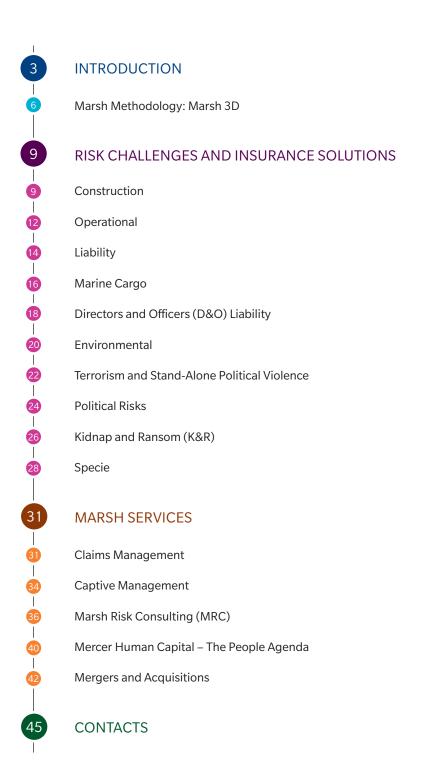


# MINING PRACTICE INDUSTRY RISK CHALLENGES & SOLUTIONS





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# INTRODUCTION

On behalf of Marsh's Mining Practice, I am pleased to present our Mining Industry Risk Analysis, which includes details of the short to medium term risk challenges faced by mining companies around the world today – and the solutions and services Marsh can provide.

Mining companies have an impressive track record for delivering continuous improvements in safety and risk governance standards. We have no doubt that the professionalism and expertise present within the industry will ensure that any new and emerging risk challenges are dealt with in an equally determined fashion.

Insurers have recognised the approach and achievements of mining companies in identifying, mitigating and retaining their risks. Many mining companies have close and longstanding relationships with their insurers built through regular dialogue with mining company executives and visits to mining sites and processing facilities.

This document should be of value to any organisation involved in this ever-evolving industry.

The very nature of mining natural resources means that many businesses will have operations in some of the most remote and inhospitable areas in the world and very often coupled with a high susceptibility to natural catastrophe.

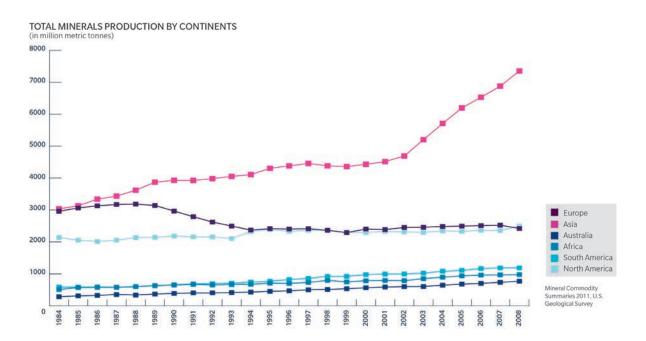
In addition to the traditional risk factors, the mining industry now faces an even wider range of challenges. Factors such as climate change, new technologies, economic uncertainties and secure supply of key consumables like electricity, water, gas and other fuels are all difficult to predict and bring additional complications to securing appropriate balance sheet protection.

# THE EFFECT OF THE FINANCIAL CRISIS ON MINING

As a number of mining companies were financing operational expansion on the back of debt, many have been significantly affected by the recent global financial crisis. Credit markets seized up, requiring balance sheets to be shored up to prevent a funding crisis. Drastic measures had to be taken including suspending operations, divestment of non core assets and other cost-cutting measures to protect earnings.

Less than two years later, these strategies have, broadly speaking, paid off. Operational efficiencies have increased and, as many countries demand more and more commodities (including coal, copper and iron ore) to underpin the expansion of their infrastructure, the mining industry is once again thriving with commodity prices rising.

Additionally, the ongoing rapid expansion of a middle class in China, India, other parts of Asia, Latin America and Eastern Europe, continue to fuel the voracious demand for these commodities.



### GLOBAL EXPANSION BRINGS NEW RISKS

To satisfy this demand, heavy investment has been seen in mining assets in Canada, South America, Australia, Asia and Central Europe amongst others. In addition, some mining companies are looking at ways to get to quality reserves in non-traditional locations, including Mongolia, the Democratic Republic of the Congo, Afghanistan and Mauritania.

Safety and environmental control of mining activity remain key drivers, but expectations of sustainable development require the provision of electricity, water, healthcare and education to the local communities where mining operations are based. Companies are also more exposed to Political Risks and K&R activity than had previously been the case.

The creation of new mining techniques (such as the ability to secure minerals from under ice, lakes, and inside volcanic sulphur mines) requires the development and use of advanced extractive technologies which can create additional risks.

The expanding geographical reach of mining companies brings greater exposure to host government actions – such intervention has increased substantially in recent years.

The economic crisis has led to the introduction of new taxes and royalties on mining companies. We have seen levies introduced in Chile and many parts of Africa – and proposed in Australia.

Some countries are also looking to replace lost revenue by nationalising mineral assets, which could lead to the imposition of resource rents, affect royalty rates, increase control of foreign participation, and introduce new mining codes.

Furthermore the increased demand for rare earths, particularly in the 'green' sector, and then the tightening of export restrictions on these by China, searches for alternative sources of supply are ongoing in Australia, Brazil. Canada. South Africa. Greenland and the US.

Many existing sources were mothballed when China undercut world prices in the 1990s and it will clearly take some time to restart production.

# **ENVIRONMENTAL RESPONSIBILITIES**

Mining owners and operators face many significant and complex environmental risks throughout the mining cycle including groundwork, handling hazardous substances, waste disposal and control. These include risks arising from more onerous regulations on liability for environmental damage and growing pressure from shareholders to disclose environmental performance.

New regulatory structures are designed to address the potential impacts of mining activities on the environment and to ensure the local community doesn't become financially liable for the reclamation of abandoned sites with a risk of civil fines, penalties and sanctions being imposed on those companies who fail to satisfy the local civil authorities.

### CHANGING WEATHER PATT ERNS

In the last 12 months, natural disasters such as earthquakes and floods have had a real impact on mining companies, as have climate change and water scarcity issues. Factoring the potential effects of climate change is of particular relevance to the mining industry when undertaking environmental risk assessments (as well as integrating them within Enterprise Risk Management programmes).

### **HUMAN CAPITAL**

An ageing specialist workforce affects many sectors, but perhaps none more so than in mining – particularly in the developed countries where the disparity between the numbers approaching retirement and those entering industry is increasing. Growing demand for metals and minerals just adds to this challenge.

### SERVICES AND SOLUTIONS

We have outlined our analysis of the risks and challenges facing Mining companies in the short to medium term.

We have put together our comprehensive response in the following two sections of our Industry Risk Challenges and Solutions Report. Our detailed analysis and our industry expertise has enabled us to propose a full range of insurance solutions, risk consulting capabilities and other service offerings which are specifically tailored to the mining industry. We believe these will be of significant benefit to mining companies.

### **OUR CREDENTIALS**

We have a deep understanding of the mining industry secured over many years of close working relationships with a large number of mining companies from single site businesses to the largest multinationals.

