

# ENERGY EXPERT: ISSUES IN FOCUS

*A quarterly review of disputes and complex issues in the hydrocarbon production and processing industries.*

Baker & O'Brien, Inc.

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## A Refinery Changes Hands – Was the Facility Fit-for-Service or Out-of-Compliance?

### Litigation, North America

By Mel Sinquefield



Before a refinery is sold, potential buyers undertake a detailed due diligence process to evaluate the technical and economic

capabilities of the asset under consideration. This includes assessing the physical condition to determine if the assets are fit-for-service and in compliance with relative government regulations to meet the terms and conditions of the sales agreement.

One particular refinery had a long operating history under at least two previous owners when it was sold to another refining company. Due diligence was performed and terms and conditions were agreed and documented in the purchase and sale agreement. The standard section for Representations and Warranties contained the typical clause for compliance with laws, including environmental and safety.

Following the sale, the purchaser claimed that, in retrospect, the seller had not been in compliance with certain environmental laws and safety regulations at the time of sale. Non-compliance was claimed for Environmental Protection Agency (EPA) laws such as the Risk Management Plan (RMP) and the Clean Water Act Spill Prevention Control and Countermeasure Plan. Other non-compliance issues pertained to Occupational Safety and Health Administration (OSHA) Process Safety Management (PSM) regulations. These

claims related to design, maintenance, inspection, testing and safe operations of pressure vessels, hazardous area classification, tank farm overflow containment, and inspection of underground buried pipe.

Baker & O'Brien assessed the validity of alleged non-compliance issues based on equipment status at the time of the sale, as well as the reasonableness of compliance-driven repairs. Our consultants reviewed equipment files, repair records, and audit reports. We used our expertise with: (1) environmental law and safety regulations; (2) mechanical integrity and asset care practices; and (3) RAGAGEP.

***RAGAGEP – Recognized and Generally-Accepted Good Engineering Practices***

Through this analysis, Baker & O'Brien consultants developed an understanding of those claims that were reasonable, and of those, which were appropriately and proportionately corrected to compliant status.

An important aspect of the professional opinion is the interpretation of minimum legal requirements and just what is considered routine ongoing maintenance and compliance efforts. Our preliminary expert report brought authoritative and insightful clarity to the claim that enabled parties to achieve a settlement.

## Petroleum Coke Pit Retaining Wall Collapse

### Litigation, North America

By Bill Jackson

Crude oil is a mixture of many hydrocarbons that are separated and processed at refineries to manufacture various petroleum products. These hydrocarbons range from light gases to heavy residues and, finally, solids. A refinery coker unit processes heavy residues into more valuable products. A byproduct of a coker is solid petroleum coke, which is frequently used as a fuel in cement kilns and power plants. Petroleum coke, after being cut from the process vessel by the use of high-pressure water jets, is typically stored in a large pit or walled area in order to enable the water to drain. Once the coke is adequately dry, it is ready for sale.



A 30-foot high retaining wall of a coke pit suddenly collapsed at a refinery, flooding petroleum coke and water into the surrounding property. Fortunately, no individuals were injured in the incident, but the company suffered significant property damage and business interruption. The

collapse of the coke pit wall eventually became a point of contention in a larger dispute. Baker & O'Brien was engaged in this case to review: (1) the civil, structural, and process safety engineering designs to determine if the coke pit was fit-for-service; and (2) if the actual operating conditions at the time of the collapse were within the design parameters. Our consultants conducted a technical review of the civil and structural design drawings and calculations of the pit walls and the execution of the design to determine whether proper engineering practices and codes were incorporated. Additionally, we investigated the process safety management procedures and practices of both the construction project and the actual operation.

Baker & O'Brien prepared a written report and participated in depositions.

## Was an Engineering Design Flaw Patently Obvious?

### Jury Trial, North America

By Dave Morgan



A refinery operator engaged an Engineering, Procurement, and Construction (EPC) contractor for a project to design and construct piping and equipment associated with product storage and pipeline systems. The project included a relief system that transferred liquid products to a "slop oil" storage tank in the event there was any overpressure in the system. Approximately eight years after installation, the relief system experienced a weld failure on the inlet piping of a pressure relief valve (PRV) which resulted in a hydrocarbon release that led to personal injury claims. The refinery filed a claim against the EPC contractor for: (1) design flaws in the pressure relief system that led to the incident; and (2) failure to indemnify the refinery against the personal injury claims. Baker & O'Brien was retained to evaluate these claims.

Our assessment included evaluating roles and responsibilities of the EPC contractor and the refinery operator to determine if their actions contributed to or caused the incident to occur. The EPC contractor evaluation included reviewing standards of care for the design and construction of pressure relief systems including: PRV set points, piping and support design, materials of construction, and system operating conditions. Refinery operator evaluations included assessing maintenance practices, operating procedures, and determining if any pressure relief system design flaws were "patently obvious" and, therefore, potentially the responsibility of the operating company to have identified these flaws during the eight years the system had been in service.

Baker & O'Brien also reviewed the EPC contract to determine if the indemnification clause was consistent with industry practice. We developed and submitted an expert declaration and provided court room testimony.

## Consulting Support for Complex Commercial Disputes

When faced with complex commercial disputes in the energy-related industries, clients often turn to Baker & O'Brien for its independent and objective support. For over 20 years, the firm's consultants have employed their engineering knowledge, industry experiences, and commercial acumen to provide assistance on a wide range of matters. Our project experience includes disputes involving operational incidents, standards of care, asset valuation, commercial supply terms, product quality, large engineering and construction projects, and intellectual property.

Our clients include many of the world's largest law firms, insurance providers, and operating companies. Law firms rely upon Baker & O'Brien to evaluate

technical and commercial aspects of a case and provide expert testimony. Our analyses, conclusions, and expert testimony have been heard by judges, juries, and arbitration panels around the world. On insurance matters, clients rely upon Baker & O'Brien's assistance for investigation of industrial accidents and quantification of resultant property damage and business interruption losses. We are also called upon to assist insurers in subrogation actions by evaluating causation theories and claims for damages.

We welcome the opportunity to discuss our qualifications in more detail as they relate to your specific area of interest.

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