

HUMAN RIGHTS WATCH

"What Do We Get Out of It?"

The Human Rights Impact of Bauxite Mining in Guinea



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Printed in the United States of America

ISBN: 9781623136604

Cover design by Rafael Jimenez

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OCTOBER 2018 ISBN: 9781623136604

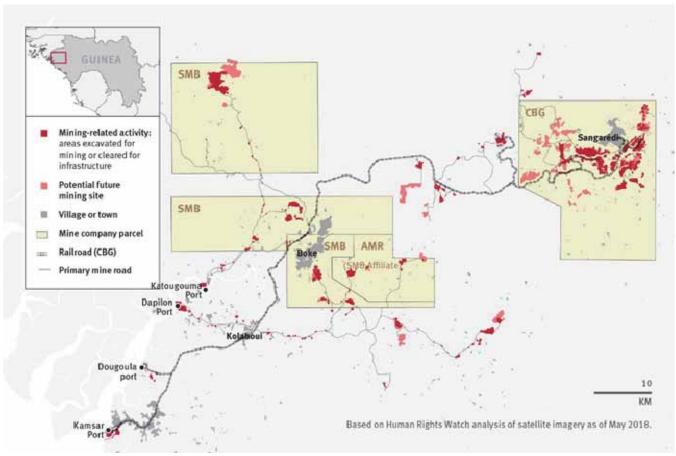
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Map



Mining activity in areas in the Boké region visited by Human Rights Watch. © 2018 Human Rights Watch.

Summary

Bauxite mining in Guinea, one of the world's poorest countries, is booming. Since 2015, the government of President Alpha Condé has transformed Guinea into a top global exporter, and the biggest to China, where the bulk of global aluminum is produced. Bauxite from Guinea now makes up a large proportion of the aluminum used across the world in car and airplane parts and consumer products like beverage cans and tin foil. With several more companies preparing to begin exports, Guinea, which has the world's largest bauxite deposits, may soon become the largest global producer.

The Boké region, in northwestern Guinea, has been the center of much of the bauxite sector's recent growth. The region now has dozens of open-sky bauxite quarries, whose red earth makes them hard to miss in Guinea's often verdant landscape. Mining companies use heavy machinery to remove any earth covering the bauxite and dynamite blasting to break up the ore found underneath. A network of mining roads and railways, used to transport bauxite to ports, crisscross once isolated rural communities. Industrial ports, where bauxite is loaded onto barges or ships for export, are juxtaposed with the mangroves, paddy fields and local fishing ports that formed the backbone of riverside communities' livelihoods.

Although Guinea's bauxite boom provides much-needed tax revenue for the government, thousands of jobs, and profits to mining companies and their shareholders, it has profound human rights consequences for the rural communities that live closest to mining operations. Mining companies take advantage of the ambiguous protection for rural land rights in Guinean law to expropriate ancestral farmlands without adequate compensation or for financial payments that cannot replace the benefits communities derived from land. Damage to water sources that residents attribute to mining, as well as increased demand due to population migration to mining sites, reduces communities' access to water for drinking, washing and cooking. Women, who are primarily responsible for fetching water, are forced to walk longer distances or wait for long periods to obtain water from alternative sources. The dust produced by bauxite mining and transport smothers fields and enters homes, leaving families and health workers worried that reduced air quality threatens their health and environment.

Riots broke out in Boké in April and September 2017, due to anger at inadequate local services, particularly a lack of water and electricity, resentment at the rapid expansion of mining and broader concerns about the impacts of mining on local communities.

Thousands of young people ransacked government buildings and erected informal checkpoints, preventing mining companies from operating. "If frustrations accumulate, it can be anything that sparks the powder," a senior ministry of mines official told Human Rights Watch. "The population sees the financial investment a company is making, they see taxes being collected, trucks taking bauxite from their farmland abroad [for export], they breathe the dust, and they ask, 'what do we get out of it?'"

Guinea's government told Human Rights Watch that, in view of the potential human rights issues associated with mining, the government "utilizes fully its state power to ensure Guinean laws [relating to the mining sector] are respected and to oversee the activities of mining companies." But the government's focus on growing the bauxite sector has at times appeared to take priority over social and environmental protections. "We wanted mining activities to begin first, while there was a lack of supply [from other countries] in the market, while at least ensuring the minimum legal rights were protected from the beginning," said Saadou Nimaga, secretary general of the ministry of mines. "We're aiming to integrate environmental and social protections gradually."

