



Case Study
March 2021

SpaceDraft for Safety Planning and Hazard Prevention

DuPont La Porte Incident Investigation

Reimagine the way complex incident investigations are communicated to improve causal understanding and share lessons to prevent future incidents.

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OVERVIEW

The DuPont La Porte toxic chemical release incident that occurred on 15 November 2014 was a tragic event resulting in the deaths of four workers.

The incident timeline is complex, involving several personnel across four levels of a chemical manufacturing facility. It is difficult to provide a clear understanding of how the incident unfolded in a plain text report supported with still images.

SpaceDraft's time and motion incident timeline capability enables improved understanding of how this complex incident unfolded. The visual representation of the incident improves learning potential and ability to share lessons globally.

With SpaceDraft, users are able to:



Communicate incident timelines visually with animation over 33x faster than text.



Improve understanding of physical relationships between hazards and people.



Communicate complex hazard interactions with time & motion.



EXISTING CHALLENGES

The DuPont La Porte toxic chemical release involved eight key personnel who all took different actions on the day of the incident. The timeline is complex and difficult to understand when communicated via plain text.

The incident unfolded in key phases including immediate actions from shift personnel, local emergency response and community emergency response.



Complex timeline with several key decisions made by multiple people.



Difficulty to understand spatial relationship between people and hazards.



Incident occurred across multiple levels of the manufacturing building.

Events unfolded across 4 different levels of the manufacturing facility using northern and southern stairwells making it difficult to communicate how events unfolded without the use of an animated timeline.

With SpaceDraft, communicating key events in the incident timeline is over 33x faster than reading the text report. SpaceDraft enables common understanding of key incident events and improved ability to learn from the investigation.

SOLUTIONS

SpaceDraft's easy to use platform allows for the visualisation of critical elements of the incident timeline and subsequent emergency response.

Animating the actions of each key worker and their physical relationship to the toxic release, results in an easy to understand and easy to share incident learning experience.



Understand incident timelines

Understand the physical location of workers in relation to hazards.



Improve learning

SpaceDrafts can be shared globally across an organisation for improved distribution and access to organisational learning.

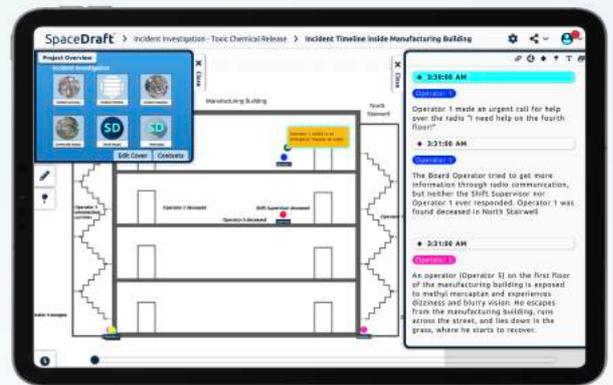


Improve communication of incidents

Incidents are complex. Text-based investigations do not enable adequate communication of incident context or hazard relationships.



The DuPont La Porte incident investigation was conducted by the U.S. Chemical Safety & Hazard Investigation Board and can be read in full on their website.



RESULTS

The SpaceDraft of the DuPont La Porte facility toxic chemical release incident investigation provides a simple and effective animation that demonstrates the physical relationship between the 8 key workers involved in the incident and their exposure to deadly methyl mercaptan vapour.

The SpaceDraft condenses over 60 pages of the report into a visual medium supported with key incident data; facilitating improved communication and learning.

The SpaceDraft platform provides a quick-turnaround, cost effective solution to support incident investigations in organisations of all sizes.



33 times faster communication of incident timeline and incident context compared to reading a text report.



Animate incident timelines for **improved communication and learning**.

SAFETY USE CASES

SpaceDraft's platform supports several high-impact safety use cases including:

- ▶ **Job Safety Analysis:**
Plan for success.
- ▶ **Traffic Management:**
Communicate plans easily.
- ▶ **Task Risk Assessment:**
Animate risk interactions.
- ▶ **Workplace design reviews:**
Review pre- and post- design changes.
- ▶ **Manual handling time & motion studies:**
Communicate risk visually.

Step change your safety with SpaceDraft.



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For more information on SpaceDraft please email jump@spacedraft.com We look forward to hearing from you!



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