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CUT AND RUN:
How Britain's top two
mining companies have
wrecked ecosystems
without being held to
account

Aerial view of a coal mining operation in Central Kalimantan, Indonesia. Credit: Daniel Beltrá

London Mining Network (LMN) is an alliance of human rights, development, environmental and solidarity groups.

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INTRODUCTION

Mining is one of the most destructive activities in the world. Apologists for the industry* tell us that it only disrupts one per cent of the Earth's surface and yet, along with agriculture, supplies 100 percent of its people with the things we need to live.

One per cent of the Earth's surface is around 5,100,645 square kilometres. That is an awful lot of land. And who lives on that land? Often Indigenous Peoples, African traditional and customary communities and small-scale farmers; not members of the political and economic elites of the world. As with the entire history of empire and colonialism, land is seized, lives disrupted, livelihoods destroyed, communities divided, cultures undermined and ecosystems devastated so that other people, elsewhere, can benefit; and the disproportionate benefits gained by those who are already wealthy and powerful are justified by appealing to the general good of a broader population which apparently needs the 'resources'.

The direct environmental impacts of mining can be catastrophic. Occasionally these impacts take the form of sudden, cataclysmic disasters such as the tailings** dam failures at Samarco, Brazil, in November 2015 and Brumadinho, Brazil, in January 2019, where large numbers of people were killed and hundreds of miles of waterways polluted. But there are less headline-grabbing disasters which go on for years – potentially for thousands or hundreds of thousands of years: the suffocation of living systems by dumped mine waste, the continuous acidification of waterways, the dispersal of toxic heavy metals and radioactive isotopes. Why is this allowed to take place in the first place? Why are those responsible for damage on such a massive scale so rarely held to account?

This report examines several cases where two mining companies with good reputations among 'ethical' investors have not only created severe and lasting environmental damage but have then walked away, leaving responsibility for clean-up to others who have proved unable or unwilling to do it.

Bougainville Copper Mines Limited, a subsidiary of Conzinc Riotinto Australia, one of the precursors of the company now known as Rio Tinto, dumped toxic mining wastes from its Panguna copper-gold mine in Bougainville (an island off the coast of Papua New Guinea) straight into the local river system between 1972 and 1988. This caused such outrage that it sparked a war for independence from Papua New Guinea, a war in which thousands were killed and independence was not won. The mine was abandoned – but with the eventual coming of peace and, now, the prospect of independence through the ballot box, Rio Tinto has simply given the mine to the authorities in Bougainville and Papua New Guinea, though they do not have the wherewithal to clean up the waste.

BHP's Ok Tedi copper-gold mine in Papua New Guinea, which BHP controlled from the beginning of mine construction in 1981 until it pulled out in 2002, similarly dumped waste straight into the local river system. After a number of years it concluded that it should no longer dump mining waste into rivers and that it should not have operated the mine at all. Its solution was to set up a trust fund for use in the affected area, to hand the mine over to the Papua New Guinea government, to declare that this was the end of the matter, and to walk away. The massive mess remains.

Rio Tinto's financial involvement in the Grasberg copper-gold mine in West Papua enabled mine owner Freeport McMoRan of the USA to expand and continue mining operations which had turned a mountain sacred to the Amungme indigenous people into a vast hole in the ground, with toxic mine wastes discharged straight into the local river system, contaminating it all the way to the coast. Rio Tinto, in response to new Indonesian laws on foreign ownership of mines, recently sold its share of this disastrous operation and explicitly states that it has no legal responsibility for clean-up, claiming that all such responsibilities are included in the sale of its share of the project.

BHP decided to pull out of the IndoMet project in Central Kalimantan in Indonesia, but the work that it did in developing an open-cast mine in the middle of the rainforest has caused huge disruption and helped guarantee deforestation and water pollution in coming years, as well as disenfranchising local indigenous communities.

BHP and Rio Tinto are the two biggest mining companies in the world. They are both listed on the London Stock Exchange and Rio Tinto has its headquarters in London. Most British residents will have some kind of involvement with these companies through their banks, insurance companies or pension funds, or through their local authorities' pension funds, as these companies are a favourite among institutional investors. The examples contained in this report are not the only examples of these two companies 'cutting and running'; nor are they the only companies who do this; but perhaps these can suffice as examples. Read on, and see why we need to find ways to hold these companies to account.

* Jonathan Dunn, of Anglo American, quoting Anglo American's Chief Executive Officer Mark Cutifani while giving evidence to the House of Commons Select Committee on Foreign Affairs Inquiry 'Global Britain and South America', 2 July, 2019.

** Fine wastes created by initial treatment of mined ores to extract the desired mineral.



DESTROYING BORNEO'S RAINFOREST

IndoMet coal mine, Indonesia

written by **Andrew Hickman, London Mining Network**

The IndoMet coal mining project is a clear example of a mining project that need never have existed. BHP's (1) development of these metallurgical coal mining concessions deep in the heart of the Borneo rainforest is something that brings shame on the company, but more than that still needs to be accounted for by the company and its investors. For many years it has been clear that large-scale opencast coal mining needs to be halted. For BHP to have continued to develop these coal concessions at this point in time in this particular place is inexcusable. BHP's legacy in Central Kalimantan is to have assisted in sowing the seeds of the final destruction of the Borneo rainforest. More than that, the climate impact of this ongoing coal mining operation is incalculable. Pushing ahead with the development of this mining area, at the expense of the indigenous inhabitants of the region, often through using illegal and unethical practices, further adds to a shameful record which demands rectification (2).

In recent years, repeated Indonesian governments have made multiple efforts at regaining control of natural resources from foreign investors. Following years of the Suharto regime's authoritarian policies of centralization, supported by foreign investors and allies, subsequent Indonesian governments have made various attempts at wresting back control and profit from foreign investors, combined with policies of de-centralization. This cycle of seeking 'foreign direct investment' followed by a push for a return to national control is reflected in the history of the IndoMet project.

