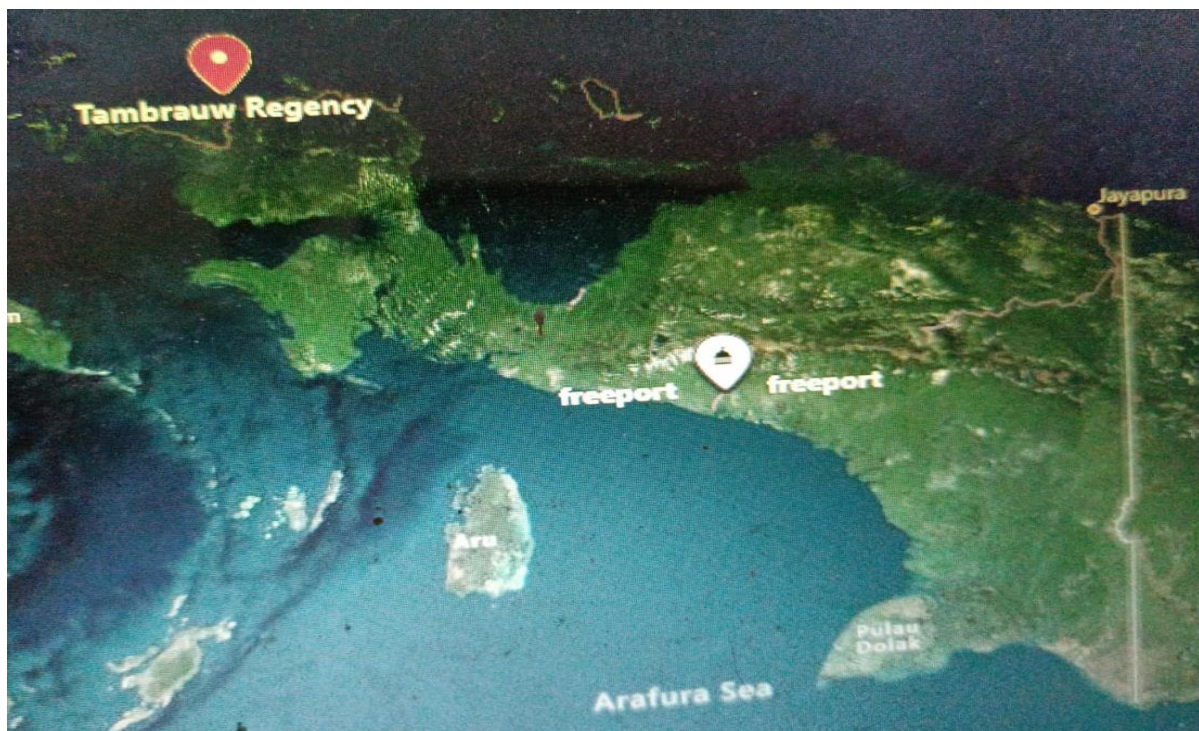




# Freeport Mining and its Environmental Impacts on the Riverine Ecosystem



*Fig 1: Map of West Papua showing the location of Timika regency where the Freeport Mine is located.*

*Source: Google map showing the location of Freeport Mine in West Papua.*

## A. Introduction

This report is prepared by Lembaga Peduli Masyarakat Wilaya Mimika Timur Jau (LEPEMAWIL) a coalition of grassroots Civil Society Organizations mostly consists of women and youth groups to address environmental and human rights issues that are affecting the indigenous people of Eastern Mimika regency. The report is prepared for advocacy purpose, given the fact that the situation in the East Mimika regency is deteriorating rapidly, the people in this part of the area are appealing for assistance from both local and international community to ensure the government and Freeport Mine especially address the situation as soon as possible.

## **B. Background**

Freeport McMoRan Inc. began its investment in the mountains of Mimika regency in 1967 with the passing of Foreign Investment Law (PMA) No.1 of 1967 that enabled the signing of Contract of Work between the Government of Indonesia and the Freeport McMoRan Inc. a US based company. The signing of contract was seen as illegal by the West Papuans at the time because West Papua was politically and legally not part of Indonesia at the time, it was seen as part of the deal that Indonesia might have used to lure USA to its side of the divide during the battle for the ownership of West New Guinea at the time. Also the undemocratic 'act of free choice' in 1969 was in part purposely planned towards Indonesia's annexation in order to protect the 1967 business contract.

