2009 HSR Forum

Previous Forum Outcomes
&
Industry Safety Performance

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NOPSA

Output from Previous Forums

Key Issues		
2006	**2007**	**2008**
Communication	HSR Education	Training & Competency
Consultation	Role of Workforce	Mgmt Communication
Effectiveness of NOPSA	SCs & New Facilities	Safety Culture & HSRs
HSR Networking	Safety Case Training	Process v Personal Safety
Contractor Personnel Recognition	Competency Standards	
	Safety Culture & Production	

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NOPSA's Actions on 2006 key issues

Communication

- Publish Inspection Policy & Procedures on web site, including specific requirements to meet with HSRs;
- Distribution of CEO Newsletter to HSRs
- Boot room gossip and brochures and leaflets, including a number specifically for HSRs
- Report Operator & Industry Performance
- Ongoing production of safety alerts

NOPSA's Actions on 2006 key issues

Effectiveness of NOPSA *NOPSA continues to provide:*

- Corporate and Operating Plans, extensive plain English documents
- Training/competence plans for NOPSA OHS inspectors
- Facility Integrity National Programme, Maintenance Backlogs as subjects in Inspections

Consultation

- Operator involvement with workforce as a focus in PIs and SC Assessment
- NOPSA incident notification system to provide for making complaints

HSR Networking

- NOPSA sponsors 'HSR Online'

Recognition of Contractor Personnel

- Communicate operators' duties to all personnel

NOPSA's Actions on 2007 key issues

Better Education for HSR Role/Powers

- NOPSA produced HSR Handbook

Role of Workforce

- Re-inforce workforce involvement in Safety Cases – assessment policy
- New Safety Case Guidelines for workforce involvement (release in 2010)

New Facilities – Safety Case Familiarisation

- Inspection within 6 weeks policy
- Focus on SC awareness in inspections

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NOPSA's Actions on 2007 key issues

Safety Case Training

- Accreditation of HSR Training Providers
- Theme for today's Forum

Competency Standards

- NOPSA's 2008 Workshop

Safety Culture that integrates into Production

- This Forum = Process Safety Culture
- Four focus areas for 2009-2010

NOPSA's Actions on 2008 key issues

Training and Competency

- HSR Handbook
- NOPSA policy on inspection topics
- Policy to meet with HSR's on every inspection
- CEO Newsletter topics
- Lifting Operations National Progamme, including crane operators

Management Communication

- Encouragement & Support for the Industry CEO Leadership initiative
- Safety Leadership – NOPSA focus area for 2009/10

NOPSA's Actions on 2008 key issues

Safety Culture

- Workforce familiarisation of Safety Case (Today's Forum and Safety Case Brochure)
- Process Safety Culture (Today's Forum)
- Safety Leadership encouraged through NOPSA workshops
- Safety Case Guidelines currently being produced

Process vs Personal Safety Balance

- Process Safety Culture (Today's Forum)
- NOPSA focus area for 2009/10

This Year's Themes:

Process Safety Culture

HSRs & the Safety Case

And still learning ….

We are VULNERABLE ...

so be VIGILANT

21st Anniversary of the Piper Alpha tragedy
6 July 1988

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Texas City Refinery
15 Fatalities – March 2005

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US Chemical Safety Board

- Mistakes made in Texas City have their roots in decisions made by managers, sometimes years earlier
- Safety culture is first and foremost about how managerial decisions are made
- Are production and cost control being rewarded at the expense of safety and risk management?
- Recommended BP set up independent panel

Baker Report Findings Jan 2007

Preventing process accidents requires vigilance…

People can forget to be

afraid!

Corporate safety culture

- effective process safety leadership
- operating discipline: no toleration of deviations from safe operating practice

Process safety management systems

- process safety standards & good engineering practices
- translate corporate expectations into process safety criteria

Performance evaluation, corrective action and oversight

- effective root cause analysis of incidents & audits to ensure performance
- senior management oversight of process safety

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Buncefield Oil Storage Depot

United Kingdom

Dec 2005

Buncefield Investigation Findings

- Leadership and Culture

- **Collate and communicate data**
  - high potential incidents
  - solutions and control measures

- **Undertake thorough root cause investigation**

- **Share lessons learned and best practices**

How has the Australian offshore petroleum industry been performing ?

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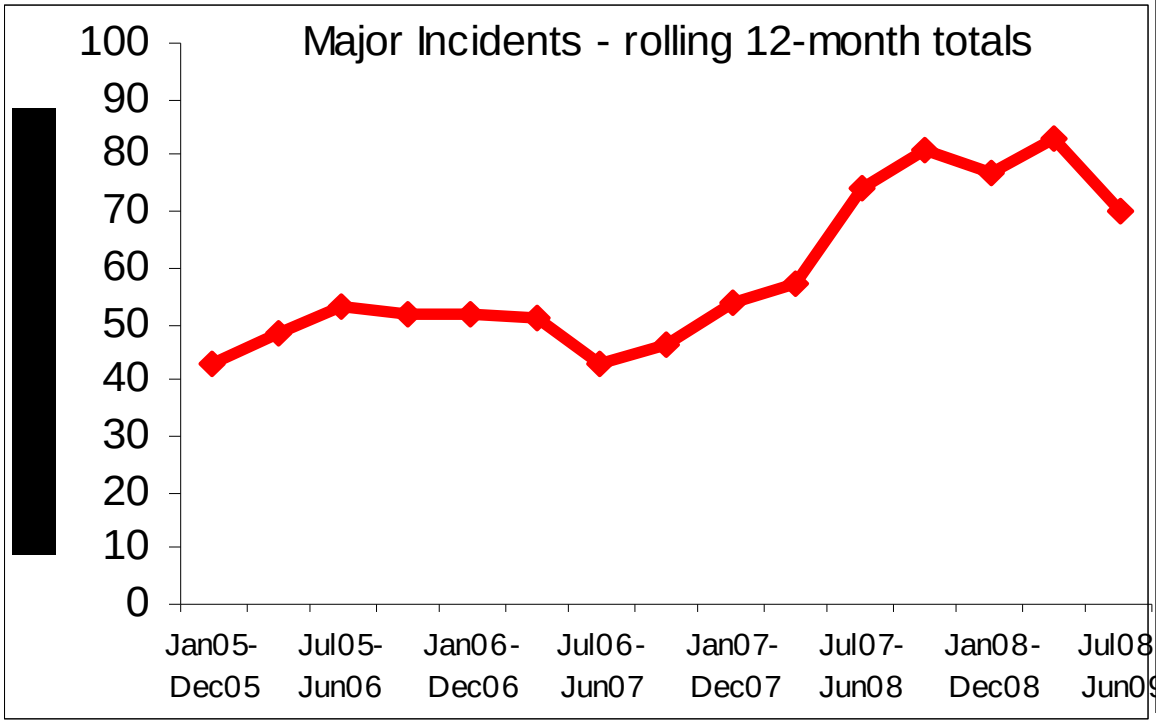
Offshore Petroleum Industry Health & Safety Performance