We have a large dedicated network of mining specialists operating all over the world who provide risk management advice, claims consultancy and transactional services on a daily basis to our mining clients.

Furthermore, we have colleagues whose professional backgrounds include accountancy, law, loss adjusting, underwriting and banking; these skills serve to reinforce the level of advice and service we can and do provide.

To deliver our services consistently around the world to our mining clients we have developed an innovative advice and service delivery framework – Marsh 3D – which provides significant benefits to our clients such as better planning and cost efficient programmes.

We trust you find this Risk Analysis to be an informative document. Marsh's Mining Practice is available to you – contact details are included at the back of this report.

Sincerely,



ANDREW J. CHESTER Head of Marsh's Global Mining Practice

# MARSH 3D - DEFINE, DESIGN, DELIVER

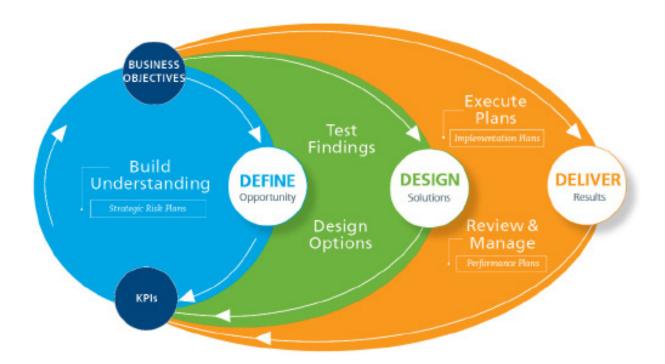
As mining companies are confronted with increasing challenges and pressures, they require a strategic and customised approach to risk management.

Marsh 3D is a dynamic strategic risk planning methodology. It enables us to provide a comprehensive and bespoke service to clients worldwide – and is of particular benefit to clients within the mining industry. Ultimately, Marsh 3D helps clients maximise the return on their risk management investment.

# THE MARSH POSITION

Marsh 3D uses rigorous cost-benefit analyses to help mining companies determine the best use of capital and the most appropriate allocation of resources based on their individual business model. We work hand-inhand with the client over a three-year period to design and execute solutions that address key risks and improve efficiency over 12, 24, and 36-month periods. We target each element of risk management – from identifying risk through to its quantification, design of solutions, execution, and claims advocacy.

Following each time period, we compare results to predetermined key performance indicators to measure the value of risk management to our clients' businesses.



# MARSH 3D: DEFINING, DESIGNING AND DELIVERING



Define what is possible by better understanding your business strategies, emerging risks, key performance indicators (KPIs) industry issues, risk profile and tolerance, existing opportunities, and more. Our 12, 24 and 36-month strategic planning process goes beyond renewal cycles to enable more comprehensive solutions

**Design** solutions – after applying powerful analytics – that address pre-loss mitigation, risk finance, and post-loss containment. Combined with a thorough cost- benefit analysis, this will allow you to set priorities and make the most efficient use of capital and resource

Deliver outstanding results through 12, 24 and 36-month implementation plans to tie back to your KPIs. The plans represent the best ideas from Marsh's risk and insurance specialists and your own risk management team combined to maximize the short and longterm benefits to your business

# THE ADVANTAGE OF THINKING LONGER TERM

The three-year approach of Marsh 3D enables us to take a long-term view to risk management, one which goes beyond the traditional 12-month insurance renewal cycle – and ensures that we identify intricate issues such as business strategy, emerging risks, claim trends, insurance market movements, draft legislative amendments and long-term risk improvements and plan for them well in advance.

The benefits of this approach are sustainable improvements through better planning, reduced volatility, risk improvements, sustainable reductions in cost and peace of mind.

Marsh 3D draws on the expertise of Marsh's insurance programme design and risk assessment capabilities to create risk and insurance options that specifically match the risk tolerance, risk profile and coverage requirements of each mining company.



# RISK CHALLENGES AND INSURANCE SOLUTIONS

# CONSTRUCTION

# Construction challenges facing mining companies include:

- **Secure supply** certain key consumables like electricity, water, gas and other fuels bring complications to the procurement of insurance
- Capital expenditure inflationary costs of oil, steel, coal, transportation, energy, mining equipment and contracting and the uncertainties of different jurisdictions and cross territory regulatory environments
- Technology continued development to meet the industry's demands (e.g. sag mill gearless drives/ autonomous mining/modularisation) and the use of new energy sources (wind farms/gas turbines/hydro electric) can affect compatibility, safety and lead times for replacements or servicing
- Buoyant construction market large volume of projects placing increasing demands on the already finite resources of specialist project personnel of both mining companies and of EPC/EPCM contractors
- Health & safety recent disasters in Chile and New Zealand highlight the need to maintain the highest level of working conditions
- **Bankability** lenders can be reluctant to offer limited/non recourse finance for projects in certain emerging markets. They also require comprehensive insurance programmes to include Delay in Start Up coverage

# WHY CONSTRUCTION COVER IS IMPORTANT

These challenges require a robust insurance programme consistent with the insured's risk appetite and exposures which also satisfies any legal and contractual requirements. As a significant risk mitigant it provides a cost certain solution for inclusion within the project risk register and financial model.

# THE MARSH POSITION

We are able to provide cover for all parties concerned including owners, contractors and lenders using our global network to ensure that the cover meets with local legal requirements.

We are able to offer:

- Expert support on contract review, comprehensive benchmarking data and insurance budgeting
- Client workshops to assess applicability and likely cost of Delay in Start Up cover, (including process for proof of loss)
- Optimal programme design, detailed underwriting submissions, a global placement strategy in local, regional and international markets which reflects client preferences and relationships
- Advice on the format of insurance road shows and likely questions from insurers

These will, at an early stage, be encapsulated in a pre agreed action plan with milestones.

Complete contract certain insurance documentation will be provided including policies, insurance manuals and claims protocols with pre nominated loss adjusters and other experts.

### **OPERATIONAL HANDOVER**

Multiple handover dates and operational activities during construction (e.g. power generation from dedicated power stations, stockpiling of ore) plus the subsequent ramp up of machinery to full design capacity are a particular feature of mining projects.

It is important to understand the interrelationship between these features and to reflect them in the insurance policies to avoid potential gaps in cover between the construction and operating insurances – there have been a number of high profile disputes and uninsured losses resulting from the failure to understand the interrelationship. We have developed a 12 point plan to ensure a seamless transfer.

Our policies can provide cover for:

- All risks of physical loss or damage to construction assets (including mobile and mining equipment) in the joint names of interested parties (Contract Works)
- Loss of owner's anticipated future income streams (Delay in Start Up)
- Liabilities to others arising from the Project (Third Party Liability) and Political Violence
- Professional Indemnity/Errors and Omissions cover
- Contractors including Plant and Equipment, Employers Liability, Workers Compensation, and Motor

# **SURETY BONDS**

Mining companies are routinely required to quantify the total potential cost of reclamation (using regulated estimating procedures) and to provide an acceptable form of financial assurance, prior to the beginning of the mining process. They will also require bonding from contractors and suppliers. Marsh's Surety Practice has specialised surety expertise for reclamation, as well as advance payment, performance tender and supply bonds.

