</li> <li>2. Yellow "Caution" tag on P A Lock</li> <li>3. Caution tag correctly filled in</li> <li>4. Tag tear-off strips all secured to P A Lock key in lockout cabinet</li> <li>5. Number of P A Lock entered on permit in section "2"</li> <li>6. Black Permit Authority Lock on electrical lock out calliper</li> <li>7. Red warning tag on PA lock</li> <li>8. No. of P A lock entered on Electrical Isolation Permit</li> </ol> <p><b>PERMIT ACCEPTORS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Blue Job Lock on calliper</li> <li>2. Blue "Stop" tag on Job Lock</li> <li>3. Stop tag correctly filled in</li> <li>4. Number of Job Lock entered on permit in section "2"</li> <li>5. Blue Job Lock on electrical lock out calliper</li> <li>6. Blue "Stop" tag on Job Lock</li> <li>7. No. of Job Lock entered on Electrical Isolation Permit</li> </ol> <p><b>WORKERS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Green Personal Lock on calliper for each worker</li> <li>2. Blue "Stop" tag on Personal Lock</li> <li>3. Name and department on "Stop" tag</li> </ol> <p><b>INTRUSIVE WORK</b></p> <ol style="list-style-type: none"> <li>1. Intrusive Work Checklist completed and signed</li> <li>2. Isolation Schedule Document completed and signed</li> <li>3. Live side of flanges tagged and signed</li> <li>4. Break Point tags or Cut Line tape applied and signed (Break Point tags and Cut line Tape removed after line break or cut).</li> </ol> |     |    |                   |

**LOCKOUT TAGOUT USAGE/BLINDING AUDIT CHECKLIST**

Equipment Blinded: ..... Checked by: .....  
 Date: .....

| Element: <b>BLINDING</b>  | Yes | No | Findings/Comments |
|---|-----|----|-------------------|
| <p><b>OPERATORS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Current blind list form in use.</li> <li>2. Equipment name and Unit number correctly identified on blind list</li> <li>3. Blind list has unique number</li> <li>4. Name and signature of person who prepared and approved the blind list are present on the form</li> <li>5. Correct size and rating of blinds indicated on blind list</li> <li>6. Tag number clearly identified on Blind list</li> <li>7. Identified the correct location for blind installation</li> <li>8. All information completed on blinding tag</li> <li>9. Removes tag in presence of fitter prior to flange nut being broken</li> <li>10. Present when first flange nut is broken</li> </ol> <p><b>PERMIT ISSUERS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Copy of Blind list attached to permit</li> <li>2. P&amp;ID attached and marked up to identify location of blinds.</li> <li>3. Verifies that blind list is current and complete.</li> </ol> <p><b>PERMIT ACCEPTORS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Copy of Blind list attached to permit</li> <li>2. P&amp;ID attached and marked up to identify location of blinds.</li> <li>3. Operator present when first flange is broken</li> <li>4. Correct location identified</li> <li>5. Correct size and rating blind and gasket in place</li> </ol> <p><b>WORKERS RESPONSIBILITY</b></p> <ol style="list-style-type: none"> <li>1. Verifies that equipment number on blind tag is same as equipment number on permit</li> <li>2. Operator tag is removed prior to starting task</li> <li>3. Operator is present prior to breaking flange</li> <li>4. Removes worker tag once blind is installed</li> </ol> |     |    |                   |

### Confined Space Entry - Safe Work Practice Audit

Unit/Plant:  
Auditor:

Date:

*Instructions: Explain every "No" response in the "Corrective Action" column.*

| Number | Question   | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|--|-----|----|-----|-------------------|-------------|----------|
| 1      | Is a valid confined space entry permit posted at entry location with correct signatures and dates, including sign in and out? Signatures required: Permit Approver, Permit Issuer and Permit Acceptor  |     |    |     |                   |             |          |
| 2      | Are all necessary documents (RAMS/JSA, Hot Work Permit, Supplemental Permit) at the job site and signed?   |     |    |     |                   |             |          |
| 3      | Is an approved rescue plan in place and signed by rescue personnel?  |     |    |     |                   |             |          |
| 4      | Have all energy sources been identified and isolated? Examples of energy sources: <ul style="list-style-type: none"> <li>• Instrumentation</li> <li>• Utilities</li> <li>• Purges</li> <li>• Radiation sources</li> </ul>  |     |    |     |                   |             |          |
| 5      | Have Simultaneous Operations been considered? Simultaneous Operations involve work occurring in the same work area that could create a hazardous atmosphere or otherwise affect work in the confined space.  |     |    |     |                   |             |          |
| 6      | At each isolation point, is there a <b><u>blind entry tag</u></b> and a blind tag hung?  |     |    |     |                   |             |          |
| 7      | Are gas test results current, within permit limits, and recorded on the permit with time/date/name of tester? Subsequent gas testing shall be made by Operations: <ul style="list-style-type: none"> <li>• At the beginning of each shift</li> <li>• At least every 6 hours, or more frequently if indicated on the entry permit by the Shift Supervisor</li> <li>• Anytime the space has been vacated and unattended for any period of time more than one (1) hour</li> </ul> |     |    |     |                   |             |          |

