

Process Safety Assessment Tool (PSAT)

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Chair of the Process Safety
Working Group

Teams Webinar

Thursday 23rd July 2020



Webinar Series

- This is the 4th in a series of Webinars provided by UKOPA
- All previous presentations can be found in the members centre
- For this session, please
 - Ensure your microphone is muted & webcam is off
 - Use the chat facility to raise any questions during the session ... this will also allow us to and get back to you with a response if we didn't have time to answer your question during the session

Agenda

- PSAT history and development
- Process for completing the questionnaire
- How the results will be provided
- How to make use of the results
- Questions?

PSAT 'What is it?'

- PSAT is a self-assessment tool for identifying how your organisation perceives it is performing within the 10 identified risk control areas (covered later)
- The individual reports produced allows you to benchmark yourself against other UKOPA members and where necessary put an action plan in place for improvement
- To provide meaningful statistical data and comparisons, completing and returning the survey is required by all members
- However, it is what companies do with their individual results that brings the real benefits!

History

- The Baker Report (BP Texas City), Buncefield and 'Response Project Teams' that came out of the incident, there was an increased focus on process safety, along with HSEs drive to 'raise the bar on process safety management' (with a focus on leadership)
- UKOPA members decided that this would be beneficial to develop a tool that would enable them to assess their process safety systems and compare how they were performing in relation to others anonymously
- The PSWG was actioned with the development of the process and tool and the initial survey and report was published in 2008
- The output of the initial survey used to develop the strategy for Good Practice Guide 003
- Sharing workshops also enabled those organisations who had scored themselves highly to share their good practice with the rest of the industry

Development and original 'tool'

- PSWG initially identified the Risk Control Areas that the PSAT tool would cover and then developed the activities and questions associated with each
- A scoring system was also created
- An online database was developed to allow members to answer the questions
- Once all members had submitted responses, graphs could be produced showing individual company scores compared with the cohort of members who had completed the survey

PSAT risk control areas, activities and questions



- PSAT is made up of 10 Risk Control Areas, with activities and questions associated with each (see next slide)
- Members answer the questions based on how they believe their company performs
- Scores are recorded and the performance figure is provided at the 'activity' level in the individual report

PSAT risk control areas, activities and questions



Risk Control Area	Number of activities	Number of questions
Route Management	9	28
Operating Procedures	10	40
Emergency Response	13	56
3 rd Party Interference	11	37
Maintenance, Inspection & Other	9	42
Integrity	7	26
Assessment Records	11	40
Competency & Training	5	22
Leadership	3	19
Modification & Repair	3	17
Total	81	327

Completing the survey

- Following the failure of the PSAT online tool, it was agreed that the 2019 survey would be completed via spreadsheet
- Each UKOPA member has been provided with the spreadsheet. It has a separate tab containing questions for each of the Risk Control Areas (enabling, if required, different staff members to complete the different sections)
- Upon submission of all member data, individual company reports will be prepared and issued

