Report on Monitoring in the Philippines

Human Rights and Environmental Impact of Nickel Mining at Rio Tuba

electronics watch

Responsible public procurement. Rights of electronics workers.

Cover image:

Rio Tuba Nickel Mine and the adjacent processing plants

(Photo by FoE Japan, 2017)

Electronics Watch is an independent monitoring organisation for public buyers. We help public sector organisations work together, and collaborate with civil society monitors in production regions, to protect the rights of workers in their electronics supply chains. Electronics Watch affiliated public buyers are in Australia, Austria, Belgium, Denmark, Germany, the Netherlands, Norway, Spain, Sweden, Switzerland, and the UK. Our monitoring partners work in Bolivia, China, Czechia, DR Congo, Hungary, India, Indonesia, Malaysia, Mexico, the Philippines, Poland, Taiwan, Thailand and Vietnam.

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HEKS EPER Bread for all.

The author(s) bear the sole responsibility for the contents of this report.

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Background

In 2021, Electronics Watch launched a monitoring pilot of mining operations linked to global electronics supply chains. This project is co-funded by HEKS (formerly Bread for all)[1] and includes monitoring in the Philippines, the Democratic Republic of the Congo, and Bolivia. Electronics Watch has been working with its monitoring partner, Pacific Asia Resource Center (PARC), and their partner, Friends of the Earth Japan (FoE Japan), on nickel mining in the Philippines. PARC is a people's think tank based in Tokyo and works to connect various social movements for common purposes.

The Island of Palawan is home to the largest nickel mines in the Philippines. Mining and related processing have taken place since the 1970's in this region. The village of Rio Tuba is in the Municipality of Bataraza, Province of Palawan. The Rio Tuba Nickel Mining Corporation (RTNMC) started open pit mining in 1975. It is currently the largest producer of lateritic nickel ore[2] in the Philippines. Sumitomo Metal Mining Co. Ltd. (SMM) is a Japanese company engaged in development, manufacture and sales of nickel products. In the 2000's SMM established the Coral Bay Nickel Corporation (CBNC) in Bataraza. Berong Nickel, and Citinickel Mines and Development are also active in mining nickel on the island.

1 www.heks.ch

2 Lateritic nickel ores account for about 70% of known global nickel resources and are found close to the earth's surface making it easily accessible for the nickel industry. Lateritic ore is found in tropical locations such as the Philippines and Indonesia.

Inside Rio Tuba Nickel Mine Premises
(Photo by FoE Japan, 2012)

Plant I and II of Coral Bay Nickel Corporation
(Photo by FoE Japan, 2012)

Palawan is known for its diverse and endemic flora and fauna. Many of the endemic species are also considered rare, threatened or endangered. Nickel mining has caused environmental destruction and led to peoples' struggles against the expansion of mines. The Strategic Environmental Plan for Palawan Act (SEP law/ Republic Act No. 7611 of 1992)[3] protects the natural habitat and the resources.

Currently, mining companies are seeking to expand mining operations. With plans to quadruple the mining area, the potential environmental and social impact is enormous.

Battery Supply Chain Linkages

The main shareholder of RTNMC is Nickel Asia Corporation (NAC) with 60% of the shares. Sumitomo Metal Mining Co., Ltd. holds 26% of NAC shares. Sumitomo Metal Mining Co. Ltd. (SMM) also holds 54% of the shares of Coral Bay Nickel Corporation (CBNC). Nickel is produced by CBNC through its High-Pressure Acid Leach (HPAL) process.[4] It is then shipped to refinery plants owned and operated by SMM in Japan, to be refined into battery materials.

Some of the most important buyers of SMM battery material are the Japanese electronics company Panasonic and the auto maker Toyota.

3 Strategic Environmental Plan (SEP) for Palawan Act (No. 7611). See, for example, http://extwprlegs1.fao.org/docs/pdf/phi19797.pdf.