| Number | Question   | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|--|-----|----|-----|-------------------|-------------|----------|
| 8      | Do all entrants have a personal 4 gas monitor for continuous monitoring? If there are exceptions, have they been approved by proper authority per                            |     |    |     |                   |             |          |
| 9      | Does the confined space have a continuous area monitor located in the work zone? If there are exceptions, have they been approved by proper authority                        |     |    |     |                   |             |          |
| 10     | Are entry points free from tripping hazards?   |     |    |     |                   |             |          |
| 11     | Are "DO NOT ENTER" tape and tags being used at all entrances when hole watch is not present?   |     |    |     |                   |             |          |
| 12     | Are all lines blinded at the first flange as close as possible to the vessel? If there is an exception, is the Confined Space Entry Exception Form complete and at job site? |     |    |     |                   |             |          |
| 13     | Have PPE requirements been listed on permit? Is PPE being worn by safety watcher and entrants?   |     |    |     |                   |             |          |
| 14     | Is watcher trained, present for all entry, and able to communicate with entrants? Request to observe this communication.   |     |    |     |                   |             |          |
| 15     | Are all personnel involved aware of the hazards with the confined space?   |     |    |     |                   |             |          |
| 16     | Did the auditor issue Stop Work Authority?   |     |    |     |                   |             |          |
| 17     | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority?  |     |    |     |                   |             |          |

## Working at Heights - Safe Work Practice Audit Checklist

Unit/Plant:  
Auditor:

Date:

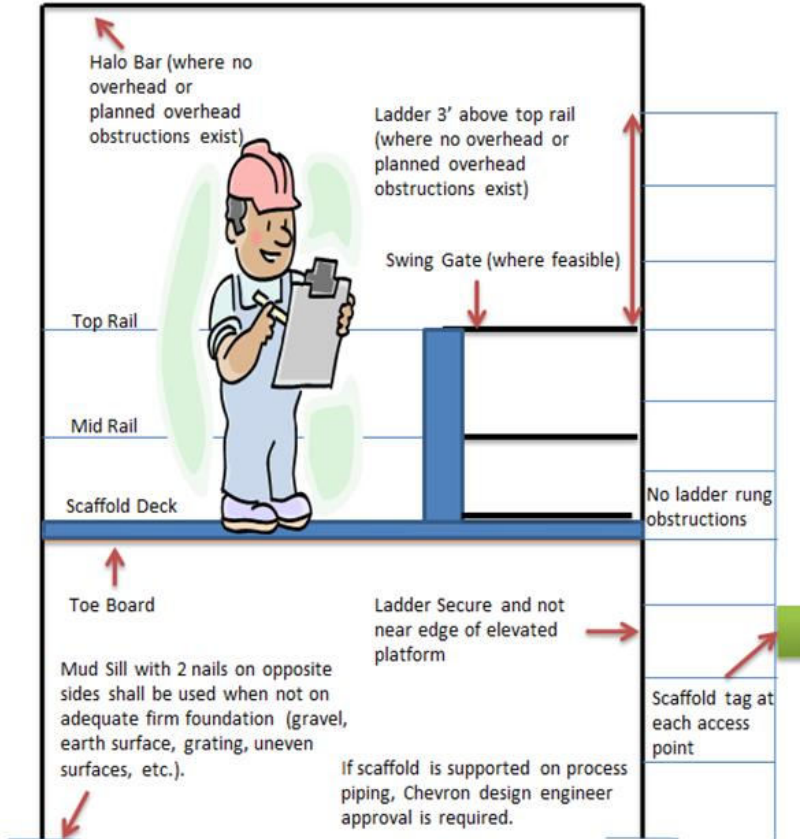
*Instructions: Explain every "No" response in the "Corrective Action" column.*

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 1      | Have all fall-prevention methods (e.g. work platforms with guardrails) been exhausted before using fall-protection methods (personal fall arrest systems)?  |     |    |     |                   |             |          |
| 2      | <p>Are acceptable anchor points utilized? Below are some common acceptable points?</p> <ul style="list-style-type: none"> <li>• Piping - less than 6 metres between supports and 6" diameter or greater for 1 person (uninsulated), 8" diameter or greater for two persons (uninsulated)</li> <li>• Scaffolding - as marked on scaffold tag</li> <li>• Fixed ladder - on stringer, where rung meets stringer</li> <li>• Engineered Lifelines</li> </ul> <p>Below are some examples of unacceptable points:</p> <ul style="list-style-type: none"> <li>• Electrical conduit</li> <li>• Cable trays</li> <li>• Valve handles or valve stems</li> <li>• Unsecured ladders</li> <li>• Untested lifelines</li> <li>• Scaffold ladders</li> </ul> |     |    |     |                   |             |          |
| 3      | Is the anchor point located to limit the potential from colliding with any lower hazard?  |     |    |     |                   |             |          |
| 4      | Is a self-retracting lanyard utilized when exposed to a fall less than 6 m.?  |     |    |     |                   |             |          |
| 5      | Is an emergency action plan documented in the emergency action plan section of the RAMS/JSA? The plan shall contain contact information for emergency responders.   |     |    |     |                   |             |          |
| 6      | If fall is greater than 6 m., has ERT been notified through radio contact?  |     |    |     |                   |             |          |

