

**RepRisk Special Report:
Most Controversial Mining Projects**

Introduction

This RepRisk Special Report focuses on the 10 mining projects that have attracted the most criticism related to environmental, social and governance (ESG) issues in the past two years¹.

The report analyzes documented negative incidents, criticism and controversies related to the 10 mining projects that received the highest RepRisk Index (RRI)². The RRI is RepRisk's proprietary algorithm that captures criticism and quantifies a project's exposure to controversial ESG issues. The information has been captured and systematically analyzed from a wide range of third-party sources including online and print media, NGOs, government agencies, blogs and more.

South Africa's Lonmin Marikana Platinum Mine topped the list as the most controversial mining project according to RepRisk ESG Business Intelligence. Workers at the mine were subjected to poor working conditions and also paid very low wages. When they held a strike in August 2012 to express their dissatisfaction it quickly turned into fatal clashes with the police and ongoing violent disputes involving the mineworkers union. Reportedly, 44 people were killed at the mine.

In May this year, Turkey experienced its worst mining disaster at the Soma Komur Isletmeleri Mine where an explosion killed 301 miners. At the time of writing this report, the police were investigating the company's executives for negligence as they were apparently aware of the mine's deplorable safety conditions prior to the accident. Soma Komur Isletmeleri Mine was ranked as the second most controversial mining project.

The coal and metals mining projects included in this report were located in various locations around the world, primarily in developing countries such as Guinea and Afghanistan, but also developed countries such as Canada.

As shown in the cases outlined in this report, safety problems may not only be an inherent risk of the work itself, but can also stem from negligence on the part of management, who may be looking for ways to cut costs and increase productivity, and who potentially endanger workers as a result.

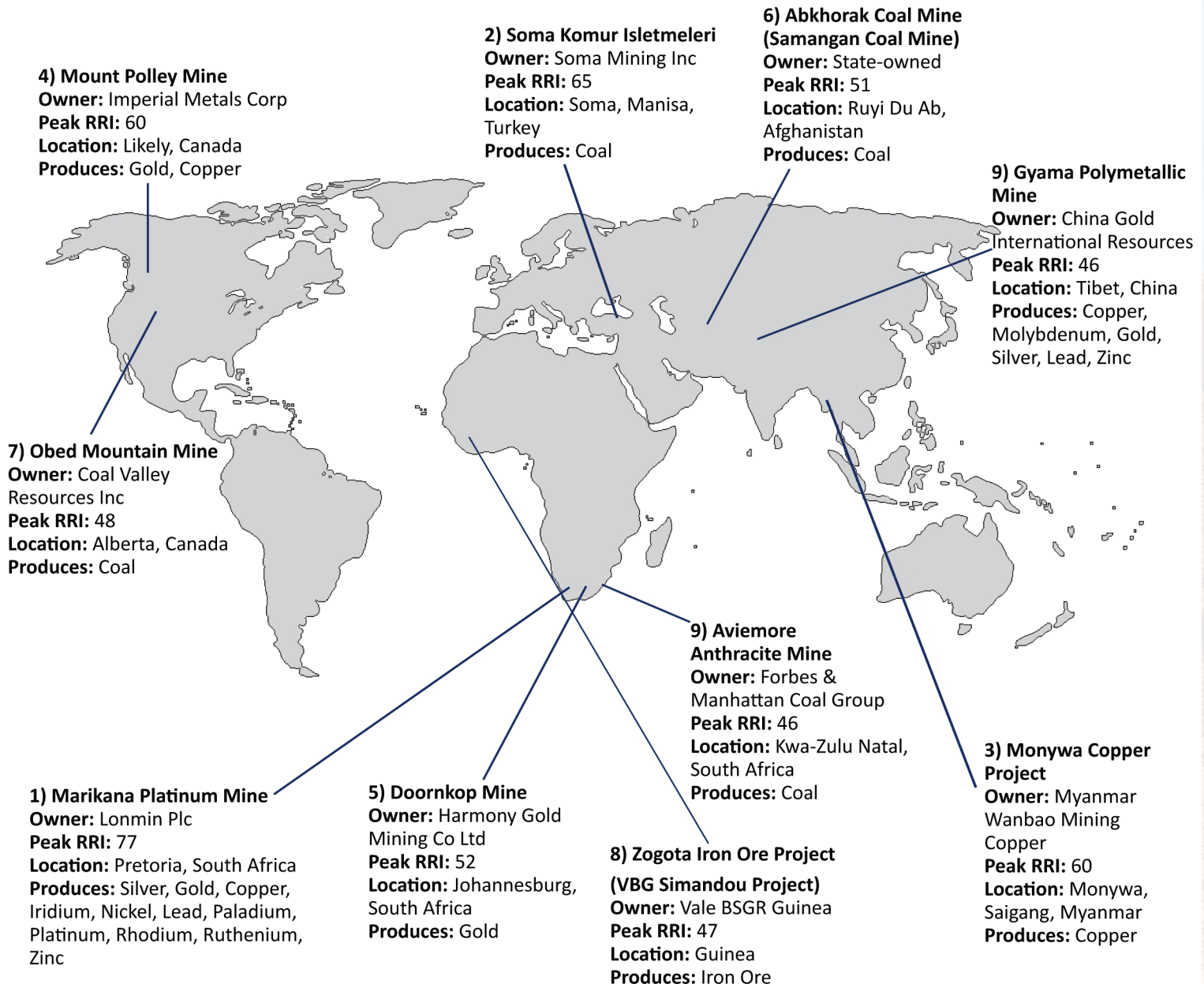
Environmental issues are also prominent in the mining industry, where contamination, pollution and overuse of water is a common risk. Another risk is related to the impact on communities by mining projects, particularly complaints from local residents who may have been forced off their land to make way for the operations.