Indonesia, in addition to giving vast areas of land for Free to Freeport Mine gave away flat lands stolen from the Amungme tribes to build Kuala Kencana Township for the Mining workers which were also given without compensation. The indigenous people were moved from their original locations to areas that they have not used to live before resulted in many died over the years due to poor social services and exposure to Malaria infested environment.

West Papua National Liberation Army or locally known as Organisasi Papua Merdeka (OPM) took roots in the area as well fighting against the Indonesian military for ages since the 1960s. Our people became victims of the struggle for freedom as well as the company's mistreatment and land grabbing. The problem was intensified because of heavy militarisation causing our people to further isolate themselves into the jungles. The other factor was heavy resettlement and migration from other provinces in Indonesia and Papuans from within the province also settled in Timika marginalizing our people in the process.

## **C. Company's Social Mapping and Identification of Land ownership**

The indigenous people of Amungme and Kamoro tribes were categorized under "fauna" which in other words were animals and do not have the ownership to the land and rivers within the area by the company and Indonesian government during the signing of the contract in 1967. This resulted in its discriminatory community social responsibility services that provide welfare to a handful of people by the company. Even then it started recognizing the rights of indigenous people to their land starting from 1996, but before that, no royalty and land compensation were payed to the land owners. The company did not do the social mapping well at the beginning because they came with military and police, whoever they chose became the Land owners while the others were left out of the company's royalty scheme and social responsibility plan for the surrounding communities.

The land belongs to the Amungme, Kamoro and Sempan tribes that occupy the area from the mountain to the coast and towards the East Mimika area. The Freeport concession areas should have been Jita, Agimuga and Manasari districts but were excluded from the Mining list of concession areas.

The Amungme tribe considers the mountain as their sacred place, where their ancestors' spirits live. Land is considered a symbol of motherhood by the tribes because it provides sustenance and life. However, for 54 years Freeport has exploited the natural resources from the mountains and shattered the beliefs that have been held firmly by the Amungme, sempan and kamoro tribes. The mountains and land were cleared, dredged and dug out by Freeport without compensating well to the landowners.

#### D. Freeport Dumping sites

Freeport Mine did not have tailing dump where the disposed tailings could be stored and treated before disposal into the river system. The Freeport Mine dump toxic wastes directly into the river in particular Ajikwa River that flows south-ward into the sea. In the process destroyed the nearby sago forests and fish in the rivers that our people depend on for survival for centuries.



**Fig 2:** Map showing the Freeport Mine tailings dump site, red lines indicates Western and Eastern embankments of the tailing; Yellow Square indicates the disposal into the sea where the nearby islands were also affected by the tailings disposal.

Freeport Mine dumps around 10, 000 tons of toxic waste per day in previous years, now it has reached 300,000 tons per day. The tailings are channelled through the Aji Kwa river, which is located east of the city of Timika. The company stated that they will use the waste for road construction but until now no roads have been built using the waste.

Tailings Properties: 1. Grain size: 2.38 mm - 0.149 mm, 2. It is non-plastic or loose, 3. SSD specific gravity: 2.48 - 2.86, 4. Loose density: 1.23 - 1.79 kg / l, 5. The sand equivalent value is 81.3%. 6. Soundness: 2% - 8%.

The management of the Freeport Mine maintains that tailings do not contain harmful chemicals, but community observations and experiences shows that the water contains toxic wastes that includes harmful chemicals like mercury and cyanide. Health problems in the local community, the dying of fish yearly, crocodiles and other aquatic animals do die which indicate that the tailings contain harmful chemicals. Free Port Mine needs to come out clear on the information because people and animals are dying due to the pollution.

### **E. Impact on River Systems**

The impact on the riverine ecosystem was generally contaminated from the headwaters down to the sea including vast areas of sago forests, fish stocks and biodiversity in it. The Ajikwa River was contaminated with tailings and sedimentation from the mine. Sedimentation build up along the river continue to expand outwards into the sago forests and also contaminated swamps and streams that were nearby. Vast areas of land were contaminated by the tailings.



**Fig 3:** Ajikwa River near Banti Village around 20 kilometres from the Freeport mine.



**Fig 4:** Ajikwa River in the middle, 50 kilometres from the sea and 60 kilometres from the mine, sedimentation build up could be clearly seen, it stretches for some kilometres into the forests.