BHP negotiated its way through several such cycles and then in 2016 finally sold up their interest in these large metallurgical coal deposits in Central Kalimantan. Predictably, the exact reasons for this departure have been hidden behind vague words (3). However, the sale follows the wider cyclical pattern of the extractive industry, at one time developing a project and then, when either the financial outlook worsens or when other political and strategic factors intervene, discarding it with little regard for the destructive legacy that they are leaving behind. The project is now fully controlled by Adaro Energy, one of the largest Indonesian mining companies (4). However, the question needs to be asked what the impact of BHP's role is in developing this 'extreme' coal project in an age when the mining industry claims both community legitimacy and social and environmental responsibility.

For years, BHP have claimed good practice both in terms of stewardship of the climate and in their dealings with indigenous communities. Can BHP really cut and run from this project and not face up to the serious questions over their legacy in the region?

To understand this legacy more clearly, there needs to be a fuller understanding of the history and geography of the area where these concessions are located (5). In 2007, the Indonesian, Malaysian and Brunei governments, together with the World Wildlife Fund (WWF), established the 'Heart of Borneo Conservation Area'(6) in the centre of the island of Borneo and its rainforest shared by these three countries (7).

The push for profit

The idea was to try to halt once and for all the accelerating destruction of one of the last and largest remaining intact primary rainforests in the world (8). The area has been called the 'Lungs of Asia' and this reflects its importance both to the region and the wider world (9). As well as its importance in aiming to tackle the world's climate crisis, it is an attempt to preserve the biodiversity and richness inherent in this globally important region (10). In the 1990s, BHP developed and secured the mining rights to the IndoMet coal concessions in this area (11). At least two of the seven coal concessions forming part of the IndoMet project overlap with the Heart of Borneo Conservation Area (12).

The concessions cover 350,000 hectares, an area five times larger than Singapore or twice the size of Greater London, mainly located in the regencies of Murung Raya, Barito Utara and Kapuas, but stretching beyond into East Kalimantan province (13).

If this was just a matter of saving biodiversity and wildlife, such as Borneo's threatened orangutans, it would be a serious enough error of judgement (14). However, what is not as well publicized is the impact that the development of these coal concessions has had and continues to have on the indigenous guardians of these forests and their downstream neighbours in the villages and towns of Central, East and Southern Kalimantan (15).

In the push to make greater profit from the coal resources of Kalimantan, BHP chose to invest its money in this 'extreme' coal project on the frontiers of the existing coal industry in Kalimantan. Throughout the 1990s, the destructive impacts of this industry were increasingly plain to see in both East and South Kalimantan. Entire communities were displaced and disenfranchised, rivers polluted, livelihoods and social structures destroyed, corruption endemic and climate chaos a significant part of daily life for local communities (16). BHP chose to invest in the relatively pristine area of Central Kalimantan, lured by the high quality of the metallurgical coal reserves and blinded by the possibilities of being the new king of coal on the block and the potential of huge profits (17).

For a while, this is what happened. BHP with its financial clout was able to arrive in Central Kalimantan and use money to change the game (18). Cronies were sent in to persuade local inhabitants of Maruwai village to cut down the rainforest in order to change the legal categorization of local lands and forest. Token compensation was offered to those people who bought into this scheme and when local resistance started to appear, intimidation and other means were used to ensure the right outcome for the company (19).

This happened at arm's length from the company, allowing them to claim ignorance of what was happening on the ground. All this was done in preparation for the large-scale mining that was being planned (20). Roads were built and a trans-Kalimantan railway to transport the coal from the centre of Borneo to the coal ports in South and East Kalimantan was surveyed for and proposed (21), with the aim of exporting to the coal-hungry markets of Asia and beyond (22).

Communities were encouraged to cooperate with this new company's project through token social projects and the promise of a modern urbanized future paved with money from coal (23).

In Central Kalimantan, communities have heard these promises before. Over recent years, waves of natural resource exploitation have arrived on their doorsteps. First it was the timber industry, who denuded the forests of their valuable timber. In outer regions of the forest, the bulldozers arrived to make way for oil palm plantations. Further upstream, the mining companies came, taking control of communities and the road network started by the logging companies. This is 'cowboy' country and BHP knew that when they chose to invest in IndoMet. For all the company's protestations that they were 'proceeding slowly and cautiously', it is clear that concerns for local communities and the environment (that these communities have lived from and protected for centuries) were not even part of the equation (24). The lawless reality of the region encouraged and allowed BHP and other coal companies to bully their way into the lives of local people and to take control of their natural heritage (25).

If BHP's legacy was only limited to the impacts on the people and environment in Central and East Kalimantan that would be scandal enough, but the impacts of this mega-mining project stretch far wider to being of regional and global concern. Much has been written about oil companies' search for new 'extreme' oil deposits in the environments of the Arctic and in deep sea exploration. The IndoMet project is the equivalent 'extreme' in coal exploration, threatening the biodiversity and ecology of the Borneo rainforest and therefore impacting global efforts to tackle climate change (26).

The majority of Indonesia's coal is exported, which makes facing up to Indonesia's coal business fundamental to tackling the ongoing global climate crisis. Indeed, Indonesia and Australia are by far the largest exporters of coal in the world, in 2017 together making up more than half of the world coal exports (27). Domestically, in July 2019, President Jokowi went on record as wanting to 'start reducing the use of coal', apparently signalling a move away from the Indonesian government's increasing reliance on domestic coal power generation. This is perhaps a move in the right direction, but in itself this statement means nothing without concrete action. Indonesia's long-term plans include 39 new coal-fired power plants that are currently under construction and 68 more which have been announced. Three of the six new power plants expected to go online this year are coal-fired. Domestic consumption of coal has been increasing rapidly and this forms part of the mix that makes Indonesia one of the largest emitters of CO₂ in the world (28). In defending the development of coal mining in the forests of Borneo, BHP makes much of the distinction between metallurgical and thermal coal (29), but this distinction rings hollow in the face of the climate emergency facing the world.