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 7      | Do personnel have two safety lanyards at all times in order to achieve 100% fall protection and at least one lanyard secured at all times?  |     |    |     |                   |             |          |
| 8      | Is there a fall arrest observer with the ability to quickly summon emergency response in place to observe employees who are wearing fall arresting harnesses and exposed to falls greater than 2 metres?  |     |    |     |                   |             |          |
| 9      | Have workers inspected all components (harness, lanyards, D-hooks) of the fall protection system to ensure that they are in good working order prior to use?  |     |    |     |                   |             |          |
| 10     | Have the components (harness, lanyards, D-hooks) of the fall protection system been annually certified?   |     |    |     |                   |             |          |
| 11     | Do harnesses have suspension trauma safety straps? Do workers know how to properly use the strap?   |     |    |     |                   |             |          |
| 12     | Where work is being performed on scaffolding, is the scaffold tag in place at each access point?  |     |    |     |                   |             |          |
| 13     | When work is being performed on scaffolding, is the scaffold tag inspection up to date for the shift?   |     |    |     |                   |             |          |
| 14     | During Turnarounds, Capital Projects, and general maintenance where simultaneous work below overhead work occurs, is catchment fencing placed at locations where work is being performed?   |     |    |     |                   |             |          |
| 15     | During Turnarounds, Capital Projects, and general maintenance where simultaneous work below overhead work occurs, are grating/hole covers installed when work activities involve the use of materials that can fall through grating?              |     |    |     |                   |             |          |
| 16     | Are canvas bags or grab and twist method being used to lift materials and tools to elevated heights? Metal or plastic buckets are not acceptable for lifting.   |     |    |     |                   |             |          |
| 17     | During general maintenance with no simultaneous work below overhead work, is barricade tape used to prevent unauthorized individuals from entering below the work area (dropped object prevention)? Is the tape tagged with an informational tag? |     |    |     |                   |             |          |
| 18     | Is scaffold constructed per standard? See Example of Proper Scaffold Construction, below.   |     |    |     |                   |             |          |

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 19     | Did the auditor issue Stop Work Authority?  |     |    |     |                   |             |          |
| 20     | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority? |     |    |     |                   |             |          |

## Example of Proper Scaffold Construction



### Job Safety Analysis/General Work Permit Safe Work Practice Audit

Unit/Plant:  
Auditor:

Date:

*Instructions: Explain every "No" response in the "Corrective Action" column.*

| Number | Question   | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|--|-----|----|-----|-------------------|-------------|----------|
| 1      | Is the permit legible?   |     |    |     |                   |             |          |
| 2      | Is there a detailed job description listed to ensure all hazards can be identified?  |     |    |     |                   |             |          |
| 3      | Are all the required signatures in place to allow work to begin? <ul style="list-style-type: none"> <li>• Permit issuer</li> <li>• Permit acceptor</li> <li>• Work party members</li> <li>• Special permit approvers</li> </ul>                      |     |    |     |                   |             |          |
| 4      | Are the work boundaries well defined? Rule of thumb for a general work permit is 15 metres or less for line of sight.  |     |    |     |                   |             |          |
| 5      | Are the hazards identified on the JSA/RAMS applicable to the tasks being performed? Was the Preventing Serious Injuries and Fatalities Field Guide or Hazard Wheel consulted?  |     |    |     |                   |             |          |
| 6      | Have Simultaneous Operations been considered? Simultaneous Operations involve work occurring in the same work area that creates potential for injury, property damage, environmental impact, or requires significant communication and coordination. |     |    |     |                   |             |          |
| 7      | Are the "actions taken to address hazard(s)" appropriate for the hazards identified and correct according to safe work practice standards.   |     |    |     |                   |             |          |
| 8      | Are the "actions taken to address hazard(s)" functioning?  |     |    |     |                   |             |          |
| 9      | Are all equipment and tools being used marked on the permit?   |     |    |     |                   |             |          |
| 10     | Is PPE Required Above Refinery Basic PPE correctly specified for identified hazards?   |     |    |     |                   |             |          |
| 11     | Is the appropriate PPE worn and used according to safe work practice standards?  |     |    |     |                   |             |          |

| Number   | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--|---|-----|----|-----|-------------------|-------------|----------|
| 12   | Are required permits and standby personnel properly marked and in place at the job site? (e.g. Hot Work Permit, Confined Space Entry Permit, Fire Watch)                          |     |    |     |                   |             |          |
| 13   | Has the permit been read, understood, and signed by personnel performing the work?  |     |    |     |                   |             |          |
| 14   | Is emergency information listed (e.g. nearest muster location, eyewash, safety shower, MSDS reviewed, fire equipment, etc.)? Has emergency equipment been verified as functional? |     |    |     |                   |             |          |
| 15   | Did the auditor issue Stop Work Authority?  |     |    |     |                   |             |          |
| 16   | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority?   |     |    |     |                   |             |          |
| <b><u>Additional Comments and observations</u></b> |   |     |    |     |                   |             |          |
|  |   |     |    |     |                   |             |          |

### Hot Work - Safe Work Practice Audit

Unit/Plant:

Date:

Auditor:

Instructions: Explain every "No" response in the "Corrective Action" column.

