

Reflective Learning

No Leaks – I own my barrier

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شركة تنمية نفط عُمان
Petroleum Development Oman

Agenda

1. Welcome and safety brief
2. Introduction to process safety day
3. Explain the hand out
4. NO LEAKS VIDEO PART 1 – It can't happen to me
5. Discussion point 1
6. NO LEAKS VIDEO PART 2 – The valve story
7. Discussion point 2
8. NO LEAKS VIDEO PART 3 – I own my barrier
9. Discussion point 3
10. Personal actions

Hand out

LEARNING FROM INCIDENTS

PREVENT INVESTIGATE SHARE



HANDOUT 'NO LEAKS – I OWN MY BARRIER'

INTRODUCTIONS, SAFETY BRIEF & LEADER INTRODUCING PROCESS SAFETY

PART 1 IT WON'T HAPPEN TO ME



In this part we see the memorial of Piper Alpha. Piper Alpha was a large North Sea oil platform that started production in 1976. It produced oil from 24 wells and in its early life it had also produced gas from two wells. It was connected by an oil- and gas pipeline to other installations. On 6 July 1988, there was a massive leakage of gas condensate on Piper Alpha, which was ignited causing an explosion which led to large oil fires. 167 people died...

DISCUSSION

PART 2 THE VALVE STORY



In this part the bowtie is described. There are Hardware- and Human barriers, which are supported by Critical Processes.

HARDWARE BARRIERS start with the specifications outlined in the Design and Engineering Practices and Manuals, based on industry standards and Shell specifications. The hardware barriers contain equipment which is essential for making barriers effective.

HUMAN BARRIERS include specific procedures and responses to operating and emergency conditions. Making sure people have the proper training, drills and competency assessments are among the ways we keep the human barriers strong.

CRITICAL PROCESSES allow us to manage risks across organizational boundaries with a focus on the desired output in a consistent, disciplined manner which regular assessment of the health of the process and actions to continually improve its performance

DISCUSSION IN GROUPS

PART 3 I OWN MY BARRIER



In this part we see the Petal model appear, a visual representation of Asset Integrity. Asset Integrity is keeping our product in the pipe from the moment we start drilling until the moment we deliver our products to our customers. We identify:

DESIGN INTEGRITY: This requires that design engineers assess the Process Safety risks of proposed facilities and design and build assets to specific standards.

TECHNICAL INTEGRITY: This involves maintaining hardware through proactive testing, inspection, maintenance and repair.

OPERATING INTEGRITY: This means operating all our facilities within the prescribed operating envelop from start up to shut down.

INTEGRITY LEADERSHIP: This describes the accountability of business leaders to ensure our assets are safe through all phases of their life cycle.

DISCUSSION IN GROUPS & PERSONAL ACTION



NO LEAKS VIDEO PART 1

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Discussion Point 1

Which process safety incidents have you experienced or heard of?

What were the consequences?

How could it have been worse?

NO LEAKS VIDEO PART 2 – The valve story

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Discussion Point 2

Please discuss in groups of 4 – 6 people:

What role do you play in preventing process safety incidents?

Which barriers are you responsible for?

NO LEAKS VIDEO PART 3 – I own my barrier

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Discussion Point 3

Please discuss in groups of 4 – 6 people:

How do you know your barrier is strong and healthy?

How do you prove this?

Personal Action

After your team discussion please write down your personal action on the poster provided (refer next slide)

What will you do differently to ensure your barrier always stays intact?

Please do not forget to mark your attendance on the Process Safety Web page. To confirm please [click here](#)

