HYDROCARBON RELEASE PREVENTION – OUR COLLECTIVE CHALLENGE

HUGH D BENNETT – CO-CHAIR HYDROCARBON RELEASE PREVENTION WORKGROUP

STEP CHANGE IN SAFETY

PRESENTATION AGENDA

WHAT IS STEP CHANGE?

THE UK CHALLENGE AND WHAT HAS WORKED WELL

WHAT UNDERPINNED THE SUCCESS?

WHY HAS THERE BEEN AN INCREASE IN RECENT REPORTS?

JOINED UP THINKING

S.A.D.I.E. SAFETY ALERT DATABASE INFORMATION EXCHANGE

CATEGORISATION COMPARISON BETWEEN NORWAY AND UK

STEP CHANGE IN SAFETY

WHAT IS STEP CHANGE?

STEP CHANGE IS A "NOT FOR PROFIT" ORGANISATION

STEP CHANGE IN SAFETY WAS FOUNDED IN 1997 BY THE OIL AND GAS INDUSTRY TRADE ASSOCIATIONS WITH THE AIM OF REDUCING ALL THE UK OFFSHORE OIL AND GAS INDUSTRY INJURY RATE BY 50%.

BY 2002 A NEW VISION WAS CREATED: "THE UK IS THE SAFEST PLACE TO WORK IN THE WORLDWIDE OIL AND GAS INDUSTRY

MEMBERSHIP OF STEP CHANGE NOW INCLUDES THE UK HEALTH AND SAFETY EXECUTIVE AND THE TRADE UNIONS.

IT IS THIS BROAD STAKEHOLDER BASE THAT MAKES THE STEP CHANGE GROUP EFFECTIVE ACROSS THE WHOLE INDUSTRY.

STEP CHANGE HAS MEMBERSHIP ACROSS 128 COMPANIES IN THE UK

IN 2010, WE SET OURSELVES A TARGET OF REDUCING THE NUMBER OF HYDROCARBON RELEASES BY 50% IN 3 YEARS

STEP CHANGE IN SAFETY

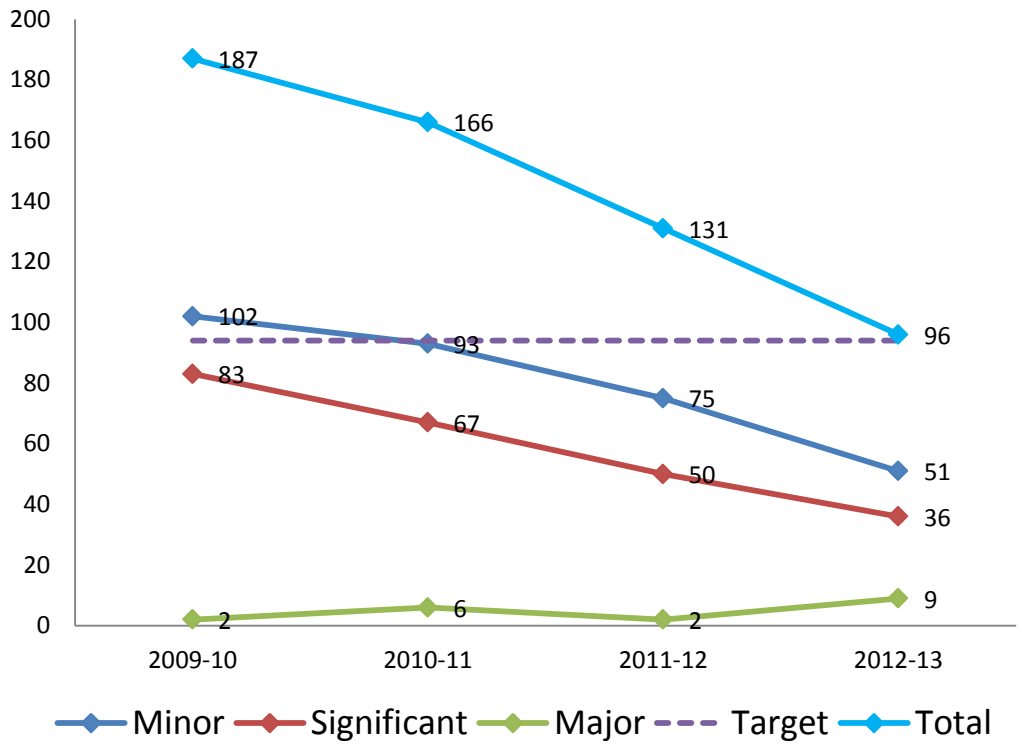
WHAT'S WORKED WELL?