Collected since NOPSA commenced

- Accidents and Dangerous Occurrences
- Planned Inspections
- National Programmes

MAJOR Accidents & Dangerous Occurrences



MAJOR A + DOs include:

Death/serious injury

Could cause death/serious injury

Fires or explosions

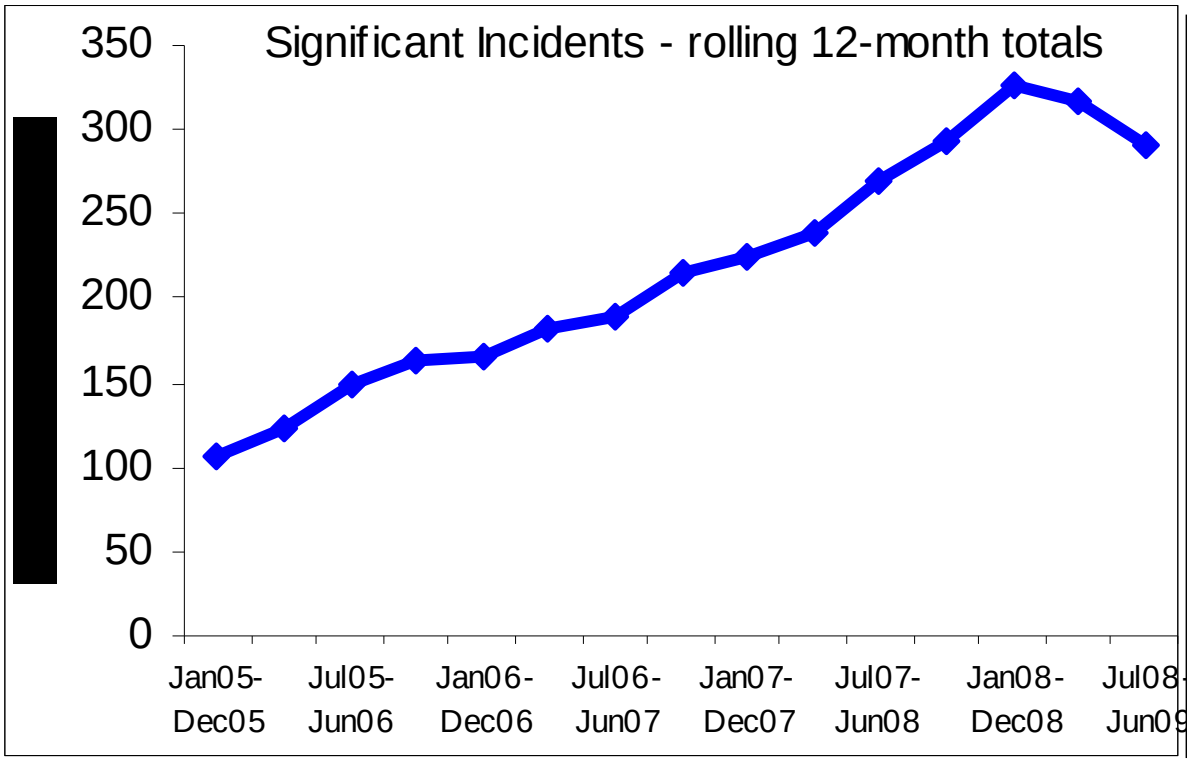
Collision marine vessel & facility

Hydrocarbon gas release >300 kg

Petroleum liquid release >12 500 L

The International Regulators Forum (IRF) has devised a severity rating. '**Major**' is considered more serious, followed by '**Significant**'.

SIGNIFICANT Accident & Dangerous Occurrences



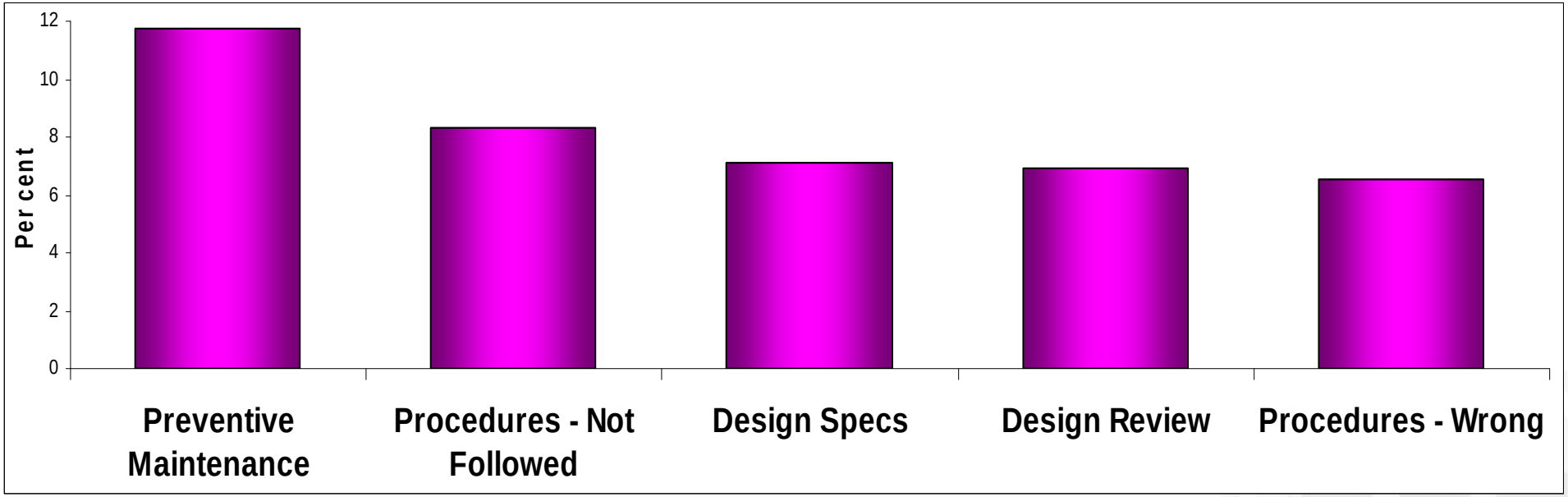
SIGNIFICANT A + DOs include:

- Incapacitation LTI ≥3 days
- Could cause an LTI ≥3 days
- Other kind needing immediate investigation
- Damage to Safety-critical Equipment
- HC gas release >1-300 kg
- PL release >80 -12 500 L
- Well kick >50 barrels
- Unplanned Event - Implement ERP

The International Regulators Forum (IRF) has devised a severity rating. '**Major**' is considered more serious, followed by '**Significant**'.

Accidents & Dangerous Occurrences

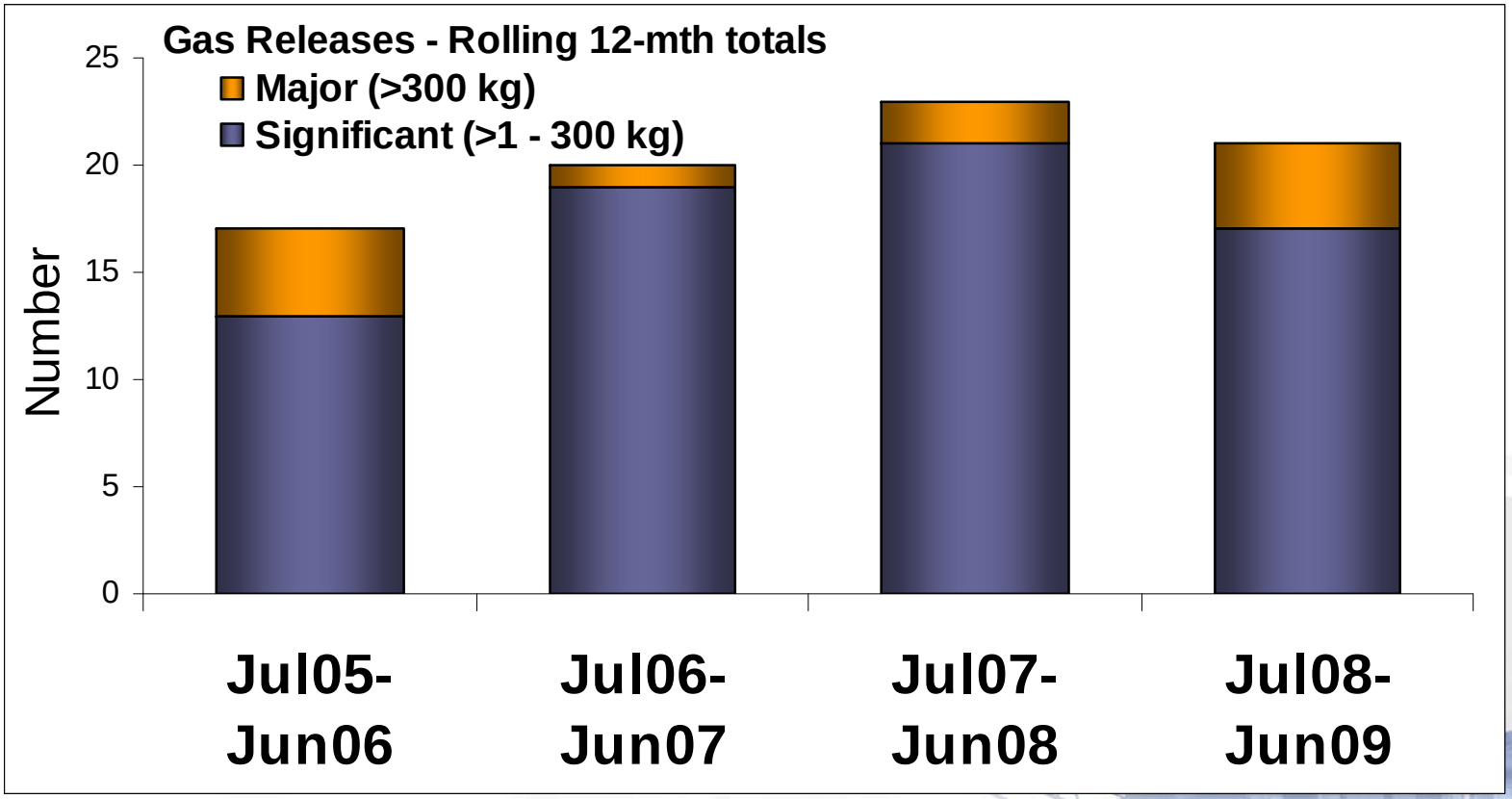
Top 5 Root Causes



Data from Jul 2008 – Jun 2009

Hydrocarbon Gas Releases

Number per Year



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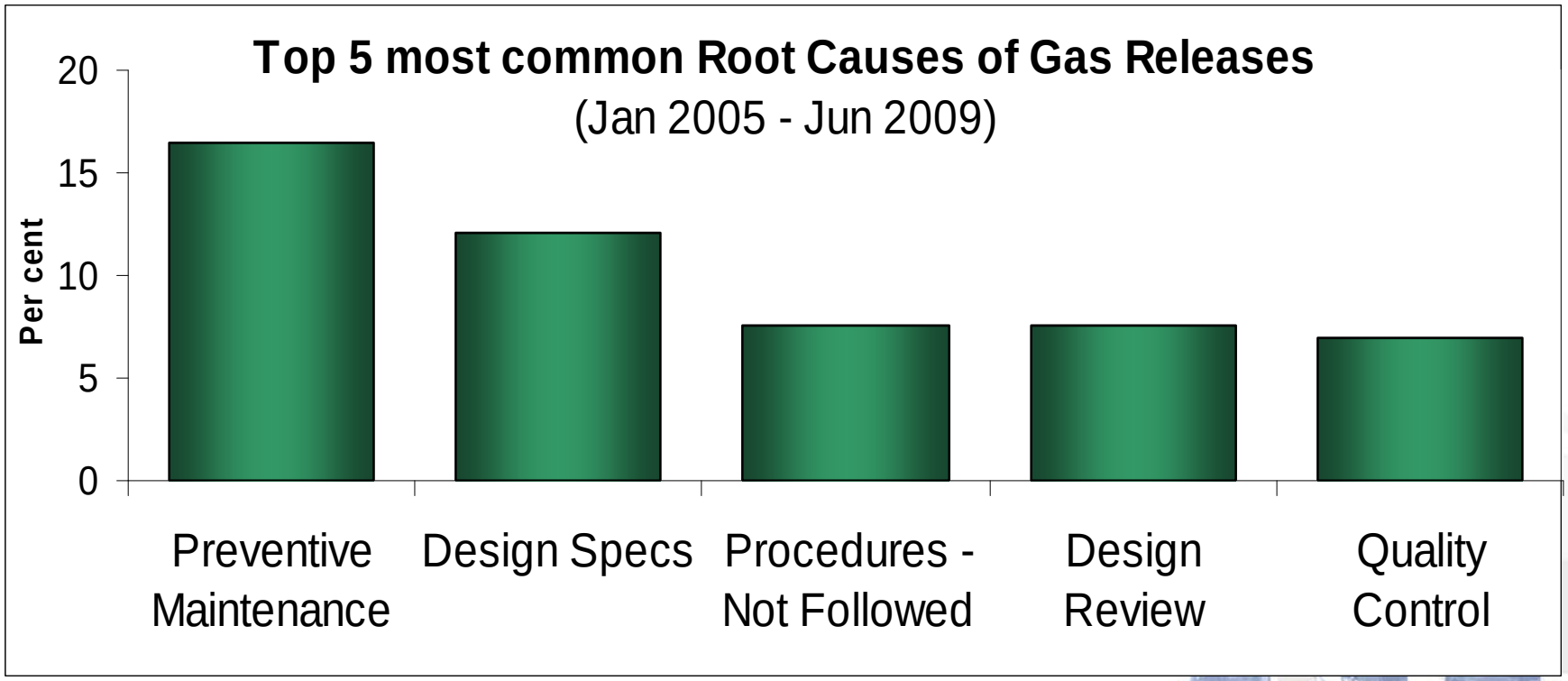
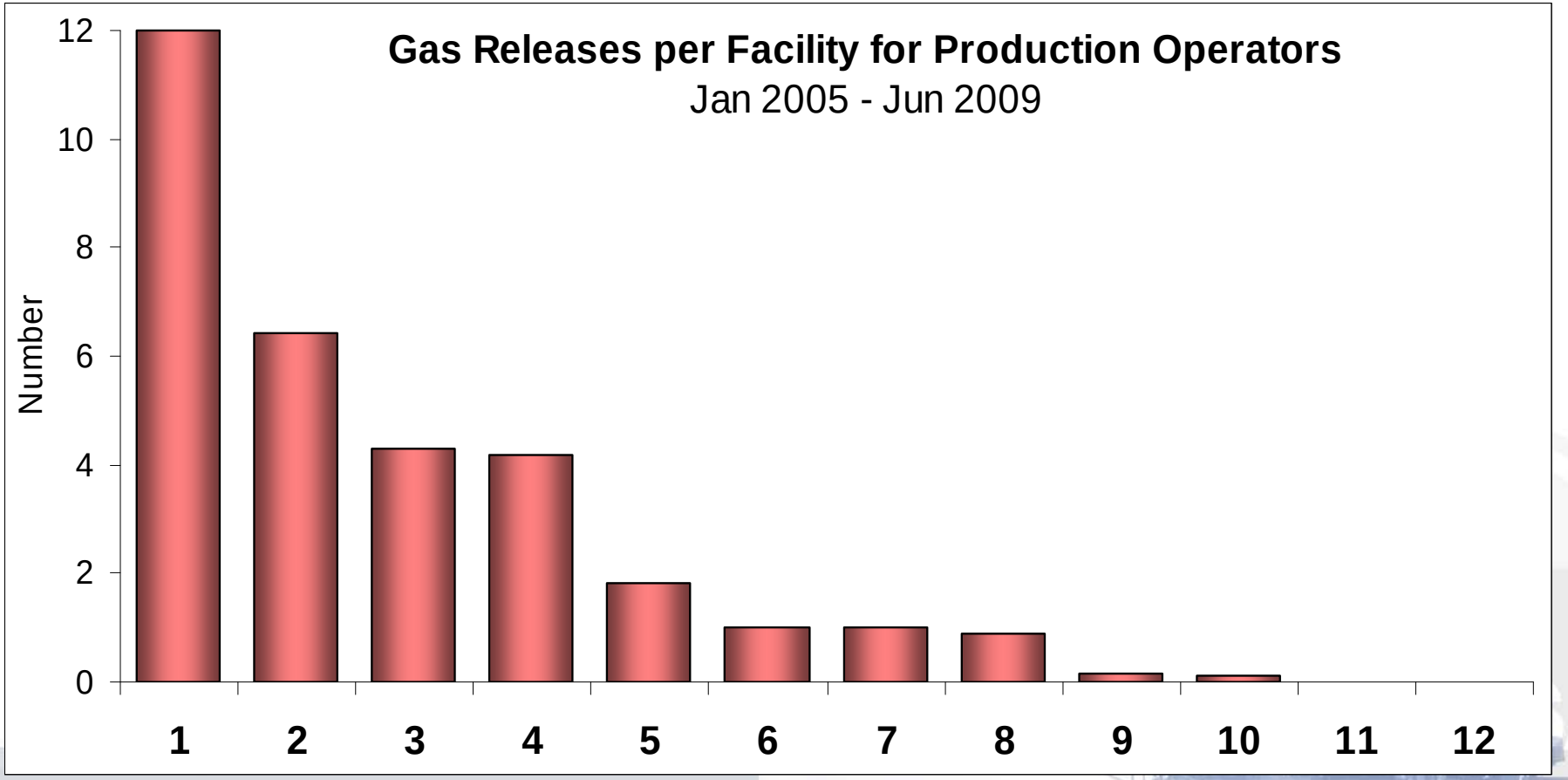
Hydrocarbon Gas Releases

