PT KPC/Bumi Resources Deadly Coal

Ecological and Social Crisis caused by KPC/Bumi Resources' Coal Production



Coal stockpile at KPC Bengatta mine, June 2014. Photo: JATAM.

by Merah Johansyah, Sarah Agustiorini, Seny Sebastian and Siti Maimunah Published August 2014

JATAM East Kalimantan jatamkaltim72@gmail.com www.jatam.org

Executive Summary

Indonesia's largest coal mine, PT Kaltim Prima Coal ('KPC'), owned by PT Bumi Resources Tbk ('Bumi Resources') and TATA India, has been associated with human rights abuses and massive environmental contamination, according to a new report by JATAM, Indonesia's Mining Advocacy Network.

The KPC mine is located in the Indonesian province of East Kalimantan and produces around 50 million tonnes of coal per annum, making it one of the world's largest coal mines. JATAM conducted a field visit to KPC's project sites in June 2014, visiting three affected villages and the Sangatta township.

According to interviews with local communities and other research undertaken by JATAM, the KPC mine has had the following impacts:

- Wastewater from KPC's mines is frequently discharged untreated into the Sangatta and Bengalon Rivers, contaminating river water that is used by villages downstream and killing fish and other aquatic organisms. Rivers are contaminated with heavy metals and suspended solids, and mine drainage have caused water to become either acid or alkaline.
- Studies have shown that the Sangatta River is especially contaminated with heavy metals, with lead concentration reaching 18 times the regulated level. According to a researcher from the Agricultural University of Sangatta, the river water is no longer safe to be consumed or used due to the risk of skin disease and carcinogenicity. Communities living along the Keraitan River now have to buy water for their daily needs as the river water is contaminated.
- The mine has destroyed wetlands, forests and agricultural soils with high water retention capacity, leading to exacerbated flooding downstream. KPC's mining operation has destroyed the soil over an area of 90,000 hectares, which has radically altered the hydrology of the entire Sangatta River system. Villagers report frequent flood events affecting at least three villages and a main road thoroughfare in the region. Villagers report that flooding can persist for a week and that they have received no aid or compensation from the government or KPC.
- Indigenous Basap Dayak people have reported massive fish kills in the Keraitan River due to contamination by KPC pit B. The dead fish used to be edible species traditionally caught by the community, and their depletion has resulted in economic and nutritional losses.
- Villagers report serious dust and noise disruptions from blasting, which occurs frequently without any prior announcement. The blasting has shattered window panes and caused cracks in the buildings. Children wake up crying in shock and fear from nighttime blasting.
- Indigenous Basap Dayak villagers from Keraitan village have already been moved from their ancestral homelands and are now facing another relocation.

KPC has been intimidating people to force them to move, and the local municipality has stopped providing health workers or teachers to the village. Villagers from Keraitan and other relocation sites report having insufficient land to cultivate or hunt.

- Villagers living around the mining operation have no access to electricity despite the fact that KPC has been mining the area for more than 20 years and have installed 18.9 MW of thermal generation capacity.
- Communities have lost land to the mining pits, and people have been offered meager amounts of compensation for lost land, fruit trees and other resources.
- Villagers report that there have been no aid or assistance from KPC or the government of East Kutai Regency. "We feel that KPC wants to drive us out of our village, our homeland," said one interviewee.

Shares prices of Bumi Resources, the financially troubled holding company of KPC, have plummeted 71% over the past year. However Swiss bank Credit Suisse, along with China Investment Corporation and the China Development Bank, have been heavily involved in bankrolling the corporation. J.P Morgan Chase and Deutsche Bank have also been identified as key underwriters for Bumi Resources, despite the company's poor financial performance.

We therefore call on all banks, financiers and shareholders of Bumi Resources to use their influence with this company and their subsidiaries to bring an end to the problems of KPC. If this does not happen immediately, they should cancel their loans and commit to issue no more loans or purchase no more shares or bonds in Bumi Resources or any company associated with it and takes steps toward public divestment from these companies.

