Paying for pollution?

Stuart Sutherland

As the recent bursting of a tailing dam owned by Brazilian mining joint venture Samarco unfortunately demonstrates, environmental pollution continues to be a major source of concern for the (re)insurance market.

Samarco, a 50/50 joint venture between BHP Billiton and Brazilian mining operator Vale, has already been fined 250mn reais ($65.5mn) as a result of the 5 November incident at its Minas Gerais iron ore operation in Brazil, which killed at least 12 people.

As Insider Quarterly went to press, Samarco, Vale and BHP were attempting to control the fallout from the disaster, which has polluted the Rio Doce river across two states. From a business interruption perspective, Vale, the world's largest producer of iron ore, said it could take years for the river to recover but has refused to be drawn on how much the clean-up costs and fines could amount to or to give a time frame for when the mining operations might reopen.

Yet it is the potential environmental liability impact that remains the unknown factor, with market sources suggesting the extent of overall insured coverage could well be in excess of $600mn. Taken together with the property and business interruption elements of the cover, the (re)insurance market is facing a potential overall loss that could be in excess of $1bn.

The Samarco incident follows Hungary's worst ever chemical accident in 2010, when a spill of industrial toxic red sludge at the Ajkai Timfoldgyar plant, owned by MAL Magyar Aluminium, flooded seven villages and towns, killing 10 people and injuring more than 150.

In 2011 MAL Magyar Aluminium was fined EUR472mn over the spillage, with a government statement indicating the fine reflected the unprecedented volume of hazardous material released when reservoir walls were breached. Some 700,000 cubic metres (184 million gallons) flooded out. The alkaline substances - a by-product of aluminium production - flooded nearby towns and agricultural land in western Hungary, eventually spreading across an area of 40 square kilometres (over 15 square miles) and reaching the River Danube.

Upstream concerns

Alongside mining firms and industrial manufacturers, which are understandably in the environmental pollution spotlight, operators in the energy arena also face significant environmental risks and pose interesting challenges for underwriters.

Naturally, and especially in the wake of the Deepwater Horizon explosion and blowout at the Macondo well in 2010, one tends to think of oil spills as the main area of concern here. One would not want to downplay the risk posed by oil spills, but it's important to understand that when we're talking about environmental risks in the energy market there are actually a wide range of possible threats.

According to the US Environmental Protection Agency, for example, the oil and natural gas industry remains the largest industrial source of emissions of volatile organic compounds, a group of chemicals that contribute to the formation of ground-level ozone. The oil and natural gas industry is also a significant source of emissions of methane, as well as air toxics such as benzene, ethylbenzene and n-hexane, which the agency claims have been linked to cancer.

It's not just the traditional oil and gas industries that pose an environmental risk to underwriters, however. In the renewables market, for example, more unusual risks include suggestions of bird and bat mortality at wind farms, as well as anecdotal reports of negative health effects from noise on people who live very close to turbines.

And with the increased uptake of fracking there are now investigations underway to determine possible associated environmental pollution and/or health effects. As one can see, the potential array of environmental risks associated with the energy sector is vast, and is certainly not limited to oil spills and their associated impact.

EU Offshore Safety Directive

From a regulatory and risk perspective the environmental pressures on operators continue apace, and in Europe those working in the upstream arena have recently seen the introduction of a new directive. The EU Safety of Offshore Oil and Gas Operations Directive (2013/30/EU, or the Offshore Safety Directive) seeks to align the different major accident hazard regulatory frameworks across Europe within one stricter regime aimed at further minimising the risks of offshore operations.

Although it has stopped short of mandating financial coverage for offshore risks, one of the key changes as a result of the new directive is the creation of a new "competent authority" - an independent body that provides regulatory oversight of the management of major accident, safety and environmental risks. Other changes include a requirement for each duty holder to have a safety and environmental management system.

This latest directive for offshore operators follows the earlier EU Environmental Liability Directive, which requires the damage caused by a major environmental incident to be remediated and paid for by the company responsible. It previously applied to coastal waters and designated European Protected Sites, but the EU Offshore Safety Directive extends its application to the whole of the marine environment.

Catastrophic coverage

A crucial fact that needs to be understood when we're talking about potential environmental exposures for energy companies is that we are not merely dealing with a large volume of attritional losses here - these can often be large-scale catastrophic events.

As Deepwater Horizon, the Ajkai Timfoldgyar plant in Hungary and more recently the Samarco mining disaster demonstrate, the scale of potential losses for insureds can be considerable. The severe, long-tail nature of catastrophic liability claims that can arise from explosions, crashes, contamination and accidents can severely damage a company's reputation and profitability, and requires an underwriter with the expertise and financial security to comfortably write environmental casualty programmes.

It's not only the big beasts in the energy market we're talking about here, many of which have well established captive arrangements where environmental liabilities are concerned, and tend to turn to the commercial market for high excess layers.

Obtaining protection for potential environmental pollution is a major concern for the smaller and mid-market energy players, which are now well served by both traditional casualty offerings in the London energy insurance market and more specific environmental insurance products.

At AIG, our London market casualty offerings for the energy market include follow-form excess liability limits available up to $50mn, with catastrophic, high excess limits available of up to $150mn. Here we are talking about coverage typically created through an endorsement to the general casualty policy for pollution events that fit within specific time parameters.

Alongside casualty offerings we have an extensive environmental liability offering in the guise of environmental impairment liability insurance (EIL), which crucially differs from standard environmental liability-associated covers in that policies do not distinguish between sudden and accidental and gradual pollution.

EIL policies are also able to respond to regulatory obligations - which are becoming increasingly complex, going beyond traditional clean-up costs and covering wider environmental damage. Although historically tied to M&A activity within the energy arena, in recent years EIL insurance in Europe and the US has grown to be a significant standalone product for operational risk.

Of course, some might argue that with exploration and production activity amongst many companies in the oil and gas arena decreasing as a result of continuing depressed prices and difficulties in the commodities market, the actual risk of a major pollution incident is lessened. Yet as the recent Samarco incident cruelly demonstrates, industrial environmental disasters can occur at any point in the economic cycle, and it would be unwise for insureds to let their guard down.

Similarly, underwriters faced with environmental risks in the energy sector cannot afford to be complacent with regard to pricing, as the potential cost of major claims is, unfortunately, not diminishing either.

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