



Chair's Update

The editor for our latest edition is Jayandran Mohan, based in Oman he joined the committee over the summer and this is an opportunity for him to share news from the Middle East and Asia.

Closer to home the group's webinars continue to be well received with hundreds joining the sessions, so please do look out for emails on our next dates. We have some exciting webinars being planned including a look at the risks associated with Lithium Ion batteries, and an update on process safety management. Finally discussions are well advanced at a look at how the military deals with handling hazards and hazardous substances.

Engagement with our LinkedIn page is growing, we have broken through the 1000 mark for followers and would like to see the numbers continue to increase why not post a comment or an article?

Before I hand over to Jayandran just a reminder to keep an eye on the control of contractors, the UK statistics for April through June (latest I can find from the HSE) record 28 fatalities across all industries of which 60% are recorded as self employed and 40% are employed. The HSE point out that numbers continue to fall but this period covers a COVID lockdown in the UK with much lower numbers of people at work!

India - Workplace Disasters During Lockdown

Between the months of January and August alone, there have been, at least, 25 serious industrial accidents that have claimed the lives of over 120 people. A report published by IndustriALL Global Union, a Geneva-based federation of unions from around the world pegs these totals even higher. As per its report, India averaged a single mishap and death every alternate day over the span of just a single month in May. Only a couple months after the deadly gas leak at the LG Polymers chemical factory in Visakhapatnam, the town recorded yet another leak on June 29, that resulted in the deaths of another two workers, and the hospitalization of 4. Just two days after, the thermal power plant of Neyveli Lignite Corporation was rocked with a boiler explosion that led to the deaths of six workers, causing injuries to 17. A handful of days later, a candle factory in the Ghaziabad district went up in flames leading to deaths of another eight workers. India's push to transform itself into a \$5 trillion economy is commendable but it is worth considering the dear cost unhindered investment into infrastructural growth could come at, as this relates to the loss of human life and ecological damage resulting from poor planning and maintenance of industrial infrastructure. It remains to be seen whether the government will take heed of the huge public outcry triggered by the publishing of the latest draft EIA legislation

AUTHOR NOTE

Dear Members,

Thanks for giving me this great opportunity to scribe in HAZI.d newsletter.

I enriched myself by attending the wonderful webinar about PSM and Business Continuity which has been presented by Mr. David Evans & Mr. Chris Lewis. In continuation with that, I attempted to present knowledge updates about Process Industries in this newsletter as follows: (i) A gist about Process Industry accidents in India due to Pandemic Lockdown process gaps & failures (ii) The importance of corrosion rate calculation has been elicited with an incident (iii) The essence of CHAZOP and its important has been detailed.

Thanks,
Jayandran Mohan

CORROSION RATE – A PROACTIVE APPROACH

In Kuwait's Mia A-Ahmadi is the largest of three crude oil refineries; it produces Benzene, Jet Fuel, and Diesel. In June 25, 2000, while maintenance crew were attempting to control a gas leak from a Liquefied Natural Gas pipeline at the refinery, an explosion occurred and destroyed the entire facility. The explosion killed five workers near-by, more than fifty workers on site were injured and financial losses of more than \$840 million both from production loss and revamping the facility. The cause of the gas leak was due to several reasons. Stress corrosion cracking was the primary contributing factor to the cause of the accident. Corrosion is one of the main cause for many Chemical Industry accidents. Corrosion rate prediction and preventive maintenance are the proactive measures to avoid such incidents. To know how the corrosion rate is calculated and how to use the graphical interface to calculate corrosion rate, please refer <http://www.icmt.ohio.edu/software/freecorp/help-overview.asp>

HAZOP

Control Hazard and Operability Study (HAZOP) typically focus on two broad facets of the control system. First, they assess whether the control loops are adequate for the process that they are applied to. Second, they evaluate whether the control system is properly integrated with the underlying process and ensure that it does not act as a potential occupational hazard by causing unintended operational interference or obstruct the operation of another control system. The detailed information about HAZOP can be archived at http://www.uobabylon.edu.iq/eprints/publication_7_13123_6247.pdf

Tech Support

If you have technical queries related to HAZOP, PSM, Please drop an email to jayandranhse@gmail.com. The queries will be discussed with the experts and appropriate reply will be mailed back.

Next Webinars

We are hoping to run two webinars before the end of the year.

Ian Travers is set to return to present on **“Process Safety Management Setting, implementing and monitoring KPI's”** we are hoping to be able to agree a November date for this.

And in a world that is increasingly reliant on lithium batteries Nigel Blumire will present a session on

“The safety and challenges of Lithium-ion batteries”

We hope to be able to get a date in December for this.

Drop me an email if you know of any great speakers and/or topics you would like us to cover: David.evans@corpress.uk

Process Industries Ventures in OMAN

- Since 2019, Chinese companies involved in petrochemicals, metallurgy, logistics, building materials, fisheries and other fields have expressed a strong interest in Duqm, Oman. At present, Daleel Petroleum, a joint venture between CNPC (China National Petroleum Corporation) and a Mezon Petrogas SAOC, has become the third largest oil producing company in Oman
- Oman-based Sohar Asphalt has signed up China Chemical Hualu Engineering Company for the construction of the sultanate's first bitumen refinery at Sohar Industrial Port being set up at an investment of over \$400 million
- Duqm Refinery and Petrochemical Industries Company LLC (DRPIC) has selected LyondellBasell's world-leading polypropylene (PP) and high-density polyethylene (HDPE) technologies for a new facility.

We aim to start a series of posts on past incidents on the LinkedIn page IOSH_Hazardous Industries group please link with us and join in.