This report, based on more than 300 interviews in more than 30 mining-affected villages in the Boké region, as well as dozens of interviews with local and national government officials, civil society groups, environmental scientists, public health officials and company representatives, documents how the practices of mining companies, when combined with inadequate government oversight, upend the lives and livelihoods of rural communities. The report's research and conclusions are based on the conduct of two mining projects, chosen because they were, at time of writing, Guinea's two largest bauxite producers.

The first project, La Société Minière de Boké (SMB), is a joint venture that includes a Chinese company that is the largest aluminum producer in the world. The SMB consortium has expanded rapidly since it began operating in 2015 and is already Guinea's biggest exporter. The second, La Compagnie des Bauxites de Guinée (CBG), is a decades-old company, co-owned by the Guinean government and multinational mining companies,

including Alcoa and Rio Tinto. This report considers the impact of these two projects on communities' land and livelihoods, access to water, air quality, and health.

Loss of Land and Livelihoods

Dozens of farmers from 16 villages located near mines, ports and mining roads described how mining companies have expropriated ancestral farmlands without adequate compensation or in exchange for financial payments that don't replace the benefits families and communities derived from land. "They've expanded into our fields, the areas we depended on for food. And now much of our fertile land has been taken from us," said a community leader from Boundou Waadé, a village surrounded by five CBG mines. "The company has destroyed our means of subsistence."

Rural land is Guinea is typically organized by reference to customary (i.e. traditional) laws, which recognize the right of a family, linage or community to land based on their longstanding connection to the local area. Although Guinea's land law can be interpreted to recognize customary rights, obtaining legal protection in practice requires communities or individuals with customary land tenure to have formally registered or recorded their landownership. Very few rural farmers have done this—in large part due to the government's failure to roll out a 2001 rural land policy intended to facilitate land demarcation, registration and protection in rural areas. Since the passage of a 2011 mining code, the government has also failed to pass regulations establishing compensation standards for land acquisitions in the mining sector—a missed opportunity to provide clearer protection for the land rights of rural farmers and communities.

In the absence of clear protection for customary land rights, mining companies often maintain that rural land remains, in legal terms, "the property of the state," which has granted the company the right to exploit it. This interpretation allows companies to acquire land without the informed consent of rural farmers or without providing adequate compensation. In CBG's case, for example, local officials and community leaders said that for decades the company never paid compensation for land used for mining. "When CBG needed land, they just took it," said one community leader. CBG said it paid compensation in most cases and showed Human Rights Watch documented examples of compensation payments. Where compensation was paid, however, CBG often utilized outdated compensation standards, which severely undervalued farmers' crops, and did not

adequately compensate farmers for the value of the land itself, making it harder for farmers to find replacement land or to develop new revenue streams. "As we lose our land, we're forced to more frequently farm other areas, and so our land is becoming less productive," said a farmer from Hamdallaye, a village where satellite imagery shows that the community has lost 40 percent of its ancestral lands to CBG's mining activities. CBG in 2018 committed to deploy a new approach to compensation, in which farmers will receive replacement land from rehabilitated mining sites.

Although the financial compensation mining companies do pay—at times to the entire community, at times to individual farmers—can be a short-term windfall, it is difficult for subsistence farmers to use the money to develop sustainable sources of income in the longer term. SMB's cash-for-land approach, for example, which gives farmers one-off financial payments to reflect both the value of land and trees and crops growing it, has allowed the consortium to acquire land quickly to fuel its rapid expansion. But it has often left farmers without the resources, support or training needed to find new land or new livelihoods. "Compensation just comes in one go, whereas your crops and fields stay with you for many years, for decades even," said one farmer.

Mining executives said that individuals often refuse to accept alternatives to financial compensation but acknowledge the need for mining companies to combine financial payments with other forms of support, including training on how to manage compensation payments and assistance developing new sources of food and income. As things stand, civil society leaders said that, instead of reinvesting compensation money, farmers share it with family members, build new houses, or even send their children to Europe via the North Africa migration route. "I used the compensation money I got to send my two sons to Europe," a father told Human Rights Watch. "But since they arrived in Libya I've not had any news for about two months. I'm worried they are in prison or dead."

