

Facility Integrity National Programme

Findings from Reported Incidents and
Planned Inspections

February 2008



Purpose

- Thank you for joining with us to share key lessons learned from NOPSA's Facility Integrity National Programme and industry's facility integrity management

What have we been doing?

Data obtained from:

- NOPSA's Planned Inspections using prompt sheets that reflect NOPSA's elements of Facility Integrity
- Accidents and dangerous occurrences reporting under the OHS legislation

How do we share results?

- Presentations that provide detailed information on both sets of findings are available on the NOPSA website at:

<http://www.nopsa.gov.au/programmes/>

Inspection: what we found

- Safety management system areas of improvement:
 - Management of change and deferrals
 - Backlog, maintenance and testing of safety critical elements
 - Performance standards for SCEs
 - Monitoring, independent auditing and review

Good practices from FI inspection

- Overall maintenance/integrity management systems
- Management reporting of performance indicators
- Company staff competency
- Onshore/offshore communications
- Supervision

Planned Inspections

Prompt sheet & Traffic Light Scoring System



FACILITY INTEGRITY
FACILITY INTEGRITY MANAGEMENT SYSTEM
ONSHORE INTERVIEWS

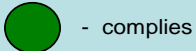
OPERATOR:

INSPECTION DATE(S):

FACILITY(S):

No	Prompt	Guide Notes	Comments /Status			
1	Policy and strategic objectives for Facility integrity		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> Tick one (✓)
2	Planning, Responsibility and Authority		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> Tick one (✓)
3	Training and Competency		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> Tick one (✓)
4	Deviation/deferrals, monitoring and records		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> Tick one (✓)
5	Audit and review		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> Tick one (✓)

Legend:



- complies



- partially complies (incomplete system)



- non compliance (major failing or Key elements missing)



- Not Tested / No Evidence

INSPECTION CARRIED OUT BY

(Please send the completed prompt sheets to T3 EA)

Name:

Signature:.....