1. Introduction

PT Bumi Resources Tbk ('Bumi Resources') is a holding company headquartered in Jakarta, Indonesia, engaged in exploration and exploitation of fossil fuels, including coal mining and oil exploration. It operates through a number of its subsidiaries, including PT Kaltim Prima Coal ('KPC'), which operates over 90,000 hectares of coal mining in three districts in East Kalimantan: North Sangatta, Rantau Pulung and Bengalon.

2. Company overviews

2.1 Introduction to PT Bumi Resources Tbk

In 1990, Bumi Resources made its initial public offering (IPO) on the Jakarta and Surabaya Stock Exchange. In 1997, PT Bakrie Capital Indonesia acquired all of the Company's shares held by AJB Bumiputera, amounting to 58.51% of the total shares issued by the Company, thereby gaining control.

The controversy surrounding Bumi Resources' controlling company Bakrie Capital is inevitably linked to the Bakrie family. Abu Rizal Bakrie, the owner, has an active political career in the Golkar Party established by Soeharto. In 2004, President SBY appointed him as the Coordinating Minister for the Economy. A year later he was shifted to Coordinating Minister for People's Welfare. He began to lead the Golkar Party in 2009, and was appointed as the Party's Presidential Candidate in 2012. The well-documented scandal of the hot mud disaster which caused great loss to tens of thousands of people living around his oil and gas drilling operation, PT Lapindo Brantas, in Sidoarjo-East Java, affected his electibility as a presidential candidate and this year he failed to get himself appointed as a candidate in the presidential elections.

Since Indonesia's Bakrie family has taken control of Bumi Resources, the company has been linked to bribery charges, international probes over debt and financial irregularities, and suspicious transactions that have led to boardroom disputes. The Guardian has gone as far as stating the chaos surrounding... Indonesian coal-miner Bumi Resources shows no sign of ending.

With the current persistence of depressed coal prices, Bumi Resources has become 'the weakest positioned with inadequate liquidity' among Indonesia coal mining companies, as it has more than US\$1 billion of debt maturing within the next 12

http://investing.businessweek.com/research/stocks/people/person.asp?personId=728025&ticker=BNBR:IJ&previousCapId=39293520&previousTitle=Fieldpoint%20Private%20Bank%20&%20Trust

See.

¹ See, http://www.aljazeera.com/indepth/features/2014/04/suharto-ghost-stalks-indonesian-election-20144613551356258.html

³ See, http://www.thejakartapost.com/news/2010/06/16/police-seize-gayus%E2%80%99-assets-totaling-rp-74-billion.html

⁴ See, http://af.reuters.com/article/energyOilNews/idAFL3E8L91LR20121009?sp=true

⁵ See, http://www.bloomberg.com/news/2013-05-07/nat-rothschild-rues-terrible-mistake-in-deal-gone-sour.html

⁶ See, http://www.theguardian.com/business/marketforceslive/2013/jan/22/bumi-probe-fails-prove-misuse-funds

months, according to Moody's investor services. In August 2014 the company into selective default for missing a deadline on a key bond payment.

2.2 Introduction to Kaltim Prima Coal

PT Kaltim Prima Coal ('**KPC**') operates the biggest coal mine in East Kalimantan, with a concession covering 90,938 hectares in three districts. The company was granted Coal Contracts of Work (PKP2B) during Soeharto's authoritarian regime for the period 1982 to 2021. The contracts of work were given without the consent of local people around the mining area.

In October 2003, Bumi Resources acquired 100% stake in KPC from Rio Tinto and British Petroleum. In 2007 30% ownership in the mine was bought by TATA India. Under the ownership of Bumi Resources, KPC continued to increase coal production from 16.7 million tonnes in 2003 to 48 million tonnes in 2008. In 2010, they announced a target of increasing the production to 70 million tonnes. However, in 2013 the company only produced 50 million tonnes, or around 12% of total national coal production. KPC states that they intend to raise their production to 57 million tonnes this year.