Dozens of farmers said that the impact of loss of land has been compounded by the damage caused by mining to remaining farmland, and other sources of livelihood, like fishing. "Now the mine has arrived, our fields are covered in dust," said one villager, who showed Human Rights Watch researchers trees and crops covered in a layer of red dirt. "When you cut a branch, dust just falls off it, and you're inhaling it. Why should we have to work like that?" Community leaders said that mining companies rarely accept that they are

responsible for the reduced productivity of agricultural land or reduced income from fishing and only occasionally provide compensation.

Although women participate in farming, the bulk of compensation for land belonging to families or communities is paid to men in family or community leadership roles. Land that men and women depended on and exploited is therefore replaced by financial compensation distributed only to a handful of largely male community leaders. "Our husbands just give us whatever they want, even if the products that came from this land were used by all of us," one woman told Human Rights Watch. While some men can at least obtain jobs at mining companies to replace lost income, women are rarely employed by mining companies, even though they are often responsible for finding alternative sources of food where land is lost to mining.

Reduced Access to Water

Unless managed appropriately, studies show that bauxite mining will have significant impacts on the hydrology of the surrounding landscape. Scores of residents told Human Rights Watch that they believe that mining had reduced water levels and quality in the local rivers, streams and wells that they rely on for washing, cooking and drinking, threatening the access to water of thousands of people. In several communities adjacent to SMB mines, damage to natural water sources meant villagers were for long periods forced to rely on SMB to bring them water in tankers. "Some days the water in the tankers is dirty," said one community leader. "So we have to conserve the clean water we have and wait for the next delivery."

Communities in the Boké region also told Human Rights Watch that the expropriation of land for mining or mining infrastructure had prevented communities from accessing streams and natural springs where they previously found water, while an influx of people seeking jobs in mines increased pressure on remaining water resources. Water scarcity means that women and girls, who are primarily responsible for fetching water, are forced to walk longer distances than they would ordinarily do, or wait longer to use overburdened remaining sources, such as boreholes or wells. A woman from a village near an SMB consortium port said she wakes up at 4 a.m. or 5 a.m. to get in line for water. "I take my children with me so that by the time we're finished they can go to school," she said.

Mining companies underscore that there are multiple reasons for inadequate access to water in the Boké region, including population migration, climate change-related factors and the aridity of the area, particularly in the dry season. They say they take steps to mitigate the impact of mining on local water sources and highlight their work to build boreholes and wells in mining-affected communities. The absence of public government or company data regarding the impact of mining on water levels and quality, however, makes it difficult to assess the adequacy of companies' responses.



A man washes clothes next to a mining road belonging to the La Société Minière de Boké (SMB) consortium. © January 2018. Ricci Shryock for Human Rights Watch. Local communities state that the construction of SMB's mining roads blocked rivers and streams, diverting their course and reducing water levels in local wells.

In SMB's case, research by Human Rights Watch suggests that the company has not done enough to prevent damage to water resources, with significant consequences for local communities. "The river where we draw water has been polluted by red mud that drains down from the mine," said one community leader from a village near an SMB mine. An April 2017 government inspection concluded that, "SMB has not taken any effective measure to reduce pollution of surface water by the transport of sediments into waterways that renders them murky and further contaminates them." A 2018 mining ministry-

commissioned audit found that, "[SMB's] mining roads demonstrate some important environmental limitations," including several technical deficiencies that could result in sediment flowing into rivers and streams. SMB told Human Rights Watch that the consortium has built or repaired 120 boreholes in local communities and said that it is only aware of one location in which mining had damaged local waterways, where the situation had been quickly remedied. But SMB, which conducted little or no monitoring of water quality or availability during the first three years it operated, lacks the data needed to support the contention that its operations have not affected access to water. The consortium told Human Rights Watch it began a water quality and availability monitoring program in 2018.