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 1      | Is a valid hot work permit posted at jobsite, filled out, and signed with correct signatures, dates and are readings current?   |     |    |     |                   |             |          |
| 2      | Are there Maintenance, Contractor, and Operator initials in the renewal boxes with gas detection readings at dates and times as required by the permit?   |     |    |     |                   |             |          |
| 3      | Are there adequate means of spark containment in all directions?<br>Examples of adequate spark containment: <ul style="list-style-type: none"> <li>• Fire blankets</li> <li>• Shields</li> <li>• Area kept wet</li> </ul> |     |    |     |                   |             |          |
| 4      | Are drains and vents sealed/sandbagged within a minimum of 15 metres of hot work?   |     |    |     |                   |             |          |
| 5      | Are combustible materials within 12 metres of floor openings, holes, cracks in flooring, open doorways, etc. protected?   |     |    |     |                   |             |          |
| 6      | Is a trained Fire Watch present with an extinguisher and/or fire hose located at the job site ready for use?  |     |    |     |                   |             |          |
| 7      | If it is open-flame work, is the fire hose deployed, charged, and ready for use?  |     |    |     |                   |             |          |
| 8      | Have all pipes, vessels, tanks, columns, confined spaces been verified to be cleaned or purged, properly blinded/isolated with required tags prior to performing hot work?  |     |    |     |                   |             |          |
| 9      | If an expandable plug is used for vapor barrier protection during hot work, is blinding in place upstream from the expandable plug?<br>If there is no blind, is an Isolation Exception Form completed and at the jobsite? |     |    |     |                   |             |          |

| Number                                      | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|---|---|-----|----|-----|-------------------|-------------|----------|
| 10  | Are flashback preventers installed? The flashback preventer can be located at the cylinder or at the torch. The preferred method is the flashback arrestors will be located on the torch. |     |    |     |                   |             |          |
| 11  | Are bottles secured to prevent tipping?   |     |    |     |                   |             |          |
| 12  | Did the auditor issue Stop Work Authority?  |     |    |     |                   |             |          |
| 13  | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority?   |     |    |     |                   |             |          |
| <b>Additional Comments and Observations</b> |   |     |    |     |                   |             |          |
|   |   |     |    |     |                   |             |          |

**Portable Grinder - Safety Audit (refer CDMS #000331)**

Unit/Plant:

Date:

Auditor:

*Instructions: Explain every "No" response in the "Corrective Action" column.*

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 1      | Is the appropriate PPE worn and used according to safe work practice standards? Proper additional PPE for grinding: <ul style="list-style-type: none"> <li>• Face shield AND goggles/spoggles</li> <li>• Leather gloves</li> <li>• No loose clothing or entanglement hazards</li> </ul>   |     |    |     |                   |             |          |
| 2      | Has a visual inspection of the portable grinder been completed prior to each use, and periodically during extended use?   |     |    |     |                   |             |          |
| 3      | Is the grinding wheel in proper operating condition for the grinder? <ul style="list-style-type: none"> <li>• Rated for grinder speed (RPM)</li> <li>• Designed for the application</li> <li>• Free of physical damage/imperfections</li> <li>• Not wet or contaminated</li> <li>• Wheel is not worn – replace if necessary</li> </ul>  |     |    |     |                   |             |          |
| 4      | Inspect the grinder for the following: <ul style="list-style-type: none"> <li>• Lock off switch</li> <li>• No lock-on switch</li> <li>• Tool free adjustable safety guard</li> <li>• Quick disk change</li> <li>• Adjustable side handle</li> <li>• Power cord in good condition</li> </ul> Verify through questioning that the grinder is equipped with an anti kick-back slip clutch. |     |    |     |                   |             |          |
| 5      | Is the surrounding area free of combustible materials or objects that may melt/burn in the line of fire of sparks?  |     |    |     |                   |             |          |

| Number   | Question   | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--|--|-----|----|-----|-------------------|-------------|----------|
| 6  | Is the tool double insulated and not require earth leakage protection?   |     |    |     |                   |             |          |
| 7  | Has the mechanic been trained and qualified in using portable grinders?  |     |    |     |                   |             |          |
| 8  | Are both hands being used to control the electric grinder? One hand on the handle and one hand on the body of the grinder.           |     |    |     |                   |             |          |
| 9  | Is the work surface level and clear of obstacles? Grinding is not to be performed while standing on ladders.                         |     |    |     |                   |             |          |
| 10   | Is the work surface secure so that it will not move as a result of grinding wheel rotation?  |     |    |     |                   |             |          |
| 11   | Does the mechanic stop at regular intervals in order to rest their arms?   |     |    |     |                   |             |          |
| 12   | Does the mechanic allow the grinder to come to full speed before using and allow the grinder to stop completely before setting down? |     |    |     |                   |             |          |
| 13   | Did the auditor issue Stop Work Authority?   |     |    |     |                   |             |          |
| 14   | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority?              |     |    |     |                   |             |          |
| <b><u>Additional Comments and Observations</u></b> |  |     |    |     |                   |             |          |

