Oil and Gas Treating Facility Explosion

INTERFACE
A B|RILEY COMPANY
ENGINEERING & CONSTRUCTION EXPERTS

Expert opinions related to design and operating conditions prior to plant explosion



Dispute

A Texas plant treated oil and gas from incoming pipelines prior to sales. Oil condensate was to be stabilized (i.e., stripped of entrained gas particles) and gas was to have impurities (e.g.,

hydrogen sulfide and water) removed before sales. The plant owner and operator used a trucking company to unload and transport oil condensate from the plant's atmospheric storage tanks to consumers while it sold treated gas through pipelines.

The plant had a hydrocarbon release that resulted in an explosion and fire, severely injuring an oil truck driver who was unloading oil from the plant's atmospheric storage tanks at the time of the explosion. The oil truck driver filed suit against the plant owner, claiming damages resulting from the facility's unsafe design, operations, and maintenance practices.

PROJECT

Oil and Gas Treating Facility Explosion

DISPUTE MAGNITUDE

\$25 MM+ Personal Injury Dispute

PRIMARY ISSUES

Plant Explosion

Operations and Maintenance Practices

OSHA Process Safety Management (PSM) Requirements

Facility Design Issues
Oil Stabilization and
Storage





Approach



Counsel for the oil truck driver retained Interface to evaluate the plant design, operations, and maintenance practices, as well as the oil truck driver's conduct, leading up to the incident. Interface's analysis included reviewing the following:

- Facility design documents
- Operating manuals and other written procedures
- Instrumentation and equipment manufacturer data
- Accident investigation reports and witness statements
- Maintenance records
- · Employee training records
- Operating data, including operating pressure and alarm logs
- OSHA process safety management (PSM) records

Interface identified multiple industry standards and regulatory requirements that the plant owner had failed to adhere to. In multiple locations, the plant operators bypassed the facility's stabilization equipment and sent oil directly to its atmospheric storage tanks, which, coupled with other operating decisions, allowed for explosive vapor to escape the storage tanks and reach an ignition source. As a result, Interface concluded the plant was operating in an unsafe manner prior to the incident and the plant owner had failed to advise the truck driver of certain unsafe conditions it was aware of prior to the incident. Interface found no evidence that the truck driver had acted unsafely or contributed to the incident.

Outcome



Interface submitted an expert report detailing its opinions, and Interface's expert further supported those conclusions during deposition testimony.

In the weeks prior to commencement of the trial, the case settled favorably for Interface's client.