**Pohon - Pohon yang Mengering di Sepanjang Sungai Ajikwa / Wanogong Timika –Papua**



**Fig 5:** Ajikwa River near the sea, the impacts of the toxic waste and sedimentation on the Mangroves near the sea.



**Fig 6:** Sedimentation along the Ajikwa river to the south east of Timika town covering vast area of mangrove forests.



**Fig 7:** Polluted Ajikwa river near the sea.

Impact on plants on the banks of Ajikwa River is getting worse by the day due to constant sedimentation. Trees dry up including sago plants and mangroves along the coastal regions and on the nearby islands. The water change to a cloudy green-black colour, even during floods, the colour becomes coffee milk and black sulphur. Millions of fish died suddenly in the area of the eastern embankment where the Freeport tailings waste disposal was located it

has occurred 4 times yearly from 2016-2020. People still see fish die every day on the river banks.



**Fig 8:** Millions of fish died in Timika on the waters of Ajikwa down to the sea where the river meets the sea. Freeport explained that it was a natural phenomenon, fish that were died were not from the river but from the sea migrated to the area to look for food, died due to low oxygen.



**Fig 9:** Common water colours on the south eastern waters of Timika where the toxic waste are being dumped.

#### **F. Impact on Local Community**

The local people called Wanogong River while the company called Ajikwa River to the main river that flows South-ward from the Freeport Mine. It flows through three districts namely Jita district, Agimuga district and the Manasari district. The tailings and sediments from the mine have been destroying the ecosystem in the river including the food sources of the people in the three districts. A total of 6,484 residents in the three districts are currently no longer

have access to the river transportation routes due to sedimentation and silting as a result of Freeport's dumping of toxic waste into the Ajikwa River.

The Kamoro and Sempan tribes live near the rivers for centuries, their major activities like hunting, harvesting sago, fishing and travelling happens with the river. Their staple foods for centuries were sago, fish, pig and other animals that were found in the river and on the land. They live simple Melanesian lifestyles of loving, caring and sharing, usually carry out activities such as harvesting sago or hunting for games in groups as a family.

Their only means of transport is by dug out traditional boats. The traditional dug out boats are also used for inter-island communication, recreation for burial, perform traditional rituals on boats in rivers, trading and barter, looking for and collecting food in the sea or rivers and visiting relatives from one village to another. All these activities were lost with the river pollution and sedimentation. The Kamoro and Sempan tribes who live along the river and nearby islands are on the verge of extinction.



**Fig 10:** Villagers from Otakwa village travelling to Timika town experienced difficulties along Otakwa river in 2020 due to sedimentation build-up and shallow water making it difficult for the canoes to use motors, they have to use support sticks.





**Fig 11:** In 2019 the group headed for Otikut village, Manasasri district was constrained by waste from the river mouth between Puriri Island and the sea.



**Fig 12:** People who want to go to Agimuga village in 2018 got stuck between the Sampa River and Puriri Island near the sea



**Fig 13:** In 217 People on the black sand village abandoned the village due to pollution from the Freeport mine. The people from this village have not found a new resettlement site yet, they are currently living with relatives in Timika town and surrounding communities.



**Fig 14:** Black sand village before 2017 when the beach was not polluted to the extreme.



**Fig 15:** Villagers living in low quality homes due to the problems, the displaced villagers from Black sand village construct makeshift homes like this as well to survive.



**Fig 16:** Abandoned villagers from Black sand village still not settled since 2017.

### **G. Impact on People's Livelihood**

Peoples' livelihoods have been disrupted due to the pollution. People have to travel for miles to hunt for animals for food and to harvest sago. Transportation on the river using traditional

boats was also stopped due to sediment build up on the river and coast line of the sea at the mouth of Ajikwa River. Islands near the mouth of Ajikwa River are sinking due to sediments build-up, their food sources are also being poisoned by the toxic waste from the mine making the life expectancy shorter.

Due to sediments people choose to travel along deep sea routes which often times putting their lives at risk. Some people who have urgent interests choose to use a fast alternative by crossing through the high seas. In the last 10 years, people who were forced to cross the sea route using small boats have experienced an increase in accidents at sea in the 2011-2020 periods.

