IN HOUSE EXPERTISE, MAKING IT COUNT

When a shipment of naphtha became contaminated, Integra Technical Services brought together a multi-disciplined team that included Marine Cargo and Chemical Engineering expertise. They were able to reduce the claim cost and establish a potential subrogation action with a high likelihood of success against the vessel.

A petrochemical plant purchased 10,000 tonnes of naphtha, which was shipped in a product tanker from the supplier and then discharged into a storage tank that already held 22,000 tonnes of naphtha. The naphtha was intended as feed stock for a steam cracker in which ethylene and propylene are obtained by breaking down or "cracking" the naphtha rapidly in furnace tubes in the presence of steam and at a very high temperature, in this case about 800°C. The hydrocarbons produced, known as olefins, are reactive and can be further processed to give a range of polymers and other products, including plastics such as polyethylene and polypropylene.

It is normal procedure to test the purity of the feedstock naphtha before processing. In this case, organic chloride contamination of 50 parts per million was measured (against the specification of one part per million). Chlorides cannot be tolerated in this type of plant because they can cause corrosion in the processing equipment.

Integra Technical Services were appointed by international Reinsurers to establish the cause of contamination, investigate the extent of the loss and identify any opportunity for mitigation and recovery. Alistair Lamb, Managing Director – Singapore, Integra Technical Services explains "in addition to Marine Cargo knowledge, it was abundantly clear that we needed a Chemical Engineer. Knowledge of the petrochemical aspects of the product would be essential to assessing the loss mitigation options."

Collaboration and teamwork at Integra Technical Services really comes into its own when there is a complex claim. Andrew Gibson, Executive Adjuster, Integra Technical Services specialising in handling Marine Cargo losses, explains "having a highly skilled and qualified team means we are able to call on in house Loss Adjuster experts at short notice and bring them together quickly, without having to step outside our organisation." Given the specific petrochemical issues presented by this matter, Tony Thirkettle, an experienced chemical engineer with substantial petrochemical and claims management expertise and who has worked for Integra Technical Services since 2012, was brought onto the team.

Alistair, Andrew and Tony quickly agreed a strategy, roles and responsibilities - with Tony considering loss mitigation options, Andrew reviewing the marine elements (including the vessel charterparty contract and potential root cause of the contamination) and Alistair coordinating communications with the Reinsurer client, the Insured, local Cedant and the local surveyors they had appointed.

MITIGATION OPTIONS

Could the naphtha be de-contaminated, was there a way of removing the contaminant? Two options were considered, firstly whether it could be removed using a separation or adsorbent process and, secondly, was it technically possible to dilute the chloride to an acceptable level (below one part per million).

Tony explains "after thorough investigation, I found a patent for a process to remove the same chloride contamination from naphtha as in this case, which coincidentally had

CASE STUDY

been developed and registered by the Insured. Unfortunately, the plant described in the patent had not actually been built and no other similar facilities were available. Diluting the contaminant would have been theoretically possible but reducing the high degree of contamination to an acceptable level would have required a large amount of clean feedstock and posed logistical or tankage problems. The Insured needed the feedstock tanks back in use, so the contaminated product would have to be pumped into a vessel offshore. The whole process would have taken 18 months and been extremely costly, without any guarantee of success."

Two other options were then explored. Firstly, whether the contaminated product could be used as high-grade fuel to power boilers or gas turbines (an expensive but potentially workable option) or, as an alternative, finding someone prepared to purchase the contaminated product 'as is, where is' on a salvage basis. This final option proved successful and taking account of ancillary costs, enabled the claim to be substantially reduced.

SUBROGATION

At the same time as Tony was working through the loss mitigation options, Andrew was exploring the root cause and examining the marine cargo aspects, including whether standard operating procedures for cleaning cargo transfer pipes and vessel tanks had been applied prior to loading, identifying previous cargos that had been carried by the ship, and establishing the relevant responsibilities of the vessel owner under the charterparty contract.

Through these investigations it was established that neither the discharge facility nor the receiving plant had handled organic chlorides through the naphtha handling facilities (tanks, pipes etc.). Furthermore, it was identified that the cargo carried by the tanker immediately prior to this naphtha shipment was a cargo of organic chlorides. The vessel's crew had not thoroughly cleaned the tanks and pipes prior to loading the subject naphtha cargo which allowed the chlorides still present in tank bottoms and transfer pipes to contaminate the naphtha parcel. A subrogation claim is now being pursued against the vessel.

IMPORTANCE OF EXPERTS

Alistair concludes 'having a multi-skilled in-house team working together in an environment that encourages collaboration and teamwork has been shown time and again to deliver benefits to clients. In this case significant savings and most likely a successful subrogated recovery.'

Alistair Lamb
BEng (Hons) LLM ACII
Managing Director - Singapore
Integra Technical Services

Alistair is an experienced engineer with specialist working knowledge of rotating equipment, including gas turbines, power generation units and compressors, along with experience working on offshore oil & gas platforms and within petrochemical facilities.

He joined Integra Technical Services, Singapore, in 2015 as a Senior Adjuster and was promoted to Managing Director – Singapore in 2017. Since 2011 he has been involved in numerous energy claims onshore and offshore across Europe and Asia.

Andrew Gibson
BA LLB, ClArb, ACILA
Executive Adjuster,
Integra Technical Services

A qualified Lawyer, Shipbroker, Commercial Arbitrator and Chartered Loss Adjuster, Andrew has worked in the marine, stevedoring and transport / logistics sector since 1981 for companies such as Sydney Ports Corporation, P&O Ports and Horsell International.

He joined Integra Technical Services in 2012 and is responsible for handling major and complex Marine and related losses in the Australian and Asian regions.

Tony Thirkettle
M.Sc. M.I. Chem. E.
Chemical Engineer,
Integra Technical Services

Tony's career began with Bechtel, before working with Fluor and Davy in the Middle East and Europe. Experience includes project engineering for the design of several "secondary-recovery" projects in Iran and as a process engineer on petrochemical plant design.

Prior to joining Integra Technical Services in 2012, he worked for Munich Re as a property claims engineer specialising in oil, gas and petrochemical claims.