**Vacuum Truck - Safety Audit**

Unit/Plant:

Date:

Auditor:

*Instructions: Explain every "No" response in the "Corrective Action" column.*

| Number | Question   | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|--|-----|----|-----|-------------------|-------------|----------|
| 1      | Is a permanently installed continuous self-checking grounding/monitoring verification device (MGV) being used? Is the device confirming a good ground? Good ground indicated by green light.   |     |    |     |                   |             |          |
| 2      | Did a qualified worker verify the ground? If no MGV is in use, has a certified electrician verified the ground?  |     |    |     |                   |             |          |
| 3      | Are all hoses in good condition with no braids or wires exposed?   |     |    |     |                   |             |          |
| 4      | Have hoses been properly banded and marked with last test date? Is test date within a year?  |     |    |     |                   |             |          |
| 5      | Ask operator to explain how he conducted continuity test. <ul style="list-style-type: none"> <li>• Was hose continuity tested between connections?</li> <li>• Was hose end at truck checked for continuity between truck and hose connection?</li> <li>• Hose-to-hose connections &lt; 1 OHMS.</li> <li>• Each hose segment (end to end) &lt; 0.75 OHMS/M.</li> <li>• Is hose at suction end bonded to metal collection container? Is container grounded and were connections checked for continuity?</li> </ul> |     |    |     |                   |             |          |
| 6      | Are all hose connections safely wired or taped shut to prevent accidental opening?   |     |    |     |                   |             |          |
| 7      | Is the truck vented to a safe area? <ul style="list-style-type: none"> <li>• Downwind of liquid source</li> <li>• Away from personnel</li> <li>• Away from ignition sources</li> <li>• Minimum 15 metre hose</li> </ul>  |     |    |     |                   |             |          |

| Number | Question   | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|--|-----|----|-----|-------------------|-------------|----------|
| 8      | Is operator wearing required PPE? <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses</li> <li>• Nomex</li> <li>• Personal four gas monitor</li> </ul>   |     |    |     |                   |             |          |
| 9      | If working with corrosives and toxics, is operator wearing required additional PPE? <ul style="list-style-type: none"> <li>• Chemical suit</li> <li>• Goggles</li> <li>• Face shield</li> <li>• Respirator</li> </ul>  |     |    |     |                   |             |          |
| 10     | Is the truck equipped with a spill kit? Spill kit shall include: <ul style="list-style-type: none"> <li>• At least 10 Kg. of absorbent material</li> <li>• At least 10 oil absorbent pads</li> <li>• At least 1.2 m of small diameter boom</li> <li>• 20 litre metal bucket</li> </ul>               |     |    |     |                   |             |          |
| 11     | Are wheel chocks of suitable size in place in front and back of a tire and emergency brakes in use while performing vacuum operations?   |     |    |     |                   |             |          |
| 12     | Is the tank level indicator working properly?  |     |    |     |                   |             |          |
| 13     | Are warning signs or barricade tape deployed around vehicle, associated equipment, and work area (including end of vent hose) during loading/discharging activities?   |     |    |     |                   |             |          |
| 14     | Is the vacuum truck operator within 10 m of truck?   |     |    |     |                   |             |          |
| 15     | Is this a switch load? If so, was compatibility and relaxation time considered? Did the operator discuss this with a Chevron representative?   |     |    |     |                   |             |          |
| 16     | Is there a completed internal manifest? Manifest should include: <ul style="list-style-type: none"> <li>• Information on material: quantity, pressure, temperature, flash point, and pH</li> <li>• Clear instructions for material discharge</li> <li>• Whether a switch load is involved</li> </ul> |     |    |     |                   |             |          |
| 17     | Is there a completed RAMS/JSA? Are the hazards identified on the JSA applicable to the tasks being performed?  |     |    |     |                   |             |          |

| Number   | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--|---|-----|----|-----|-------------------|-------------|----------|
| 18   | Was the pre-trip check logged on the vehicle inspection report for the current shift?                                   |     |    |     |                   |             |          |
| 19   | Is MSDS or other chemical hazard information available for review?  |     |    |     |                   |             |          |
| 20   | Did the auditor issue Stop Work Authority?  |     |    |     |                   |             |          |
| 21   | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority? |     |    |     |                   |             |          |
| <b><u>Additional Comments and Observations</u></b> |   |     |    |     |                   |             |          |
|  |   |     |    |     |                   |             |          |

### Lockout/Tagout - Safe Work Practice Audit

Unit/Plant:

Date:

Auditor:

