

Process Safety Working Group

Report to UKOPA October 2008

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UKOPA/08/0077

Outline of Report

- PSWG ToR and membership
- UKOPA Action
- PSWG programme of work to develop process safety self assessment tool (questionnaire)
- Outline of tool
- PSWG pilot study
- Proposal UKOPA benchmarking study

PSWG – Terms of Reference

Aim

To provide information and expert opinion, direction and guidance on Process Safety to the UKOPA members and Industry Stakeholders on behalf of UKOPA.

Objectives

- To develop process safety KPI model for pipeline operators and consider how best to share performance and publish reports to external stakeholders.
- To share knowledge and best practice on process safety between UKOPA members.
- To review, interpret and question the Legislator's proposals for process safety leadership.
- To influence the scope of process safety leadership initiatives being developed by the HSE.
- To develop and publish practical pipeline operator KPIs for pipeline safety management which are aligned with legislation, pipeline codes and best practice.

PSWG – 2008 Deliverables

- Prepare draft pipeline KPI report (presented at February meeting)
- Develop process safety benchmarking model for UKOPA (PSWG May Meeting)
- Complete model development, challenge inputs, define pilot study (PSWG June Meeting)
- Review pilot study results, consider how best to report results, define requirements for UKOPA rollout (PSWG September Meeting)
- Work has been well supported by
 - Mark Baldwin (Eon)
 - Tom Smith (Shell)
 - Mike Thomson (Ineos)
 - Kunal Aggarwal / Tony Stonehewer (National Grid)
 - Jane Haswell (PIE)

PSWG 2008 Work Programme

	Action	Status
i)	Develop self assessment questionnaire based on risk controls – PSWG joint development of 3 rd party interference module	√
ii)	PSWG members to complete risk control questions for all modules	√
iii)	Challenge and review risk control questions	√
iv)	K Aggarwal to develop excel-based PS benchmarking questionnaire and results reporting model	√
v)	PSWG members agree model and complete questions and scoring for incorporation	√
vi)	Pilot study – completion of questionnaire by PSWG members	√
vii)	K Aggarwal to analyse and present results for PSWG to review	√
viii)	T Stonehewer to present pilot study results and UKOPA rollout at UKOPA meeting	

PSWG Benchmarking Questionnaire:-

- Risk Control Areas identified
 - Using PD8010, TD1 and HSE Guidance
- Each risk control area defined as a series of scored questions
- Excel based model developed
- Scores for each risk control area analysed and presented
- Model tested in PSWG pilot study (Eon, Ineos, NG, Shell)

Next few slides provide an overview of the model, its structure and give examples of the results.

Risk Control	Key Issues	Developed by
1. Leadership	Audit, closeout, incident investigation	T Stonehewer
2. Modification & repair Process	Repair & mods procedures, changes to design, defect management	T Stonehewer
3. Integrity	Pipewall condition, corrosion mgt, AG pipework condition	J Haswell
4. 3rd Party Interference Management	Surveillance, supervision, marking & information	PSWG
5. Route Management	Route survey, ground condition, land use	T Smith
6. Operating Procedures	PTW, roles & resp, operation & control procedures, SCADA etc	T Smith
7. Competence & Training	Resources, competence assessment of staff & contractors, training	K Aggarwal
8. Asset Records	Design, construction, maintenance, access to information on critical assets	M Thomson
9. Emergency Response	Resources, testing, liaison, equip & spares, communications, PERO	M Baldwin
10. Maintenance, Inspection, Other	Checks & maintenance, protective devices, hazardous areas, electrical	M Thomson



UKOPA



United Kingdom
Onshore Pipeline Operators' Association

Process Safety - Risk Control Questionnaire

Company Name:

Contact Name:

Contact Address:

Contact E-mail:

Contact Phone:

Third Party Interference Management

Total Score: 26

Depth of Cover

- | | |
|---|--------------------------|
| Is your standard depth of cover > 1.1m ? | <input type="checkbox"/> |
| Do you have a process to investigate location specific depth of cover? | <input type="checkbox"/> |
| Do you have a process to check depth of cover using random sample checks at frequency | <input type="checkbox"/> |
| Greater than 4 years | |
| Less than 4 years | |

Markers

- | | |
|--|-------------------------------------|
| Is there a company standard in place for marker post location and information? | <input type="checkbox"/> |
| Can marker posts in either direction be seen from a single position? | <input checked="" type="checkbox"/> |
| Is there a process in place to confirm marker post condition? | <input checked="" type="checkbox"/> |
| Is there a replacement programme? | <input type="checkbox"/> |

Surveillance

- | | |
|--|-------------------------------------|
| Do you have a company standard for company vantage or aerial surveillance? | <input checked="" type="checkbox"/> |
| Do you carry out aerial or vantage surveillance at regular intervals? | <input checked="" type="checkbox"/> |
| In time-frame of greater than 2 weeks | |
| Less than or equal to 2 weeks | |
| Do you use an automated system for capture of siting reports ? | <input checked="" type="checkbox"/> |

