



**PetroSA**

## **FA Platform**



**Safety Meeting – 18.02.2020**



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# AGENDA

Introduction to Theme of the Month / Safety

Shift Handover



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# INTRODUCTION TO SHIFT HANDOVER

- ❑ While effective communication is important in all organizations, it is particularly important for continuously operating plants during shift changes.
- ❑ Clear and effective communication during a shift handover provides a key layer of protection in the prevention of major incidents.
- ❑ The objective of this shift handover is to promote accurate and reliable communication of relevant information across shift changes, thereby ensuring the continuity of a safe and effective working environment.



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# EFFECTIVE SHIFT HANDOVER

An effective handover consists of three steps:

- Good and proper preparation by the outgoing personnel for handover.
  
- Performing the handover in which the outgoing and incoming personnel communicate to exchange relevant information.
  
- Cross-checking of information by the incoming personnel as they assume responsibility.

**A lack of effective information transfer has led to serious incidents in the process industry. This has included the Piper Alpha offshore platform incident and the Texas City refinery incident.**



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# WHAT MAKES AN EFFECTIVE SHIFT HANDOVER

**For a handover to be considered effective, it should be conducted:**

- At the normal place of work, such as the shift office, Control Room, or Field Operator stations. For example, it should not take place on the Helideck, Recreation Room or corridor on the way out.
- Face-to-face, using clear language.
- Without interruption.
- As a two-way communication with feedback.
- Both participants are taking joint responsibility for ensuring the accurate transfer of information.



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# WHAT DOES THIS MEAN?

- Developing the communication skills of existing staff with appropriate training.
- Ensuring that communication skills are considered in the recruitment of shift-workers and are included in the training and training validation process for new employees.

**Both verbally and in written format. It should meet the information needs of incoming staff, which will mean giving consideration to:**

- The design of operator supports, usually a shift log book.
- New Shift Instructions LOG.
- Electronic recordkeeping of previous Handovers.
- Quick reference to management of Change.

***NOTE: It is not good enough to just leave the shift log for the oncoming shift to read.***



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# HANDOVER RISKS TO CONSIDER

**Consideration should be given on how to manage additional or special risks associated with:**

- Any non-standard or higher-risk handovers, such as during a plant run down for a turnaround, during a turnaround event, or on plant re-start after a turnaround / shutdown.
- Other examples could include major project construction or commissioning activity.

**A lengthy absence from work, which could be due to:**

- Illness.
- Shift patterns: If the shift cycle includes rostered leave periods, then special arrangements should be made to extend the handover to ensure that the returning shift team is properly updated.
- Some sites prepare a special set of handover notes based on a compilation of the logs over the absence period. Shift team members are required to return to work one day early to receive an update and/or attend a team safety briefing.



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# WHAT SHOULD BE INCLUDED IN A SHIFT LOG

- Shift role being handed over.
- Identity of outgoing and incoming shift.
- Shift rotation; morning, afternoon, night (time and date).
- Personal and process safety.
- Incidents, accidents, and reported hazards, plus any steps taken in response.
- Status of work permits, with particular emphasis on extensions, incomplete work, and isolations.
- Any special permits to prepare, such as confined space entry.
- Status of emergency control systems, with particular emphasis on bypasses or defeats (including gas detection, fire detection, relief valves, emergency shutdown, fire water systems, etc.).



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# WHAT SHOULD BE INCLUDED IN A SHIFT LOG

- Alarm status.
- Temporary operating arrangements, such as air hoses on hot-spots, use of bypasses, or manual valve settings.
- Temporary plant modifications.
- Operations status, Unit operating status, operating rates, plant out of service, deviations from target, deviations from operating envelope, and any operating limitations.
- Events such as changes in operation, tanks switches, upsets, and recoveries (include times of events).
- Key equipment status and changes: It is good practice to maintain a “white board” register to show the status of trips/bypasses, safety system impairments, cooling water configuration, and power configuration and operating mode, flare header configuration, backup equipment, and any temporary operating arrangements.
- Equipment out of service.



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# SHIFT HANDOVER ON MAINTENANCE ISSUES

- Status of work orders that are in progress, planned, or raised.
- Preparation required for future maintenance activity and permit preparation.
- Staffing issues such as illness, any on-shift training, and any cover requirements.
- Daily instructions, including procedure changes, management communication, and special instructions.
- Routine duties: Records of any routine tests and checks performed by shift personnel on a periodic basis for the area, such as status of rotating equipment, checks on fire protection (monitors, hydrants, foam, active systems settings, and autostart status of firewater pumping systems), and the testing of alarms, detectors, and monitors.
- Comments: A comment area can be provided to detail any other points not covered, but should be a small part of the overall handover log.

**Signatures: The log should be signed and dated by the incoming and outgoing shift roles.**



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# RESULT OF POOR HANDOVERS





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# SHIFT HANDOVER CHECKLIST

	Y	N	PARTIAL
<b>PROCEDURE</b>			
Does the site have a formal written shift handover procedure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>SUPPORTING INFRASTRUCTURE</b>			
Have the requirements to complete an effective handover been put in place? (For example, defined locations, face-to-face two-way communication, free from interruptions, verbal and written communication.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have staff been appropriately trained in how to conduct a shift handover?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the process recognise the need for shift logs (written or electronic) to be in place for the handover?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is sufficient time given to prepare and deliver the handover?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are higher risk non-standard handovers considered, such as at turnaround or during project activity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is account taken of additional handover requirements that may be required after a lengthy absence?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a log book provision made for unmanned operational facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has consideration been given to units where noncontinuous shifts may be in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does each role on shift complete a shift handover with a handover log book?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the contents of the log book clearly defined for each role?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a post-shift handover team meeting needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>STEWARDSHIP</b>			
Are shift handover log books retained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there an audit process to ensure shift handover is being appropriately conducted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**THANK YOU!**

**Questions!**