

Safety & Loss Prevention

Special Interest Group Newsletter

Issue 2020/01 June 2020

... Words from the SLPSIG's Newsletter Editorial Team...

If anyone would like to write an article for the newsletter about good practice, previous SIG events or outreach (e.g. support to universities or other institutions), or anything else that you think our readers would find interesting – please do not hesitate to get in touch with Mahmoud Gawish, Newsletter Editor at specem@ichememember.org

Introduction

The S&LP SIG is delighted to announce the reestablishment of a periodic newsletter following a SIG member survey conducted in August 2019, in which an overwhelming majority of members expressed interest in receiving a S&LP SIG newsletter.

The S&LP SIG committee has therefore incorporated the development and dissemination of a periodic newsletter as part of its 2020 activity plan and beyond to address members' wishes. Member feedback on this first issue is most welcome. Please write to the Newsletter Editor.

Member Survey

The member survey response also indicated that the vast majority of members are interested in taking part in S&LP SIG events, in either workshop or webinar formats. The response breakdown demonstrated that the topics of most interest were:

- Lessons learned from accidents and near misses (case histories);
- Risk management in the process lifecycle (design, construction, operations management and decommissioning);
- Human Factors in Process Safety; and
- Professional Process Safety Engineer: how and why?

Respondents also highlighted other topics of interest:

- Safety culture in Industry;
- Industry best practice;
- · Functional Safety; and
- Process validation and verification: how to establish and maintain Process Technical Authority?

Members were asked about their location preference for the proposed S&LP SIG events. Approximately 50% of respondents preferred London, followed by Manchester, and the remaining 50% preferred other locations in Scotland, Ireland, Malaysia and Australia. Overseas members preferred online events, which will be the delivery method for the foreseeable future due to COVID-19 social distancing measures.

The survey results did not provide a clear indication of appetite to participate in local hubs. However, some members indicated that they would be willing to contribute towards a discussion of what a local hub should aim to achieve.

Strategy Planning Meeting

A special S&LP SIG committee meeting was held in January 2020 to devise a strategy and set direction for the SIG activity plan, following a period of low SIG visibility. It was agreed to restart the periodic S&LP SIG newsletter and refresh S&LP SIG web presence, in addition to developing and maintaining a topic list as the basis for SIG activities. For more details on the meeting and its outcome see https://www.icheme.org/media/14156/slpsig-9-jan-2020-minutes.pdf.

Topics List

The list of topic areas on which the SIG Committee has agreed to focus is:

- Learning lessons from past case histories;
- Risk management in the process life cycle (design, construction, operational management to decommissioning);
- Erosion of organisational competency through loss of experience (mergers, downsizing, ageing workforce, etc);
- Hazards of creeping change in existing plant;

- Hazards in growth areas such as use of LNG and hydrogen, and their production and distribution;
- Safety and zero carbon confluence or conflict;
- Digitisation threats and opportunities;
- Major hazards outside the process industries how can we help each other;
- 100 years of Process Safety passing on the baton;
- Process validation and verification;
- Professional Process Safety Engineer how and why?
- Human Factors in Process Safety; and
- · Functional Safety.

The SIG committee is developing short status statements on each topic as the basis for action. For example, the following comments outline part of the basis for targeting "Hazards in growth areas such as use of LNG and hydrogen, and their production and distribution".

Emerging LNG Uses

To date most LNG facilities in the UK have been large installations operated by major oil and gas companies. There are four small LNG installations in Scotland supplying gas to local gas networks and there have been a number of small LNG installations used to fuel fork trucks and road lorries. The viability of these has been largely dependent on the relative prices of fuels.

There is a move now to use LNG in more such installations, partly to reduce pollution from the vehicle exhausts. There are also plans in place to fuel ships all or in part with LNG, again to reduce pollution. There is also a move to use LNG in areas where there is no mains gas supply, as an alternative to LPG or gas oil.

This means that new entrants into the industry (whether in design, construction, operation or maintenance) with little if any prior knowledge of the hazards of LNG need to understand and manage those hazards.

There is thus a need to ensure that the accumulated knowledge of the management of LNG hazards is made available to these new users in an effective and appropriate manner.

Do you have comments or suggestions on our target topics? Please write to Andy Rushton, Chair at slpsgchair@ichememember.org.