CBG has for decades built, operated and maintained a water treatment system and pipe network that provides running water to large areas of Sangaredi town, where its mines are located, and the neighborhoods where its workers live in the port town of Kamsar. But in six of the rural villages that surround CBG's mines in Sangaredi, residents said that years of mining have damaged local rivers and streams. "We used the river for drinking water, for washing and fishing—it was clean water," said a community leader from Boundou Waadé. "But CBG has exploited near the source of the river, reducing its flow, and red mud from the mines flows into it during the rainy season." CBG said it follows international best practices to prevent mining-related damage to water resources and Halco (Mining) Inc., the holding company that comprises CBG's private-sector shareholders, told Human Rights Watch that: "CBG is unable to address claims [relating to damage to water sources] of an unsubstantiated nature dating back as far as 1973."

The responsibility for monitoring the impact of mining on local water sources, however, belongs to mining companies, not local communities. Until 2017, CBG did not deploy the necessary monitoring tools—such as a model tracking the impact of mining on the flow of local rivers, streams and groundwater—to adequately track the impact of mining on water levels. CBG said it is now developing the monitoring tools that will allow the company to understand the impact of mining on local water sources.

Threats to Health from Reduced Air Quality

Scores of residents from the Boké region described how their lives had been blighted by the dust produced by the mining and transport of bauxite, with red dust entering villages

and homes and covering crops. "It gets everywhere, even into our food when we're cooking," said one woman from a village near an SMB hilltop mine. Villagers, many of whom said they believe mining is already contributing to respiratory illnesses, worry about longer-term health impacts. "When you come back from your fields dirty, and covered in dust, even if an illness doesn't show straight away, it can certainly appear later," said one community leader.

Doctors and health workers who spoke to Human Rights Watch said that, given the absence of public air quality monitoring data by mining companies and the lack of reliable local government health statistics, it is impossible to draw firm conclusions on potential associations between mining and respiratory illnesses. Many are worried, however, that reduced air quality from mining activities could contribute to negative health outcomes. "I don't think humans can coexist with the mine," said a health worker who serves villages where SMB operates. The Guinean government conducts only a very limited number of air quality measurements for each company each year, but in some cases, particularly in SMB's concession, the monitoring suggests at worst a potentially serious risk to public health and at best an urgent need for improved monitoring by mining companies and the government.

The dust blown from open-sky bauxite mines and storage areas and displaced from the roads on which the ore is transported is not normally more toxic than other forms of dust. But the World Health Organization (WHO) has said that exposure to any fine particle dust, which makes up a portion of the dust produced by mining activities, can cause, trigger or exacerbate respiratory and cardiovascular diseases. Vehicle exhaust emissions are also a proven cause of respiratory illness.

Residents of the dozens of villages and homes located along the SMB consortium's unpaved mining roads, on which hundreds of trucks transporting bauxite travel every day, are the most acutely concerned by dust and vehicle emissions. "Even our saliva has changed color due to the dust," said a woman from a village adjacent to a mining road. A 2018 mining ministry-commissioned audit estimated that the truck traffic on SMB's roads is, "as many as 4,000 or 5,000 vehicles per day." CBG transports ore for export by train, but villagers located close to active mines operated by both CBG and SMB remain concerned about air quality, as do those in residential neighborhoods close to a CBG processing plant where bauxite is crushed and dried.

SMB denies that its activities are negatively impacting air quality and health. After initially operating with far from adequate mitigation measures for limiting dust emissions, SMB significantly lowered dust levels on its mining roads in the 2018 dry season by more frequently watering its mining roads. Communities remain concerned, however, about the impact on air quality of both exhaust emissions and dust, even if dust levels have somewhat reduced. A joint ministry of mines and ministry of environment inspection in February 2018, the middle of the dry season, recorded levels of fine particulate matter well above the levels recommended by the WHO in four villages near SMB's operations. SMB's leadership disputes the validity of these findings, noting that testing was only conducted in each location for a matter of minutes. SMB began conducting its own air quality testing in 2018 but said that the results will not be made public until the end of 2018. CBG began comprehensive air quality monitoring in 2017 and has not yet released updated public data, although it told Human Rights Watch in July 2018 that its monitoring shows that air quality, including particulate matter, is within the highest-level targets established by the WHO.

