

Hazard Awareness Workshops (HAWs) Framework

1. Introduction:

Worksite Hazards Management (WHM) Must-Win project aims to improve awareness of PDO and contractors workforce to realize, identify and manage various hazards at workplaces. It focuses on three key areas namely; improving HSE training, enhancing awareness of hazards and improving Toolbox Talks. In PDO, LTIs root causes analysis for incidents in 2008-2010 revealed that lack of hazard identification continues to be the highest causation followed by lack of competence. In 2009 and 2010, nearly 78% of PDO and contractors LTIs resulted from worksite hazards.

Therefore, the need to develop Hazard Awareness Workshops (HAWs) and rolling them out to all worksites was identified to ensure that all workforces have the ability to understand and identify hazards and are capable of reporting and controlling them on their worksites. HAWs target all staff on worksites with a particular focus on non-supervisory staff as they have the highest exposure to risks and incidents.

All the supervisory staff are adequately engaged on the awareness and management of worksite hazards via the "Safety Leadership" training programs that were rolled out in 2009.

2. Objectives:

The main objective of HAWs should be:

- To improve the ability of the workforce to realize, identify & manage various hazards and their potential consequences at worksite.

However, different companies may cover other objectives depending on the level of awareness that already exist amongst their workforce and maturity of their HSE MS. These could be:

- To improve workforce awareness and understanding of the various hazards and risks management tools and systems (e.g. TRIC, Job HSE Plan, JSA, PTW, etc)
- To improve their knowledge and skills in contributing to and delivery of effective toolbox talks.

3. Target Audience:

All non-supervisory staff (workers and crew) on all worksites (drilling, logistics and well services sites, construction and operation sites, exploration sites) working in PDO premises.

4. Sectors / activities to be covered

- Drilling, logistics and well services (Well engineering)
- Construction (surface facilities construction, pipelines , flowlines construction & workshops)
- Production Operations (gathering & production stations)
- Business & Facilities Support
- Exploration
- Catering and kitchens

5. Duration & Frequency:

HAWs duration may vary from 45 minutes for just practical hazard hunt or it may take up to 3 hours if class room activity is included. However, duration should not exceed 3 hours per worksite and for each shift. Drilling and well services units can conduct HAWs during "Super Tuesday" to allow active participation of all crews in HAWs exercise. Other sectors (construction, production operation ...etc) can split their large numbers of workforce into small groups to conduct HAWs without any need to stop the work.

HAWs need to be conducted to cover entire workforce in each contractor company. This means that several workshops need to be conducted for construction contractors with large numbers of workforce. Implementation of HAWs can be done throughout the year and all staff must participate at least once before end of December 2011.

Corrective actions generated from HAWs shall be closed as soon as possible and followed up every Super Tuesday or in weekly safety meetings.

6. Facilitators:

HAWs will be owned and delivered by PDO & contractors in their worksites. In 2010, more than 200 facilitators from PDO and contractors community were trained on facilitation techniques and how to successfully run hazard awareness workshops in their workplaces. The facilitation techniques material that was used in the training sessions is available electronically and can be accessed through below links.

Initial sessions need to be facilitated by key senior personnel like Operations Director, Operations Manager, Engineering Manager, Drilling Manager, Rig Manager, Tool pusher, HSE Manager/ Advisor, Construction Engineer/ Supervisor, Delivery Team Leader, Production & Maintenance Co-ordinator, Power Systems Co-ordinator, MAF Terminal Supervisor, Facilities & Business Support Team Leader. Once HAWs process becomes well established, then other competent personnel may start facilitation like Driller and other front line Supervisor.

7. Materials:

Below are some of the materials and other delivery means that can be used to deliver HAWs. This material is available electronically to all contractors through PDO HSE for contractors' web page

- <http://www.pdo.co.om/hseforcontractors/blocks/hsefunction/must-wins/MW-worksiteHazard.htm>

PDO HSE "online library" that is accessible for all contractors already include lots of hazard awareness materials http://www.pdo.co.om/hseforcontractors/online_library/

- Slides on hazards identification and management (e.g. Working Safely package, Enhanced Site Supervision ESS, Dealing with Hazards & Risks course slides, Shell Hazard Awareness Risk Perception SHARP, Rig Makhater, Glove on a Stick, Hands Free Lifting)
- Haz-ID Book (Well Engineering Hazard Identification Training Package)
- TRIC cards/ poster
- LTIs presentation packages
- MBPS Toolbox Talk story video.
- Incidents videos & animation.
- Digital/video camera
- Posters.