3. Ecological and Social Crisis caused by Bumi Resources and KPC

3.1 Coal mining impacts on local water resources

3.1.1 Water contamination and flooding

Coal mining require vast amounts of groundwater and surface water throughout the production chain. KPC's coal mine withdraws massive amounts of water from the Sengatta and Bengalon Rivers, which then becomes heavily contaminated. Wastewater from KPC's mines is discharged back into the Sangatta and Bengalon Rivers and their tributaries. These two rivers function as the main water resource for communities in the two districts where KPC operates. According to the testimony of a resident of the Sepaso Induk village interviewed by JATAM, since the beginning of 2013 people in the village can no longer use water from the Bengalon River. They have to dig wells to ensure that the water they consume is safe, since KPC discharges wastewater from pit A to the Lembak River, a tributary of the Bengalon River.

"The river has become turbid and harmful to use. Some kids at Simpang Empat Sepaso suffered from skin rash and itch after bathing in the river," said interviewee A, resident of Sepaso Induk village.

⁷ See, http://m.bisnis.com/en/read/20140804/110/31300/indonesian-coal-producers-pressured-by-weak-coal-prices-moodys-says.

http://www.bloomberg.com/news/2014-08-11/bumi-makes-second-attempt-to-avert-375-million-bond-default.html

⁹ Koryak, Michael. 1999. Origins and Ecosystem Degradation Impacts of Acid Mine Drainage, U.S. Army Corps of Engineers. http://www.lrp-wc.usace.army.mil/misc/AMD_Impacts.html.

Another impact felt at the Sangatta River is that floods now regularly affect the downstream area. Mining destroys wetlands, forests and agricultural soils with high water retention capacity and turns them into bare gravel and rock that allows water to run off immediately. The KPC mining operation has destroyed the soil over an area covering over 90,000 hectares, which has radically altered the hydrology of the entire river system.

According to local residents, the river often overflows and floods the villages when they experience heavy rainfall, with floodwaters even reaching urban areas, especially in South Sangatta and North Sangatta districts located along the river.¹⁰

"Our village sometimes gets flooded up to adult neck height, it can persist for a week and yet [we receive] no aid from the government or from KPC. Even worse, it was discovered that KPC opened the Pit J dam and worsened the flood which caused a total paralysis to our activities. No man could work, the children could not go to school, I was not able to sell anything, overall we lost so much due to the flood" said interviewee B, head of the Community Association of Kajang Village. "Our village lies lower than others in the region, that's why the flood will hit us first and leave the mud and debris here."

In 2013, floods hit in February, April, August, and December,

"Almost every time the rain came, we were flooded, but sometimes the flood also came without prior rain. They say the floodwaters originated from Rantau Pulung, the upstream village where KPC is mining" said interviewee B.

Yet, according to interviewee C, a villager of Singa Gaweh, working daily at a pontoon river crossing at Old Sangatta Village, KPC has never admitted their role in the floods: "Still, KPC refused to admit that they caused the flood at our village" he said. When the flood strikes, workers like interviewee C can not go to work and lose their daily earnings of Rp. 300,000 (USD25).

The flooding is exacerbated by heavy sedimentation in the Sangatta River, observed since the upstream areas have been mined. Sedimentation is so heavy that dredged sections clog up again fast.

"You see, they tried dredging the river section at Kabo and Munthe several times but with no result and still we get the floods. That's because KPC dumps their waste every day into this river" said interviewee D, a motorbike driver at Munthe Village which is also a victim of flooding.

¹⁰ The area regularly hit by flooding in South Sangatta includes the Kajang, Masabang and Teluk Lingga (Old Sangatta market) villages as well as the Sangatta-Bontang road, the main artery of the region. In North Sangatta, the area covers the Kabo Jaya village (Kampung Jawa and Prodisa) and the Munthe area – KPC complex, APT. Pranoto road and the campus of the Islamic High School of Sangatta (STAIS).

3.1.2 Water Contamination

Several studies on Sangatta River also show that the river is contaminated with heavy metals. At the end of 2013, Dr. Asfie Maidie, lecturer in the Fishery and Marine Faculty of the Agricultural University of Sangatta, found that Pb (lead) concentration in Sangatta River had reached 90 ppm, far above the regulated threshold of 5 ppm. "Sangatta river water is no longer safe to be consumed or used, due to the risk of skin disease and carcinogenicity" said the researcher.