*Instructions: Explain every "No" response in the "Corrective Action" column.*

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 1      | If one of the four standard isolation methods is not being used is an Isolation Exception Form at the job site? The four standard isolation methods:<br>1) Dropout spools removed and blind flange installed<br>2) Blinds installed<br>3) Double block and bleed<br>4) Single block and bleed |     |    |     |                   |             |          |
| 2      | Are valves and other isolation points tagged and entered on the Equipment Isolation List (EIL)?   |     |    |     |                   |             |          |
| 3      | Are locks located on each valve and electrical isolation point and do lock numbers match what is documented on the EIL?   |     |    |     |                   |             |          |
| 4      | Are the appropriate craft and personal locks attached to the lock hasp?<br><ul style="list-style-type: none"> <li>• Personal – green</li> <li>• OMC – black</li> <li>• Electrician – orange</li> <li>• Operator – red</li> <li>• Craft - blue</li> </ul>                                      |     |    |     |                   |             |          |
| 5      | If blinds are being used as an isolation point, has a blind list been generated?  |     |    |     |                   |             |          |
| 6      | If blinds are being used as an isolation point, are blind tags hung next to blind locations? Are flanges that are used as isolation points identified with a colour-coded spray ?   |     |    |     |                   |             |          |
| 7      | If single or double block and bleed is used, is the bleeder valve open with a vent bleeder tag that is zip tied through the yoke <b>and</b> valve wheel?  |     |    |     |                   |             |          |

| Number | Question  | Yes | No | N/A | Corrective Action | Assigned To | Due Date |
|--------|---|-----|----|-----|-------------------|-------------|----------|
| 8      | Are Maintenance and Operator tags zip-tied in place, legible, and filled out completely? The tag shall include: <ul style="list-style-type: none"> <li>• First initial and last name</li> <li>• Equipment/service number</li> <li>• Date</li> <li>• Reason tagged</li> </ul>  |     |    |     |                   |             |          |
| 9      | Have personnel verified all energy sources isolated or disconnected? Request that the operator or mechanic working the job show you the location of each energy isolation point.  |     |    |     |                   |             |          |
| 10     | Are switchgear or other power sources tagged and properly locked?<br>Locks required for isolation:<br>Permit Authority Locks = Black<br>Job Locks = Blue<br>Electrical Locks = Orange<br>Scaffolders Locks = Yellow   |     |    |     |                   |             |          |
| 11     | Has the start button been pushed with Maintenance present to verify equipment will not start?   |     |    |     |                   |             |          |
| 12     | Has all possible stored or residual energy been verified as released? If energy cannot be verified as released, is the Isolation Exception Form at the job site? ( Examples of stored or residual energy: <ul style="list-style-type: none"> <li>• Fan blades</li> <li>• Overspeed trips</li> <li>• Pistons in a compressor</li> <li>• Flywheels on a compressor</li> </ul> |     |    |     |                   |             |          |
| 13     | Have the Operations Supervisor, Operator, Contractor and Chevron Mechanic(s), signed-off on the EIL?  |     |    |     |                   |             |          |
| 14     | Did the auditor issue Stop Work Authority?  |     |    |     |                   |             |          |
| 15     | Can the workers interviewed provide examples of situations that might come up that should initiate Stop Work Authority?   |     |    |     |                   |             |          |

**Additional Comments and Observations**

# Managing Safe Work Practices – Audit/ Review Procedure

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## 1.0 Overview

The Refinery will assess performance in conducting high risk work safely by conducting Audits or reviews of high risk work.

Assessment requirements apply to the following:

- Confined Space Entry
- Electrical Work
- General Work Permit
- Hot Work
- Isolation of Hazardous Energy
- Work at Height

**Contractors:** This process applies to all contractors working within the Refinery areas of responsibility.

### 1.1 Terms and Definitions

Refer to the Downstream & Chemicals – SWP Terms and Definitions.

## 2.0 Procedure Steps

High risk work will be assessed quarterly by the following personnel:

| Safe Work Practice                            | Observer                              | No./Frequency |
|---|---------------------------------------|---------------|
| Confined Space Entry including Gas Detection. | SWP Advisors                          | 1/Quarterly   |
| Electrical Work                               | Electrical SME/Coordinator            | 1/Quarterly   |
| Permit to Work                                | Appointed Senior Operations Personnel | 33/Quarterly  |
| Hot Work including Gas Detection              | Safety Coordinators                   | 1/Quarterly   |
| Isolation of Hazardous Energy                 | Appointed Senior Operations Personnel | 33/Quarterly  |
| Work at Height                                | Safety Coordinators                   | 1/Quarterly   |

## 2.1 Planning For Audit / Review

The Reviewer/Auditor should make the necessary plans prior to conducting the Review/Assessment as per QMS and OE Process Assessments through Audits and Reviews.

## 2.2 Review Job Task Documentation

The following information is needed for review:

- RAMS or,
- Written work plan for performing work
- Daily Risk Assessment
- Work permits and forms

Verification is important during the assessment. The Assessor is encouraged to cross-check the documentation by conducting interviews with Permit Issuers and Acceptors involved in the permitting and management of high-risk work. If the data gathered in the evaluation suggests a significant or immediate risk, the information should be reported immediately to the appropriate level of management and a LI/NLI will be submitted.  
Assess Results

## 2.3 Communicate Findings and Develop Corrective Actions

The Assessor discusses the findings and recommendations during the feedback session with the affected individuals as per QMS AND OE PROCESS ASSESSMENTS THROUGH AUDITS AND REVIEWS.. The information will be entered into E-Suite and used during the annual Managing SWPs process review to evaluate adherence to the Safe Work Practices Standards and Procedures and to determine whether corrective actions are addressed in a timely manner.