4 High Pressure Acid Leach (HPAL) is a process used to extract nickel from laterite ore bodies. The HPAL process utilizes elevated temperatures, elevated pressures, and sulfuric acid to separate nickel from the laterite ore. https://tinyurl.com/2p87tbxy

Tesla's Model S exclusively uses lithium-ion batteries supplied by Panasonic. Multiple reports show that Panasonic batteries are used in Tesla's Model S, Model 3 and the more recent Model Y. Although Tesla has begun diversifying its battery suppliers to include CATL, LG Chem and Samsung SDI, Panasonic remains the exclusive supplier for some models at least until 2023. Based on the current data we cannot exclude supply chain linkages to lithium-ion batteries in mobile devices.

Gathering Data

FoE Japan has been monitoring in Rio Tuba continuously since 2006. They have focused on nickel mining operations by RTNMC and hydrometallurgical processing operations by CBNC. In January 2009, FoE Japan conducted interviews[5] with a total of 133 indigenous Palawan households. They documented Palawans' experiences of changes in the environment, their livelihoods and health since the start of CBNC operations. Considering the widespread presence of skin conditions, FoE Japan worked with water analysis experts from 2009 to 2011 to understand the extent of water contamination in the area. In the following eight years, they collected 74 water samples in key contaminated areas during the dry and wet seasons.

Water sampling at the water pocket close to the stockpile

(Photo by FoE Japan, Oct. 2011)

Test tube results from the location

(Photo by FoE Japan, Oct. 2011)

5 From January 12-18, 2009, random visits were made to each of the mainly indigenous households in the villages of Sumbiling, Taratak, Ocayan, Rio Tuba, and Iwahig, and interviews were conducted using a questionnaire.

Pipeline carrying water from CBNC tailings facility to the sea near Tagdalongon
(Photo by FoE Japan, 2010)

Respiratory Problems and Skin Diseases

Residents experienced health issues after plants began operations. The most reported symptoms were coughing and headaches. In 2005, residents reported a sudden increase in skin diseases among children. Elderly people in the community testified that skin diseases had never occurred before. They suspected a relation with the wastewater from the plant.

Even though FoE Japan did not find causal linkage between the wastewater from the plant and the skin problems during monitoring, the wastewater from the plant nonetheless raised suspicion among the residents. Wastewater contained tailings which are the left-over materials from the processing of mined ore. Tailings generally leave the mine processing plant in a slurry form (diluted with water) and are stored on the surface in storage facilities called tailings dams, or tailings storage facilities.[6] Wastewater from the tailings storage facility of the processing plant is transported through a pipeline and discharged in the sea near Tagdalongon.

6 https://tinyurl.com/2s3f4f2w

Togpon is the only river that has tributaries that flow out from the mine development area and into Rio Tuba Inlet. Only in the Togpon River did FoE Japan and water analysis experts find hexavalent chromium. Hexavalent chromium is a known carcinogen which damages the liver and skin and has been linked to nickel mining worldwide.[7] The chemical was detected in 2010 in drinking water access points for residents along Rio Tuba. Continued water sampling tests clearly found hexavalent chromium exceeding WHO standard levels[8] for 11 consecutive years, particularly during the wet season. The skin condition can be caused by the hexavalent chromium pollution and other pollution found in the wastewater. It is not likely that the skin conditions can be fully explained by the hexavalent chromium pollution alone. The ongoing pollution raises questions of accountability and companies' ability to exercise proper environmental due diligence.

Engagement with Mining Companies for Safe Drinking Water

In 2013, after FoE Japan began conducting water sampling analyses, the developers jointly began a programme to establish pipelines that distribute safe spring water collected from nearby mountains. However, the volume of water flowing into the pipeline is much less than the local population requires. Residents near the end of the pipeline report that faucets in their area are often dry. FoE Japan has been requesting SMM to resolve the river pollution issues linked to hexavalent chromium. Data of water samples from 2009 to 2019 indicates the hexavalent pollution of the water sources remains unresolved. Although Covid-19 travel restrictions have not allowed monitoring partners to conduct on-the-ground monitoring work, continued dialogue with SMM suggest no concrete actions have been taken as at April 2022.

7 https://www.theguardian.com/global-development/2022/feb/19/we-are-afraid-erin-brockovich-pollutant-linked-to-global-electric-car-boom.