49% reduction in HCRs in 3 years (2010-2013)

Guidance on hydrocarbon release reduction plans

Assurance and verification guidance

Mechanical Joint Integrity – Route to Competence



STEP CHANGE IN SAFETY

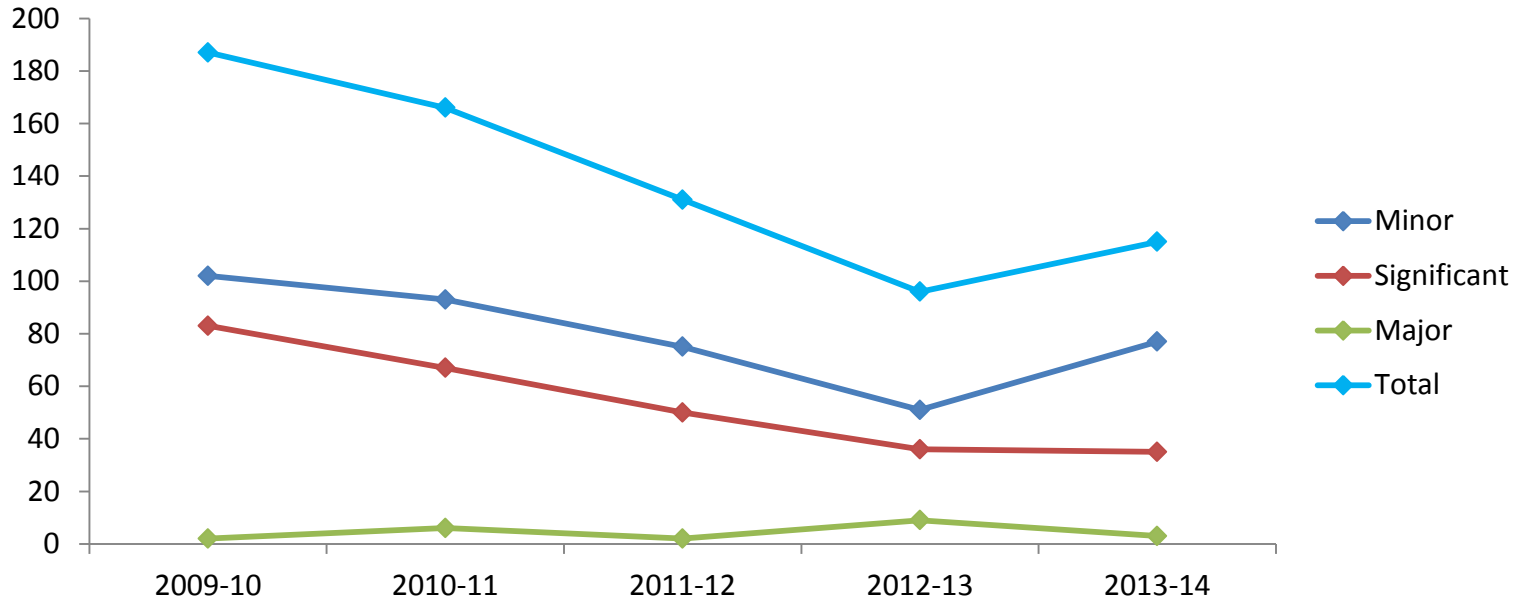
WHAT UNDERPINNED OUR SUCCESS?

- The Health and Safety Executive (HSE) HCRs Reduction focus and intervention policy
- HCR Plans
- Practical workforce engagement tools
- Joined up Thinking
- Cross-industry sharing

STEP CHANGE IN SAFETY

WHY THE INCREASE?