Master Data Sheet

UKOPA Member

Categories
Route
Management

Activities

A

B

C

D

Max

Min

Avg

Line Walk

0

4

3

5

5

0

3.0

Routing Survey

2

4

3

2

4

2

2.8

Ground Movement
checks

4

4

3

2

4

2

3.3

Change of land use

3

4

3

4

4

3

3.5

Mineral extraction
and mining
operations

4

4

4

0

4

0

3.0

Soil, Erosion,
washout,
marshland

3

4

3

0

4

0

2.5

Ground Condition
(Drainage, water
logging)

2

4

4

4

4

2

3.5

River and special
crossings

4

5

6

4

6

4

4.8

Leak Detection

0

4

4

3

4

0

2.8

**Total Routing
Management**

22

37

33

24

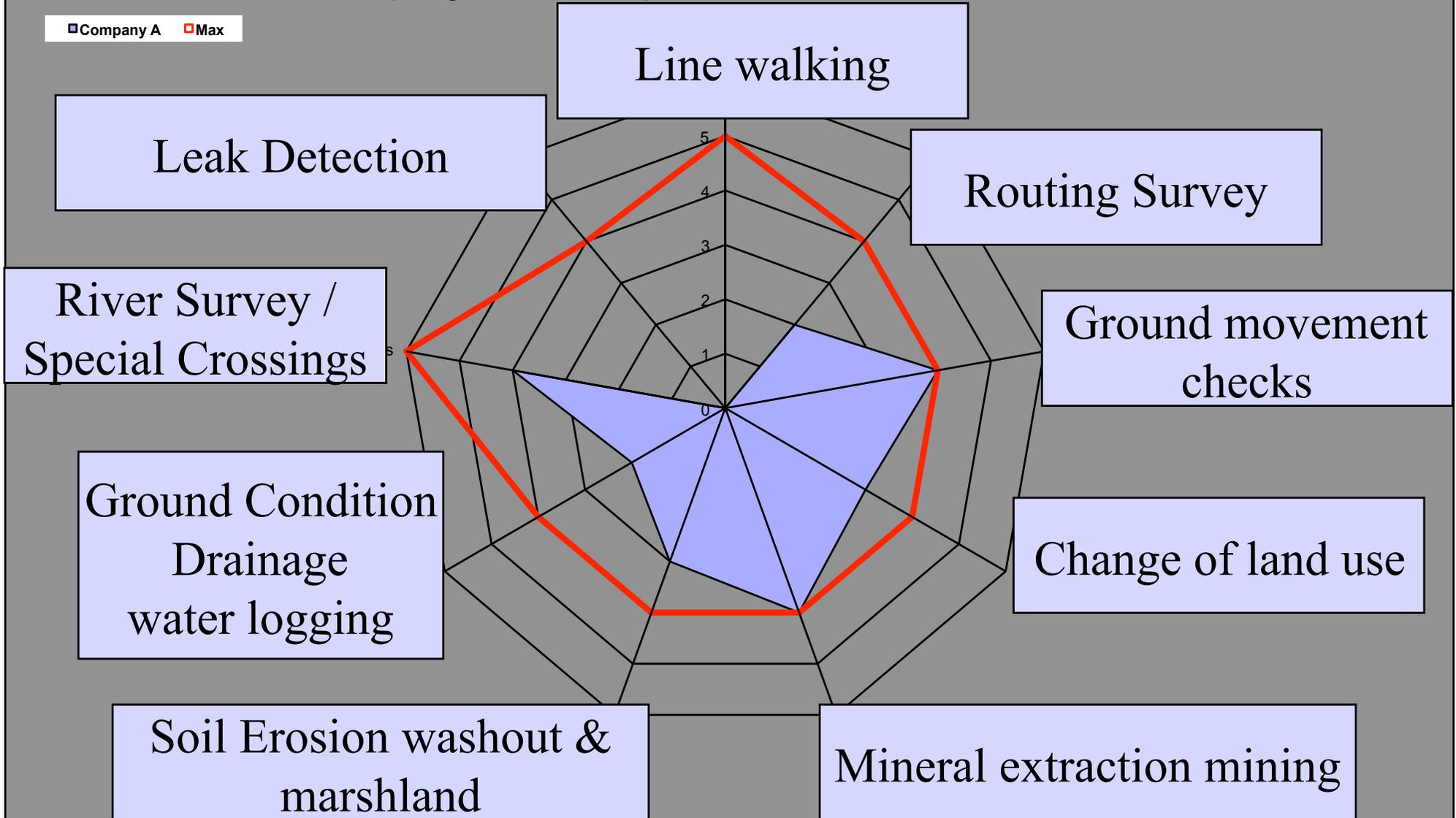
39

13

29

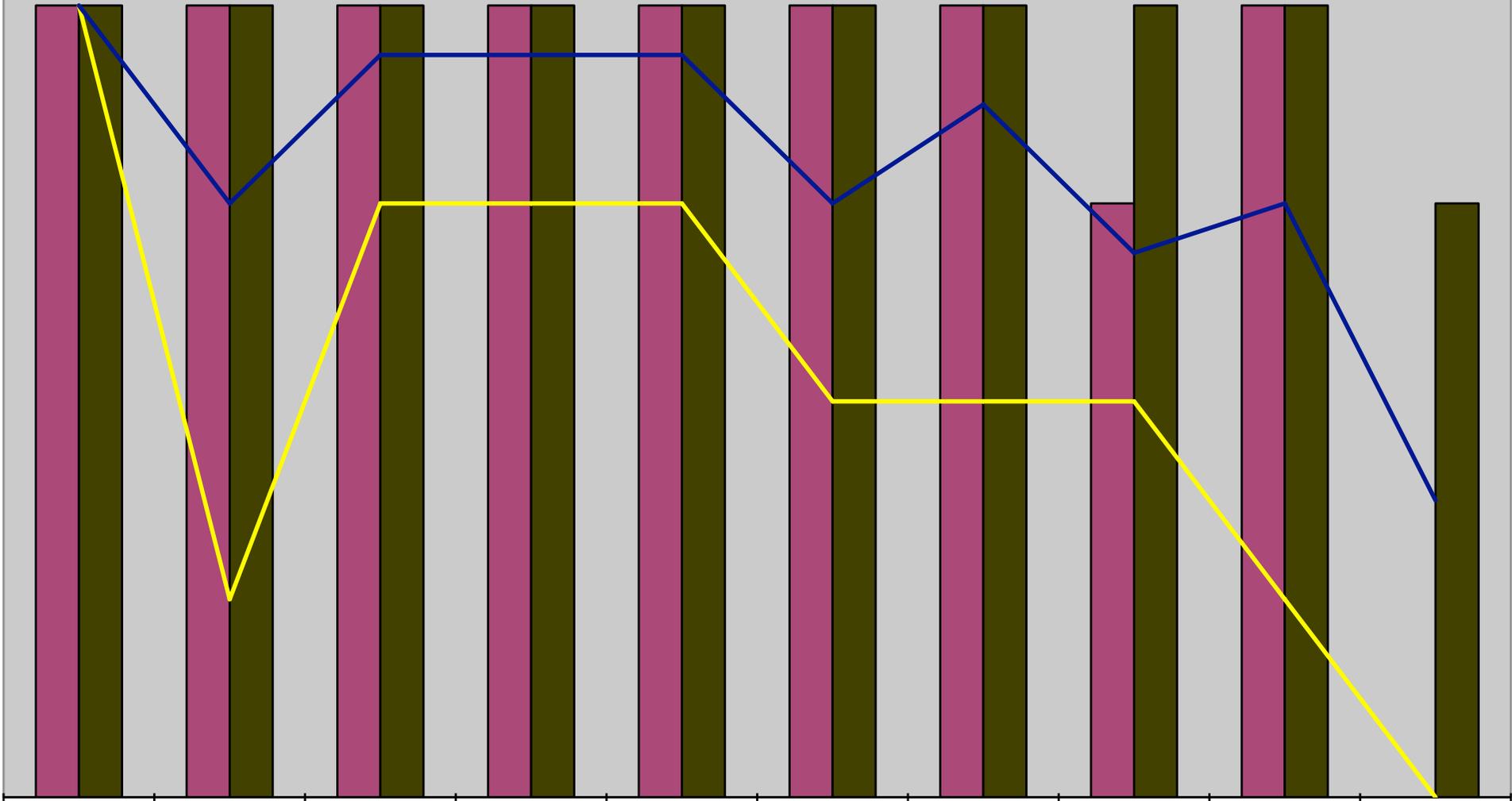
Company score compared to maximum

Company A Max





Operating Procedures



Permit to work Operating Manuals Manning levels Roles and Responsibilities Pressure management Control Centres Interfaces with upstream and Downstream Isolation procedures Alarm Management Leak Detection system

Feedback from PSWG Pilot Study

Value of process:-

- Assessment and review of own management systems and procedures
- Identifies areas of strength and weakness
- Provide standard basis for operators to discuss how they manage the risks and identify best practice

Feedback from PSWG Pilot Study

- Questionnaire takes approx 8 hrs to complete
- Best to involve 2-3 people
- Use comments boxes to provide explanations, feedback etc

- Use as a tool for internal assessment
- Can be applied to single or group of pipelines, and submit more than one questionnaire for analysis

UKOPA Process Safety Benchmarking Proposal

- Development of a web-based questionnaire for UKOPA
- Process Safety Survey to be downloaded from UKOPA website – Nov 08
- UKOPA members to upload (anonymous) completed survey to UKOPA website by Jan 09
- Results to be shared at UKOPA meeting Feb/ Mar 09
- Agree topics for best practice workshop for those members who complete the survey – Apr/May 09