## 2.4 Develop Corrective Action Plan

Managers will discuss the relevant findings with affected personnel and coach them as needed. The Manager will assign responsibility for individual(s) closing out corrective actions and a schedule for completion. The information will be tracked in E-Suite I to ensure that actions are closed.

## 2.5 Close Gaps

### 2.5.1 Track Corrective Actions to Completion

The Manager will use the E-Suite Tool to ensure corrective actions are tracked to completion.

### 3. Roles and Responsibilities

The following table outlines the roles and responsibilities associated with this procedure.

**Table 1. Roles, Responsibilities and Competencies**

| Role                                | Responsibilities  | Competencies  |
|-------------------------------------|---|---|
| Assessor                            | <ul style="list-style-type: none"> <li>• Gather relevant information for a specified work task and evaluate.</li> <li>• Provide results to the appropriate level of management and the SBU Process Advisor.</li> </ul>  | <ul style="list-style-type: none"> <li>• Basic skills using the <u>E-Suite</u> Tool</li> <li>• Basic analytical skills.</li> <li>• Knowledge of the work being reviewed.</li> <li>• Knowledge of the SWP requirements.</li> <li>• Ability to communicate with multiple levels of management.</li> </ul> |
| Audit Controller                    | <ul style="list-style-type: none"> <li>• Coordinate the SWP assessments .</li> <li>• Assess summary results to report deficiency trends.</li> </ul>   | <ul style="list-style-type: none"> <li>•</li> </ul>   |
| Manager                             | <ul style="list-style-type: none"> <li>• Review assessment results with affected personnel and coach them as needed.</li> <li>• Establish goals to close out deficiencies.</li> <li>• Ensure that corrective actions identified in the report are tracked to completion.</li> </ul> | <ul style="list-style-type: none"> <li>• Basic analytical skills.</li> <li>• Communication skills to cascade feedback of evaluation results to affected personnel.</li> <li>• Coaching skills.</li> <li>• Ability to track any deficiencies discovered in the assessment to closure.</li> </ul>         |
| Safe Work Practices Process Advisor | <ul style="list-style-type: none"> <li>• Assess summary results to report deficiency trends in the Managing SWPs annual review.</li> <li>• Provide summaries and trends as input to the Managing SWPs annual review.</li> </ul>   | <ul style="list-style-type: none"> <li>• Understanding of this procedure.</li> <li>• Facilitative leadership skills.</li> <li>• Analytical and planning ability.</li> <li>• Understanding of continuous improvement.</li> </ul>   |

# Appendix 1 – SWP Audit Checklist

|                       |                        |
|-----------------------|------------------------|
| <b>Permit number:</b> | <b>Type of Permit:</b> |
| <b>Plant No:</b>      | <b>Equipment ID:</b>   |

| <b>Question</b>  | <b>Y</b> | <b>N</b> | <b>N/A</b> | <b>Comments</b> |
|--|----------|----------|------------|-----------------|
| <b>DOCUMENTATION</b>   |          |          |            |                 |
| 1. Hazard Assessment Conducted and attached on permit?   |          |          |            |                 |
| 2. High risk work RAMS conducted and attached on permit?   |          |          |            |                 |
| 3. Adequate communication plan in place?   |          |          |            |                 |
| 4. Work plan written and attached on permit?   |          |          |            |                 |
| 5. Work site visually inspected by Permit Approver to verify that the permit conditions are met and that other work being performed in the vicinity will not introduce additional hazards? |          |          |            |                 |
| 6. Proper barricades and safety signs are in place?  |          |          |            |                 |
| 7. Ground fault circuit interrupters (GFCI's)/ residual current devices (RCD's) are used for all cord connected electric power tools and other cord connected devices?                     |          |          |            |                 |
| 8. Correct type of permits/ forms are issued for the work task (cold work /Confined Space Entry / Hot work /live electrical /Excavation)?  |          |          |            |                 |
| 9. Pre-job safety briefing Conducted & documented?   |          |          |            |                 |
| 10. Permit Issuer and Permit Approver verifies controls are in place and signs the permit.   |          |          |            |                 |
| 11. Permit Requester understands the permit conditions and signs permit(s)?  |          |          |            |                 |
| 12. Proper PPE worn for work type performed?   |          |          |            |                 |
| 13. Permit acceptor permit accreditation valid and relevant.   |          |          |            |                 |

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| <b>13. Workers have the knowledge and training to perform the job?</b>  |  |  |  |  |
| <b>14. Permit revalidation, extension, renewal, or cancellation is completed per the relevant SWP standard.</b>                                     |  |  |  |  |
| <b>15. Permit Issuers supervisor or other person in charge performs work-in-progress field reviews (reviews are verifiable per SBU procedures)?</b> |  |  |  |  |
|   |  |  |  |  |
| <b>GAS DETECTION</b>  |  |  |  |  |
|   |  |  |  |  |
| <b>1. Gas meter is bump tested daily or prior to use and the results are recorded?</b>  |  |  |  |  |
| <b>2. Gas meter has been calibrated within last month (check Monthly calibration sheet)?</b>  |  |  |  |  |
| <b>3. Calibration gas is within expiration date?</b>  |  |  |  |  |
| <b>4. Detector tubes (if used) are within expiration date?</b>  |  |  |  |  |
| <b>5. Detector tubes (if used) are from the same manufacturer as the sampling pump.</b>   |  |  |  |  |
| <b>6. Gas testing is conducted in a safe manner?</b>  |  |  |  |  |
| <b>7. Qualified Gas Tester performs the gas testing?</b>  |  |  |  |  |
| <b>8. Gas test results recorded on appropriate permit?</b>  |  |  |  |  |
|   |  |  |  |  |