It is essential that BHP's role in exacerbating this situation and Indonesia's continued reliance on coal for its economy and energy provision is highlighted and is accounted for. BHP, despite its good words promoting its role in fighting climate change (30), cannot be allowed to avoid paying the appropriate compensation for its irresponsible investment in this extreme coal project. Even in financial terms, the IndoMet project has made no sense. In 2016, when BHP sold its 75 percent share of the project to Adaro Energy for US\$120 million, the price was well below the US\$335 million Adaro paid for their 25 percent stake in the project in 2010 (31).

There is much talk by economists and climate change analysts about the idea that coal resources are becoming 'stranded assets' for mining companies and their shareholders. These figures are just one illustration of how BHP's investment in the IndoMet project has been a bad financial decision, as well as a disastrous one ethically (32). Moreover, it must be remembered that these huge amounts of money pale into insignificance when seen in the context of the project's impacts on lives, livelihoods and the environment in Kalimantan and beyond.

BHP forced through the development of IndoMet in the middle of one of the last and largest remaining intact rainforests. The company is surely culpable of criminal negligence in its efforts to gain profit from coal resources that need never have been exploited



The ethical and environmental case against BHP

Ethically, the business record of the wider coal industry in Kalimantan and Indonesia is appalling. The management of BHP and investors in the Indonesian coal sector know this and have no excuse for their involvement in this situation. Many other UK businesses have been caught up in this dirty world of corruption, collusion and nepotism (33). BP and Rio Tinto were responsible for developing possibly the largest opencast coal mine in the world in East Kalimantan, Kaltim Prima Coal, which they then sold on to Bumi Resources, controlled by the politically connected Bakrie family. Others have followed the lure of quick money, most notably Nat Rothschild and his associates in the notorious deal to list Bumi plc on the London Stock Exchange (34). This venture ended in abject failure and resulted in FCA censure and a fine of £4.65 million (35). BHP's partner and recipient of their shares in IndoMet, Adaro Energy, is also immersed in this same dark amoral business world of Indonesian coal (36). Public opinion in Indonesia is increasingly aware of these realities and is beginning to question the underlying values and role of the coal industry in Indonesian society. A recent film, "Sexy Killers", exposing this industry, has been viewed more than 24 million times online and Adaro is accused (37), like many other similar coal mining businesses, of corruption and tax avoidance (38).

However, the case against IndoMet is not primarily a business one, it is a wider ecological one. The public in Indonesia and around the world are waking up to the idea that fighting climate change is not just about science and facts, but it is also a question of justice.

The IndoMet mine was developed by BHP at a time when the science of climate change was already beyond dispute and human agency in the impending crisis was similarly indisputable. The company forced through the development of this mine in the midst of one of the last and largest remaining intact rainforests (39), whose biodiversity was already internationally protected, and over and above the consent of local people. BHP, therefore, is surely culpable of criminal negligence in its efforts to gain profit from coal resources that need never have been exploited. This exploitation continues to this day and BHP's role in this ongoing legacy needs to be accounted for. This is essential for the sake of our global future ecological heritage. It is essential for the sake of the impending climate crisis that the world faces today. No less importantly, it is essential for the sake of the natural environment and people living in and around the IndoMet project's mining concessions (40).

On 22 June 2019, 10-year-old Ahmad Setiawan drowned in a disused water-filled coal pit near Samarinda, East Kalimantan's provincial capital. Since 2011 alone, 35 children have died in the disused tailings pits that litter the urban environment around Samarinda (41).

This reality illustrates the nightmarish fate that continued coal exploitation of Kalimantan's coal resources will bring if the politicians, business people and investors are not forced to wake up to the harm that they are causing in Kalimantan (42). How these realities can be brought to bear on these agents of despair is another question and is one that is perhaps harder to answer (43).

However, we cannot afford to shy away from these issues, nor can those more directly responsible for this situation do so either.

In 2015, London Mining Network asked Jac Nasser, the then chairman of BHP, to consider ensuring that the IndoMet mining concessions were returned to indigenous and local guardianship or at least a solution found to mitigate the legacy of their operations once they had departed from the project. This constructive suggestion from the floor of the company's AGM was dismissed as 'unrealistic' (44). Four years down the line from that moment and more than four years of expanding coal exploitation at IndoMet (now AMC) (45), BHP must now be made to face up to their very 'real' and ongoing legacy in Central and East Kalimantan(46).

' WILL THE MINE CLEAN UP THE RIVER?'

Ok Tedi, Papua New Guinea

written by **Hal Rhoades, The Gaia Foundation**



Mining projects in Papua New Guinea (2006), including Ok Tedi in the top left. Image: PNG Chamber of Mines and Petroleum.

"Before the river was not like this; It makes me feel like crying. These days this place is ruined. So I feel like crying.

Where I used to make gardens, The mud banks have built up. Where I used to catch prawns and fish. There is an empty pool... And so I feel like crying."

- Lament sung by Indigenous Yonggom woman Duri Kemyat. Recorded in 'Mining Capitalism' by Stuart Kirsch.

In Papua New Guinea's Western Province, near the border with Indonesian-controlled West Papua, the Star Mountains rise. From one of these mountains, Mount Fubilan, the Ok Tedi River springs forth, before following its course down the mountains, through the forests and into the Fly River Delta which runs on into the Gulf of Papua.