# **CASE STUDY**

# The challenge:

While working on a major project, a client was faced with a substantial mid-term delay and a significant increase in costs. The delay was primarily due to permit difficulties and protracted land owner negotiations. Much of the cost increase was due to the unexpected appreciation of local currency against the USD.

# The solution:

Following a rigorous analysis, Marsh was able to differentiate between increased and neutral risk factors to persuade insurers to ignore insurance market conventions for calculating additional premiums. This achieved a saving to the insured of over USD9 million.



# **OPERATIONAL**

The operation of mines presents a number of significant risk exposures which are aggravated by the need at times to mine several kilometres below the surface and more recently under large bodies of water, together with a reliance on ever more sophisticated plant and machinery. This means that the risk of operational property damage and ensuing business interruption is one of the key balance sheet exposures faced by mining companies.

# OPERATIONAL CHALLENGES FACING MINING COMPANIES INCLUDE:

- Increasing level of mining activity in natural catastrophe parts of the world together with changing seasonal weather patterns
- Moving into ever more difficult areas such as deeper underground, underwater, under ice and at higher altitude
- Geotechnical challenges and operational challenges with bigger and deeper open pits
- Increases in commodity prices leading to pressure on productivity and earnings targets
- Exposure associated with managing and maintaining tailings facilities
- Managing supply chain the impact of the Japanese earthquake on the supply of trucks, components, and tyres is not yet clear but the adverse affect on the automotive industry generally is already evident. The 2011 heavy rains in Queensland provided a severe test of managing supply chains for some mining clients

- Adjustment and collectability of large, complex
   Business Interruption claims such as the breakdown of critical machinery or the loss of port loading facilities
- Long lead times for replacement of key plant, machinery and equipment (or their components) following a loss possibly exceeding indemnity periods, thereby leading to an uninsured exposure
- Contingent Business Interruption, for example reliance on third party infrastructure such as railways and ports
- Sustainable development including transport and power infrastructure – ensuring that local communities are better off than before

# WHY OPERATIONAL COVER IS IMPORTANT

When considering the scale of potential losses associated with operational risks and the challenges identified above, it is clearly important to have adequate risk transfer strategies in place, with insurance being a significant consideration.

# THE MARSH POSITION

We place operational risk cover for a large number of mining companies throughout the world, and can include within our policies protection for lenders providing finance to mining projects.

The size and diverse nature of our portfolio allows us to provide comprehensive policy wording reviews, optimal programme design options and benchmarking of key policy coverages to include policy limits, sub limits, deductibles and rating levels.

Furthermore, we provide advice on the content of underwriting submissions and client roadshow presentations to insurers including likely topics for discussion.

Our global network of mining placement professionals are resident in all the major international market centres which allows us to negotiate with all the key decision makers on a face to face basis to optimise placement terms and conditions.

Our policies can provide cover against all risks of physical loss or damage. Considerations include:

- Adequate Loss Limits our extensive network of market relationships, in conjunction with the skill and experience of our broking professionals enables us to structure programmes to deliver policy limit options to reflect our clients' event risk exposures
- **Natural Catastrophe** ensuring natural catastrophe limits and key exposure sub-limits (see case study) are addressed
- Risk Mitigation working with risk engineers (whether Marsh, insurer or third party) to establish the exposures and to identify risk mitigation and business continuity measures which are important factors in achieving the maximum and most cost effective capacity available
- Business Interruption (BI) the various approaches to minimise the financial loss in the face of a BI incident include the use of pre-agreed claims protocols, prenominated loss adjusters, clear policy language and the use of our in-house Forensic Accounting and Claims Service (FACS)
- Contingent Business Interruption for losses at the premises of customers, suppliers and utilities and critical infrastructure such as ports, railways and roads which are particularly vulnerable to natural catastrophe such as flooding
- Project Transition Phase seamless transition of projects from construction to the operational phase.
   Marsh has very significant experience of this critical business transfer to ensure that adequate cover is maintained at all times

# **CASE STUDY**

# The challenge:

A client has a critical Maximum Foreseeable Loss exposure to its tailings facility.

# The solution:

Utilising the comprehensive Risk Management and Risk Engineering information available to us and using six separate regional placement teams to access global insurance capacity, Marsh successfully placed a programme limit to the equivalent of approximately USD600 million, with no sub-limit for tailings – and with the normal tailings facility restriction to "Plant and Equipment therein and thereon" deleted.

# LIABILITY

A prime concern of mining companies worldwide is the safety and well being of their workforce and those who come into contact with the mine and the processing facilities. It is imperative that mining organisations adopt risk management procedures that support a zero tolerance approach to workplace injuries and fatalities, backed by a comprehensive liability insurance programme.

The location of new mining operations can involve building communities to accommodate employees. This creates additional liability exposures as diverse as medical malpractice for healthcare facilities and nonowned aviation exposures for airstrips and helipads.

Liability challenges facing mining companies include:

- Environmental mines are frequently located in environmentally sensitive areas and can be close to lakes and rivers which the local population rely on for their water and food supply
- Extraction the exposures to the mine workers (either employees or contractors) to the pollution risks associated with mineral extraction
- **Tailings** the storage of 'tailings' including the downstream exposures to any tailings dams (such as the Hungary incident in 2010)
- Subsidence, landslip and underground collapse the risk to mineworkers and others and impact on any surrounding property
- Class action can arise as a result of injury and/or disease to the workforce or from an environmental incident
- **Pollution** both sudden and accidental pollution coverage and gradual pollution
- **Employers liability** compulsory in many countries and recommended elsewhere even if only on a contingent basis
- Local labour Local requirements can mean utilising and training local labour as part of the workforce which can bring additional exposure

## WHY LIABILITY COVER IS IMPORTANT

All of these complex challenges require a comprehensive liability insurance programme reflecting the client's specific circumstances and exposures which also satisfies legal and contractual requirements. In many countries and jurisdictions a number of liability covers are a fundamental pre-requisite even when not actually required by law.

# THE MARSH POSITION

Our extensive knowledge and experience of the mining industry and our global footprint enables us to benchmark, structure and tailor our policy wordings to address a company's specific liability requirements in the locations that they operate. We use the strength of our relationships to find solutions for our mining clients.

Our policies can provide the following coverages on a primary basis subject to the policy triggers:

- **Construction liability** can be provided on a standalone basis or excess of third party liability provided by the Construction All Risks (CAR) policy
- Costs and expenses associated with defending a claim
- **Employers liability** noting the decreasing usage of subcontracted workforce
- **Medical malpractice** offering associated protection when mining companies operate in remote locations
- Public liability protecting permitted visitors to the site
- Professional indemnity providing protection for negligent advice from specialists such as engineers
- Pure economic loss as a result of loss of production
- **Sudden and accidental pollution** including losses arising from tailings facilities
- **Subsidence** including landslip and underground collapse

The following are additions that can be secured excess of a primary:

- Automobile liability including earth movers and public vehicles
- Marine charterers liability including loading and offloading
- Owned and non owned aviation



# MARINE CARGO

Mining reserves are often found where local demand for them is low, creating a need to ship them over long distances. Marine Cargo insurance is more important than ever with increasing commodity prices creating a higher cargo risk per vessel.