Use of camera in hazardous areas like oil and gas production facilities needs to be controlled by permit to work system.

8. Quality and effectiveness assurance:

Some of the key success factors that will ensure effectiveness and good quality of HAWs are:

- Leadership commitments from PDO and contractors management (presence of senior management, senior staff, support and guidance when required, specific time and date is dedicated, management of hazards, follow up on closing actions).
- HAWs deliverables (HAZ-ID poster, Hazard Register) are monitored and presented regularly to Contract Holder.
- Competent facilitators are selected and coached to run HAWs, in particular on basic facilitation skills and competence assessment.
- Clear and concise description is provided for facilitators on how to run HAWs.

However, some signs or indicators can be used to judge the effectiveness of HAWs like:

- All workforces are actively involved in Hazards identification exercise.
- Visible and invisible hazards are spotted and reported
- Constructive discussion on hazards and controls is taking place.
- Positive feedback from participants.

9. How HAWs can be run at worksites:

Three examples (options) on how to conduct HAWs at worksites are provided below. Examples include detailed steps that facilitators need to follow while running workshops in workplaces. All examples are centered on workers themselves identifying and recognizing hazards and suggesting controls with minimum guidance and support from facilitators. Examples are designed to cater for different work groups and considering different requirements. Duration varies from 45 minutes for a practical hazard hunt to 3 hours if class room and activity sessions are included. Some of the expected products at the end of the workshops are also included. These examples were tested initially in different worksites and feedback was incorporated in the process.

HAWs delivery approaches/ steps

Option (1)

Main Objective:

- Improve the ability of crew members to realize, identify and report hazards at their work sites.
- Reinforce the use of TRIC and participation in TBT.

Duration:

Up to 3 hours; includes the normal tea-break.

Facilitation:

Initial sessions are facilitated by senior staff; until the workforce leaders are deemed competent to run the event themselves.

Material & Delivery Means:

- The approach is to use digital photos during a Super Tuesday work stoppage.
- Computer/ laptop to download/view pictures.
- Previous hazards photos/ posters for the warm-up session.

Approach/Methodology/Process

Step 1: start with a 5 minute warm-up session (viewing previous hazards photos from other crews).

Step 2: After the warm-up session, a group of 3 are sent out into the normal work environment tasked with photographing a minimum of 3 hazardous situations.

- One is the photographer, #2 is the scribe, and #3 is the 'director'.
- They are given a strict time limit of 15 minutes to return to the meeting room.
- Use of camera must be controlled by PTW

Step 3:

A laptop is already set up, so that the camera can be downloaded; and the team then present the hazard and come up with possible corrections/ controls

- This can happen during normal operations – because it is the hazard awareness of the group of 3 that is important, not necessarily the photographic result nor the hazard spotted.
- The shift then either accept or reject the photos; and discussion is encouraged on how to remove the hazard or at least mitigate the risk. Constructive criticism of the photo itself is also encouraged.
- This might happen at end of shift, during a meal break or sometime during the remaining shift period.
- We create a sense of urgency to have the mitigation decided upon before they go off shift – they own the hazard and need to make it right.
- Once decided, the same 3 man group returns to the selected hazard and enacts the agreed improvement – in other words they now photograph the enactment of the RIGHT way.

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- *This may prove cumbersome for some hazards requiring procedural changes. But, it could be interesting to see what their creativity comes up with!!*

Step 4: The product - outputs

The work unit team leader now takes the responsibility of posting this fine piece (RIGHT & WRONG with TRIC) at the work onsite and then also sending it to Unit/Rig/ Site head office, where it is collated with the other inputs from the other work units.

- The primary objective is get a photo set on that tea shack wall; showing their own hazard; and showing their own people with the improvements.
- The secondary objective then is to accumulate a unique set of Haz-ID sheets specific to well test operations.

The bigger picture

This could be worked further into “best” of the month; individual poster(s) could be created around a theme (lifting, hands & fingers) ; and also uploaded into UWX for sharing amongst other contractors.