Lessons Learned Database, Peter Marsh

Everyone active in S&LP needs a basic level of familiarity with "classic" accidents, including knowledge of how those relate to their own processes and where to find relevant information. The S&LP SIG is developing a Major Accident Lessons Learned Database ("Incident Gallery"). The intent is to raise awareness of and introduce several landmark incidents across multiple industry sectors. It contains a series of one-page incident summaries which serve to promote the importance and use of Root Cause Analysis, to catalyse cross-sector sharing of lessons

learned and good practices, and to "signpost" the reader to further, more authoritative publications. See the link below: https://www.icheme.org/membership/communities/special-interest-groups/safety-and-loss-prevention/resources/lessons-learned-database/.

Do you have a nomination for an incident that should feature in this gallery? Please write to Carolyn Nicholls at slpsgsecretary@ichememember.org.

PSM and Loss Prevention during COVID-19

Process Safety Management during COVID-19 is potentially vulnerable due to the remote working and disruption to process operations resulting from the pandemic. Two recent articles explore Process Safety Management during COVID-19, one developed and published by the IChemE Safety Centre titled 'Managing Process Safety during the COVID-19 Pandemic, May 2020' (https://www.icheme.org/media/13927/managing-process-safety-during-the-covid.pdf) and the second is titled 'Chemical Accident Prevention & Preparedness, Pandemic Measures and Chemical Process Safety, Bulletin Special Issue, May 2020 JRC 120768 European Commission (https://minerva.jrc.ec.europa.eu/en/shorturl/minerva/IIb_covidv3pdf). See the upcoming events section of the newsletter for details of a webinar on the same topic.

As True Today As Has Always Been, Clive de Salis

IChemE has a wealth of information collated from the past, ranging from the ICI safety newsletters from Dr Trevor Kletz and others, proceedings of the early "Hazards" symposia to lecture notes from Frank Crawley's work at Strathclyde University. This article reflects on some of the ICI newsletters commenting on the probability of failure of an operator to respond to an alarm. It illustrates the relevance of material in the archive to the points of debate (frequently recurring questions) that arise in current Process Safety considerations. The article can be found in this link: https://www.icheme.org/media/14176/newsletter_item_on_ici_news_on_operator_failure.pdf.

Committee Meetings

The S&LP SIG committee intends to meet on the following dates:

- 21 August
- 16 October
- 18 December
- 19 February 2021

Due to COVID-19 social distancing restrictions, meetings are planned virtually during 2020. Do you have something for the committee to consider? Please write to Andy Rushton, Chair at slpsgchair@ichememember.org.

We are grateful to those who take the time to contribute to the S&LP SIG Newsletter. Please note that content and opinions are those of the contributor(s) named above (or in resources accessed online) and do not necessarily reflect the views of the S&LP Committee or the Institution of Chemical Engineers.

S&LP SIG Activities

University Process Safety Workshops

The S&LP SIG aims to promote inclusion of Process Safety in the curricula of IChemE accredited degree programmes. S&LP SIG volunteers can support academic staff in the delivery of suitable teaching material, typically through a one-day workshop.

S&LP SIG delivered two Process Safety workshops for students at London South Bank University and Queen Mary University London in January 2020. Approximately forty students attended each event, organised by S&LP SIG committee members with the support of SIG volunteers and the London South East members group. Both workshops were one-day interactive programmes with the primary objective of promoting student awareness of Process Safety. Morning sessions included presentations on importance of Process Safety and the fundamental differences between Personal Safety versus Process Safety, illustrated through a case study on the Texas City incident. The afternoon sessions incorporated a practical HAZOP workshop with students playing roles of the HAZOP team members. The feedback on the events was very positive. Students were very enthusiastic to get perspectives from industry that were provided through the workshop.

S&LP SIG intends to promote similar university events in the future. An information pack to support volunteers is in preparation. Would you like to lead or join a volunteer team to support your former or local university? Please write to Panos Topalis at slpsqsecretary@ichememember.org.

Upcoming Events

PSM During COVID-19

The IChemE Safety Centre in collaboration with the S&LP SIG is running a webinar on Process Safety Considerations during COVID-19 on Wednesday 1st July 2020. More details on the agenda and webinar presenters can be found here: https://www.icheme.org/membership/communities/special-interest-groups/safety-and-loss-prevention/events/1-07-20-process-safety-considerations-during-covid-19/.

Digitalisation Event

The S&LP SIG is planning a Digitalisation event proposed for February 2021 which will be promoted from September 2020. The proposed agenda will include speakers from the IChemE Safety Centre, Hull University, UK Health & Safety Executive amongst other participants and stakeholders.