For millennia these mountainous and forested ecosystems have been home to Indigenous Papuans like the Yonggom and Ninggirum, for whom hunting, fishing and small-scale subsistence agriculture form the basis of life. The traditional territories of these Indigenous Peoples boast rich soils, abundant fish and game and, deeper in the Earth, deposits of gold and copper that have drawn mining companies to the area.

In the 1960s and '70s, government patrols and private companies including the Kennecott Copper Corporation, now part of British mining company Rio Tinto, discovered significant reserves of gold and copper under Mount Fubilan. In 1981, Broken Hill Proprietary Ltd (now known as BHP) began construction of a mine to extract these metals (47).

Majority owned and operated by BHP until 2002, the Ok Tedi copper-gold mine started operations in 1984 catalysing the largest and longest environmental disaster in Papua New Guinea's history - a disaster for which BHP is yet to be held fully accountable.

Since it was opened, the Ok Tedi Mine has discharged 80,000 metric tonnes of mine waste (the equivalent of 40,000 modern family cars), including heavy metals, directly into the Fly River System every day (48).

In one of the wettest regions of the planet, downstream of the mine, the Ok Tedi and Fly rivers run thick and grey with waste. When the river floods, the waste sludge rises over the banks, smothering forests and the food-producing gardens of the Indigenous Peoples living downstream of the mine. The polluted water travels up side-creeks, causing similar destruction there.

To date, more than 2,000 square kilometres of forest has been damaged or destroyed by mine tailings from the Ok Tedi Mine. The hunting, fishing and garden areas of an estimated 40,000 local and Indigenous people have been damaged or destroyed and fish populations (49) have declined by 95 percent in the Ok Tedi River compromising their livelihoods, food security and forest-based culture (50).

“Before the mine, we had plenty of food. We inherited gardens along the river from our parents. Bananas and taro from the gardens fed our family. Game was plentiful and we ate wild pig, cassowary and cuscus meat. The river was clear and it was easy to catch fish and prawns,” said Andok Yang, of the Yonggom People, in 1996. “(Now) there are no fish in the river and the turtles no longer come to lay their eggs. The animals have all gone away and we do not know where they are living. I worry about the future: will we continue to face these problems or will the mine clean up the river?” (51)

Mount Fubilan, the site of the Ok Tedi Mine, has been reduced from a peak of over 2,000m, to a 3km wide open pit, the bottom of which lies at sea level.

The reason for much of this destruction lies in BHP’s decision to use riverine tailings disposal – the direct discharge of untreated mining waste into rivers – as a means of disposing of the waste generated during the mining process. Even among the majority of mining companies, this is regarded as an unacceptable environmental practice (52).

BHP decided, and actively lobbied, to employ this method of waste disposal after a landslide – the region is seismically active – destroyed the footings for a tailings dam near the mine in 1984 (53). Their decision, despite the consequences, was allowed by a Papua New Guinean Government concerned about the potential loss of national revenues from mining (54).

During the time it operated the Ok Tedi Mine, BHP spent over \$100millionAUD (£53.7million) fighting four lawsuits (55) brought by Indigenous Peoples and environmentalists seeking to get the company to install proper waste management facilities and pay adequate compensation to affected communities. A tailings dam was never built and experts consider the compensation won by affected communities to be incommensurate (56) with the damage done and certainly unable to undo damage to intangible cultural and spiritual health.

In a 2009 report (57) on the situation around the Ok Tedi Mine, advocacy group BHP Billiton Watch wrote that:

“Despite millions of dollars in legally mandated compensation, the people living along the Ok Tedi and Fly Rivers still find it difficult to feed their families. In many areas, it is difficult to access potable water during the dry season. Access to health care and basic services in rural areas has not improved downstream from the mine.... Very few of the compensation and development programs sponsored by the mining company have proven successful.”

Feeling the strain of severe reputational damage, in 1999, after over a decade of damage had been done, CEO Paul Anderson began the process of distancing BHP from the ecological disaster that Ok Tedi had become. In an interview for the Asia Times he declared that the Ok Tedi Mine was “not compatible with our (BHP’s) environmental values and the company should never have got involved” (58).

In 2002, BHP transferred its 52 per cent (59) stake in the mine to Papua New Guinea Sustainable Development Program Company (SDPCO) – a new, Singapore-based charitable trust company set up by BHP with the stated aim of ensuring the mine would benefit affected communities seeking further compensation and economic development. Critics of the company view this as an attempt by BHP to limit the company’s environmental liability for cleaning up the biggest environmental disaster in PNG’s history. Writing in 2002, anthropologist Stuart Kirsch (60), who has conducted extensive research on Ok Tedi, described the double-movement involved in BHP’s exit: “...it (the new trust company) relies on the continued operation of the mine, including the disposal of 80,000 tons of mine tailings per day into local rivers, to pay for development programs... the primary purpose of the trust is to provide BHP Billiton and the Papua New Guinea government with indemnity from claims relating to losses from pollution or damage to the environment as a result of the mine’s operation.” In 2013, this immunity was repealed when PNG Prime Minister Peter O’Neill passed a bill allowing his Government to take complete ownership of Ok Tedi Mine. However, BHP is yet to be held fully accountable for the extent of the damage its operations caused. Reports (61) suggest that the damage done by BHP’s Ok Tedi Mine is likely to be irreversible; areas deforested due to exposure to mine waste will permanently remain savannah grasslands.

Recently the mine has also experienced extensive Acid Mine Drainage (AMD) (62), causing acidic waste and toxic metals to leach into the river. The Ok Tedi Mine, now wholly owned by the PNG Government, is currently scheduled to close in 2025 (63).

The reason for much of the destruction lies in BHP’s decision to use riverine tailings disposal. Even among the majority of mining companies, this is regarded as an unacceptable environmental practice

THE MINE THAT CAUSED A CIVIL WAR

Panguna mine, Bougainville

written by **Volker Boege**,
Co-director of Peace and Conflict Studies Institute Australia

The Panguna copper and gold mine, situated in the Crown Prince Range in the centre of Bougainville, commenced operations in 1972, and in the 1970s and 1980s it was one of the largest open-pit mines in the world.