Demand for commodities has stimulated the development of new mines based on the prospect of greater return on investment. This has created an increasing need for Project Cargo and Marine Delay in Start Up (MDSU) insurance to cover physical loss of equipment and the subsequent financial impacts of delayed project start-ups.

# WHY MARINE CARGO COVER IS IMPORTANT

With new and emerging risks, it is increasingly important to consider cargo cover at an appropriate limit.

These risks include:

# • Infrastructure/transportation

- Mines are increasingly remote, so land and sea transport logistics can be more perilous, often with restricted access to quality vessels which can lead to an increased risk of loss or damage including business interruption
- Outdated or inadequate port facilities leading to delays
- Theft of precious metals and finished products such as copper cathodes

### Piracy

- Loss of, or damage to, equipment or mined commodities
- Resulting replacement costs and business interruption/delays
- Ransom payments

# Price volatility

- Rising commodity prices
- Price fluctuations
- The cost of replacement following loss or damage where commodities may have to be purchased at higher prices to fulfil contracts

# THE MARSH POSITION

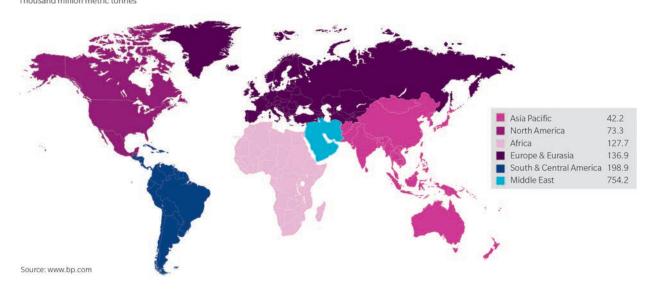
We advise mining companies on the many risk challenges they face particularly the basis of valuation to apply in the policy. Marine Cargo insurance valuations are agreed between clients and insurers and can vary according to sale price of goods, market value at the time of loss, the peak value between date of loss and scheduled arrival at destination.

We have access to risk management specialists who can advise on transport routes, packing and loading especially as mining operations venture into new and remote territories. Our policies can provide cover against:

- Physical loss or damage to goods through use of Institute Cargo Clauses or their local equivalents.
   Specific clauses can apply for interests such as coal
- War risks coverage while goods are on board vessels or aircraft, and 15 days at transhipment points
- Loss or damage caused by strikes and people acting from a political motive

Marsh wordings can include clauses providing for the payment of additional freight charges, extra expense, buyers' or sellers' interest and control of branded or trademarked goods.

# PROVED COAL RESERVES AT THE END 2009



# DIRECTORS AND OFFICERS (D&O) LIABILITY

A background of increased regulation, environmental considerations, supply chain management, counterparty risk and volatile economic conditions mean mining company executives are facing an increasingly complex environment to navigate which can expose them to litigation or investigation.

# These include:

- Strategic decision making projects can take years to come to fruition in the mining sector. Disclosure requirements regarding reserves and potential reserves mean mining executives are making long-term predictions, which may not be adequately protected by disclaimers. If plans change over time, this can lead to shareholder lawsuits and put decision makers in the spotlight.
- Fund raising mining is extremely capital-intensive, many companies are forced to regularly access debt and capital markets. While IPOs are an obvious risk, heavily discounted rights issues and secondary offerings can significantly dilute equity and create an adversarial shareholder community. Debt offerings and restructurings are not risk free, as experienced by issuers facing reduced terms in recent years.
- Mergers, acquisitions, divestitures and share
   offerings these activities bring close regulatory,
   media, employee and investor scrutiny. The pressure
   to increase reserves and project pipelines in mature
   markets mean the mining industry is seeing a high
   level of M&A activity.

- Environmental liabilities and site rehabilitation directors are at risk of criminal prosecution for pollution incidents resulting from their operations
- Executive remuneration increased shareholder awareness of compensation has led to scrutiny by the shareholders

### WHY D&O COVER IS IMPORTANT

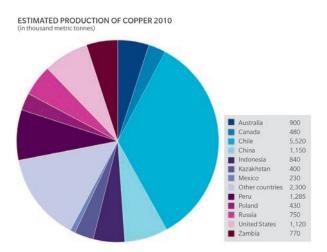
The implementation of appropriate risk management and corporate governance standards and the effective management of financial risk within the balance sheet are critical to delivering shareholder value. Failure to do so can result in crippling law suits.

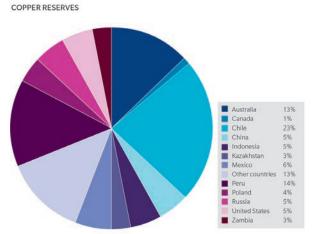
The increased availability of litigation funding and cost insurance means that law suits are only likely to increase; this is exacerbated by the development of securities class actions in previously 'safe' jurisdictions.

## THE MARSH POSITION

Our approach relies on specific client reviews to ensure that each client's policy matches their individual risk profile and risk transfer objectives. Marsh's Global Advisory Board keeps abreast of vital industry news such as new legislation and provides for innovative product solutions.

We have an extensive client base and benchmarking tools which allow us to review our clients' individual exposure and to advise on the buying patterns of their peers. In many instances, we are able to indicate likely shareholder action after potential stock price reductions and benchmark a client's programme to understand the economic value of each layer of insurance bought.





Mineral Commodity Summaries 2011, U.S. Geological Survey



# **ENVIRONMENTAL**

Environmental and associated business risks arise throughout the lifecycle of a mining operation:

- Exploration transporting fuel and drilling equipment to remote rural locations, crosscontamination of strata through exploratory drilling, developing new roads in remote territories and all associated emissions and waste
- Construction and development removal, transportation and storage of overburden, construction of mining and process facilities and developing wastewater treatment plants
- Mining and processing pollution and environmental damage from contaminants released during the handling, movement, treatment and storage of mine tailings and associated health and safety risks
- Closure and restoration extensive ground works, risks include the treatment and disposal of acid mine drainage

While many environmental risks are generic, some are specific to mining techniques and the particular ore being extracted. The significance of site-specific risks can depend on the environmental characteristics and sensitivity of the surrounding area, often categorised in terms of how the surrounding land is used and the quality of the underlying aguifer.

# WHY ENVIRONMENTAL RISK COVER IS IMPORTANT

Environmental risk cover can protect mining owners, operators, contractors and investors against a wide and complex range of risks which can cause significant financial loss.

### THE MARSH POSITION

As well as placing cover for generic environmental risks, we can tailor and structure policies to address specific project risks. Our extensive network of relationships helps us find sufficient cover for all sizes of projects.