Root Causes



Production Operators

Gas releases per Facility per Operator



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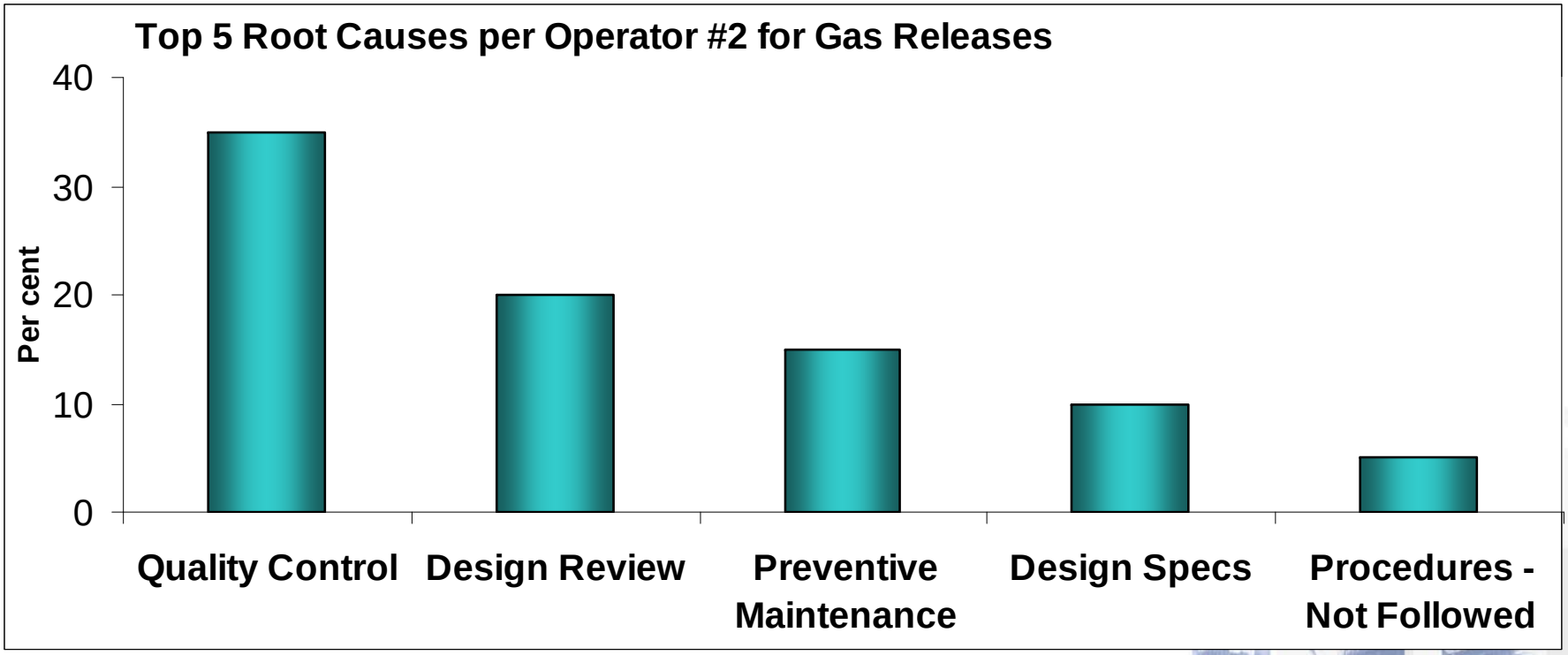
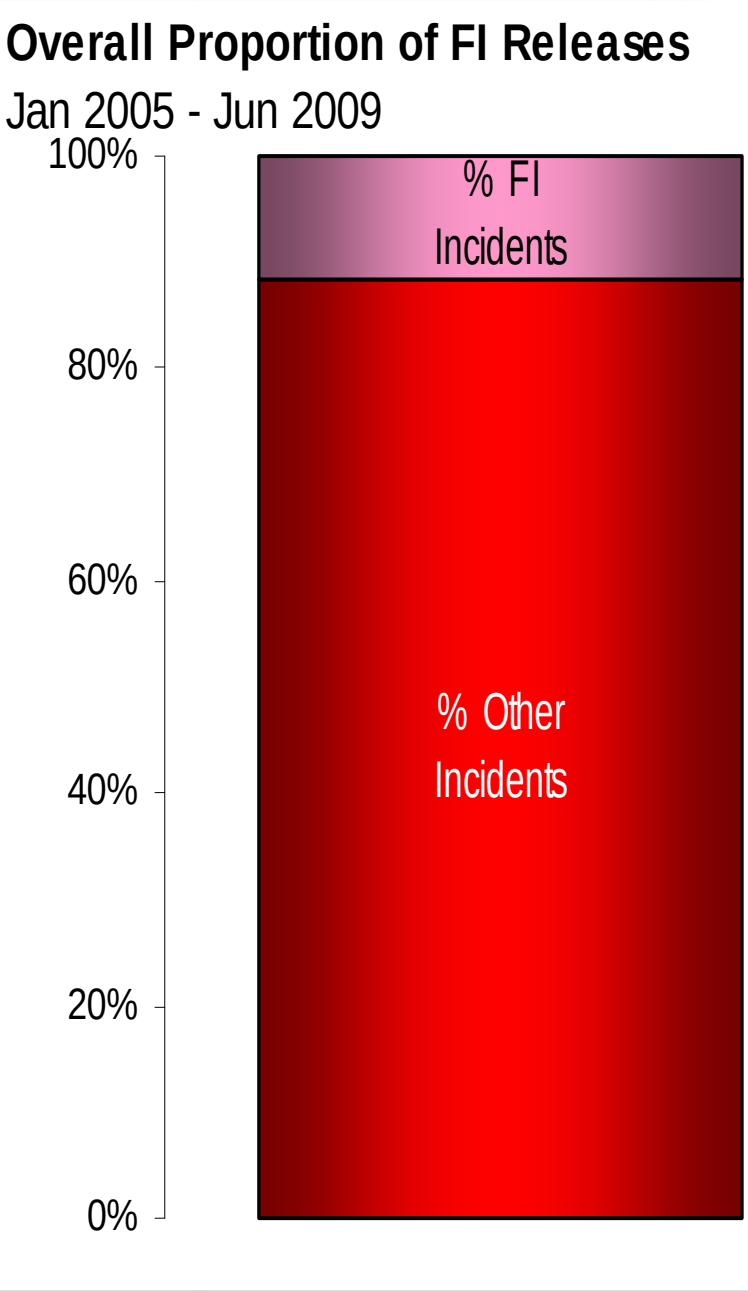
Production Operator # 2