1. The report covers the period from August 2012 to August 2014.

2. The RepRisk Index (RRI) is a proprietary algorithm developed by RepRisk that captures criticism and quantifies a company's exposure to ESG risks. The RRI does not measure reputation, but is rather an indicator of ESG-related reputational risk. The RRI ranges from zero (lowest) to 100 (highest). A higher value indicates a higher ESG risk exposure. The calculation of the RRI is based on the frequency and timing of the news, as well as the impact of each individual news, depending on the influence of the news source, the severity of the criticism and whether the issue is new for a company or not.

In order of ranking, the 10 Most Controversial Mining Projects are:

1. Marikana Platinum Mine (South Africa)
2. Soma Komur Isletmeleri Mine (Turkey)
3. Monywa Copper Project (Myanmar)
4. Mount Polley Mine (Canada)
5. Doornkop Mine (South Africa)
6. Abkhorak Coal Mine (Samangan Coal Mine) (Afghanistan)
7. Obed Mountain Mine (Canada)
8. Zogota Iron Ore Project (VBG Simandou Project) (Guinea)
9. (Equal) Aviemore Anthracite Coal Project (South Africa)
9. (Equal) Gyama Polymetallic Mine (China)



1. Marikana Platinum Mine (South Africa) Peak RRI: 77

Operated by Lonmin PLC (United Kingdom)

Top Issues: Human Rights Abuses and Corporate Complicity; Poor Employment Conditions; Freedom of Association and Collective Bargaining; Violation of National Legislation; Fraud

Lonmin's Marikana Platinum Mine in South Africa rose to international prominence in August 2012 when violent clashes between striking miners and local police resulted in at least 44 deaths and 78 injuries. In total, over 3,000 workers, who were paid on average USD 2 per day, participated in the strike, demanding better pay and working conditions. The clashes have been described as the "bloodiest conflict between police and protesters since the apartheid ended in South Africa in 1994"³ and led to wider worker unrest across South Africa's mining industry. By October 2012, an estimated 75,000 workers in various mines across South Africa had taken to the streets demanding wage increases following the so-called "Lonmin massacre."

Since the strike in 2012, at least 20 workers at the Marikana Platinum Mine have been killed in an ongoing dispute between the National Union of Mineworkers (NUM) and the upstart Association of Mineworkers and Construction Union, which has accused NUM of failing to represent the workers' movement. In April 2013, NGOs claimed to have uncovered evidence that Lonmin's CEO sent a letter to the Minister of Mines demanding that the "full force of the state" be brought against the striking workers.

