

ACCIDENT INVESTIGATION SERVICES



- **Determine Cause and Establish Procedures to Prevent Reoccurrence**
- **On-site Examination and Evaluation of Components**
- **Accurate & Complete Documentation**
- **Materials Laboratory Services**

M&M Engineering provides highly trained engineers with expertise in conducting comprehensive accident investigations. Most of our multi-disciplinary staff of materials engineers, metallurgical engineers, mechanical engineers, and chemists hold advanced degrees and professional certifications.

M&M Engineering has performed over 7,000 accident investigations and failure analyses since 1977. We have a broad range of expertise in mechanical engineering, materials engineering, and the skills to document, preserve, and interpret the evidence required for accident reconstruction and failure analysis.

Broad Experience Base

The diversity of our staff and our extensive technical experience enable us to establish the cause of accidents and determine how to prevent them from recurring. We draw on our in-depth knowledge of the equipment and processes used in the utility, petrochemical, pulp and paper, manufacturing, and other industries.

Customized Investigations

Because each accident is different, we consider our client's short and long-term needs when formulating

our investigation approach. Our analysis can be intensive and detailed, focusing on the failure mode of a single component, or we can design a broad-based study that includes a thorough examination of an entire process or facility. As the need for additional disciplines expands, we are supplemented further by a network of professionals in chemical, environmental and process engineering, as well as equipment design.

M&M Engineering supports each investigation with awareness of the potential for litigation. Using established procedures, we maintain accurate, complete documentation so that we can provide litigation support.





Case Study

While preparing for a major refinery turnaround, a half-full, hot oil storage tank failed at the roof-to-shell seam. The resulting overflow of product started a fire at the base and up the side of the tank, and in the safety dike. Was the storage tank safe for continued operation or did it need to be emptied? Could this situation be avoided in the future?

An M&M Engineering investigation team arrived on-site within hours after the accident, assisting the refinery with the investigation and the determination of whether the tank was stable. After interviewing various plant personnel and examining the damaged tank, we gathered additional evidence, including metal and weld samples and chemical properties of the stored product. Based on our findings, we questioned the integrity of the remaining storage tank, and recommended that it be completely emptied in as fast and safe of a manner as possible.

We also determined the extent of repairs needed on the storage tank. We assisted the plant in establishing the likely

cause of the accident and helped them put systems into place that will decrease the likelihood of a similar accident in the future.

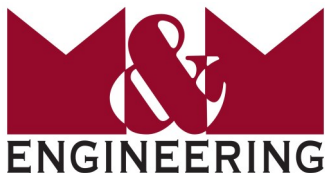
Materials Laboratory

Our fully equipped [materials laboratory](#) and a machine shop are available twenty-four hours a day to support our accident investigations.

Independent Third-Party Laboratory Services

As an independent third party laboratory, M&M Engineering has performed over 5,000 formal multi-party investigations, accident investigations, and [failure analyses](#) since 1977. We provide litigation support to insurance and legal industries by way of documentation reviews, material evaluations, laboratory testing, technical reporting, and expert witness testimonies.

More information about these services is available on our [Independent Third-Party Laboratory Services](#) page.



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