Results provided

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Min	Average	Max	Max Poss
GIS	2.5	2	2.25	2.5	1	2	2	1.75	0.75	2.5	2.5	1	2.5	3	2	2.25	2	1.5	1.25	0	1	0.0	1.82	3.0	3.0
Pipeline Records - GIS	3.5	3.5	3	2	2	1.5	3	3	2	2.5	1.5	2.5	3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.5	2.52	3.5	3.5
Review & Update	1.5	1.5	1	1.5	1.5	1.5	0.5	1.5	1.5	1	1.5	1.5	1.5	1.5	0.5	1	0.5	1	0.5	1	0.5	0.5	1.17	1.5	1.5
Results and Data - Inspection Data	2.25	2.25	2.25	2.25	2.5	2.5	2.25	2.25	2.25	2.25	2.25	2.25	2.25	1.25	1.25	2.25	2.25	1	1.75	2.25	2.25	1.0	2.1	2.5	2.5
Operating Records (Pressure Cycles, Temperature, start / stop)	1.75	1.75	1.75	1.75	1.75	1.75	0.25	1.75	1.75	1.25	1.75	1.75	0	0.75	1.75	0	1.25	0	1.75	1.25	0	0.0	1.23	1.8	1.8
Asset Information	1	1.25	1.5	1.25	1.25	1.5	1.25	1.5	1.5	1.5	1.25	1.5	0.5	0.25	1.25	1	1.5	1.5	1.25	1.5	1.5	0.3	1.26	1.5	1.5
Maintenance Records	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2	2.5	2.5	2.5	2.5	2.5	2	2.5	2.0	2.45	2.5	2.5
Availability / Accessibility of critical information	2	1.25	1.5	1.5	1	1	1	2	1.5	2	2	2	1	1	1.25	2	2	1.75	1.25	1.25	1	1.0	1.49	2.0	2.0
Operating Manuals	3	3	3.25	2.75	2.5	3.5	2.5	3.5	3.5	3	3.25	3.5	2.25	2.75	3	2.75	3.5	3.25	3.25	3.25	3.5	2.3	3.08	3.5	3.5
Maintenance & Operating Drawings	4	4	4	2.55	3.05	3	2	3	2	3	3.05	4	2.3	3.25	2.8	4	4	3	4	4	3	2.0	3.24	4.0	4.0
Design & Construction	2.1	1.1	2.3	2.1	1.8	1.8	1.7	2	2	2	1.8	2.5	1.1	1.2	2.3	2.5	2.5	2	2.5	0.8	2.3	0.8	1.92	2.5	2.5
Total	26.1	24.1	25.3	22.65	20.85	22.55	18.95	24.75	21.25	23.5	23.35	25	18.9	19.45	22.1	22.25	25	19.5	23	19.3	20.05	18.9	22.28	26.1	28.3

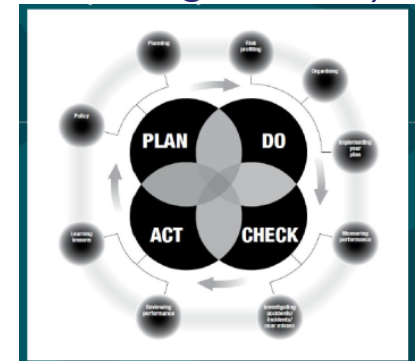
- Individual Report with scores anonymised –
- Breakdown by risk area and activity
 - Green – Highest score generally similar to max possible score
 - Light Green
 - Yellow – Average score
 - Amber
 - Red – Below average
- Individual company results for 2020, and where previously available, comparisons with the 2016 and 2014 results (by the end of September 2020 if all questionnaires are returned)

How to use the reports

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	Min	Average	Max	Max Poss
GIS	2.5	2	2.25	2.5	1	2	2	1.75	0.75	2.5	2.5	1	2.5	3	2	2.25	2	1.5	1.25	0	1	0.0	1.82	3.0	3.0
Pipeline Records - GIS	3.5	3.5	3	2	2	1.5	3	3	2	2.5	1.5	2.5	3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.5	2.52	3.5	3.5
Review & Update	1.5	1.5	1	1.5	1.5	1.5	0.5	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	0.5	1	0.5	1	0.5	0.5	0.5	1.17	1.5	1.5
Results and Data - Inspection Data	2.25	2.25	2.25	2.25	2.5	2.5	2.25	2.25	2.25	2.25	2.25	2.25	2.25	1.25	1.25	2.25	2.25	1	1.75	2.25	2.25	1.0	2.1	2.5	2.5
Operating Records (Pressure Cycles, Temperature, start / stop)	1.75	1.75	1.75	1.75	1.75	1.75	0.25	1.75	1.75	1.25	1.75	1.75	0	0.75	1.75	0	1.25	0	1.75	1.25	0	0.0	1.23	1.8	1.8
Asset Information	1	1.25	1.5	1.25	1.25	1.5	1.25	1.5	1.5	1.5	1.25	1.5	0.5	0.25	1.25	1	1.5	1.5	1.25	1.5	1.5	0.3	1.26	1.5	1.5
Maintenance Records	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2	2.5	2.5	2.5	2.5	2.5	2	2.5	2.0	2.45	2.5	2.5
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Total	26.1	24.1	25.3	22.65	20.85	22.55	18.95	24.75	21.25	23.5	23.35	25	18.9	19.45	22.1	22.25	25	19.5	23	19.3	20.05	18.9	22.28	26.1	28.3