Access to Remedies

Community leaders told Human Rights Watch that mining companies often do not promptly or meaningfully respond to their complaints about the impacts of bauxite mining on their land, livelihoods, health and water sources. "Many [community members] testified to the fact that all complaints addressed directly or indirectly to CBG went astray and did not result in any remedial action," concluded a CBG-commissioned study in December 2014. CBG has since implemented a new grievance mechanism, in which minor complaints are dealt with by community relations staff but serious or persistent problems are elevated to senior management. Local officials said that, while the new mechanism is slow, they believe CBG does make a good faith effort to resolve complaints.

Communities where the SMB consortium operates said that, while community relations staff meets frequently with residents, these meetings rarely lead to action to address complaints. "I'm fed up with meeting with the company representatives," said one community leader. "We always have meetings with them, and nothing changes." SMB did not refer Human Rights Watch to a copy of its grievance policy, but said that nine complaints had been filed by communities or individuals in 2017—none by women—with six resolved. In view of the limited number of complaints filed, and the widespread frustration

communities expressed with the consortium's failure to resolve problems, SMB should immediately develop and publish an effective grievance process and ensure that it is widely understood and utilized by communities.

Where communities asked local authorities to mediate with mining companies, many residents said this often did not lead to the resolution of issues. "Each time it's the same speeches that are made," said one community leader. "There's no follow up, so we don't think the authorities are really fighting [for] our side in all this." Several community leaders said that in the absence of constructive ways to resolve grievances, they had no option but to stage demonstrations to disrupt mining activities to force companies and the government to listen to their concerns. "We organized a demonstration in 2015 to stop CBG destroying one of the sources to the river we use for water," said a youth leader from a village near Sangaredi. "But the local authorities said that, if we continued, we'd be arrested. Of course, once we left, CBG continued their work regardless." SMB has paid villages a bonus—in the form of rice and other supplies given to community leaders—if they do not disrupt mining activities over a three-month period. "We don't need their rice," one villager told Human Rights Watch. "They just need to face up to the things that we've asked them to fix."

Although women are acutely impacted by loss of land to mining, reduced access to water, and concerns over health, strong social norms that discourage women from equal participation in village governance mean that women face barriers in lodging complaints. Mining companies said that they make sure to include women in community meetings, and to ask them for their views, but women said that it is difficult to speak frankly in the presence of their husbands or male elders and that the solutions agreed often do not adequately address women's needs.

Government Oversight

The capacity and resources of the government agencies that oversee the mining industry have improved in recent years, due in part to training and equipment from international donors. Nevertheless, government institutions still have nowhere near the personnel, resources and, at times, political will to effectively oversee an ever-expanding list of projects, with the government's focus on growing the mining sector at times trumping environmental and social concerns. "We've got to be careful," said a senior mining

ministry official. "We've signed up to this whole concept of 'responsible mining,' but we need to be careful not just to be happy only with words on the page."

In SMB's case, the government took shortcuts during the approval process for new projects to ensure mining started quickly, prioritizing investment over a comprehensive analysis of social and environmental risks. Indeed, despite deficiencies with the environmental and social impact assessments first submitted by SMB, the government allowed the project to rapidly move forward, leading to tangible environmental and social consequences for communities. "We had a decision to make," Saadou Nimaga, Secretary-General of the ministry of mines told Human Rights Watch. "If we had to wait for all these studies, the market wasn't going to wait. We knew already broadly what the impacts of mining would be." When asked about problems with its environmental and social impact assessments, the SMB consortium told Human Rights Watch that all its documentation had been approved by the Guinean government. SMB did state, however, that it is, "currently taking different actions to address the weaknesses of its first round of impact assessments and environmental management plan," including to address dust emissions and impacts on surface water. SMB in February 2018 commissioned an international consultancy to update its impact assessments and revise its management plan.

Once mining begins, environment ministry officials said that they can in theory refuse to renew a company's environmental certificate, required to operate in Guinea, where deficiencies are identified. "If the certificate isn't renewed, the company is then in a position of illegality in relation to Guinea's environmental laws," said Seydou Barry Sidibé, the secretary general of Guinea's environment ministry. However, environment ministry officials acknowledged that it is difficult for the government to close large-scale, profitable projects. "We are a poor country, a country still developing, and so we need jobs for our young people, schools for our children," said Sidibé. "So, while some mining companies do not respect environmental and social norms, it's not easy for us to suddenly close these companies down."