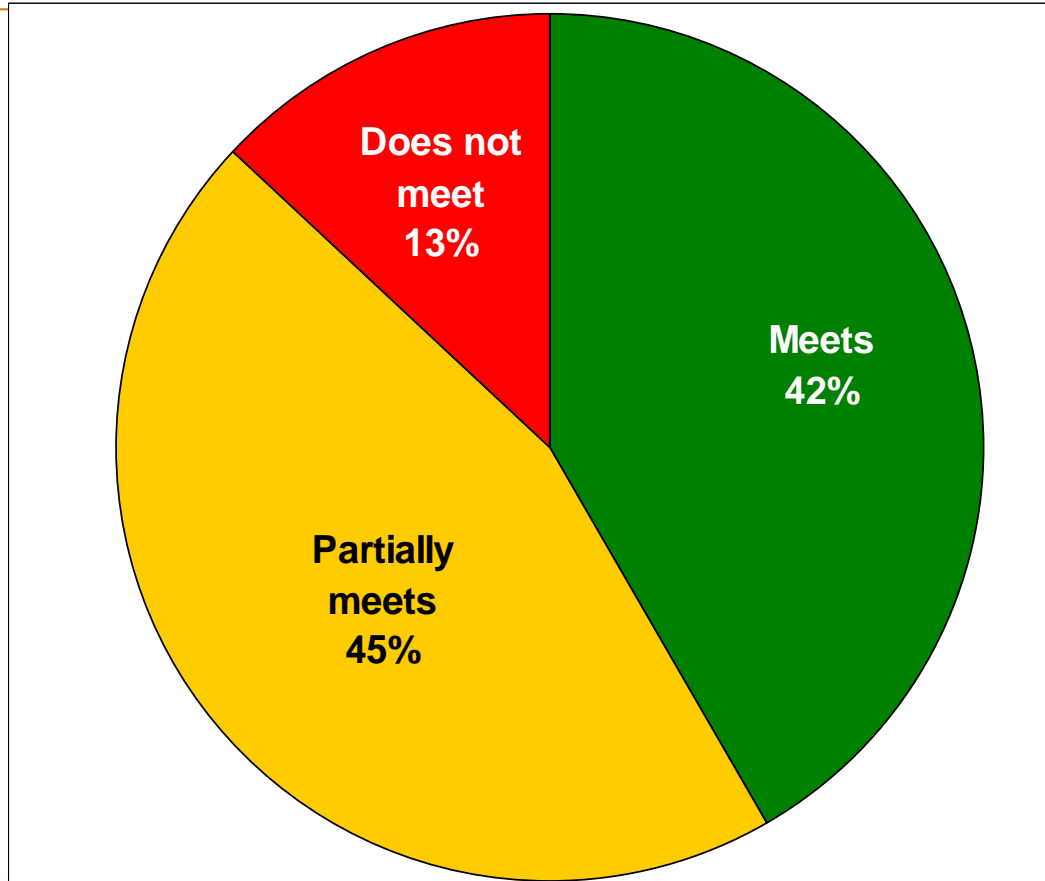
Planned Inspections

Progress

- 12 production operators
- 8 topic areas:
 - e.g. maintenance system, corrosion, pressure integrity
- 56 sheets completed
- 40% complete

Planned Inspections

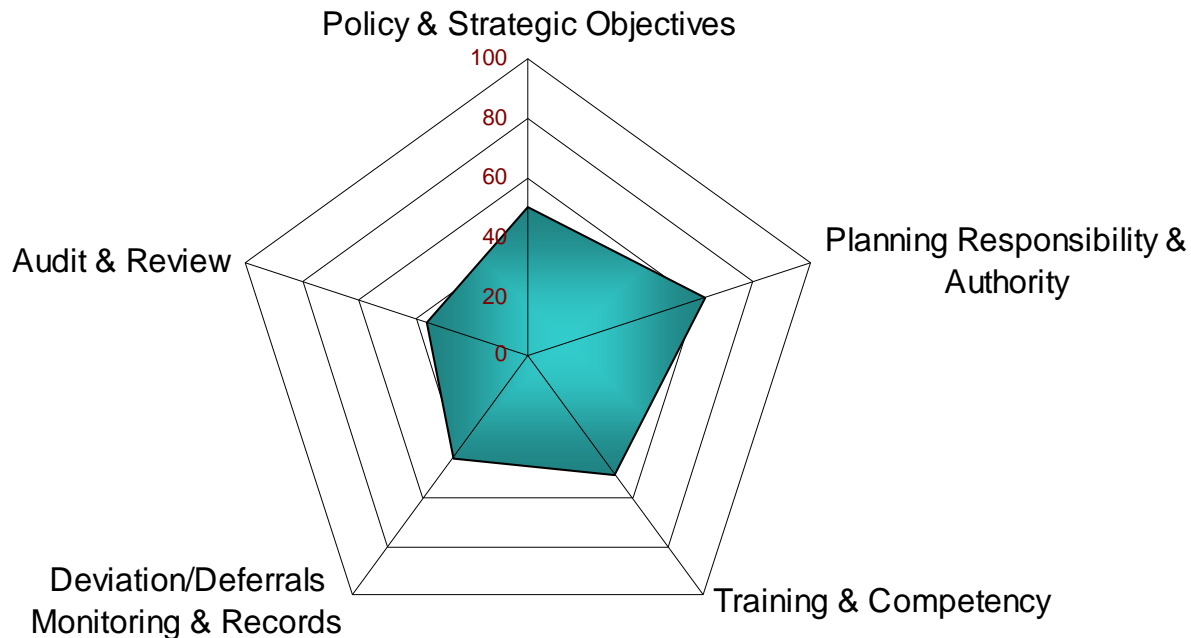
Expectation Levels - Proportion facilities at each level