2. Soma Komur Isletmeleri Mine (Turkey) Peak RRI: 65

Operated by Soma Komur Isletmeleri (Turkey)

Top Issues: Occupational Health and Safety Issues; Violation of National Legislation; Fraud; Corruption, Bribery, Extortion and Money Laundering; Forced Labor

The Soma Komur Isletmeleri Mine in Turkey has been strongly criticized by NGOs, unions and activists following an explosion in May 2014 that killed 301 miners. Prior to the accident, workers at the coal mine accused managers of "operating in a culture of bullying and cost-cutting."⁴ Although the company has denied allegations of negligence, workers claim that it frequently punished those who reported safety violations, hid serious safety issues during inspections, and used faulty equipment. According to one miner responsible for monitoring gas levels at the mine, machines always showed gas readings at dangerous levels, making it impossible to detect a methane build-up. Soma Komur Isletmeleri has been accused of falsifying records, as the company's hard copies of gas measurements allegedly showed much lower levels of carbon monoxide at the mine on the day of the accident than the digital readings obtained by prosecutors during investigations. Days after the disaster, police detained 25 individuals, including executives of the company operating the mine, as part of an investigation into the incident. There are also suspicions of corruption as two inspectors apparently gave positive feedback about the mine in March 2014. Workers claimed that they have been forced to resume work, despite being traumatized, in violation of Turkish and international law.

3. <http://english.peopledaily.com.cn/90777/7916171.html> ("Workers at South Africa's conflict-hit mine refuse to resume work," Xinhua, 19.08.14)

4. http://article.wn.com/view/2014/05/20/turkey_x2019s_preventable_tragedy/ ("Turkey's Preventable Tragedy," New York Times, 20.05.14)

3. Monywa Copper Project (Myanmar) Peak RRI: 60

Operated by Myanmar Wanbao Mining Copper Ltd (Myanmar)

Top Issues: Impacts on Communities; Human Rights Abuses and Corporate Complicity; Impacts on Ecosystems/Landscapes; Local Participation Issues; Violation of National Legislation

The Monywa Copper Project, which consists of the Letpadaung, Sabetaung, Sabetaung South and Kyisintaung Mines in Myanmar, made international headlines in February 2013, when a report by the US-based Justice Trust accused the Myanmar police force of using military-grade, white phosphorus grenades to disperse protests. According to the report, which was based on witness testimony, photographs and forensic analysis, dozens of people, many of them monks, sustained serious injuries and burns. Protests against the mine began in September 2012, with over 10,000 farmers accusing the mine operators of illegally confiscating thousands of acres of land. Other grievances included the pollution of water resources, leading to water shortages, the improper dumping of waste, leading to widespread health and pollution problems, and the forced evictions of thousands of people without adequate compensation.

Following the protests, the Myanmar government established an Investigation Commission led by popular opposition leader Aung San Suu Kyi to investigate the allegations. Days later however, the mandate of the investigation was changed to exclude villagers' grievances against the Monywa Copper Project. Months later, Aung San Suu Kyi published a report calling for compensation for villagers whose land was illegally seized for the project.

Since protests began in September 2012, RepRisk has detected frequent reports of clashes between local police and opponents of the project. Activists opposed to the mine have reportedly been arrested and imprisoned and the local monastery, which is said to be sympathetic to the protesters' demands, was allegedly attacked and pillaged. Most recently, in May 2014, two Chinese workers at the Letpadaung Mine were kidnapped by protesters.

4. Mount Polley Mine (Canada) Peak RRI: 56

Operated by Imperial Metals Corp (Canada)

Top Issues: Impacts on Ecosystems/Landscapes; Local Pollution; Waste Issues; Impacts on Communities; Violation of National Legislation

British Columbia's biggest spill in 40 years occurred when a tailings dam at the Mount Polley open pit copper and gold mine ruptured on August 4, 2014 and spilled 10 billion liters of contaminated water and 4.5 million cubic meters of metals-laden fine sand into Polley Lake, also polluting other lakes, creeks and rivers in the area near Likely, Canada. The Ministry of Environment in British Columbia subsequently ordered the mine owner, Imperial Metals, to submit a preliminary environmental impact assessment and requested the company's action plan to stop the release of tailings by August 13, 2014. Local authorities declared a state of emergency in the Caribook district, while the national Department of Fisheries and Oceans banned fishing in certain waters. They said it was too early to comment on possible threats to humans and wildlife in the area, but a ban has been placed on water for drinking and other uses. The Ministry of Environment had allegedly given Imperial Metals repeated warnings about the mine.

