

Learning Brief: #019

Date: 07/10/2020

Deeper Learning from Process Safety Related Incidents and Near Misses – the Gap between Capture, Reporting, Analysis and ‘Not Doing It Again’

This learning brief is shared in order to promote learning and improve safety. You should seek appropriate guidance regarding the relevance, accuracy, and completeness of this alert to your circumstances prior to implementation.

Theme

Culture
Incident reporting & investigation

Summary of Learning

Faulty materials provided by aluminium manufacturer, Sapa Profiles, Inc. (SPI) caused the failure of two NASA satellite launch missions.

NASA Launch Services Program (LSP) investigators uncovered a 19-year fraud scheme that included falsifying the results of thousands of its tensile tests, designed to ensure the consistency and reliability of the aluminium it extruded.

U.S. Department of Justice (DOJ) ordered SPI to pay \$46 million to the U.S. government and other commercial customers in civil claims. The failure of these missions resulted in the loss of more than \$700 million, and years of peoples' scientific work.

Description

Although this particular case was not a process safety incident, it is important to consider the culture of our supply chain organisations, and influence / monitor where possible. Include suppliers within process safety programmes where relevant. Poor / fraudulent performance of suppliers and / or failure of Client organisations to manage suppliers could lead to a Process Safety incidents or accidents.

Further reading

<https://www.nasa.gov/press-release/nasa-investigation-uncovers-cause-of-two-science-mission-launch-failures>

Nuclear Supply Chain Fraud. The Elephant in the Room. Simon Emeny, Lloyds Register, 19 June 2018 <https://www.lr.org/en-gb/insights/articles/nuclear-supply-chain-fraud/>

Energy Institute, High level framework for process safety management - [Element 18 Contractor and supplier, selection and management](#)

Energy Institute, [Guidance on meeting expectations of EI Process safety management framework element 18: Contractor and supplier selection and management](#)

Energy Institute, Guidance on the management, achievement, operation and maintenance of functional safety employing safety instrumented systems in support of IEC 61511, Competency in the Supply Chain (released Q3/Q4 2020).

The Process Safety Forum has been set up to provide an industry association platform whereby initiatives, best practice, lessons from incidents and process safety strategy can be distilled and shared across sectors, to influence our stakeholders (including the Regulators), and to drive the process safety management agenda. The Process Safety Forum consists of representatives from across industry, refer to the website for details

The website is www.p-s-f.org.uk.