Specific example of integrity management

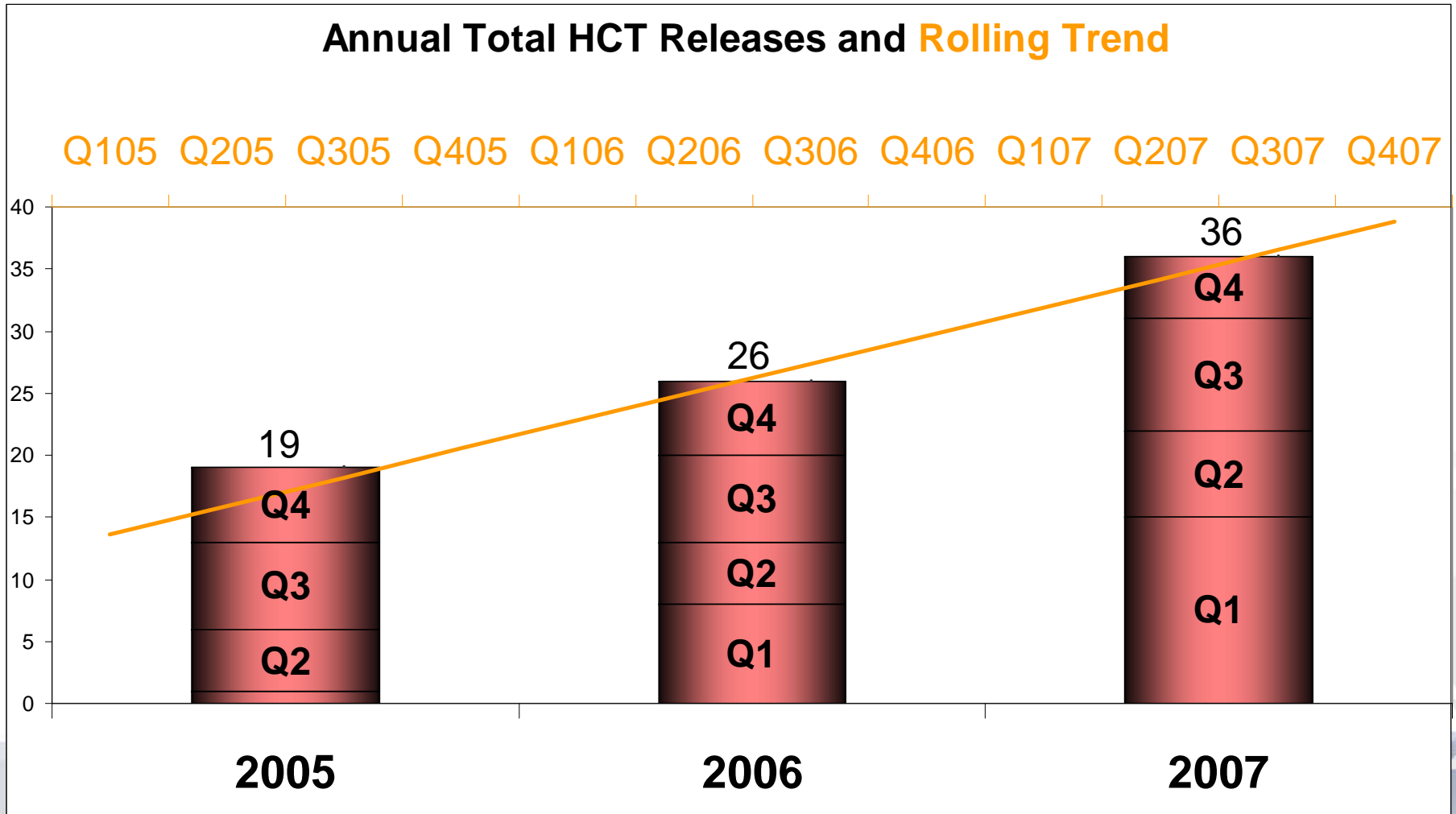
FI Management ONSHORE

% Scores - All Facilities

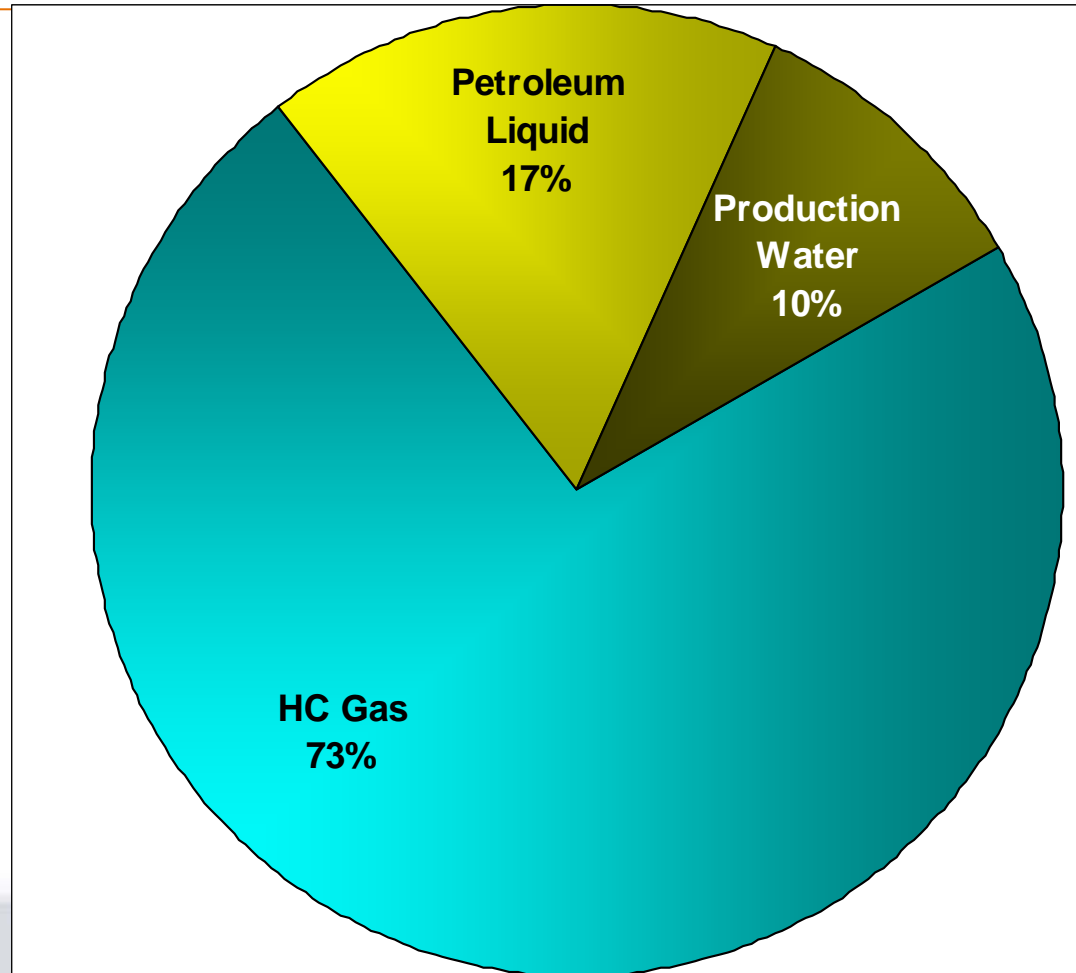