Although the government can in principle fine companies in breach of environmental obligations, national and local officials said that they believe that the contribution of mining to the Guinean economy protects companies from government sanctions. "I think criticizing SMB has become taboo inside the government," said a senior mining ministry official. "There's a political pressure that the project goes fast, because they are getting

things done, and their revenue is benefitting the government and the state. It's left little chance for the Guinean government to control what's happening on the ground."

A lack of transparency from mining companies and the Guinean government regarding the social and environmental impacts of mining compounds the absence of effective state oversight. Civil society organizations and even local officials often struggle to obtain copies of impact assessments, environmental social management plans, inspection reports, audits and monitoring data.

Guinea's National Assembly has commissions on mining and on natural resources that should provide oversight of the government's regulation of the mining sector, including through field visits to mining facilities. Because President Condé's ruling coalition, however, holds the majority of seats in parliament they are able to and have blocked proposed plenary debates in the Assembly or the formation of parliamentary commissions of inquiry to investigate allegations of misconduct by companies or inadequate government oversight.

What Needs to Be Done

As Guinea's bauxite boom continues, it is imperative that the government's capacity to oversee the mining sector and protect the rights of community members keeps pace. The government should begin by enacting long-delayed regulations establishing a uniform compensation process and standards for land acquisitions in the mining sector. The government, with support from international donors, should also strengthen national and local-level government institutions to enable them to provide effective and more regular supervision of mining companies. To enable civil society organizations to supplement government oversight, the government should ensure greater transparency in the sector, including by requiring publication of environmental and social impact assessments (ESIAs), environmental and social management plans (ESMPs), government and company periodic monitoring reports, and public data—from both companies and the government—on the health and environmental impacts of mining.

Although the Guinean government bears the primary responsibility for protecting communities, companies also have an obligation to ensure that their activities do not result in negative environmental, social and human rights impacts. Companies should

provide replacement land or livelihood restoration assistance to households who lose land to mining, ensuring that any financial compensation is provided in a way that promotes economic self-sufficiency. In view of the distinctive impact of mining on women, and the barriers they face in airing grievances, companies should consult regularly with women and ensure that remedies include specific solutions for women. Companies should also monitor air quality and water levels and quality, publish the results and publicly explain potential health impacts. Finally, they should ensure that their staff are adequately resourced and trained to effectively monitor the impacts of mining and establish effective grievance mechanisms to remedy adverse consequences. International financial institutions, including the IFC, should ensure companies meet the standards required by loan agreements, including through regular monitoring of compliance and, where necessary, appropriate sanctions.

Where mining companies fail to meet their obligations, the Guinean government and parliament should hold them accountable. While a development-focused government might want to attract investment into the sector, it should also fine, suspend or stop mining projects where companies egregiously or persistently flout the environmental, social and human protections enshrined in Guinean law. A failure to do so could mean that, far from being part of the solution to Guinea's drive for development, mining remains a major threat to communities' livelihoods and way of life.

Recommendations

To the Government of Guinea

- Strengthen the approval process for new mining projects: Only approve
 proposed extractive industries projects where applicants' have adequately
 assessed human rights, social and environmental risks and demonstrated their
 ability to protect communities from negative impacts.
 - o Require that affected communities have access to independent legal advice when environmental and social impact assessments (ESIAs) are conducted by companies and reviewed by the Guinean government. This legal advice should discuss: the government and mining companies' obligations during the ESIA process; how communities can provide input into the ESIA process, as well as how communities can challenge the arrival of mining operations in their locality; the steps that communities or individuals with customary land tenure can take to protect their property rights.
 - Publish online and post in prefectures and subprefectures decisions to approve an ESIA, including additional obligations imposed on companies if the approval was subject to conditions.
 - Ensure that two civil society representatives participate in follow up meetings to determine whether the company has met the conditions imposed when an ESIA was first approved.
- Improve monitoring of mining companies: Strengthen the capacity of government institutions at all levels, particularly the Ministry of the Environment and the Office of Environmental Studies and Evaluation (*Bureau Guinéen d'Etudes et d'Evaluation Environnementale* (BGEEE)), to effectively monitor the human rights, social and environmental impact of mining operations.
 - Provide the BGEEE with adequate resources and personnel to conduct week-long inspection missions to every active mining company by the end of 2019 and every six months by the end of 2020.
 - o Increase the number and capacity of trained staff in the Ministry of Environment and BGEEE able to analyze ESIAs, monitor compliance reports, and form inspection teams to verify that companies adhere fully to their environmental and social obligations. Strengthen the capacity of staff to