For Conzinc Riotinto Australia (CRA), a predecessor of Rio Tinto, the Panguna project brought enormous profits, and it brought considerable revenues for the Government of Papua New Guinea (GoPNG). The mine was the largest single source of income for the government and the backbone of Papua New Guinea's (PNG) economy. For the local people on the ground, however, the mining operation had major negative environmental, social and cultural effects. Land was taken from the local communities on a massive scale as Bougainville Copper Limited (BCL) was granted leases for mining, tailings disposal, building roads, mining towns and port facilities. Mining replaced agricultural land. Loss of land also meant loss of sources of drinking water and timber. Tailings were directly disposed into the local river system. Rivers were polluted. Sediment loads in rivers became extremely high. Fertile land at the river banks was lost and the rivers became the scene of mass fish die-offs; eventually fish disappeared from the rivers altogether. Forest depletion impacted on traditional hunting and gathering activities.

Wildlife declined drastically or even disappeared completely. In short: the environmental degradation put the land-based livelihoods of local communities in jeopardy.

For those affected, land is not only important as the basis for their subsistence and smallholder economy, but also as the core dimension of their social, cultural and spiritual life.

Environmental degradation was accompanied by social disintegration. The establishment of the Panguna mine led to population growth and urbanisation on an unprecedented scale. The majority of the overall urban population were young male non-Bougainvillean mine workers from other parts of PNG (only a minority of mine workers were locals). Violence, alcoholism and criminal activity also increased significantly. Squatter settlements became a widespread phenomenon. Local people blamed outsiders—workers, expatriate company management and the agents of the central government—for not respecting indigenous culture and the status and customary rights of the original owners of the land.

In the late 1980s, affected people started to demand meaningful environmental protection measures, compensation for environmental damage and a larger share of the revenues generated. CRA and the Government of Papua New Guinea disregarded the concerns of the Bougainvilleans and rejected their demands. Consequently, young members of the local clans in the mine area brought the mine to a standstill by acts of sabotage in late 1988. The GoPNG sent its police riot squads and later its military to the island and declared a state of emergency on Bougainville in June 1989. Members of the clans in the mine area established the Bougainville Revolutionary Army (BRA).

Fighting that started in central Bougainville soon spread across the whole island, and a decade-long war ensued. The BRA adopted a secessionist stance and called for political independence for Bougainville. The mine-affected areas around Panguna and downstream of the mine became the heartland of the BRA. Conzinc Riotinto Australia was forced to shut down the mine and abandon the mine site in March 1990, and the Bougainville Revolutionary Army took over the site. The mine has remained closed ever since. It is still under control of a faction of the former BRA (the Meekamui movement) today.

The war came to an end in the late 1990s, by which time an estimated 20,000 Bougainvilleans had lost their lives. In August 2001, a comprehensive Bougainville Peace Agreement was signed. This agreement has as its two core political provisions: firstly, the establishment of the 'Autonomous Region of Bougainville' (ARoB) as a special political entity within the state of Papua New Guinea, with its own constitution and government, the Autonomous Bougainville Government (ABG); and, secondly, a deferred referendum on the future political status of Bougainville – either complete independence or autonomy within PNG. This referendum was finally held from 23 November to 7 December 2019. The overwhelming majority of Bougainvilleans (almost 98 percent) voted for independence.

The mine's legacy

"Namung tampa demounamung otoa. Namung tampa mangtomarunamung otoa"
"Not a day of happiness, not a day of satisfaction have I come upon."
-Anonymous

"I saw the destruction. I was maybe around five years old, and I saw my place was virgin forest, but I didn't see any fish as the river was already infected. The place where we were living is now covered by the desert (tailings waste), it is in the area of the tailings which in some places is 30-50 metres down. One night, there was a very big rain during the night. The Jaba river basin was covered, the company was using hydraulic hoses to move the rocks to the tailings. There was a pool at the end of the creek where we usually had a bath in the morning. The day after the big storm we woke up and went running to the pool and to our surprise it was filled with mud. We asked the older people what is happening and they said –there is a company, CRA up at Pinenari. We asked what's that? Ever since that day I left that place, I have felt all those experiences that people described."
-Male, Lower Tailings

Ongoing environmental damage legacy issues include: the huge mine pit, large unstable tailings dumps, destruction of rivers downstream of the mine (Kawerong and Jaba rivers), river water pollution, destruction of fish life in the rivers, deteriorating chemical storage areas, a massive tailings delta on Bougainville's west coast, etc. The communities in the mine-affected areas, particularly those which were forcibly displaced due to the mine, suffer from squalid living conditions. Overcrowding and loss of land for gardening, timber, housing etc. has reached dramatic proportions in several communities.

Rough estimates of people directly affected by the Panguna mine legacy give figures of about 12,000 people, with thousands more indirectly affected. Moreover, it can be argued that the entire population is affected, given that all Bougainvilleans suffered from the violent conflict caused by the operation of the Panguna mine.

There has been no official environmental assessment of the damage since the mine was abandoned by Bougainville Copper Limited (BCL) in 1990. There are, however, some reports about the squalid living conditions in mine-affected communities. For example, the Autonomous Bougainville Government (ABG) President John Momis in his 2016 speech talked about the village of Morotona, saying: "... there are major land and resource tensions between the large number of settlers, and the increased numbers of the host community. The original settler houses were flooded out years ago. Those people now live in basic bush material houses, with very little gardening land, no access to sak sak, no water tanks. Their drinking water comes from polluted soaks in the ground, contributing to their suffering many health problems" (1).

