R.I.S.K.

PROJECT CASE STUDY

Risk Integrity Safety Knowledge, Inc.

Combustible Dust Risks In Concrete Silos

The Challenge

A large agribusiness performing Dust Hazard Analyses (DHAs) in their effort to meet requirements of NFPA 61 needed further risk assessment for combustible dust hazards in concrete silos.

They discovered that there are few safeguards available to mitigate the hazards associated with concrete silos. The company has roughly 10,000 concrete silos worldwide.

In their experience, combustible dust explosions have been rare in their concrete silos, and certainly not on an annual basis to indicate that risk tolerances are unacceptable with current mitigations in place. They asked RISK to help analyze the risk further to demonstrate it is acceptable.

Client Description
Company Multinational Corporation
Project Location USA, multiple sites
Industry Agribusiness
Annual Revenues $110+ Billion
Employees 150,000+ employees
RISK, Inc. Solution DHA, Quantitative Risk Assessment

The Solution:

For RISK, the first step was gathering and reviewing the existing documentation, including the DHA the site had performed. Then we held a kick-off discussion to understand the risks and safeguards that had been identified. After discussions with the company team we built a PHA template with a LOPA tool that could be applied after the DHA to further evaluate the risks. The tool was developed as a user-friendly spreadsheet to determine LOPA/QRA frequencies for future cases so sites could understand the risk more thoroughly. They used the tool several times and then we further refined the tool based on user feedback.

The Result:

The LOPA spreadsheet tool provided a way to quantify the risks with concrete silos at their sites. It reduced the time needed to analyze risks identified in DHAs. It enabled greater consistency in risk approach across their thousands of concrete silos globally, and greater confidence risks were truly mitigated.

Do you need support for combustible dust issues?

Contact us at info@psmrisk.com

Call us at 510-828-7228 to talk about your needs