Root Causes

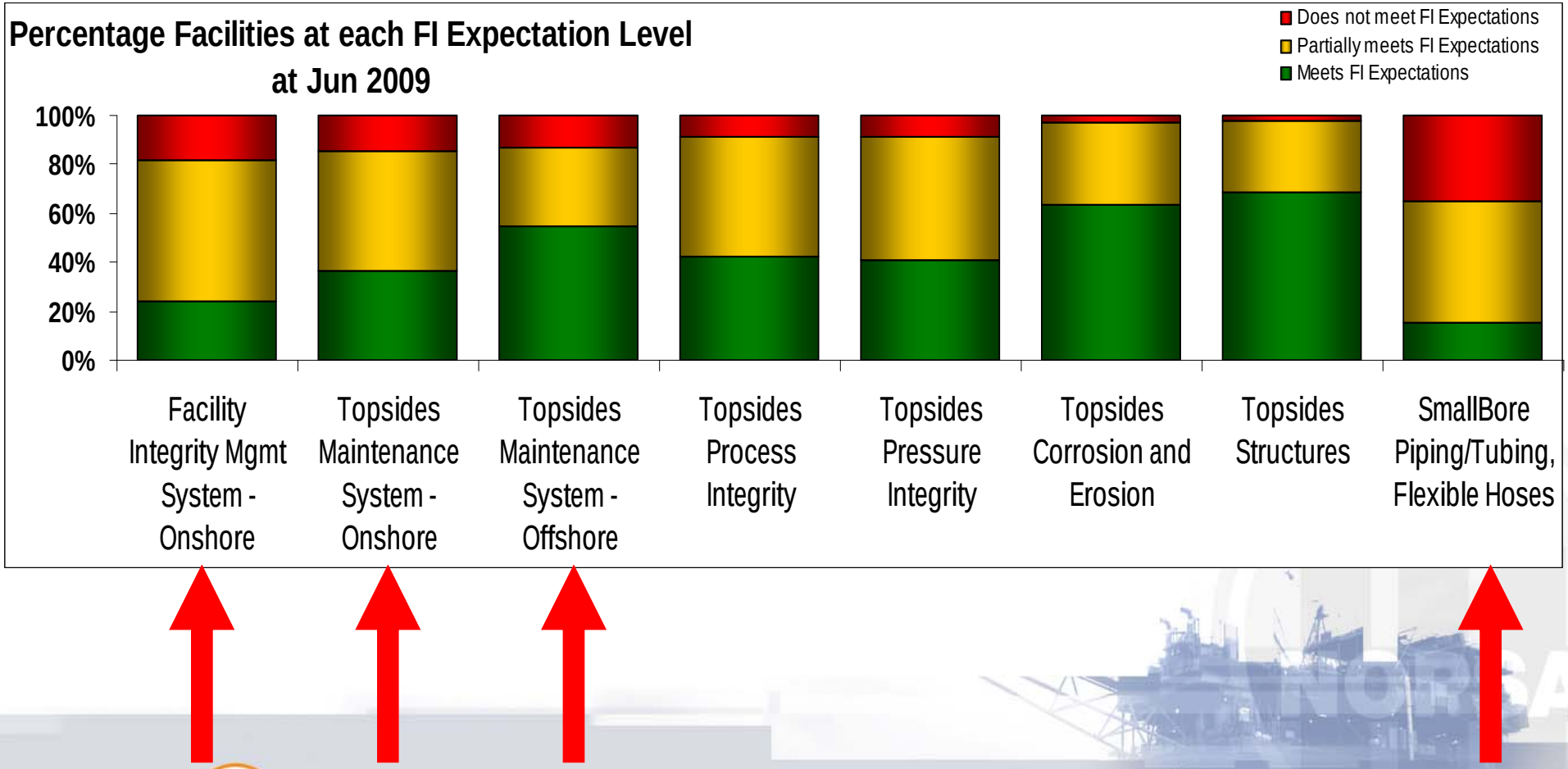


Facility Integrity
National Programmes



- **NOPSA Inspections (FI Prompt sheets)**
- **Analysis of Accident & Dangerous Occurrences**