The Catholic Diocese of Bougainville recently carried out a project collecting the stories of people in the mine affected areas about the mine legacy and their current living conditions. These stories show that environmental concerns, which were brought up by communities during mine operation, are still worries today for many areas.

The Jaba river downstream of the mine was described as flooding and changing course. It is still bright (copper) blue which concerns community members regarding its safety, and they do not drink the water or go in the river if possible.

Artificial lakes were created during the mine operation and these are now inhabited by crocodiles. Communities are also concerned that there are chemicals in the water and that it is unsafe to drink, or to wash in and cook with.

People described how walking through the rivers in order to cross to the other side causes itching and skin sores. People mourn the loss of marine life. Some rivers do not have any fish any more, or fish have sores, and people are worried that this is linked to chemicals in the rivers.

There are land shortage issues related to relocation and damaged land. In some cases, communities were relocated to geographically challenging areas such as steep mountains, gorges, or swampy areas which makes it difficult to establish and maintain food gardens. In other cases, communities were relocated to areas which are not their traditional clan land, and this leads to conflicts over land. Moreover, landslides and changing waterways also have brought land boundaries into dispute. These disputes cause unrest and uncertainty in the communities.

Forced relocation still has grave negative effects for the relocated communities today. People are of the opinion that no proper planning was done for relocations. Housing was not appropriate or well made. It was designed for nuclear family units. The houses were designed with Western ideas of family, living and land, rather than understanding Bougainville ways of living. Relocated people often found it difficult to maintain their subsistence gardening and cash crops. Those in relocation villages still live in appalling conditions.

Moreover, waste gravel from the mine operation, the tailings, destroyed vast areas of land, especially in the Mid and Lower Tailings areas. Some areas are buried under metres of gravel, resulting in massive loss of land for living and gardening. People refer to the tailings as 'the desert'.

Loss of land also means loss of sacred sites, which are central to the social and spiritual life of communities. The loss of sacred sites means there is no place to hold customary ceremonies such as those related to rites of passage for young men and women. Having had to watch sacred sites and cemeteries being destroyed by company bulldozers was a traumatic experience, which still haunts people today.

Rio Tinto has walked away from the environmental and social disaster it left behind on Bougainville, but the people and the government of Bougainville are determined not to let their actions remain in impunity



Rio Tinto cannot just walk away

In June 2016, Rio Tinto declared that it will cease to be the majority shareholder of Bougainville Copper Limited (BCL), the company which for almost two decades, from 1972 to 1990, had operated the huge Panguna mine on the island of Bougainville in Papua New Guinea. On 30 June 2016, Rio Tinto transferred its 53.8 percent shares to a trust company for distribution to the Government of Papua New Guinea (GoPNG) and the Autonomous Bougainville Government (ABG) – at no cost. Rio Tinto made it clear that the company does not consider itself under any obligation to address the mine’s environmental legacy, arguing that it adhered to PNG’s laws during its operations. Rio Tinto thus rejects any responsibility for getting involved in remedying the environmental, social, health and other legacies of the Panguna mine operations. Its official position is: “In terms of (...) the legacy issues arising from the operation of the Panguna mine, we believe that BCL was fully compliant with all regulatory requirements and applicable standards at the time”. (2)

Rio Tinto has walked away from the environmental and social disaster it left behind on Bougainville, but the people and the government of Bougainville are determined not to let their actions remain in impunity.

In response to Rio Tinto’s announcement, Bougainville’s House of Representatives held a special meeting on 20 July 2016. At that meeting, Autonomous Bougainville Government President John Momis and the then Mining Minister Robin Wilson gave speeches in which they strongly condemned Rio Tinto’s actions.

The President gave a comprehensive account of the “terrible legacy issues” and said that by its own corporate social responsibility and sustainable development standards, “Rio Tinto cannot realistically think it can just walk away from its responsibilities at Panguna”.(3)

Mining Minister Wilson declared that Rio Tinto’s decision to leave “is nothing more than a refusal to accept responsibility for the damage caused in the course of making huge profits from digging up and selling the mineral wealth of Bougainville”.(4) The House of Representatives adopted a resolution, condemning “the actions by Rio Tinto relating to the distribution of shares and leaving behind the mining legacy issues of Panguna”.(5)

Civil society organisations in Bougainville, people in the mine-affected communities and the Bougainville public at large share the position of their political representatives on this issue. And although landowners in the Panguna mine area and the population in general today are deeply divided with regard to the issue of mining in general and the re-opening of the Panguna mine in particular, they all are united in their stance regarding the need for environmental rehabilitation and the determination to hold Rio Tinto to account. A major environmental clean-up is urgently needed, and Rio Tinto has an obligation to make a major contribution.

The most important and most influential civil society actor on Bougainville, the Catholic Church, has joined the ABG in its criticism of Rio Tinto from the very beginning. The late Bishop Bernard Unabali, the head of the Catholic Diocese of Bougainville, was himself from a mine-affected community downstream of the Panguna mine.

He knew about the plight of affected people first-hand. He asked for external support. People in the mine area and downstream suffer from appalling living conditions, and at the same time feel forgotten by the outside world. They want their voices to be heard, they want tangible improvements of their working and living conditions, they want the environmental catastrophe which was caused by Rio Tinto to be addressed.

People in the mine-affected communities are worried about the lack of accurate and current information regarding environmental pollution and contamination. Many people live in uncertainty, wondering if the place they live in or where they get their food is contaminated. There are concerns around sites where chemicals were stored during the mine operation. In some cases, there are now gardens and houses in these sites, and people are worried about the health of their families. People demand more detailed information about the current state of their environment and potential ongoing negative effects of the Panguna mine operation.