In the Keraitan Bengalon village, the water in the Keraitan River is also contaminated and no longer safe since KPC opened pit B in early 2013. In February 2014, local people were shocked by mass deaths of fish in the Keraitan River. The total weight of the dead fish they observed reached 2 tonnes. The dead fish were edible species commonly caught by the community, such as the catfish Hemibagrus, Ikan Putih (Salap), Hoven's carp, Mesapi, and some other fish that become harder and rarer to catch.



Discharge into the Keraitan River. Photo: JATAM.

At South Sepaso village, the Pedaya River has also been contaminated since Pit J of KPC was opened. The village is located at the upper part of the Pedaya River and is inhabited by around 2000 people. The village borders with the North Sangatta district. A stream with a width of four meters flows through the village into the Pedaya River, continuing to the Bengalon River. Pedaya River used to be the main source of water for the indigenous Bugis community, as well as for migrant communities from Makassar and Java, but is no longer safe since the opening of Pit J.

"Don't mention the dust and floods to them, they don't care. At the end of 2013, our village was submerged by a flood, and only then the government tried elevating the road" said Interviewee E, the head of the Neighborhood Association of community number 7 of the village. But the measure was not sufficient as waterways are already being clogged by sand and mud from the mining activities.

Water containination is an extremely serious problem for the local people, since the river is the center of economy and culture for the indigenous Basap Dayak community, especially the women. The river serves as the main source of water and local livelihoods, and KPC's impacts on water resources hits at the heart of the community. The social crisis they have created is further discussed in 3.2 below.

3.2 Social impacts of KPC's mining activities

3.2.1 Relocation of Dayak Basap Indigenous Community

While most of KPC's current mining operation is within the Sangatta district, the company has been expanding into the Bengalon district and will expand to Rantau Pulung district in 2014. One of the villages directly affected by KPC mining activities is the Keraitan village. It is surrounded by two pits, Pit A and Pit B, with a total size of 1,699 hectares.

The Keraitan (or Segading) village is the homeland of Basap Dayak peoples, which originated from the Keraitan Lama ("Old Keraitan") village, located at the upper part of the Keraitan River. People were moved from Old Keraitan village to Keraitan village some years ago as a result of KPC's operations. About 50 families have been living in Keraitan village, but they are now facing another relocation as a result of the mine. Since 2012 the community has been divided into two groups, one that has moved to the new location and one that is still resisting. The new village is being referred to as "New Keraitan Culture Village" in an effort to propagandize the idea of the relocation to the community.

KPC has tried hard several times to move the community, but instead of obtaining consent from the community before mine expansion, KPC has tended to steamroll the indigenous people and push them to relocate by making life harder for them. For example, the area of the Keraitan community was taken over by KPC's mining pit B. The Keraitan village has a health center, but since the push for local inhabitants to relocate to 'New Keraitan', the health centre has received no visits from government health workers and no vaccinations. The municipality also stopped paying the two teachers in the village school in January 2014. In spite of the reduction of amenities and government social support, in the past three months, seven families that had already moved into the new settlement have returned to their old village, because they found they were even worse off in 'New Keraitan'.

Interviewee F, head of one of the families that still lives in Keraitan, said that he tried to remind his community of the consequences of relocation.

"Our traditional lifestyle includes hunting and setting up bait for deer, payau, or humming bird. Our other traditional sources of livelihood are gardening (kebon) and farming. We won't be able to live in the new settlement which is smaller and far away from our hunting grounds," he said.

Interviewee G, a neighbour of the previous interviewee, compares their fate to that of an animal:

"[We would be] like cows, living only in the size of the cage. We are used to living in a spacious area, compared to Mattirowali, the new settlement, where we can only cultivate in a 200 ha area, that's the size of the Mattirowali village, since the rest is owned by East Sepaso people" he said.

Basap people who have been relocated to Mattirowali village can no longer hunt. KPC provided them with 45 houses sized 8 by 12 meters, made of wood, as well as with a generator to pump river water and generate electricity. The settlement also has an elementary school, mosque, village office, Regional Development Bank (BPD) office, Posyandu (local clinic), and an adat longhouse (lamin adat). But in return, their movements are severely restricted due to limited area.