Our policies can provide cover against:

- Site-specific pollution legal liability; risks and liabilities arising from any 'gradual' or 'sudden and accidental' pollution and environmental damaging event
- Contractor's pollution liability, covering first and third party liabilities arising from 'gradual' and 'sudden and accidental' pollution, or environmental damage caused by contractor's operations
- Clean-up costs, including remediation projects dealing with circumstances like unknown contamination
- Changes in legislation or enforcement procedures that require increased stringency of remediation measures
- Compliance with financial assurance regulatory requirements

We can design closure and restoration insurance to address anticipated costs associated with reclamation, post-closure care and environmental corrective action for known releases at mining operations.

# MARSH'S ENVIRONMENTAL RISK ASSESSMENT AND RISK MANAGEMENT SOLUTIONS

# Environmental Risk and Insurance Assessment

We advise owners and operators of mining operations how to identify, assess and manage the key environmental risks in their business. We use current industry benchmarks to show risks that may fall outside a client's current risk appetite.

# Environmental Management System design and implementation

We can develop an 'Aspects Register' that includes all potential risks and the associated environmental impact. It assesses the significance of potential hazards and ranks them according to a system customised to our clients' risk appetite and type of mining operations.

# **Environmental Training**

We offer bespoke training addressing environmental risk management and regulatory challenges using practical examples of best practice and exercises based on our extensive experience of the mining sector.

# **Environmental Due Diligence Services**

Mergers and acquisitions require buvers and sellers to assess and address the environmental risks and liabilities of the target business and to review the setting and history of sites, identifying and characterising potential environmental liabilities. Assessments cover site conditions, operations and environmental management, surrounding areas and receiving environments to define environmental sensitivity. In addition the assessment can take future developments into consideration, review contractual risks and cost and prioritise environmental risks and liabilities.

# TERRORISM AND STAND-ALONE POLITICAL VIOLENCE

Over the past decade the risk to property and associated business interruption from terrorism and political violence has been increasing in many locations around the world.

# WHY TERRORISM AND STAND-ALONE POLITICAL VIOLENCE COVER IS IMPORTANT

As mining activities tend to be carried out in remote locations, they can be more susceptible to attacks by guerrillas or terrorist groups.

In 2010 and 2011, such incidents occurred in countries across the globe including Russia, Colombia, India, Iraq, Pakistan and North African countries.

# THE EFFECTS OF A TERRORIST OR POLITICALLY MOTIVATED ATTACK CAN INCLUDE:

- Physical damage to facilities, machinery and equipment
- Resultant impact on production
- Reputational damage or unwelcome media attention
- Additional expenses for relocation, transportation and the cost of replacement of products
- Legal liability issues

### THE MARSH POSITION

When negotiating cover for terrorism and political violence risks for mining operations, we consider geographical locations, ownership of assets, history of threats or losses and insurable values.

We work closely with mining companies worldwide to understand the physical and human security measures in place and to provide advice on risk management procedures, including:

- Exterior boundary protection (walls, fencing)
- Vehicle stop and search procedures, vehicle separation from critical areas
- CCTV camera systems and control rooms
- Security guards, firearm use policy, and shift rotations
- Sensors, metal and motion detectors
- Access restrictions, identity cards and checks

Our policies can provide cover to protect mining facilities, railroads, storage facilities (owned or third party) and end users against:

- Terrorism
- Sabotage
- Riots, strikes, civil commotion
- Revolution, rebellion, insurrection
- Mutiny, coup d'ètat
- Civil war
- War

Marsh can also arrange cover for liability to third parties or employees following physical damage to assets from any listed peril.

# THE MOBILE ASSET AND COMMODITY EXPROPRIATION (MACE) INSURANCE FACILITY

In 2011 Marsh launched this facility to meet the increased concern of multinational companies about the rise in terrorism and political risk events on a worldwide basis.

Available globally, the product, exclusive to Marsh, provides up to USD100 million of cover for a company's assets (fixed or mobile) against terrorism, political violence, forced abandonment and a broad range of government actions which can otherwise deprive the owner of the use and economic benefit of their assets in overseas territories.

# Key features of the facility include:

- Large limits of capacity (up to USD100 million) available quickly
- Pricing certainty through a noncancellable policy period of up to 36 months
- Contract certain and flexible cover

# **POLITICAL RISKS**

The mining industry is arguably more vulnerable to government intervention than almost any other. When commodity prices boom, for example, local or national governments can demand an increased share of the revenue. Governments, particularly where there has been a change, can review licensing agreements and make unilateral retroactive changes to their benefit.

# WHY POLITICAL RISK COVER IS IMPORTANT

Political risk cover can protect against catastrophic losses caused by unpredictable political events. A state or private insurer with 'clout' in the host country can serve as a partner in deterring government intervention and resolving disputes before they result in a claim. Both the US Government's Overseas Private Investment Corporation (OPIC) and the World Bank's Multilateral Investment Guarantee Agency (MIGA) can cite cases where their advocacy has helped deter adverse government actions.

## THE MARSH POSITION

Our political risk specialists are drawn from the worlds of banking and political risk underwriting and include professionals with decades of experience working with the mining industry — for both private insurers and government agencies in the export credit and investment arena. We are familiar with the commercial needs of the private market and the policy requirements of bilateral and multilateral entities including OPIC and MIGA.

This enables us to tailor and structure policies to address specific project risks within a host country. Our extensive network of relationships helps us find sufficient cover for all project sizes — even when adverse press may be focused on mining operations in countries where our clients operate or where they are planning to start projects.

As well as placing political risk cover for a broad range of mining companies throughout the world, we also place cover for lenders providing finance to mining projects and to contractors hired to construct and operate mines.

Our policies can provide cover against:

- Expropriation
- Forced abandonment
- Contract frustration
- Inconvertibility
- Forced divestiture
- Business interruption
- License cancellation
- Contract repudiation
- · Arbitration award default

# CASE STUDY: INSURING A PRECIOUS METALS CONCESSION IN LATIN AMERICA

# The challenge:

A high profile mining company had obtained a precious metals concession in a Latin American country experiencing government instability, civil unrest, and controversy relating to concessions the government was granting.

# The solution:

Marsh and the company's financial advisor negotiated the coverage with the underwriters of a private sector insurer and OPIC. The policy was carefully tailored to address the specific risks that characterised the country granting the concession. Marsh advised the client throughout the sixmonth process of structuring optimal coverage and policy wording.

# The resulting policy protected the client against:

- Expropriatory actions that could result in an outright taking of the investment, or deprive the investor of its fundamental rights
- Damage to (or abandonment of)
   assets resulting from politically
   motivated violence, including war,
   civil war, civil strife, terrorism, or
   sabotage
- Business interruption
- Currency inconvertibility

# KIDNAP AND RANSOM

Historically, the focal point for Kidnap and Ransom (K&R) has been Latin America, but the risk is increasing globally. Many of the recent mining-related K&R incidents recorded by Control Risks, were in Africa — including Niger, Nigeria, Sierra Leone and South Africa. With 80% of victims recorded as being foreign nationals (the global average is 7%), the duty of care owed to employees from mining companies has never been more critical.

### WHY K&R COVER IS IMPORTANT

Although some are politically or ideologically motivated, most kidnaps are carried out by criminal gangs motivated by financial gain. They choose targets based on the profile, remote location and perceived wealth of the organisation they work for. Unfortunately this means mining companies tend to be more vulnerable to K&R risks than organisations in other industries.