For instance, a long boat carrying 9 people heading to Agimuga district turned over when hit by waves at the junction of Sampan River near Puriri Island, and the black sand village. The incident occurred on Wednesday morning December 4 2019 at 6.00 local time; eight people survived after fighting for their lives on the sea for 8 hours afloat on empty water containers against the waves. Among 8 victims 2 people were women, a mother and her daughter and a member of the 1910 Brigif, the head of Babinsa in Faka village - Fuku, agimuga district. This is of course very dangerous for the community, not a few boats that take that route capsize in the middle of their journey because they are hit by sea waves. This story is often told by the survivors of the incident and even the local newspapers.

People who fall on the polluted water develop incurable sores like ulcers on their skin that spread throughout the body. The sores wear away the skin pigment and dig deeper into the body which has been affecting our people.



**Fig 17:** Nikson Ilimang (left) a high school student and his father Tomiy Ilimang from Agimuga experienced the development of sores on their bodies after boat accident in the sea travelling to Timika for Christmas holiday. Too much exposure to the polluted waters is dangerous for the people in the area as many have developed such sores on their bodies after exposed to the polluted waters in the area.



**Fig 18:** Hanoks Kalanagame after exposure to the polluted water during an accident in 2020 Christmas period.



**Fig 19:** Margaretha Kontali having the same sores on her skin after having exposed to the polluted water.

#### **H. Freeport intervention on community Services**

Freeport McMoRan the company exploiting the resources up in the mountains have been planting mangrove trees to recover some parts of the rivers that have been polluted by sediments. Freeport in a way has been remodelling the landscapes to cover up the damages from the public view as well as an attempt at preserving the environment. The conditions even make it difficult for the residents to access river transportation along the river to the sea estuary, due to the silting. Those people who want to visit other villages, have to wait for the flow of sea water for 3 - 4 days for the river water for the high tide for the boat or a canoe to pass through. Freeport has also constructed several new water access roads for the local people to access in some areas while others are still left to cope with the damages.

Freeport claims to be up to date with its social responsibilities for the communities in the mining areas but the realities in the area speak otherwise. Poor housing, health and education

for the local communities continue to exist though health and education services were being addressed by the company since early 2000.

The destructions caused by Freeport's mining operations has widespread impact on indigenous communities in the three districts of Agimuga, Jita and the Far East Mimika District in 23 villages located in the Mimika coastal area. Not only sea transportation routes, but they lost their livelihoods, lost access to public services such as education and health.

Freeport's social responsibility team apply their own criteria to provide basic services and denies other areas. Freeport gives ridiculous arguments by calculating damages within the mining concession areas only without opening up its scope to the other communities that settle along the river system down to the sea and the surrounding islands. Their scope covers only five villages from Kamoro tribe and three villages from Amungme tribe. The villages included in the concession area of Freeport include Mayaro, Tipuka, Ayuka, Nawari and Koprakoka for Kamoro villages and Singa, Aroanop and Waa villages for the Amungme tribe.

The reality is that large-scale gold mining and cases of toxic waste disposal by Freeport have had a widespread impact and have spread to indigenous people who live in 23 villages of Jita District, Agimuga and Manasari Districts. Waste Disposal Extending to the arafuru sea means that areas that are not the concession are affected today such as Agimuga District, Jita District and Manasari District. People from the coastal areas have been advocating for inclusion in the Freeport's concession area to benefit from company's social responsibility packages because they are directly affected by the pollution.

Freeport had promised in April 2014 to go down to the villages to meet with the victims in 3 districts but this did not come through. The company only built an alternative sea route through a dried river but route cannot be used because the river is shallow.



**Fig 20:** Freeport construct walls like this to block off polluted water from spreading into fresh water systems in the areas along the Ajikwa river.