INDUSTRY PERFORMANCE



severity	2012-13	2013-14
Major	9	3
Significant	36	35
Minor	51	77
Total	96	115

STEP CHANGE IN SAFETY

Joined-up thinking

WORKING TOGETHER TO PREVENT HYDROCARBON RELEASES

Play Movie Clip

STEP CHANGE IN SAFETY

February 2013

Step #1

Major Accident Hazards & Safety Critical Elements

April 2013

Step #2

Small Bore Tubing

June 2013

Remembering Piper

July 2013

Step #3

Reporting & Learning Lessons

August 2013

Step #4

Pipework

October 2013

Step #5

Control of Work

December 2013

Step #6

Joints

SADIE

Safety

Alert

Database

Information

Exchange

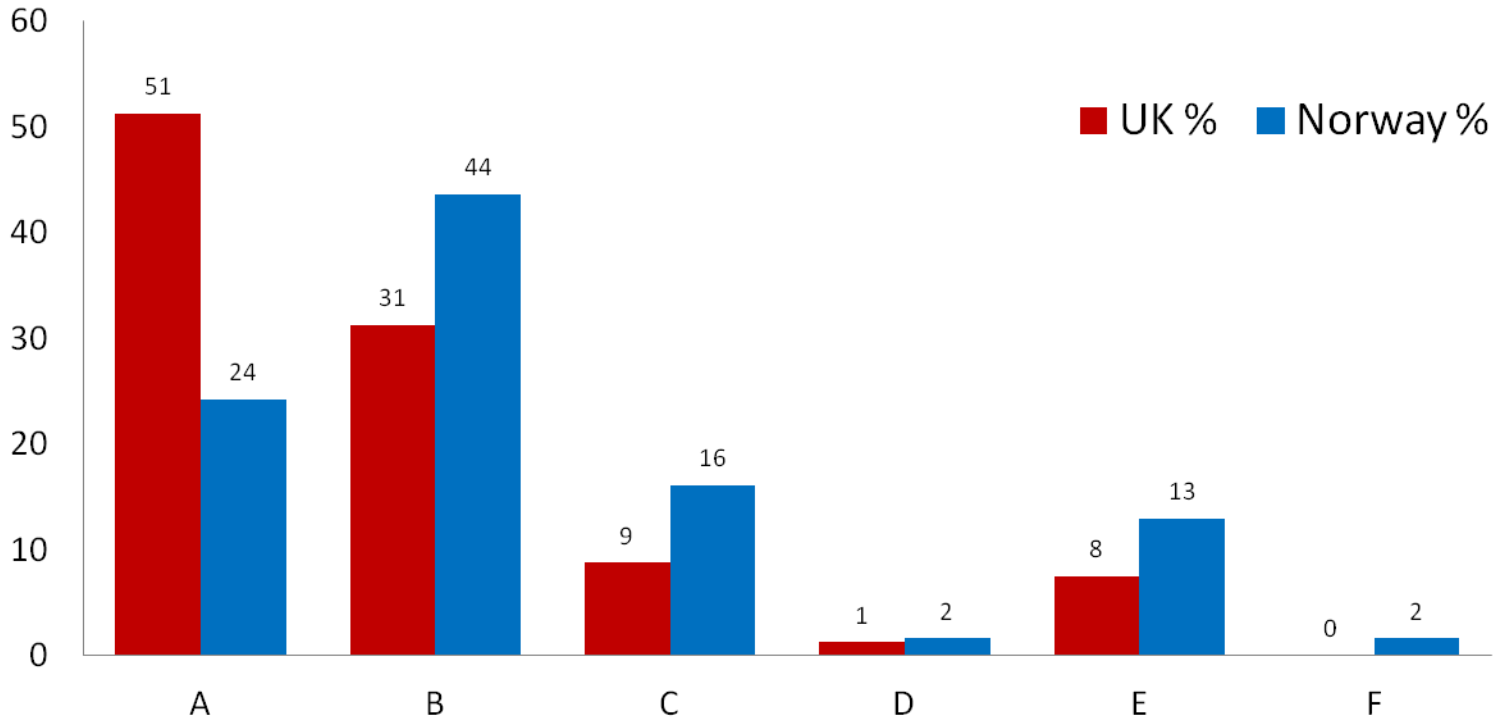
STEP CHANGE IN SAFETY

LEAK CATEGORISATION (Norway)

A. Technical degradation of system
B. Human intervention - introducing delayed release
C. Human intervention - causing immediate release
D. Process disturbance
E. Inherent design errors
F. External events

Detailed categories	
Code	Description
A1	Degradation of valve sealing
A2	Degradation of flange gasket
A3	Loss of bolt tensioning
A4	Fatigue
A5	Internal corrosion
A6	External corrosion
A7	Erosion
A8	Other
A9	Degredation of permanent or temporary hoses
B1	Incorrect blinding/isolation
B2	Incorrect fitting of flanges or bolts during maintenance
B3	Valve(s) in incorrect position after maintenance
B4	Erroneous choice of installations of sealing device
B5	Maloperation of valve(s) during manual operations
B6	Maloperation of temporary hoses
B7	Incorrect installation of small bore fittings
C1	Break-down of isolation system during maintenance (technical)
C2	Maloperation of valve(s) during manual operation
C3	Work on wrong equipment (not known to be pressurised)
D1	Overpressure
D2	Overflow/over filling
E1	Design related failures
F1	Impact from falling object
F2	Impact from bumping/collision

UK VS. NORWAY



A. Technical degradation of system
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