A Marsh K&R policy offers much more than the traditional risk transfer; it also incorporates risk reduction and mitigation. Although most mining companies will have a Crisis Management Plan (CMP), in reality a Crisis Management Team (CMT) may not have the relevant experience in dealing with an actual kidnap or extortion incident.

With a Marsh K&R policy, mining companies have immediate access to a team of experienced Response Consultants, who can expertly guide the CMT through the intricacies of handling a K&R incident. Their sole aim throughout the negotiation process is the safe return of the victim, while ensuring the company does not increase the risk of further kidnaps. They also provide expert guidance on negotiating with kidnappers and handling the media, local government, law enforcement agencies and victims' families.

# THE MARSH POSITION

Our policies can provide cover for individuals on shortterm trips through to blanket cover for a whole company including their contractors.

### Cover can include:

- Kidnap
- Extortion (including product extortion)
- Political or wrongful detention
- Hijack
- Ransom
- Loss of ransom monies in transit
- Legal liability
- Additional expenses
- Personal accident
- Business interruption
- Emergency political evacuation expenses

# **RECENT KIDNAP AND RANSOM CASES**

# Would your operation be prepared?

# Typical incident 2010 - Nigeria

# The challenge:

A businessman from the mining sector was kidnapped alongside his driver while driving back to his home in the summer of 2010. The kidnappers overtook the victim's vehicle before firing shots at it to disable the car and bring it to a halt. The victim was blindfolded and frequently moved to different locations. Within the first few hours of captivity, the captors demanded a ransom of 500m naira (USD3,300,000).

# The solution:

With the guidance of K&R consultants, an undisclosed ransom was paid and the victim was released. The consultants worked closely with local police during the incident, which ultimately resulted in the arrest of the perpetrators.

# **SPECIE**

Specie is the insurance of valuable commodities in transit or at rest. With the price of precious metals reaching record highs, it is more important than ever to ensure that the product is comprehensively insured. A loss can occur at any point in the supply chain. Many losses involve some kind of 'inside information' so our placements include coverage for employee infidelity.

# THE MARSH POSITION

We can provide a full 'all risks of physical loss or damage' solution, from surface to sale, or when the interest of the client ceases. Our placements make provision for static, vault risks or processing risks anywhere in the world. Coverage is provided on a worldwide basis and major perils such as infidelity, theft and mysterious disappearance are included.

We include a transit/premises risk contingency clause in specie placements for mining companies. This permits clients to make claims on their own policy in the event of non payment or delay in payment by the third party's carrier.

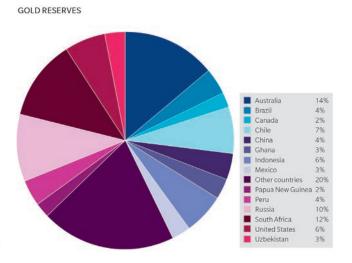
# **CASE STUDY**

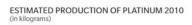
In one of the most high-profile marine casualties of recent years, the Polar Mist, a Chilean-flagged refitted fishing trawler, was abandoned by its crew in high seas in the Straits of Magellan. At the time the vessel was transporting 9.359 kilos of unrefined gold and silver.

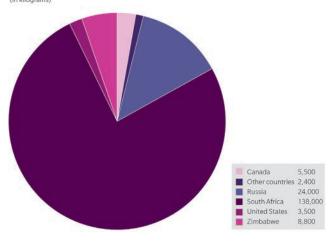
The vessel sank but because the gold was salvageable it was not deemed lost. It took in excess of twelve months to complete the salvage operation. This meant a very substantial delay in the owner being paid by the carrier.

Most contingency covers would not have responded as the gold was not deemed lost. However, Marsh's wording has made provision for this type of situation and would have responded.

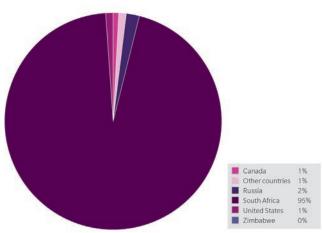
# ESTIMATED PRODUCTION OF GOLD 2010 (in metric tonnes) Australia 255 Brazil 65 Canada 90 Chile 40 China 345 Ghana 100 Indonesia 120 Mexico 60 Other countries 500 Papua New Guinea 60 Peru 170 Russia 190 South Africa 190 United States 230







### PLATINUM RESERVES



Mineral Commodity Summaries 2011, U.S. Geological Survey



# MARSH SERVICES

# **CLAIMS MANAGEMENT**

Events affecting mining companies during the past few years have resulted in significant property damage and business interruption losses. There is increasing pressure to recoup lost revenues and costs which can strongly impact a company's ability to compete, meet shareholder's expectations and to maintain the confidence and support of its Board of Directors.

With government mine safety organisations, shareholders, the media and the public scrutinising management's ability to deal with any unforeseen events or crises, the accurate quantifying of losses and the maximising of insurance recoveries in a timely manner is increasingly important.

At Marsh, we recognise that the ultimate deliverable of the insurance product is claims settlement.

# INDUSTRY EXPERIENCE AND EXPERTISE

- Our claims practitioners are well versed in the different mining techniques and associated processing activities. We recognise the complex nature of many mining losses including time-element exposures and supply chain dependency.
- We have over 100 claims professionals located around the world with specialist experience of the mining industry, with many more having broader property and business interruption claims expertise which we deliver through the local servicing and claims teams. They are frequently industry recognised professionals.
- We negotiate claims payments of over USD10 billion annually for our clients from all industries
- We understand the challenges that loss situations produce, such as catastrophe management; lost sales; difficulty in sourcing specialist mining equipment; complexity of business interruption measurement and related increased costs of working and/or extra expenses

# THE MARSH RESPONSE

- We offer scenario testing, where we review potential claim situations and the policy response ahead of any loss
- We review existing or propose new claims management protocols and the use of or the insertion of claims preparation cost clauses in the policy
- We encourage client engagement ahead of the loss with insurer appointed experts
- Upon notification of a loss, the Marsh team provides rapid claim notification to insurers
- We understand the importance of maintaining regular and detailed communication between all parties
- We ensure our clients' insurance rights are properly protected and promoted
- We offer strategic advice to clients in the presentation and management of the claim
- We offer appropriate coverage advice when required
- We work closely with appointed parties, such as loss adjusters, forensic accountants and engineers — our practitioners have long-standing relationships with these experts
- We can offer a 'lessons learned' exercise we strongly believe that the value of a claim does not end with its financial compensation

# **CLAIMS ADVOCACY**

Our Claims Advocates provide strategic advice to clients both pre and post loss and they negotiate the most challenging claims with insurers.

The Claims Advocates will usually be involved with a client prior to the inception of an insurance policy, providing technical expertise and guidance on the policy language and the claims protocols.

Their understanding of the policy enables them to properly present a claim to the insurance market and produce a quicker and more satisfactory outcome for the client. The Claims Advocates are an integral part of the Marsh Claims Team.