8 WHO recommends hexavalent chromium in drinking waters to be lower than 0.05mg/litre.

Human Rights and Environmental Impact of Mining

According to the Philippines Indigenous Peoples Rights Act 1997, mining projects must secure "free, prior and informed consent" from those who will be directly impacted. Free, prior and informed consent is a concept included and internationally acknowledged in the United Nations Declaration on the Rights of Indigenous Peoples,[9] adopted by the United Nations General Assembly in 2007. Evidence shows several irregularities in the 2003 Memorandum of Understanding in obtaining free, prior and informed consent of the people for the mining project in Palawan:

- The signatory of the MOU was a "tribal chieftain" externally appointed by the National Commission on Indigenous Peoples (NCIP), who signed without going through the traditional decision-making process. The traditional decision-making process is led by *Panglima*, a hereditary leader. In addition, the document was dated December 2003 and was to be effective for a five-year term from January 2004 to December 2008. However, this was well into the construction of the processing plant. Therefore, any construction that took place before January 2004 would have been taking place in violation of the Indigenous Peoples Rights Act.
- The developers submitted the Environmental Impact Statement to the government of the Philippines in 2002. This statement included a document that purportedly expressed the consent of affected communities. However, the signatures in that document had been lifted from signatures provided by residents attending consultation meetings. Those residents were not informed that their signatures would be used for this purpose. They did not intend to signal their consent to the development by attending consultations.

A sacred hill where Palawan indigenous people used to gather goods, medicinal herbs and water was turned into a 13-hectare limestone quarry. This is only one example of many of the impacts of mining on the traditional indigenous communities.

9 See, Article 19, United Nations Declaration on the Rights of Indigenous Peoples, https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf and Philippine Indigenous Peoples Rights Act (1997/No. 8371) https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf.

The sacred hill in 2002
(Photo by Palawan NGO Network)

The sacred hill in 2010
(Photo by FoE Japan)

Social Development Programmes

The developers have been implementing Social Development Management Programmes (SDMP) at the affected villages and indigenous communities. These include education scholarships, livelihood support and medical services. However, these services do not equally benefit all residents. The chieftain, or the barangay captain as in the case of the non-indigenous people, and those working or having an association with the projects have greater access to the benefits from the SDMP. The inequity of the SDMP created envy among residents, amplifying hatred towards some ethnic groups, and fragmenting communities. In addition, some programmes were planned without sufficient consultation with the community. For example, medication was provided to communities, but did not meet residents' demands, while the number of education scholarships were insufficient.

Mine Expansion to Meet Global Nickel Demand

Concerned community members and NGOs[10] have voiced strong opposition to RTNMC's expansion plans and asked local government agencies not to issue mining permits. A national regulation limits human activity in the areas in question. RTNMC has been lobbying

10 According to the Aarhus Convention, the affected public and environmental non-governmental organisations have the right to participate in environmental decision-making. See, https://ec.europa.eu/environment/aarhus/legislation.htm.

local politicians to remove the designated environmental protection areas to continue expansion of mining areas. FoE Japan monitoring suggests that rivers can be heavily polluted for years by mining, impacting the food security of farming communities in the region.

Way Forward

The mining operations of Palawan are continuously expanding and unless corrective actions are taken, hexavalent chromium pollution levels will continue to exceed WHO safe water standards. Mining companies should follow local customs and comply with regulation and standards[11] and national regulation and follow international standards put in place to give rights-holders the power to protect their livelihoods and environment.

Electronics Watch is working with PARC and FoE Japan to understand the SMM supply chain and monitor their mining operations in the Philippines. We seek to protect the rights of the miners and the communities.

Please see our videos on mining in Palawan, which demonstrate the need for a just transition to achieve climate goals:

A Cry from Palawan – The Environmental and Social Cost of Energy Transition

What is at Stake Behind the Energy Transition? – The Real Cost of Nickel Mining in the Philippines

11 The State shall protect the rights of Indigenous cultural communities/indigenous peoples to their ancestral domains to ensure their economic, social and cultural well-being and shall recognize the applicability of customary laws governing property rights or relations in determining the ownership and extent of ancestral domain. When disputes involve Indigenous cultural communities/indigenous peoples, customary laws and practices shall be used to resolve the dispute. https://www.officialgazette.gov.ph/1997/10/29/republic-act-no-8371/ Refer to Section 2b, 2f and 65 of the The Indigenous Peoples' Rights Act of 1997.

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