Bougainvilleans hold the strong belief that whoever caused a wrong – in this case, the damage done by the Panguna mine – has an obligation to address the wrong. People have different ideas about what this should entail. For some it is in the form of development such as education programmes, for others it is monetary compensation, others request the rehabilitation of contaminated and damaged areas or help for the relocated villages. Customary ideas of reconciliation and a sense of healing are important. People expect Rio Tinto to respect Bougainville culture and to participate in local customary forms of reconciliation and to accept the obligations that come with it. This means Rio Tinto will have to take responsibility for the damage done and the wrongs committed in the past and to show willingness to make reparations to communities for environmental degradation and to participate meaningfully in environmental rehabilitation.



THE MONSTER THAT IS EATING OUR LAND

Grasberg mine, Nemangkawi, West Papua

written by **Andrew Hickman,**
London Mining Network

In September 2018 Rio Tinto sealed a deal to sell out of their production sharing contract for the Grasberg mine in West Papua. The deal is worth US\$3.5 billion (£2.77 billion) for Rio Tinto's coffers (6). At the 2019 shareholder meeting, London Mining Network asked the chairman how much of this amount was going to be put aside for liabilities and legacy issues. The answer was shocking in its baldness. Rio Tinto considers that the price negotiated for its departure from the project includes 'selling on' all its liabilities and therefore the company, in their view, is no longer (legally or morally) responsible for the ongoing impacts of this mine (7). When seen in the context of the Grasberg mine and its legacy over decades, this statement becomes even more shocking (8). At the Panguna mine in Bougainville, off the other end of the island of New Guinea, Rio Tinto continues to face calls for legal and financial restitution by the victims of the mine and consequent civil war that erupted there in the 1980s - a war which killed an estimated 15-20,000 people (9).

As well as this history of destruction caused in Bougainville, there are many similarities with the Grasberg mine that add to concerns over its future and the future of the people and environment that exist around it (10). Most notable among these concerns is the dumping of tailings waste into the river Ajkwa and the ongoing struggle for self-determination by the indigenous population living next to the mine. Do the management of Rio Tinto really consider that, by only receiving a mere US\$3.5 billion golden handshake, they are therefore free from any responsibility for the destruction caused by Rio Tinto's more than 20 years' involvement in the project? (11).

Rio Tinto played a pivotal role in the development of the Grasberg mine, through the production sharing contract it signed in 1996 with Freeport McMoran, the US mining giant who originally developed the mine through a Contract of Work deal with the newly independent Indonesian government back in the 1960s (12). To understand the role that this mine has played in the fabric of Indonesian and West Papuan political life is essential to understanding the significance that goes beyond being, for many years, the world's largest combined copper and gold mine. In 1962, the 'New York Agreement' between the Suharto regime and the US administration set out the terms for the transferral of sovereignty for West Papua (then called Irian Jaya) from Dutch colonial rule to Indonesian rule (13). This happened concurrently with the establishment of mining rights for Freeport McMoran Inc. in the Central Highlands of West Papua. The 1969 'Act of Free Choice' was set up under token UN oversight to act as a legitimisation of West Papua's incorporation into the Indonesian state. Many West Papuans, especially indigenous West Papuans, see all these processes as a denial of their fundamental right to de-colonization and determination of their own future and the future of their lands (14). In 1996, Rio Tinto's investment in the mine provided the financial capacity to expand production at the mine from the initial Ertzberg open pit to the current open-cast pit at Grasberg. It is clear that without this additional investment from Rio Tinto, the mine would never have expanded to the point it has today. Today, the mine continues to develop and expand, through plans to create underground block-cave mining (15) and, under the new agreement with the Indonesian government, is set to continue to exploit these vast mineral reserves until 2041 (16).

It is for its environmental impacts that the Grasberg mine is most notorious. For the last 47 years, the waste from the mine has been dumped into the river Ajkwa. Currently, it is estimated that around 200,000 tonnes of mine waste is dumped in the river every day (17). Unsurprisingly, this has caused environmental and social destruction on a massive scale (18). It is only recently that Indonesian authorities are starting to wake up to this ongoing ecological catastrophe (19). Much has been written about this destruction, but it is not until you look closely at the impacts on individual Papuans' lives that you really see the consequences of this tailings practice. Moreover, part of the problem here is precisely the fact that the Indonesian authorities make it nearly impossible for neutral observers to see or study these impacts from up close (20). Access to West Papua is tightly controlled. Consequently, sensitive areas such as the lands around the Grasberg mine, the river Ajkwa and Mimika regency are even more difficult to gain an objective perspective on (21).

Mama Yosepha Alomang is a leader in her Amungme community, the indigenous people that own and live in the lands on which the mine is located. Now over 80-years-old, the testimony she gives of her life and that of her family's life living in the shadow of Grasberg is just one example of how terrible these impacts have been on her and her community (22). She tells of having lost a son to poisoning from drinking contaminated water from the mine. She tells also of suffering, torture and imprisonment at the hands of the Indonesian military from speaking up about these impacts. She is clear that responsibility for this situation doesn't just fall at the feet of the Indonesian authorities, but also clearly lies with the mining company itself (23).

In 1996, Mama Yosepha and Tom Beanal, another Amungme community leader, took Freeport McMoran to court in the USA for these abuses (24).

Unfortunately, their court case was not successful, but one of the consequences of their action was to bring to wider international attention to the destruction that has been visited upon the people of West Papua by the presence of this mine (25).

Over time, awareness of this destruction has resulted in small changes in the business conditions that this mine works in. By 2008, the Norwegian Pension Fund, one of the biggest pension funds in the world, had divested from its shares in both Freeport McMoran and Rio Tinto as a direct result of the impacts of the riverine tailings system employed by the mine and the management's refusal to modify or change this system (26). This was a small victory in a much larger battle that is still ongoing (27). One investor taking a stand against this tailings practice is a step forward, but this has not changed anything with regards to the impacts on the ground in West Papua. It is a scandal that the mine continues to dump its tailings into the river. Consequently, those living in and around the river continue to suffer, as does the environment and its biodiversity. Nearly half a century of tailings waste in the river has created a mud monster that dominates and scars the land and coastal region for miles around (28).