# FORENSIC ACCOUNTING AND CLAIMS SERVICES (FACS)

Marsh's Forensic Accounting and Claims Services (FACS) practice comprises forensic accountants, CPAs, certified fraud examiners, insurance claim specialists, adjusters and legal professionals who deliver world-class forensic accounting, investigative, dispute advisory, and insurance claim preparation and advisory services.

The FACS practice can help your company work through the vast number of claims-related issues that may follow a major incident or event. Our team of forensic accounting and claims professionals can be on the ground with you almost anywhere in the world within 48 hours of an event to provide you with proactive support to help manage the crisis. We offer claims leadership and other resources useful in the wake of an event to help you mitigate your losses, focus your attention on your employees and community, and achieve a timely recovery and return to business.

# **CASE STUDY**

Our client (a global gold mining company) sustained significant damage when a skip fell down the main shaft of one of its mines. The damage to the shaft was extensive requiring a 10 month repair to the shaft structure.

FACS assisted the client with the preparation and formulation of both the Property Damage and Business Interruption claims. Through utilising FACS's methodology and understanding of the mining techniques utilised, we were able to secure full and final settlement for a sum of USD75,000,000 within a six month period.

# **CASE STUDY**

Our client sustained a USD73,000,000 property/time element loss to their facility following a hurricane. As a result of extensive damage to the port loading facility and refinery, we were faced with providing complex solutions in a very difficult working environment.

Marsh's Forensic Accounting and Claims Services (FACS) engaged with the client to assist them with the loss management and measurement. FACS ensured a rapid on-site presence at the facility, which enabled us to schedule meetings with necessary personnel around recovery efforts. As a result FACS was able to calculate the complex property damage, BI and extra expense claim in a shorter period of time and achieve a highly satisfactory outcome for our client of over USD70,000,000. The claim was resolved within 17 months, despite the size and complexity of this loss.

This case study demonstrates the depth of Marsh's resources available to our clients. The combined expertise of our claims and FACS practice is a real differentiator for Marsh, and provides tangible solutions to our clients.

# MARSH'S DISASTER RECOVERY PORTAL

When a disaster strikes, Marsh's Disaster Recovery Portal (http://usa.marsh.com/insights/disasterrecovery.aspx) keeps clients up-to-date with the latest developments.

The Portal features timely analysis from Marsh's risk experts and provides invaluable information, resources and advice following a major disaster. Examples include the Japanese earthquake and tsunami, the Australian flooding and the Chile earthquake.

Clients can use the 'Ask an Expert' feature to get answers via e-mail to their most pressing questions and can use the site to file claims.



# **CAPTIVE MANAGEMENT**

Captive insurance companies are common in the mining sector. This is driven by a combination of factors, such as the type of risks, the market capacity and its accessibility (insurance or reinsurance), claims control and the global nature of many mining firms.

Using the right captive-related structure can have a significant impact on the cost and availability of suitable insurance for even the largest mining groups.

Several factors need to be carefully considered; much will depend on the issues a captive approach is intended to resolve, such as the level of cover, financing uninsurable risks and taxation.

Mining companies should consider whether:

- To place the captive insurer on or offshore
- To operate a wholly owned captive insurer, or to use a third party through a 'protected cell' or similar arrangement
- To underwrite risk on an insurance or reinsurance basis
- Financiers require evidence of cover and any criteria around it
- Appropriate cash resources are available to capitalise the captive

Capital management is important given the high property damage and business interruption limits normally underwritten by captives. Depending on the company's objectives and where its headquarters are, together with risk-based capital growing in popularity, simple and advanced methods can apply. In this context, both on and offshore options can be attractive. For example, creating equalisation reserves to help manage catastrophes, or a low-to-zero tax rate that helps the longer term growth of surplus within the company.

# WHY CAPTIVES ARE IMPORTANT

Every mining company faces a range of exposures that it could finance via an insurance mechanism. While many of the risks may be traditionally insurable, some will involve only a partial solution from the insurance market, with a captive helping to finance completion of the structure.

Where traditional insurance can be limited or deemed too expensive, a captive provides options and has the potential to become more valuable over time.

### THE MARSH POSITION

We advise on captive insurance options for mining companies around the world. Recognising the many factors that need to be considered (either before implementing a captive structure or having established one) we can provide support in the following areas:

- Identifying whether a captive approach is best for a client's insurance needs, including help finding the right location, structure and operation
- Structuring the optimal programme in which to place a captive, including limits, premium and cover
- Guiding premium decisions and allocating them in a way that supports transfer pricing considerations
- Optimising the level of capital deployed for such risks, within the parameters set by the business
- Establishing and managing the captive in its chosen domicile

Our global team of 450 captive professionals come from a range of backgrounds, including insurance, reinsurance, accounting, taxation and law.

### **CASE STUDY**

### The challenge:

A multinational mining company was facing a series of losses which were being disputed by the insurance market. This led to a large provision on the balance sheet and concern over the value of insurance.

### The solution:

Working with group treasury, we assessed the business' risk tolerance, benchmarked its programmes against similar businesses and made recommendations concerning the capital position of the captive insurance company. The company then used the captive to assume risks excluded by the market. This provided the certainty that the local mining operations required.

# MARSH RISK CONSULTING (MRC)

With over 70 years' experience of working with clients in the mining industry, Marsh Risk Consulting (MRC) provides advice, analytics, tools, research and solutions for a wide range of risk issues and is perfectly positioned to help mining companies better understand their risk profile and find appropriate protection.

Our dedicated professionals combine in-depth knowledge with leading industry thinking and advice to meet mining companies' day-to-day needs and keep them ahead of their risk exposures.

#### THE MARSH POSITION - SOLUTIONS FROM MRC



Marsh Risk Consulting offers the following services to help mining companies manage their risk exposures:

**Strategic risk management** – the global nature of mining makes companies susceptible to risks including natural catastrophe, terrorism and operational stress, the failure of a joint venture, political risks, and counterparty failure.

We support mining company executives by using a structured methodology to identify, define and assess risks to their business strategy, financial performance and operational effectiveness.

**Enterprise Risk Management (ERM)** – the remote and complex nature of some mining operations can mean higher operational costs, including those for energy, labour and transportation, safety, security and environmental exposures. ERM can help mining operations deliver value in these often challenging environments.

An ERM framework from Marsh supports the alignment of strategy, processes, people, technology and knowledge, with the purpose of evaluating and managing the daily uncertainties a mining company faces. This provides 'best in class' management information to support decision making.

**Supply chain management** – we help mining companies understand potentially critical failure points along the supply chain such as pumps, piping, lubes, tyres and lead time for essential plant and machinery.

We help with the allocation of appropriate risk management strategies to achieve more adaptive and resilient supply chains, by:

- Helping clients understand the key risk exposures not only in their own supply chains, but also of their suppliers
- Providing options and alternatives via a risk management plan that reduces the potential exposure to their business (including pricing and modelling)
- Helping clients execute a risk strategy in collaboration with key suppliers
- Providing risk transfer options for critical risk exposures in the supply chain

# MODELLING BUSINESS ANALYTICS (RISK MODELLING)

Risk modelling helps mining companies achieve the right balance between risk retention and risk transfer. A risk tolerance evaluation gives the client a guide to the overall amount of risk they can absorb during a year by analysing the 'headroom' available around key performance indicators. Risk modelling can assess the likelihood of loss for key classes of insurance for forthcoming periods.