5. Doornkop Mine (South Africa) Peak RRI: 52

Operated by Harmony Gold Mining (South Africa)

Top Issues: Occupational Health and Safety Issues; Violation of National Legislation

Seventeen miners were reportedly trapped underground in an accident at Harmony Gold's Doornkop gold mine in South Africa in February 2014. Nine of the miners have since been reported dead, while the remaining eight were rescued. About 130 miners at Doornkop Mine were underground when a fire, triggered by seismic activity, broke out 1,733 meters below the surface. The victims were apparently unable to reach a refuge chamber. The disaster prompted the National Union of Mineworkers and Alternative Mining Indaba to arrange a protest against the mining companies' lack of transparency and their poor treatment of workers. The accident has been described as the worst accident in the South African mining sector since May 2008, when nine workers died when the cable of a shaft elevator broke at another mine.

6. Abkhorak Coal Mine (Samangan Coal Mine) (Afghanistan) Peak RRI: 51

Operated by Afghanistan Government

Top Issues: Corruption, Bribery, Extortion and Money Laundering; Occupational Health and Safety Issues

In September 2013, 27 people were reportedly killed and at least 100 injured after being trapped underground following a collapse caused by a gas explosion in the Samangan Coal Mine, also known as Abkhorak, in Afghanistan. Many of the injured were local residents who attempted to rescue the workers trapped in the mine although they lacked proper equipment. Prior to the accident, engineers had reported a 10 percent increase in the level of methane gas, but officials allegedly paid no attention to the warnings.

The alleged corruption and negligence of officials at the Ministry of Mines has been blamed as a factor in the deaths, and the former deputy minister of the agency claims he resigned because of corruption. He says investigations into similar accidents never resulted in any consequences. Integrity Watch Afghanistan and the National Labour Union are attempting to have miners' rights written into their contracts.

7. Obed Mountain Mine (Canada) Peak RRI: 48

Operated by Coal Valley Resources Inc (Canada)

Top Issues: Impacts on Ecosystems/Landscapes; Local Pollution; Waste Issues; Impacts on Communities; Violation of National Legislation

On October 31, 2013, 670,000 cubic meters of coal slurry from the Obed Mountain thermal coal mine owned by Sherritt International polluted the Athabasca River in Alberta, Canada with shale and coal particles. The Alberta Environment Ministry and the Alberta Energy Regulator have launched independent investigations to determine the environmental and health impacts caused by the incident, which may be the second biggest spill of its kind in North American history. It has polluted 25 kilometers of the river; allegedly impacted drinking water in ten municipalities; and could affect fish reproduction and therefore put indigenous livelihoods and recreational fishing at risk.

The Alberta provincial government has also been criticized for its poor response to the spill and for failing to release test results, to the extent that NGOs are concerned that it might signal a government cover-up comparable to the federal cover-up of the Massey Energy spill into the Big Sandy River in 2000.

Canadian First Nations and other civil groups have accused the Alberta government and Sherritt International of greenwashing the environmental and health impacts of the spill. The indigenous communities and several NGOs, including Keepers of the Athabasca, Central Athabasca Stewardship Society, MiningWatch Canada, and others, are pushing the federal government to sue the company under the Fisheries Act and other state laws. They have also demanded the full disclosure of the contaminants spilled, which allegedly include toxic mercury, arsenic, and cadmium.

8. Zogota Iron Ore Project (VBG Simandou Project) (Guinea) Peak RRI: 47

Operated by Vale BSGR Guinea - joint venture between Vale and BSG Resources (Guinea)

Top Issues: Corruption, Bribery, Extortion and Money Laundering; Violation of National Legislation; Fraud; Local Participation Issues

Guinea's Zogota Iron Ore Project, also known as the VBG Simandou Iron Ore Project, has been steeped in corruption scandals involving BSG Resources, the company owned by the Israeli tycoon, Beny Steinmetz. On April 30, 2014, Rio Tinto filed a suit in New York accusing BSG of "stealing" part of its rights to the Simandou iron-ore deposit. Reportedly, Rio Tinto had been granted the rights to the project in 1997, and in August 2008, the company entered into talks with Vale SA about selling a stake in the project. The suit alleges Vale improperly forwarded highly confidential information about the project to BSG, which subsequently received the rights to the northern half of the Simandou Project in December 2008. Eighteen months later, Vale announced an agreement to buy a 51 percent stake in BSG's Guinean assets for USD 2.5 billion. In March 2014, the Guinean government cancelled BSG-Vale's rights for the northern part of the project following allegations that the acquisition had involved bribes offered to the wife of the former dictator, Lansana Conte.

In August 2012, five people were allegedly shot dead while protesting against Vale SA near the Zogota Iron Ore Project. The violence erupted during protests against the company's recruitment of non-native workers for its operations.