More than the environmental impacts, it is probably the mine's effects on Papuan society and livelihoods that have proved the most costly and the most damaging. These impacts are harder to see, to quantify and to prove, but they are nonetheless real (29). In 2005, the New York Times published an article outlining payments made by the company to the Indonesian police and military (30).

Up until that point, the precise relationship between the company and the Indonesian state which protected it was unclear and hidden from view (31). To a certain extent this is still the case, but the company no longer claims that it has no relation to the security forces that live symbiotically alongside the mine. Payments to the military and police are now admitted to, but the extent of cooperation and mutual interest is still shrouded in convenient ambiguity from both sides – neither side wanting to admit to this relationship, but both still clearly dependent on each other for continued security and prosperity (32). In November 2017, the Indonesian military occupied villages near to the mine in a sweep of suspected ‘separatists’, claiming that these separatists were holding villagers and workers hostage. This escalation of violence led to 3 reported deaths and villagers caught in the middle or fleeing to the forests for their own safety (33). This pattern of military operation and intimidation, justified by ‘insurgent provocation’, followed by deaths and displacement of local villagers, is one that has been repeated for decades in the region around the mine and beyond (34). That is not to deny the existence of the West Papuan Liberation Army (OPM/TPM), but it is clear that the fight is not an equal one and it is hard to argue against the legitimate calls for self-determination by local people and, in the case of natural resource exploitation, free, prior and informed consent over their local lands and resources (35).

At no point over the entire 50 years history of the Grasberg mine, have local communities been fully consulted or their consent been sought in the operation of the mine

It is this last point, the right for local communities to have a say over their own lands and resources that is also key to understanding the role that has been played by transnational companies, such as Freeport McMoran and Rio Tinto (36). At no point over the entire 50 year history of the Grasberg mine have local communities been fully consulted or, more importantly, has their consent been sought in the operation of the mine. The principle of Free, Prior and Informed Consent, as set out in the UN Declaration on Indigenous Peoples, is one that has been long established in international law (37). Increasingly, West Papuans are calling for the Grasberg mine to be closed down. Few Papuans believe that the mine brings a positive contribution to West Papua. The economic benefits that derive mainly from the taxes paid to Jakarta seem as remote to most Papuans, as are the international companies and shareholders that appear to be the ones most significantly benefiting from the mine (38). Most of the workforce in the mine is made up of non-Papuans and those Papuans that do work at the mine are paid minimal wages, certainly in comparison to their colleagues and to mineworkers in other countries (39). The 'development' argument that is regularly espoused by company executives at Freeport / Rio Tinto carries little to no weight with Papuans themselves (40).

It appears that the arguments for the continued development and operation of this mine are mainly being made by those further away from the direct impacts of the mine itself. Maybe today this is nothing new for many large-scale opencast mines operating in indigenous and remote regions. However, it is worth focusing on this question, particularly in light of the recent ownership struggles for control of the mine over the last few years. The politicians and media in Jakarta, Indonesia and beyond have portrayed this struggle as one of national control and have therefore legitimized the continued operation and production of the mine in those terms, but with a new Indonesian ownership structure (41).

Little attention has been paid in this debate to the mine's social, cultural and environmental costs. Far from bringing wealth and prosperity to local people, the mine brings social and health problems, labour and community conflict, rampant corruption and cultural and environmental degradation (42). Alongside these problems, the mine continues to engender increased militarization and police repression. Without open access to West Papua and the region around the mine, there seems to be little chance that these costs can be fairly calculated. Consequently, the company and the security forces that protect and benefit from it continue to operate with impunity (43). Despite the fact that majority ownership of the mine has been taken by Indonesian state-backed company Inalum, the operational control remains transnational with Freeport McMoran. Furthermore, as with many such large-scale extractive projects, it can be argued that the real control still lies with international financial institutions in the form of bank loans and international investors.

It is likely that calls for the mine to close will fall on deaf ears, given the interests and huge profits still available for its owners and investors. However, it is important for the future of West Papuan communities and the environment that they depend on, that the mine's operations and its associated impacts are monitored and radically reformed before it is too late.

What leverage there is to do this and how this can occur in the context of the new Jakarta-centred ownership structure, business and political environment, is difficult to anticipate. One thing that is clear is that transnational companies such as Rio Tinto, who have benefited and played a key role in the mine's development, cannot be allowed to walk away from their ongoing financial and moral responsibilities to the people and lands of West Papua (44).

In talking about her view of the mine and its impacts, Mama Yosepha Alomang described the mine as being a serpent that is living beneath the earth and devouring the land on which she and her people live. More than that, she talks of Nemangkawi, the traditional name for the mountain where the Grasberg mine is operating, as her own body, a mother to her community (45). It is Mama Yosepha that is being eaten up and destroyed. She is inseparable from the mountain and this crime against her and her people is one that cannot go unaccounted for.

CONCLUSIONS AND RECOMMENDATIONS

Even 'respectable', 'responsible', enormously wealthy mining companies, can do and have done enormous environmental damage, and seem to be able to avoid being held legally accountable for their actions. London Mining Network believes that they are nonetheless morally accountable for their actions, and that ways must be found to hold companies as legal persons, as well as decision-makers within them, legally accountable in cases where they have 'cut and run'.

It is not sufficient for the companies concerned to say that they would not get involved in such projects now – they must pay for the entire clean-up of the damage they have already done. They must not be allowed to give or sell their responsibilities to others.

There is a pressing need for much stricter regulation of transnational mining companies. We fully support international efforts to establish a United Nations Binding Treaty on Transnational Corporations, with an independent international body which would be able to investigate and judge cases of environmental destruction and human rights abuse and to impose sanctions.

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