HC Releases – Overall Trend

Annual Total HCT Releases and **Rolling Trend**



HC Releases by Material Type

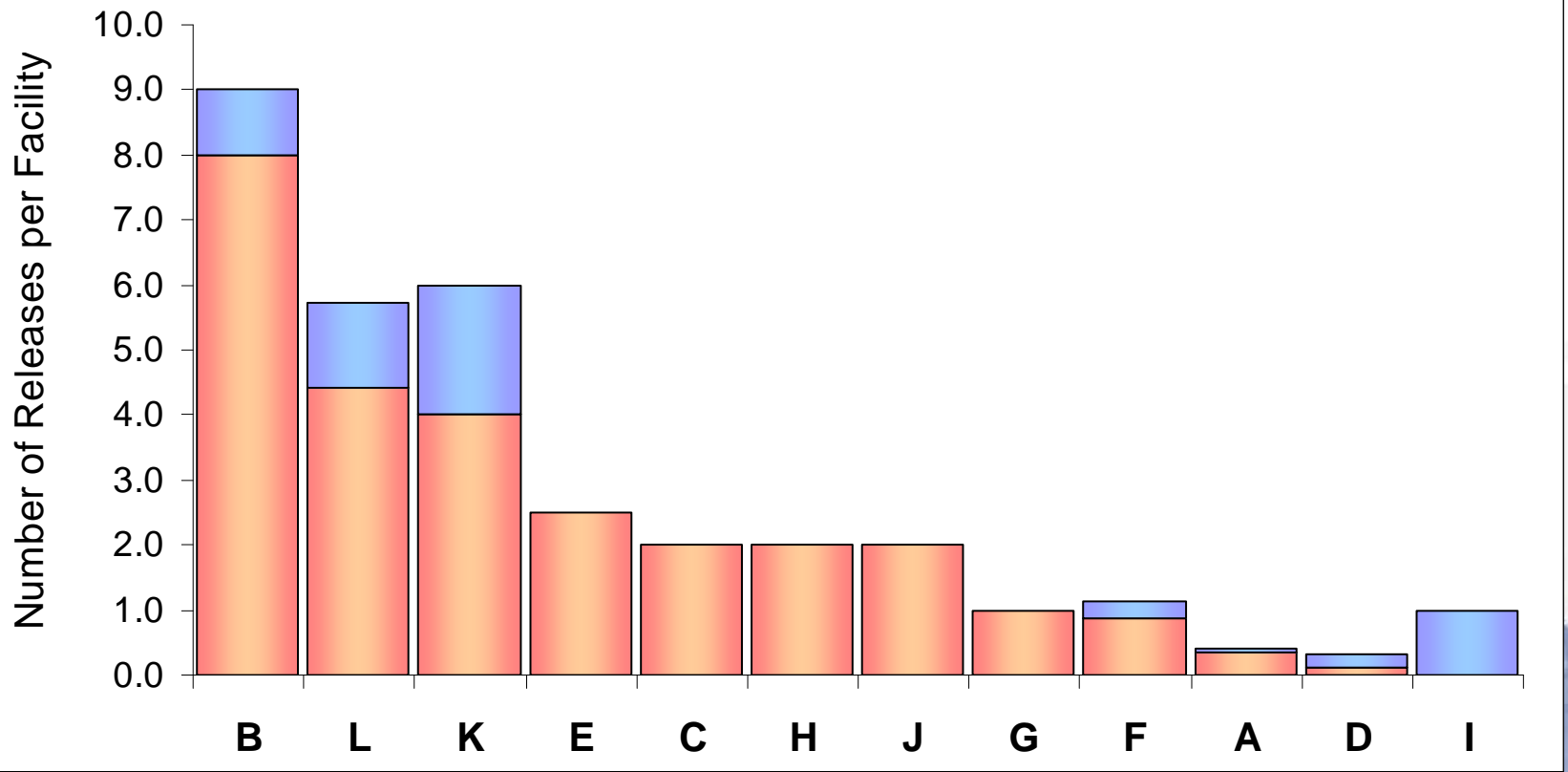