### **BUSINESS INTERRUPTION (BI) INSURANCE**

Setting up an effective BI insurance programme requires an in-depth risk assessment of both the operational and financial dimensions of the business. The outcome of the assessment determines the breadth and basis of cover, the BI sum insured, indemnity periods and essential cover extensions. Other components that need to be considered include supply chain dependencies, redundant capacity, changing customer demands and market trends.

Marsh's Business Interruption Insurance Reviews utilise our in house Forensic Accounting and Claims Services (FACS) team to examine a mining company's existing BI insurance programme and ensure the key exposures have been carefully examined.

### **CASE STUDY**

Marsh was engaged to conduct a Business Interruption Insurance Review for a client's key site.

We compiled a report detailing the financial impact the Maximum Foreseeable Loss and Normal Loss Expectancy scenarios would have. Through this analysis and testing of revenue and cost drivers FACS established the accurate Sum Insured, Declared Value and Indemnity Period as well as identifying the need for extensions such as: Dependency/Loss of Supply of Public Utilities/Output clause and Accumulated stocks clause.

#### **CRISIS MANAGEMENT**

Mining companies often operate in extreme conditions. New and proven deposits are found increasingly in areas that require significant investment and a sophisticated level of skill and technology. In such challenging environments, any issue not managed efficiently can threaten the business. Effective crisis management protects the company and both the management and board's credibility.

Marsh's crisis management advice can help minimise an organisation's risks, reduce costs and create an opportunity to enhance brand value, human capital and public trust.

### **ASSET VALUATION**

Our FACS valuation group can introduce an electronic data capture and asset tagging system, which utilises handheld computers with integrated barcode scanners to verify and value all tangible assets on site. When combined with our proprietary asset register software, we can provide our mining clients with a detailed verification and valuation of assets at unit level that will support any assets/revenue audit.

### **BUSINESS CONTINUITY MANAGEMENT (BCM)**

Business continuity management consists of identifying threats to an organisation and developing Business Continuity Plans (BCPs) that respond from initial events through to full recovery. These plans are developed by prioritising business operations, identifying tolerable downtimes, assessing financial and non-financial impacts to the business and outlining recovery strategies in the event of an interruption.

Marsh's consultants can review and audit existing plans to identify gaps and areas for improvement and also provide a range of plan scenario testing to ensure that clients' BCM arrangements remain fit for purpose.

Our BCM experts can also visit key supplier locations and assess their existing continuity preparations, identifying risks in the supply of critical products and services to our mining clients.



# MERCER HUMAN CAPITAL – THE PEOPLE AGENDA

In many developed nations, the mining workforce is ageing and the disparity between the numbers approaching retirement and those entering industry is increasing. For example in the US, the Society of Mining Engineers noted that over 58% of industry members were over 50 in 2005. Australia and South Africa quote statistics highlighting the same worrying patterns.

An example of the 'human capital' problem is a growing shortage of middle managers.

There are a number of strategies that can help mitigate this situation:

- Encouraging early retirees or workers from other roles to retrain and re-enter the industry
- Ensuring rewards are appropriate by comparing packages not just within the mining industry but also in other industries that may attract similar skill sets

- Providing long-term incentives that link parts of the reward package to the company's performance to encourage staff to stay. For example, share schemes, options schemes and long-term bonus plans.
- Paying consideration to the workforce culture (or business behaviour) of both acquired and acquirer in mergers and acquisitions situations
- Closer co-operation with educational establishments, such as creating sponsorship opportunities for students
- Apprenticeships, particularly for non-graduates, and ideally in co-operation with government initiatives
- Sponsoring career-changers, particularly in the key age group of 30-40, who may have relevant commercial experience and transferable skills
- Continue to develop talent retention programmes, internal transfer opportunities and career planning advice
- Investment in innovative technologies greater use of automated mining operations and autonomous equipment



# MERGERS AND ACQUISITIONS (M&A)

Fuelled by strong commodity prices and repaired balance sheets, M&A activity in the global mining sector looks to accelerate into 2011 and beyond – early signs that bank lending may soon recover will boost this activity further.

The increase in M&A activity, characterised by larger deals, bolt-on acquisitions and cross-border deals in emerging markets, has raised price expectations for potential assets. With resource-hungry companies looking for new assets, this trend is set to continue into the future.

### WHY M&A COVER IS IMPORTANT

Risk and insurance due diligence lowers the level of uncertainty and reduces the risk of surprises after a deal closes. Both corporate buyers and sellers are at risk of not creating adequate value in the acquisition or disposal. The main factors behind lack of success for either party are:

BUYERS	SELLERS
Overpayment	Purchase price disputes
Post deal completion issues – for example uninsured legacy liabilities	Post deal completion issues – particularly warranty and indemnity claims
Failure to integrate the target smoothly and efficiently	

Understanding the cause of these issues, and the impact that they have, can mean the difference between:

- A more efficient price versus overpayment or post-close surprises
- Improved sale and purchase agreements versus having ambiguities in the purchase and sale agreement
- Smoother, faster integration versus delays and unrealised synergies
- More efficient corporate governance

### THE MARSH POSITION

Marsh's Private Equity and M&A practice (PEMA) works to provide risk and insurance advice that complements traditional financial, legal and commercial due diligence. Our advice enables clients to better understand the risks in any given transaction and factor them into negotiations and the pricing of a transaction.

In summary, we represent buyers and sellers to:

BUYERS	SELLERS		
Identify risk and insurance issues that affect the financial negotiations such as large retentions, self-insurance, etc	Identify potential issues that may influence the deal and carve-out costs which may be used by the buyer to negotiate on price		
Evaluate current and historic insurance programmes to determine the quality and the extent of remaining insurance limits as well as the solvency of historic insurers	Estimate self-funded losses (if appropriate) and compile quality, consistent and robust information for potential buyers		
Identify and resolve issues in the Sale and Purchase Agreement	Ensure the Sale and Purchase Agreement reflects how insurance will and will not respond – and identify changes to the seller's current insurance programme necessitated by divestment		
Develop pro-forma insurance cost projections			
Determine the adequacy of reserves in cases of self insurance			
Place a range of transactional risk solutions, which provide cover against a number of deal obstacles which can			

Place a range of transactional risk solutions, which provide cover against a number of deal obstacles which can lead to purchase price disputes.

### **CASE STUDY**

### The challenge:

A target company's accruals for retained losses did not appear to be consistent with the historic loss experience. The company in question maintained that its accruals were accurate and were based on reports from its outside actuaries. There was substantial uncertainty regarding the quality of earnings, making it difficult for the buyer to confidently value the company.

### The solution:

Marsh reviewed the target company's actuarial report and found that it was both outdated and being misinterpreted by the target company. Marsh & McLennan Companies' actuaries carried out an independent review to determine the appropriate accruals for retained losses.

This review found that the annual accrual for retained losses was short by a substantial amount which reduced the EBITDA and resulted in a reduction of the purchase price for the client.



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