9. Aviemore Anthracite Coal Project (South Africa) Peak RRI: 46

Operated by Forbes & Manhattan Coal (Canada)

Top Issues: Human Rights Abuses and Corporate Complicity; Poor Employment Conditions

On October 31, 2012, two workers at the Magdalena and Aviemore mines in KwaZulu-Natal, South Africa were allegedly shot dead by security personnel working for the mines' owner, Forbes and Manhattan Coal. Workers at the mine had been on strike for two weeks demanding higher wages and, on the day of the shooting, the security guards had allegedly chased around 100 strikers into the nearby bushes. The day after the shootings, police used tear gas to disperse 200 protesters who had blocked a main road near the mines.

9. Gyama Polymetallic Mine (China) Peak RRI: 46

Operated by China National Gold Group Corp (China)

Top Issues: Corruption, Bribery, Extortion and Money Laundering; Human Rights Abuses and Corporate Complicity; Impacts on Communities; Impacts on Ecosystems/Landscapes; Local Pollution

Gyama Mine has been blamed for a landslide of rock and mud on March 29, 2013 that buried at least 83 miners who were sleeping near the site in Tibet. Sixty-six of the workers were found dead by rescue teams. A report by the Central Tibetan Administration (CTA) entitled "Assessment Report of the Recent Landslide Event in the Gyama Valley" alleged that extraction activities by the Vancouver-based company, China Gold International Resources Corporation, a unit of China National Gold Group, and its subsidiary Tibet Huatailong Mining Development, triggered the incident. The CTA accused the Chinese government and Ministry of Land and Resources of trying to cover it up.

The report further claims that the company's exploration caused large-scale environmental and social damage, including the dumping of toxic waste into a local river. Residents have voiced their opposition to the mine, and say extraction activities in the Tibetan plateau, considered sacred by locals, has gone too far. They claim that Tibetans are discriminated against when it comes to employment opportunities. They also protested about the company's use and contamination of water sources following a drought in 2009. In addition, many people have been forced to resettle, and nomads have been relocated, to make way for mining activities. Following the demonstrations, authorities allegedly put the whole region under heavy military surveillance, imposing severe restrictions on communication to the outside world and people visiting the region. Protests have also been held in Hong Kong and Canada, calling on China National Gold, and its Canadian subsidiary China Gold International Resources, to withdraw from Tibet.

DISCLAIMER

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METHODOLOGY

RepRisk Special Reports are compiled using information from the RepRisk database, which consists of negative incidents, criticism and controversies related to projects and companies’ environmental, social and governance (ESG) risks. The RepRisk database currently contains criticism on more than 40,000 private and publicly listed companies. RepRisk analysts monitor the issues related to ESG risk across a broad shareholder and other stakeholder audience of NGOs, academics, media, politicians, regulators and communities. Once the negative news has been identified with advanced search algorithms and analyzed for its novelty, relevance and severity, risk analysts enter an original summary into the database and link it to the companies and projects in question. No article is entered twice unless it has been escalated to a more influential source, contains a significant development, or has not appeared for the past 6 weeks. This helps to ensure the balanced and objective rating and weighting of the negative news, and thus the company’s quantitative measure of risk exposure, the RepRisk Index (RRI). The RRI measures the risk to a company’s reputation, not its actual reputation in general. RepRisk objectively monitors the level of criticism to which a company is exposed. All data is collected and processed through a strictly rule-based methodology. Controversial issues covered include breaches of national or international legislation, controversial products and services, environmental footprint and climate change, human rights and community relations, labor conditions and employee relations as well as fraud, anti-competitive behavior, tax evasion, and corruption. In particular, all principles of the UN Global Compact are addressed.

ABOUT REPRISK

RepRisk is the leading provider of business intelligence on ESG risks. It systematically collects and analyzes negative incidents, criticism, and controversies related to companies and projects worldwide. It does so on a daily basis and in 14 languages from thousands of public sources including international and local media, government sites, non-governmental organizations (NGOs), newsletters, social media and blogs. The RepRisk database currently includes information on over 44,000 companies, 10,000 projects, 7,000 NGOs and 6,000 governmental bodies. These numbers are continuously growing as relevant ESG information is added. The use of RepRisk business intelligence allows companies and financial institutions to proactively assess ESG issues that may present financial, reputational and compliance risks. For more information about RepRisk, please visit: www.reprisk.com.

■ Contact Information

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