FI: Inspection Results by Focus Areas



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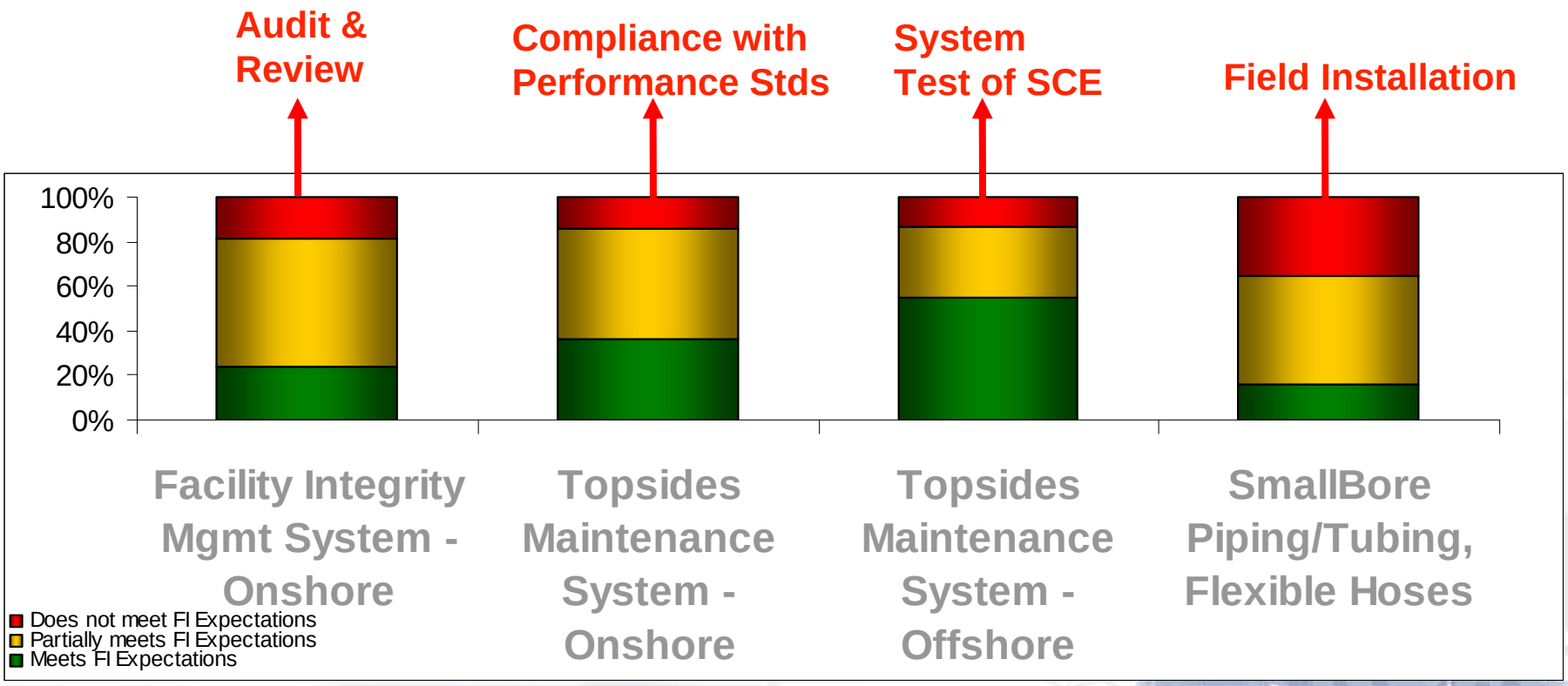
FI: Focus Area Elements that require attention



8 areas, also; process pressure corrosion structures

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Key Findings from National Programmes

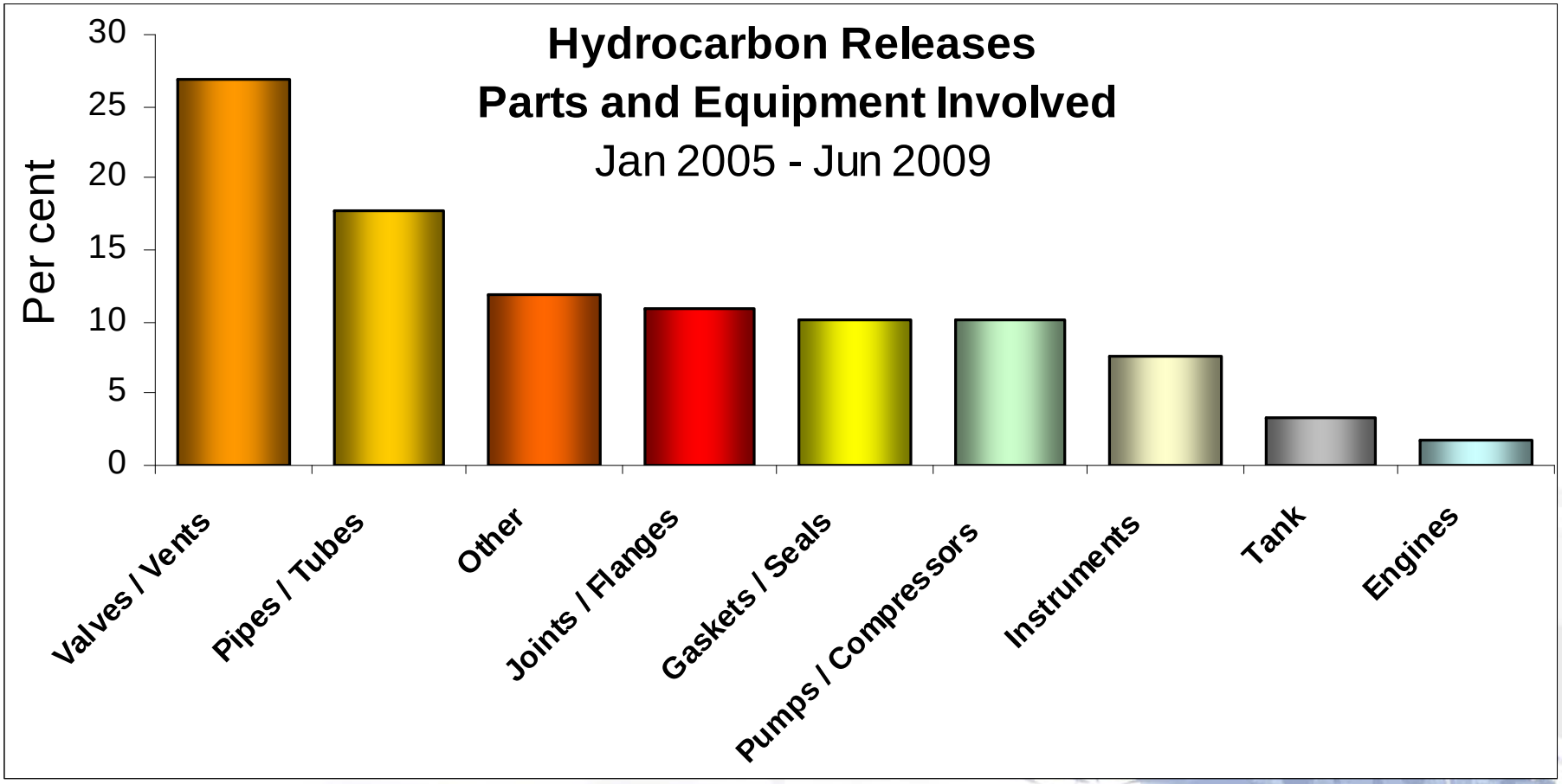
1. NOPSA Inspections (FI Prompt sheets)