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| <b>ISOLATION OF HARZADOUS ENERGY (LOTO)</b>  |  |  |  |  |
|  |  |  |  |  |
| <b>1. Isolation points for all relevant energy sources are identified prior to work starting?</b>  |  |  |  |  |
| <b>2. Locks and Tags are installed by each craft in the following order:<br/><br/>(1) Operations;<br/>(2) Electricians;<br/>and (3) Maintenance.<br/><br/>Locks and tags are removed in the reverse order?</b> |  |  |  |  |
| <b>3. Equipment Isolation Checklist is used correctly?</b>   |  |  |  |  |
|  |  |  |  |  |
| <b>CONFINED SPACE ENTRY</b>  |  |  |  |  |
|  |  |  |  |  |
| <b>1. The confined space is positively isolated prior to entry?</b>  |  |  |  |  |
| <b>2. Proper purging, flushing, venting and draining occur prior to entry?</b>   |  |  |  |  |
| <b>3. Continuous air ventilation is in place once entry occurs?</b>  |  |  |  |  |
| <b>4. Written rescue plan and rescue equipment are available?</b>  |  |  |  |  |
| <b>5. Job is carried out as per permit requirements?</b>   |  |  |  |  |
| <b>6. Confined Space Entry Log exists and is current?</b>  |  |  |  |  |
| <b>7. Gas testing is conducted (initial /continuous /follow-up) and logged appropriately?</b>  |  |  |  |  |
| <b>8. Entry Watch, Entry Supervisor, Rescue personnel are trained and available?</b>   |  |  |  |  |

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| <b>HOT WORK</b>  |  |  |  |  |
|  |  |  |  |  |
| 1. Positive isolation of hazardous energy has occurred prior to beginning hot work?                      |  |  |  |  |
| 2. Proper purging, flushing, venting and draining occur prior to hot work?                               |  |  |  |  |
| 3. Flammable /combustible materials are removed or covered within 15 meters (50 feet) prior to hot work? |  |  |  |  |
| 4. All drains/trenches are covered within 15 meters (50 feet)?   |  |  |  |  |
| 5. Appropriate spark containment is used?  |  |  |  |  |
| 6. Gas testing is conducted (initial / continuous / follow-up) and Logged appropriately?                 |  |  |  |  |
| 7. Trained Fire Watch is in attendance.  |  |  |  |  |
| 8. Fire extinguishers are located adjacent to hot Work?  |  |  |  |  |
| 9. Oxy-Acetylene /LPG cylinders are fitted with Flashback arrestor?                                      |  |  |  |  |
| 10. Gas supply is shut off during breaks and lunch Period?   |  |  |  |  |
| 11. Gas cylinder(s) are kept outside of the confined space?  |  |  |  |  |
|  |  |  |  |  |
| <b>WORK AT HEIGHTS</b>   |  |  |  |  |
|  |  |  |  |  |

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|---|--|--|--|--|
| <b>1. Area is barricaded Appropriately?</b>   |  |  |  |  |
| <b>2. Safety harness and lanyards are inspected before use?</b>   |  |  |  |  |
| <b>3. Electrical lines close to the work activity are identified and made safe?</b>   |  |  |  |  |
| <b>4. Safety harness worn correctly (chest strap at mid-chest, d-ring in back, leg straps tightened)?</b>   |  |  |  |  |
| <b>5. Anchor location is selected and inspected prior to use?</b>   |  |  |  |  |
| <b>6. 100% tie-off available &amp; used?</b>  |  |  |  |  |
| <b>7. Tools are raised and lowered by means of a tool belt/box using rope or other safe method (tools are not hand carried while climbing)?</b>                           |  |  |  |  |
| <b>8. 3 points of contact is used while climbing?</b>   |  |  |  |  |
| <b>9. Written rescue plan is available (when fall protection is used)?</b>  |  |  |  |  |
| <b>10. A Safety Standby is present when workers are wearing a harness?</b>  |  |  |  |  |
| <b>11. Portable ladder is appropriate for the task, positioned correctly, stable and in good condition?</b>   |  |  |  |  |
| <b>13. Mobile Elevated Working Platform (MEWP) is appropriate for the task, positioned correctly and operated by a competent operator, stable, and in good condition?</b> |  |  |  |  |
| <b>14. A fall-arrest system (such as a fall-arrest harness and lanyard) is used in conjunction with the MEWP?</b>   |  |  |  |  |

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| <b>15. Scaffolding is stable, has appropriate bracing, no missing scaffold planks, guardrails, midrails or toe boards and constructed by competent person?</b> |  |  |  |  |
|  |  |  |  |  |