

Michael G Sachs

Qualifications	B.Sc Chemistry & Chemical Engineering Member, Institute of Energy
Education	B.Sc in Chemistry and Chemical Engineering Edinburgh University and Heriot Watt CAT
Languages	Dutch, Norwegian, French and a little Swedish, German, Spanish and Russian
Date of Birth	1945

Current Position at CWA

External Consultant - provides expertise on all aspects of oil and chemical tank farm and terminal design, operations and trouble-shooting, and investigation of incidents in tank farms or ship/shore disputes.

Career Profile

Since 2002 Mike has been an associate consultant of CWA International Ltd and of KBC Process Consulting, as well as an independent consultant to the petroleum/petrochemical industry, specialising in oil refinery and terminal operations, particularly related to storage, handling and blending. He has also acted as an expert witness in several civil cases involving potential operational negligence in oil refineries and terminals, including the high profile case of the Buncefield disaster in the UK in 2005 and a similar disaster in Malaysia in 2008. He regularly gives training courses particularly on blending. From 1997 to 2002, he was a Vice President of KBC, acting largely in the same field. Prior to KBC, he was for 9 years General Manager of a European independent oil refinery/terminal, responsible for all aspects of the management of the corporation. Previously he spent 23 years with British Petroleum and 3 years with Statoil. His wide experience includes Oil Refinery and Oil Terminal Operations, Planning, Engineering, Maintenance, Information Systems Development, Production Management, Business Development and General Management.

2002-2019

He is currently acting as an expert witness in a case involving the sinking of a tank floating roof in UAE. Recently he has conducted surveys of the operability and safety of petroleum and chemical terminals in Oman and Saudi Arabia and a case involving the loading of palm oil in Indonesia. An earlier project has been to perform a benchmarking of the storage and handling facilities for a US plant chemical plant owned by one of the 2 largest oil majors, advising on changes to the facilities and to the operational practices in order to improve performance. He acted as an expert witness on a tank farm fire in Malaysia, and on a case involving a dispute between a Thai refinery and Singapore product trader. Previously he acted as an advisor to Pemex on the optimal configuration and location for a proposed new refinery. In 2009 he worked on US and Canadian refinery tank farm reconfiguration and refinery expansion projects. In 2007 he led a small team evaluating for the International Development Bank a number of potential locations for a new oil refinery in Central America. He has participated in an extensive strategic study for Pemex downstream, covering refinery tank farms, terminal operations and distribution facilities and optimisation. For a Caribbean refinery he carried out a refinery tank farm rationalisation study and for a Canadian refinery reviewed their tank farm structure and performance. He acted as client liaison for KBC projects in Kuwait, Kazakhstan and Russia, supervising the implementation of refinery operational profit improvements. He has also given a number of training courses on tank farm operation, blending and marine terminal management in Germany, Kuwait and elsewhere, and acted as an expert witness in disputes or arbitrations involving the quality and timing of shipments, business interruptions due to delays in engineering supplies, and direct and consequential damage claims from fires and explosions.

2001-2002

KBC Process Technology Ltd

From 2001, he took on responsibility within KBC for coordinating all activities concerned with refinery tank farm, logistics, blending and handling facilities, rationalising the methodologies, consolidating the extensive in-house data sources, and leading the operational input to study and implementation work in this field. He carried out a number of logistics studies using LP (GRTMPS and PIMS)

Page 2 of 4
CWA International Ltd

1997 - 2000

During this period he managed various aspects of KBC's business varying from consulting on refinery planning to supervising site based staff working on implementation of new refinery and tank farm operating procedures and systems such as KPI tracking. In 1998 he led an extensive and detailed study to develop a major tank farm rationalisation plan for a European refinery and managed a successful integrated multi-refinery Profit improvement program for KNPC in Kuwait, including both study phases and on site implementation.

1988 - 1997

Belgian Refining Corporation - General Manager

He successfully turned round an oil refining, blending and terminalling business which had been running with substantial losses so that by 1992 it was a commercially successful independent oil refining, trading and distribution operation, with some 220 employees and a turnover of about \$600M. This was achieved during a deep economic recession in the industry.

A main focus of his activities was to develop and implement and integrate new IT systems, including accounts, personnel, inspection records, maintenance management, process control, laboratory, oil accounting, stock management and loading automation and billing.

1986-1988

Statoil, Norway

During this period he was responsible for downstream business development, and played a major role in the \$300M purchase of a downstream oil company and its integration into the corporation while retaining the full commercial independence of the operating entities.

1963-1986

British Petroleum

A progressive career development path gave him a wide functional experience of the downstream oil industry, involving extensive assignments abroad including the Netherlands, Sweden and Singapore. For example:

1985-1986

He was initiator and manager of a project to integrate the various independent IT systems in a large complex refinery, adding further automation systems where necessary, and linking them all into a central Refinery Information System database.

1980-1985

He led the coordination of the production and distribution interests of an extremely diverse group of shareholding companies in a Singapore joint venture refinery, and implemented appropriate production planning and scheduling systems for essentially a grass roots refinery.

1976-1980

He was in charge of a team in London responsible for developing and marketing information technology for the downstream oil industry, successfully initiating major sales to third parties as well as to BP affiliates. These systems included LP and production scheduling.

1963-1976

During the early years of his career with BP he was given a variety of training/development assignments, including refinery production planning, process engineering, maintenance coordination, and refinery operations supervision.