## I. Intervention by Civil Society and NGOs

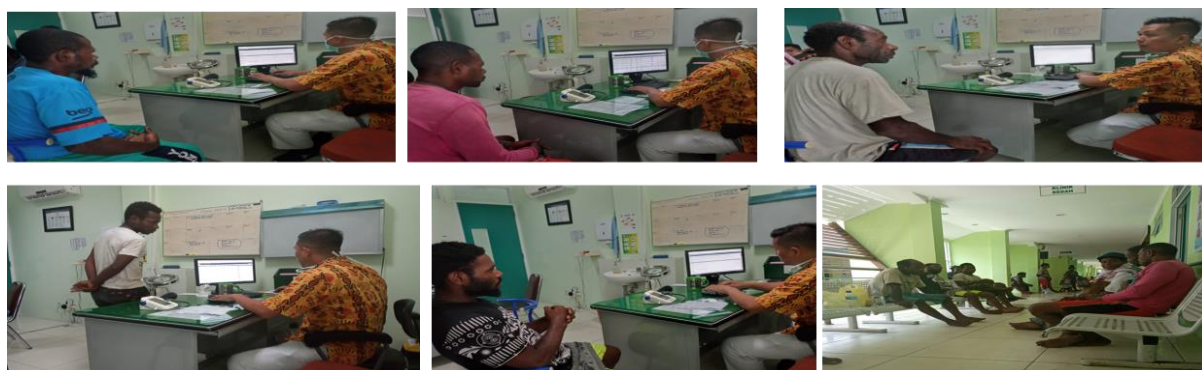
Local CSOs under the leadership of LEPEMAWI have been advocating strongly for the people. The process of drafting and consultation about the affected communities did not even involve the people who were affected by the tailings disposal from Freeport Mine. Agimuga and Jita, totalling 18 villages from downstream and coastal areas, who were victims, were also cut off from the social services. There were people along the five rivers missing in the concession area list, namely the Ajikwa, Nipa, sampa, Minarjewi and Yamaima rivers according to LEPEMAWI and JATAM records. The tribes there not invited and ignored by the company during the meeting. According to Adolfina, Sempan tribe in Agimuga and Jita, Amungme tribe in Agimuga and Jita as well as the Amungtau tribes who were excluded from the Freeport's list have formed LEPEMAWI, to advocate as an organization for the recognition by the company and the government.

According to article 60 of Law No. 1 of 2014 in conjunction with Law No. 27 of 2007 concerning Management of Coastal Areas and Small Islands, indigenous peoples or affected people have the right to obtain information, submit reports and complaints to object to all investment plans and business activities in their territory.

It should be noted, previously Freeport had also violated contract of work by carrying out 22 activities or activities that were not listed in their 1997 contract. These violations were in the form of mining expansion, underground mining activities, waste disposal, construction of the west and east embankments at the mouth of the Ajkwa River to mining exceeding the maximum quota. Until now, the total claims of 17 new activities or activities cannot be known because they are not transparent and are not open to the public and even residents.

Merah Johansyah said that in the midst of a pandemic like this, Freeport should stop all its mining activities, as has been urged by the Energy and Mining Workers Union of the Indonesian Workers Union (SP KEP SPSI) Mimika Regency because more FI workers are exposed to positive COVID-19. 19.

However, the FI did not respond to this, they took advantage of the situation to speed up the concession reform process and manipulate residents.



**Fig 21:** The CSOs assisted victims of Sore skin to the clinic for medication.



**Fig 22:** CSOs doing awareness to the surrounding communities on the pollution and health issues affecting the communities. They were also visited by the police and the surrounding communities.

#### **J. Recommendation**

The local people through the coalition of CSOs under LEPEMAWI are appealing to;

- PT. Freeport Indonesia and the Regional Government as the main actors should find solutions immediately for communities isolated from sea transportation routes to three districts, namely Agimuga, Jita and Far East Mimika Districts of the 23 villages.
- Local and Central governments should work in partnership with customary rights holders to document and account for the damages caused by the disposal of tailings and industrial waste into the river system.
- Freeport Mine, Regional Government and the Provincial Government together with the Central government should do an independent AUDIT of the Damages to the Environment, and compensate the people affected by the pollution over the years.

To the President of the Republic of Indonesia

- The President of Indonesia to direct the Ministry of Environment and PT. Freeport Indonesia to do honest testing of the toxicity of the surrounding environment food sources and publicise the environmental report,
- The President to inform PT. Freeport Indonesia to pay compensation to the people of Southeast Timika for the damages caused by the pollution

To NGOs both domestic and abroad



- We appeal to the NGOs and INGOs for advocacy and campaign against the Indonesian government and Freeport Indonesia to pay compensation for the damages done to the environment and the people of Timika
- We also appeal for support in kind or finance towards the assisting the people of Southeast Timika who are displaced by the pollution at the moment.

*By: Adolfina Kuum Chairperson of the Community Care for the Environment or Institute for Community Care for the Far East Mimika Region (Lepemawi - Timika Papua)*