HC Releases by Production Operators - Incidents per Facility

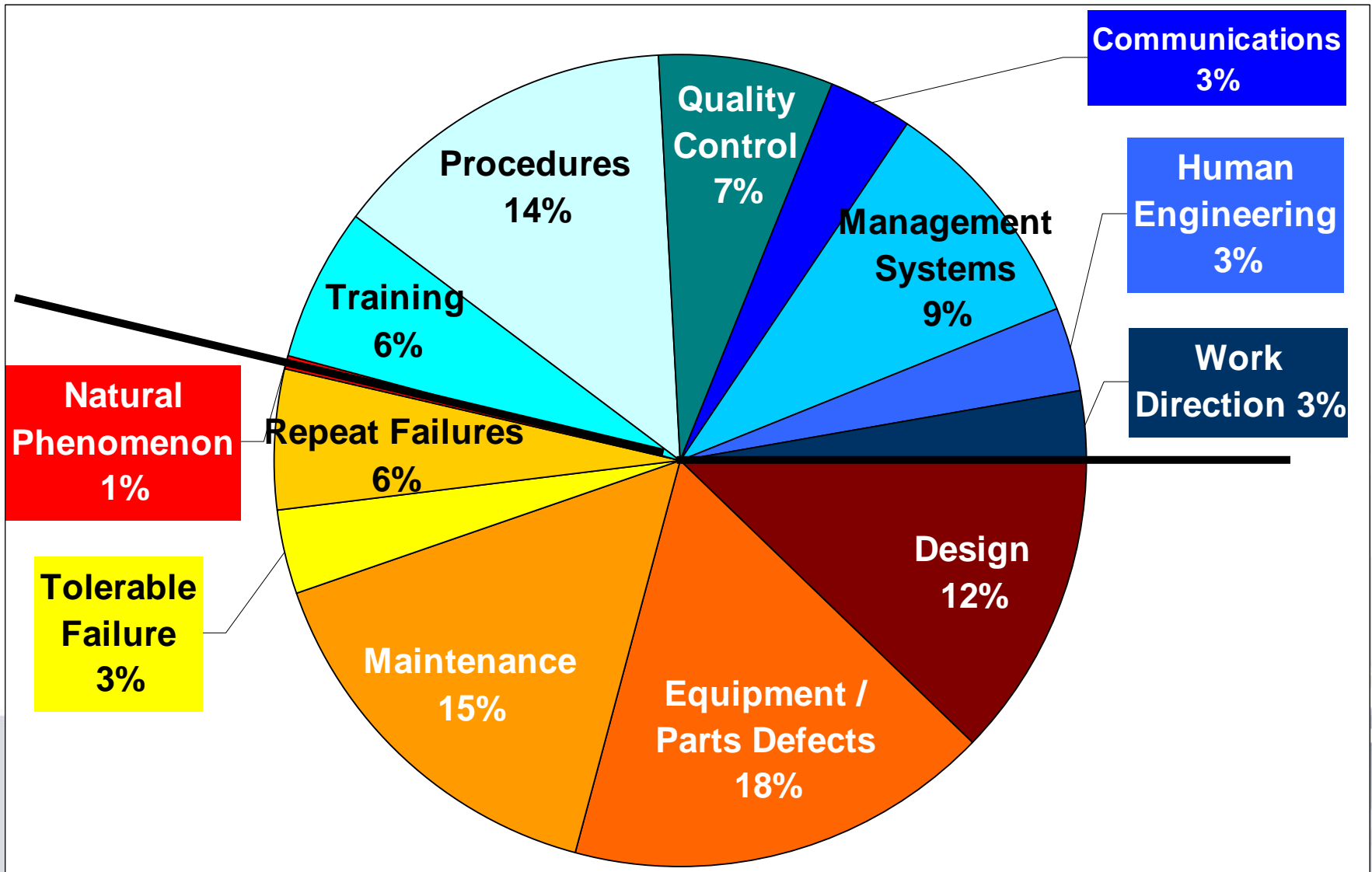
Actual (HCT) and Potential (PHCT) Releases for each Operator per Facility

PHCT Releases per Facility
HCT Releases per Facility

Jan 2005 - Dec 2007 : Operators - Anonymously Coded



HC Releases Causes (Tap Root®)