- The SWE could also select a topic or theme for that particular Super Tuesday and run a mini-competition between his work units to see what they can produce.
- Involvement from PDO both on location and in MAF will add ‘credibility’ to the exercise.

We want this to become part of the monthly cycle of Super Tuesday work stoppages.

- The next group of 3 could be given advance notice so they have time to confer/prepare for their 15 minute photo session.
- Team Leader keeps track of the participation so that each crew member is given the chance to participate with the camera.
- The goal is get the crews to look for the ‘sleeping tigers’; and therefore, by doing this HAW technique over and over again throughout the year, the crews are coached into an advanced state of hazard awareness.
- Therefore each month while using the Super Tuesday work stoppage(s) ; each work units must provide a minimum of ‘x’ photo-TRIC.
- It would be great if Play Safe scores could be enhanced for the output.

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HAWs delivery approaches/ steps

Option (2)

Main Objective:

- Effective engagement of the workforce to improve their knowledge in an interactive way and enable them understand, realize, identify and report the hazards that they spot on their locations.
- Ensure proper use of TRIC card and how to conduct effective TBT.

Duration:

3 hours per rig/hoist/ work unit per shift

Facilitation:

Initial sessions are facilitated by senior staff; until the workforce leaders are deemed competent to run the event themselves.

Material & Delivery Means:

- Slides for visible & invisible hazards at worksites, hazards photos/ posters/ for the introductory session.
- Use of digital camera. Use of camera must be controlled by PTW.
- Computer/ laptop to download/view pictures.

Approach/Methodology/Process

Step 1: Introduction Session (duration 45 minutes)

This is a key session to gain the crews hearts and minds before the Haz-Id exercise. It is important that everyone in the crew talks, and the silent personnel stimulated.

Prepare slides for:

- photos of known hazards (home & work)
 - o Let the crew explain them
 - o Ask the crew about other most common hazards in their work place (i.e. on the floor, in the mast, in tank systems, at generators, in workshops, in office, at home, etc)
- photos of hidden/unknown/unseen hazards (home & work)
 - o Let the crew find out
 - o Let them give other examples from home and work i.e. electricity, radiation, high voltage, radio waves, laser lights, X-rays, etc)
- photos of controls needed (home & work) – ask the crew before showing controls
- Introduction and explanation of TRIC and its usage (few slides)
- Explain posters for effective TBTs and use of TRIC and keep in the areas of their exercises.

Step 2: Outdoor Exercise (duration 60 minutes)

- The crew will be distributed into groups of 3 people, 1 leader and 2 team members. The leader is the one who knows reading/writing in English or Arabic and will fill in the TRIC.
- Each group is directed to go to a certain (3 max) areas on the location and do Haz-Id and TRICs (3 TRICs per group). Each TRIC should not take more than 20 minutes)
- Some coaches/supervisors i.e. RM, HAW facilitators and HSE Advisors need to go around when crews are doing Haz-Id and interact with them/guide them and explain any ambiguities in the TRIC.
- Observe the crew when hold their TBTs.

Step 3: Feedback Session (duration 60 minutes)

- The group leaders here will give feedback for the hazards they have observed and controls they are suggesting.
- They can also share what difficulties they faced in identifying hazards and controls
- They can highlight communication, language, writing or interaction/personal problems they faced during the exercise
- The facilitators will give more tips/tricks for the above issues, gets the commitment of the personnel and closes out the session.

HAWs delivery approaches/ steps

Option (3)

Session Objectives: This workshop is designed primarily for Well Engineering and Operations sites and locations to achieve the following objectives:

1. To educate the crew on the following:
 - a. What is a hazard?
 - b. Why should I care about hazards?
 - c. How could I get hurt?
 - d. What am I going to do to stop myself and others from getting hurt?
2. To reinforce the use of TRIC and effective participation in TBTs.

Duration:

3 hours.

Facilitation:

Initial sessions to be facilitated by PDO & contractor key senior personnel until the workforce leaders are deemed competent to run the event themselves.

Materials & Delivery Means:

- Slides for visible & invisible hazards at worksites, hazards photos/ posters/ for the introductory session.
- Use of digital/video cameras. Use of camera must be controlled by PTW.
- Computer/ laptop to download/view pictures.