Suggested approach

- Review areas which are red or amber
- Consider whether you have a real gap (e.g. Leak Detection – N/A for gas lines)
- Decide if risk level warrants improving process or procedure
- Document decision for all red and ambers
- Develop action plan for areas requiring improvement
- Monitor Action Plan



Next steps

- PSWG can either then facilitate a “dating service” matching members who want to share / learn from others
- Hold a ‘good practice’ workshop if there is a requirement from members for this
- An example of how a member has utilised PSAT data to develop their own improvement plan will now be shared

Use of PSAT data by a member

Pipeline Process Safety Key Performance Indicators - 2019					
Quarter 3 2019 July to September					
Number	INTEGRITY MANAGEMENT	Target Metric in period	Period	Actual	By
IM1	Kilometres of Pipeline Inspected using I PIG	36.3	Quarterly	36.3	Essar
IM2	Number of inspection digs	1	Quarterly	1	Essar
IM3	Number of structural repairs	0	Quarterly	0	Essar
IM4	Pipeline leaks	0	Quarterly	0	Essar
IM5	Overdue inspections	0	Quarterly	0	Essar
IM6	Pipeline/coating damage	0	Quarterly	0	Essar
	CATHODIC PROTECTION	Target Metric	Period	Actual	By
CP1	Cathodic Protection Surveys (on potential) km	63.2	Quarterly	63.2	Penspen
CP2	Cathodic Protection Surveys (on/off potential) km	63.2	Quarterly	63.2	Penspen
CP3	CP planned survey km completed	100%	Quarterly	100%	Penspen
CP4	CP % within design/operational criteria (measurements outside limits/ total measurements) %	100%	Quarterly	98%	Penspen
CP5	CIPS survey completed	0	Quarterly	100%	Penspen
CP6	% of pipeline surveyed by CIPs in last 7 years (rolling)	100%	7 years	100%	Penspen
CP7	Priority 1 CP actions overdue	0	Quarterly	0	Penspen
CP8	CP Surveys overdue	0	Quarterly	0	Penspen
CP9	CP Reports overdue	0	Quarterly	1	Penspen
2020	PIPELINE CORRIDOR MANAGEMENT	Target Metric	Frequency/ Contract	Actual	By

Where do we currently stand

- To date we have received 19 completed surveys from our 30 strong membership – 4 of these have been submitted by companies who were not members last time the survey was conducted
- A number of larger members, in relation to the kilometres of pipelines operated, including some of those with Board representation, have yet to respond with their results
- Statistical analysis will be carried out during August, so cut off date for data submission is the end of July
- Those who do not submit data will not be provided with access to the results

Previous results

- 2010 – 12 participants (from 20 members)
- 2012 – 11 participants (from 20 members)
- 2014 – 15 participants (from 23 members)
- 2016 – 21 participants (from 24 members)
- 2019 – currently 19 submissions (from 30 members)
- Two good practice seminars have taken place plus overviews at technical seminar / members meetings

Questions?

- Please use chat function
 - Any questions not answered now will be covered in a follow up written response.



What's next with UKOPA webinars

- There will be Hazard Awareness webinar hosted by the EPWG on 10th September – details in the next UKOPA update
- Other webinars will be arranged
- Any suggestions for future topics, please email Nikki Barker
(nikki.barker@pieuk.co.uk)