The situation is completely the opposite in the old settlement. Although located only 1.5 km away from a mining pit of KPC, road access to Keraitan is very poor, with deep mud and rocky roads. When it rains, even a motorcycle can get stuck in the mud. Keraitan doesn't have electricity but has a health clinic (posyandu). However, since 2012 when the relocation started, it stopped providing vaccinations, and there have been no visits from health workers. The elementary school has only two classrooms and two teachers who have not received their salaries for the past six months, as the government of the East Kutai regency has stopped paying them. Keraitan is isolated from any form of public facilities normally provided by the government. It is as if the government is helping KPC's plan to completely dismantle the village.



Keraitan village. Photo: JATAM.

3.2.2 Escalating Cost of Living from Electricity and Water Crisis

The KPC mining operation is fully powered with a 10 MW steam turbine generator and an 8.9 MW diesel generator, which would be enough to light 21,000 households. But, sadly, villages located around KPC's pits have no access to electricity (including Keraitan and South Sepaso). In East Kutai, only 37 villages out of a total of 135 had access to electricity in 2010, despite of the fact that KPC has been mining the area for more than two decades.

The people living downstream of the mining pits are also facing ongoing water crisis, since the river water is contaminated. The Keraitan village, which used to get water from the Keraitan River, now has to buy water for its daily needs. In particular, water for drinking and cooking has to be bought in containers. They try to cope by washing clothes and bathing with well water which has an acidic taste.

"The water turns white clothes yellowish", said Interviewee H, a Keraitan woman. She has to pay Rp. 10.000 (\$.84) for every gallon. For her family with three children, she needs to buy 5 to 6 containers per day. For electricity and water only, she spends Rp. 110.000 (\$9.2) a day, twice what she spent before the Keraitan River was contaminated.

Interviewee E, living in South Sepaso, also describes a water and electricity crisis. His village is located around 1.5 km from a mining pit, but they receive no electricity.

"We have to buy diesel for an electric generator so we can have lights during the night. We need 5 litres of diesel for electricity from 6 PM to 7 AM. We pay Rp. 9000 a litre, multiplying by five that means we have to spend Rp. 45,000 [\$3.8] of cash every day just for lighting", he said.

Life has also gotten harder for its nearby residents since the Pedaya River became contaminated:

"Anyone wishing to die soon should use the river water" said Interviewee E. Now people in his village also have to spend extra to buy water. "We don't have regular jobs, we only work on our gardens (kebon) which are now flooded with wastewater from KPC", he added.

Since Pedaya river was contaminated, they have had to spend Rp. 7000 (\$.59) per container on water. Interviewee E's wife needs to buy 4 gallons per day for cooking and drinking. Well water can only be used for bathroom activities since it tastes a bit acidic and is muddy in color, unlike water from the old Pedaya River.

"Despite the taste and color, we have to use the well water, we don't have other options," he said sadly.



Pedaya River. The color is muddy from discharges of suspended solids. Photo: JATAM.

The increased cost of living from needing to purchase water is worsened as fields (kebon) are turned into mining pits. The Neighborhood Association of the community number 7 of Sepaso village is located only 1.5 km from Pit J, and around 75% of their land has already been swallowed by the mining pit. A plot of land just next to Interviewee E's house has already been valued, for its land and plants, and is to be sold soon. The company values a mature durian tree at only Rp. 250.000 (\$21), and land at Rp. 2,500 (\$2.1) per square meter.

"KPC said it is the highest price they are paying, as in other areas they only pay Rp. 1,500, Rp. 1,000, Rp. 900, and even Rp. 200 per square meter. We don't know the regulation on compensation for land. The government closes their eyes, refusing to see our suffering as our land is taken away," he added.

3.2.3 The Increasing Work Load and Impoverishment of Indigenous Women

The river serves as an important economic and social resource for women. Until the river was polluted, almost all activities of the Dayak Basap women were centered around the Keraitan River, ranging from cooking, washing and bathing, to a place where they can communicate and share. Most of their time was spent on the river, the fields, and the gardens. At the river they shared their stories, daily incidents, and sometimes planned their activities or events.

"River was a place for us to rest and share stories", said Interviewee H.