- Backlogs in testing & maintenance of safety critical elements
- Monitoring, independent auditing and review

2. Analysis of Accident & Dangerous Occurrences

- Safety Critical Elements: inadequate testing & maintenance
- Equipment and Parts Defects

Parts and Equipment involved in FI Incidents



Accidents & Dangerous Occurrences Root Causes

Overall Top 3 (Jan 2005 – Jun 2009)

1. Preventive maintenance

needs improvement

2. Procedures

not used/not followed

3. Design specifications

needs improvement

What does the offshore petroleum OH&S regulator do?

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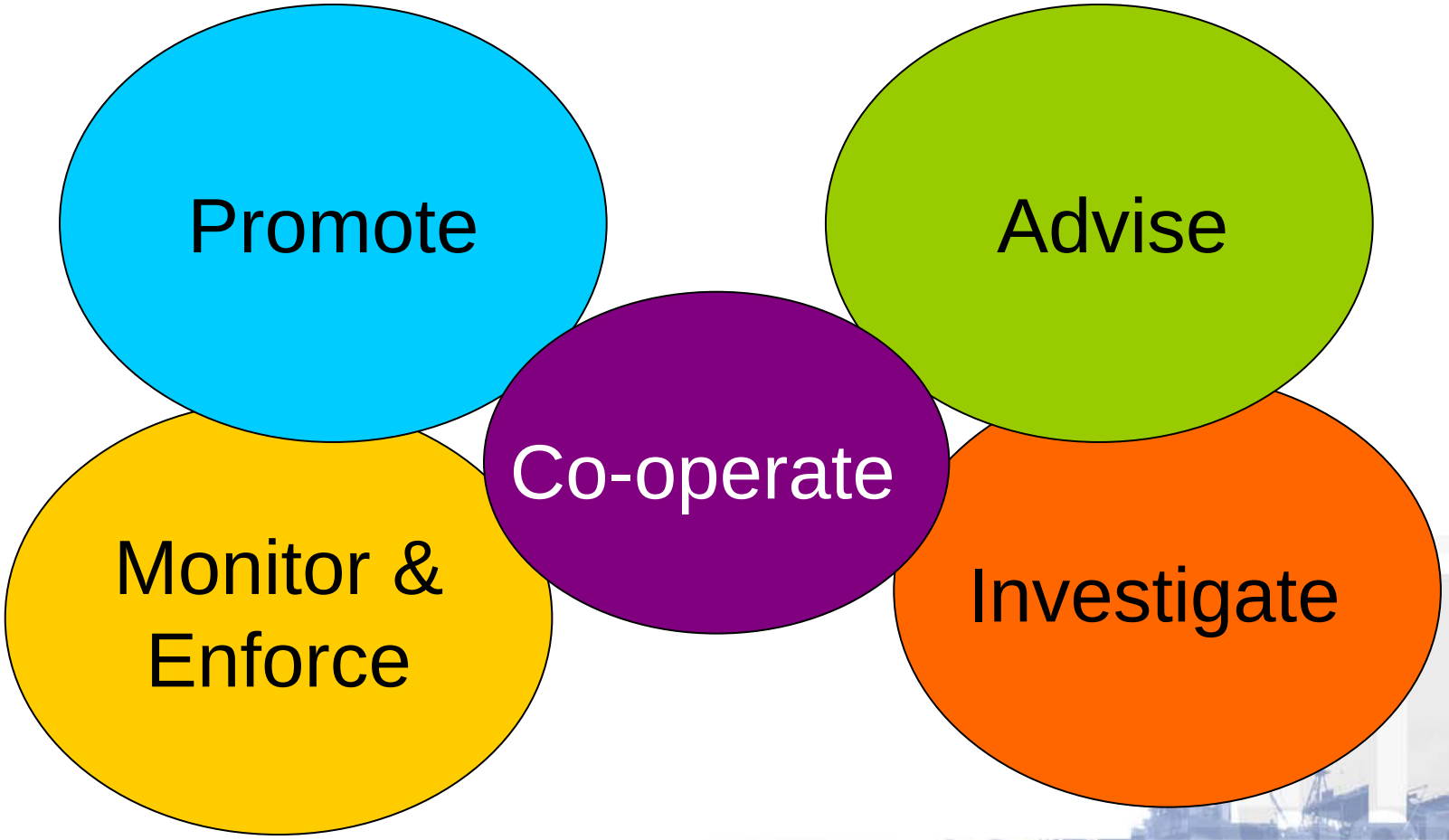
NOPSA's functions



Balanced judgment is required for these functions

NOPSA Activities 2008-09

Proactive

27 OHS Inspectors ► 89 Inspections

163 Facilities (68 pipelines)

Reactive

Assessments		~ 220
Accident & DO Notifications		~ 400
Complaints		~ 25
Enforcement	Improvement Notices	~ 40
	Prohibition Notices	~ 10

(Based on current data Jul 2008 – Jun 2009)

NOPSA focus areas: 2009-2010

- Industry safety leadership
- Asset integrity
- Emergency preparedness
- Contractors

Asset integrity

Minimum of 5 asset integrity themed audits this year:

- Company-wide critical examinations of operator systems and facilities

Drawing on NOPSA FI results and sources such as OGP Asset Integrity question set:

- Facility major incidents & barriers
- Critical equipment
- People & processes
- Projects
- Culture

Thank you