Approach/Methodology/Process - Example

Step 1: Introduction & Hazard Hunt (25 minutes)

a) Introduction (5 minutes): explanation of the session objectives. What, why, how and the outcome.

b) Hazard Hunt (20 minutes)

- The crew/ workforce will split into 4 groups (maximum 3 per group), get a camera and send out to photograph a minimum of 3 hazardous situations.
- One person is the photographer, 2nd is the scribe, and 3rd is the 'team leader.
- They are given a strict time limit of 15 minutes to return to the meeting room.
- The facilitator and senior staff (i.e. RM, Tool Pusher and HSE Advisors) need to go around when crews are doing Hazard Hunt and observe them whether they spot hazards or simply pass by.
- The rationale behind sending crew immediately for hazard hunt is to find out if they will be able/ or struggle to recognize hazards. Similarly, will they spot lions (visible & common hazards) or they'll be able to spot tigers (less obvious but serious hazards).

Step 2: Class Room & Activity Session (90 minutes)

a) What is a hazard and what is risk (15 minutes).

Give examples: travelling block, a car, a snake – no risk until associated with an activity. The facilitator to show slides of hazards that are common in the home and village.

The facilitator will show slides of various activities from the Operations facilities, hoists/ rigs or base

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(pre-photographed). Participants will be prompted to comment on the good practices and what can be improved – and how it can be improved. Choose some photos of less obvious hazards. SHARP exercise is a good way to ask people “what do you think happened next?”

b) Why should we care about hazards? (15 minutes)

Touch on the personal side, asking employees if they want to share an experience from their family, and asking for the answers to prevent reoccurrence. Use personal experiences from the company if relevant.

c) Impairment demonstration (20 minutes):

Activities to be conducted to simulate the effects of an amputated finger, blindness, broken arm etc. This is to communicate how important and necessary our health is. Focus on the family aspect. For example, picking up a child with one arm, kicking a football without eyesight.

d) Sharing & discussion of the hazards and photographs from the hazard hunt (maximum 40 minutes)

- The group leaders show photographs of their hazards and discuss why it is a hazard, and how they can prevent or mitigate the hazard. (short & long term solutions)
- Discuss – why should they be concerned about this?
- Each group must decide on the controls/ mitigations they will apply for their hazards.
- Once decided, the same 3 man group returns to the selected hazard and enacts the agreed improvement – in other words they now photograph the enactment of the RIGHT way.

This may prove cumbersome for some hazards requiring procedural changes. But, it could be interesting to see what their creativity comes up with!!

Step 3: A Second Hazard Hunt (50 minutes)

- This is similar to the 1st Hazard Hunt with a strict time limit (15 minutes).
- The purpose of the 2nd Hazard Hunt is to assess the impact and effectiveness of the workshop and whether it really improved crew awareness or not, and whether crew started to spot sleeping tigers (invisible hazards).
- The facilitator and senior staff (i.e. RM, Tool Pusher and HSE Advisors) need to go around when crews are doing Haz-Hunt and observe them whether things have changed from 1st Haz-Hunt.
- The goal is get the crews to look for the ‘sleeping tigers’; and therefore, by doing this HAW technique over and over again throughout the year, the crews are coached into an advanced state of hazard awareness.
- Sharing & discussion of the hazards and photographs from the hazard hunt, as above (maximum 40 minutes)

Step 4: Session wrap up and close out (15 minutes)

- Summarize any correction/ improvement actions agreed and assign action party and time frame.
- Explain session outputs
- Emphasize the role of crew in protecting themselves and their colleagues.
- Thank them for their contribution and active participation.

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(The product- outputs)

- The work unit team leader now takes the responsibility of collating and posting **(RIGHT & WRONG) hazards photos** identified and corrected by crew. Send copies to Contractor Head Office and PDO CH/ CSR/ Senior Well Engineer.
- If not yet available (e.g. in well test units), Accumulate a unique set of **Haz-ID sheets** specific to the worksite operations.
- From the identified hazards, produce a personalized **poster of the Top 3 to maximum 5 hazards** that will be displayed in the location.
- The location will keep a **Hazard Register** onsite available to the crew to record hazards at anytime. This will be reviewed by the Rig Manager on a daily basis and actioned if necessary. From this the HEMP register will be updated on a monthly basis and reviewed by the QHSE Manager.