Keraitan villagers can no longer use the river the way they used to, since KPC started discharging their hazardous wastewater into the Keraitan River, upstream of the village. In 2013, the color of the river water changed and mass deaths of fish occurred, with the most serious event taking place in February 2014. Local people used to catch and sell fish from the Keraitan river.

"Baung fish could fetch Rp. 30,000 per kg, Rp. 25.000 for Putih fish, and Rp. 50.000 for Mesapi fish. The Mesapi fish looks like an eel, but it's bigger in size with less bones, and the meat tastes really sweet. It was really hard to catch Mesapi fish, thus we were really sad to see many of them died just like that. Imagine, a good tasting, highly priced fish suddenly floating dead on the surface. We suspected that KPC was dumping their wastewater directly into the Keraitan River," Interviewee I said.

Later on, it was confirmed that KPC is discharging wastewater from Pit B into the Keraitan river.

"Fish that we used to eat, now we see some of them dead every day," he said sadly.

This is the third incident of a mass death of fish since KPC started discharging into and polluting the rivers for the Keraitan village. The previous incidents took place in 2013, and the largest one was in February 2014. Last March, the people started a protest at the mine hauling road. The protest continued while several rounds of meetings took place at the KPC base camp and some even in the town of Sangatta.

The river also used to be an important source of vegetables. The women used to go in groups to look for vegetable such as kangkung around the upper stream and pakis spread along the river. Since they were young, their parents had taught them the importance of the river. The relationship to the river, and all activities connected with it, had been passed from mother to daughter. As the elders passed away, new generations continued the traditions they had taught.

Since 2013, all activities of the community that depended on the river became impossible to continue. No one would follow the old routines at the river, taking bath, collecting and washing vegetables, or washing their clothes. There is no more sharing of stories at the river nor women stopping by to look for vegetables. Culture that had persisted over generations is now fading. Basap women have to bear a heavier burden, made worse by the escalating cost of living since they can no longer collect their vegetables or spices or catch fish from the river. The worst of all is having to pay for clean water.

There has been no aid or assistance from KPC or the government of the East Kutai Regency. They want to deprive the community of everything they depend on to make the Keraitan people move out from their land.

3.2.4 Blasting and disruption of local life

"Here, blasting can happen at any time as they wish, with no prior announcement to villagers," said interviewee E.

Another serious impact of the mines is the dust and loud noise from blasting that face local residents daily.

"Besides [polluting our] water, KPC is slowly making it miserable for us to live here," said Interviewee J, another Keraitan women.

"Everyday, they (KPC) would start blasting at 12PM, or sometimes at 3 or 4PM. It shattered some window panes and caused cracks in the buildings. It all happens without warning. Our children would wake up crying in shock and fear," she added. "Moreover, the dust and the loud blasting sound, sometimes in the middle of the night, make it harder for us to feel comfortable living here, especially for the children. Ever since the opening of pit A and pit B, this situation continues."

The dust from blasting spreads outside of the mine, including to the elementary school nearby. The classrooms are covered with dust, which is clearly unhealthy condition for students and teachers.

"The dust can be so heavy that sometimes we need to do the laundry again if the clothes happened to be left outside overnight to dry, or if it rains on them. It's time and energy consuming, and getting water for washing is also hard now. We feel that KPC wants to drive us out of our village, our homeland," said interviewee H.



A billboard warning of blasting near Sepaso Induk village. Some villages don't even have such warning.

Photo: JATAM.

4. Closing Remarks

KPC was granted their Coal Contract of Work during the Soeharto regime in 1982, and started to extract coal in East Kutai 22 years ago. The presence of this mining company has caused a social and ecological crisis which is can still be seen today. Their environmental and social impact will only deepen if they are allowed to increase their production to their projected 70 million tonnes per year.

We therefore call on all banks, financiers and shareholders of Bumi Resources to use their influence with this company and their subsidiaries to bring an end to the problems of KPC. If this does not happen immediately, they should cancel their loans and commit to issue no more loans or purchase no more shares or bonds in Bumi Resources or any company associated with it and takes steps toward public divestment from these companies.

Appendix: Series of satellite images showing the expansion of the PT KPC mining area into forest and villages