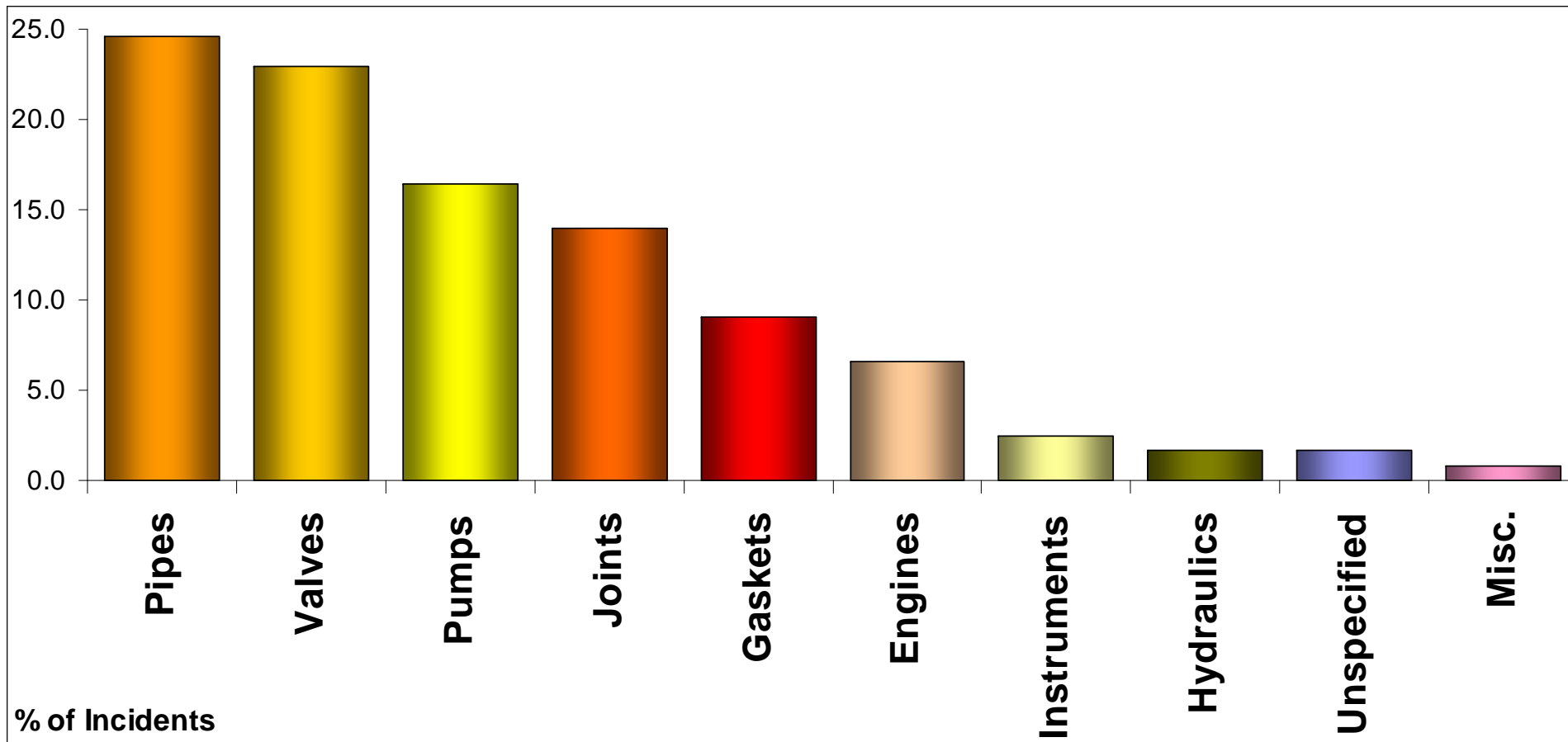
Areas of concern

Hydrocarbon releases

- Equipment/parts defects
- Non-adherence to procedures
- Inadequate maintenance and testing of safety critical elements (SCEs)
- Unclear performance standards for SCEs

HCT Releases

Parts/Equipment Involved



International Regulators Forum

Asset Integrity Conference 2007

- Leadership commitments to safe and reliable operations
- Monitor and respond to leading indicators to meet defined performance standards

International Regulators Forum

Asset Integrity Conference 2007

- Maintaining multiple independent prevention and mitigation barriers
- Self audits not adequate, need independent audits and corrective actions

International Regulators Forum

- Management and control of deferrals and modifications
- Regular review of near misses
- Workforce participation provides insight into process vulnerabilities.

What's next?

- FI programme through to mid 2009
- Post inspection and Accident & Dangerous Occurrence analysis on the website
- Encourage industry to share good FI practices for continuous improvement

What else could be done?

- Industry website to share good practices
- Common leading indicators in process safety and facility integrity
- Training for Senior Leadership on integrity and major accident events

We are not alone

“But the most important lesson from Norway’s 40 years of petroleum operations is that structures and equipment do not always last as long as expected – even with detailed and systematic inspection and maintenance.”

BP Texas City – US CSB CEO

“All industrial managers need to treat safety and major accident prevention with the same degree of seriousness and rigor that is brought to financial transactions.”