- oversee currently-neglected impacts of mining, such as the consequences of resettlement and land expropriations.
- Operationalize Prefectural Committees for Environmental and Social Supervision (Comités Préfectoraux de Suivi Environnemental et Social (CPSES)) by providing the equipment and funding, from mining companies if appropriate, needed for CPSES members to conduct site visits every quarter to each company operating in their locality. Ensure that the reports that result from CPSES missions are made public.
- o Ensure all monitoring includes detailed consideration of impacts on women.
- As well as monitoring the impact of individual mining projects, monitor and publicly report on the cumulative impacts of mining on the environment and livelihoods, including impacts exacerbated by climate change.
- Sanction non-compliant companies: Develop and deploy a broader set of sanctions for companies that violate Guinean laws regarding social and environmental management. Potential sanctions should include meaningful financial penalties, temporary suspension of activities for a defined period and, ultimately, the project's termination.
 - Publish a policy paper describing the government's approach to sanctioning mining companies and the circumstances in which each form of sanction will be imposed.
 - Ensure that all sanctions, and the reasons for their imposition, are made public.
- Improve transparency: Improve the access of affected communities and civil society organizations to key documents, from the government and mining companies, related to the human rights, social and environmental impacts of bauxite mining.
 - o Key documents include environmental and social impact assessments; government decisions validating impact assessments, including the conditions imposed on companies where approval was subject to conditions; resettlement plans; monitoring reports or audits conducted by the government and companies; decisions regarding the renewal or otherwise of companies' operating permits, as well as decisions describing sanctions imposed on companies.
 - Summaries of key documents should be translated into local languages,
 made available online, and posted in public buildings, including in mining-

- affected communities. Government authorities should not only make the information accessible upon request, but also proactively disseminate information that is relevant to the protection of rights of affected communities.
- Ensure that civil society organizations, mining-affected communities and vulnerable groups, including women, can meaningfully participate in consultations regarding proposed regulations or new policies in the mining sector.
- Implement land reform to protect customary land rights: As part of a wider land reform process, urgently take action to identify, secure and demarcate customary land rights, particularly in areas where mining exploitation is planned. Ensure there is a legal mechanism to protect such land rights.
- Develop regulations on land acquisitions in the mining sector: Draft and adopt regulations describing the process to be followed to resettle and compensate communities who lose land to mining, whether homes or agricultural land. These texts, which should be developed in consultation with civil society and affected communities, should:
 - Make clear that compulsory land acquisition should only be a last resort, where necessary and proportionate, and only to the minimum extent necessary.
 - Clarify whether the Guinean government and companies are required to follow Guinea's public utility process for compulsory land acquisitions, including land occupied by farmers with customary land tenure. If they are not required to do so, any alternative mechanism should reflect the safeguards for compulsory land acquisitions and involuntary resettlement contained in human rights law.
 - Ensure that individuals with customary land tenure, and occupants of land who have planted crops or built infrastructure on land, are adequately compensated where land is acquired for mining and that their living standards are not negatively impacted.
 - Address the role that the prompt rehabilitation of land can play in restituting land, including by discussing how to secure the land tenure rights of local communities when land is restituted.

- o If the provision of replacement land is not possible, require companies to provide both financial compensation for the value of land and property and livelihood assistance to restore or improve communities' living standards.
- Provide safeguards to ensure that women can participate in compensation processes and receive adequate compensation, replacement land and/or livelihood assistance.
- Require companies to monitor and publicly report on the effect of land acquisitions on living standards, including with disaggregated data on women.
- Monitor and protect access to clean water: Monitor the effectiveness of companies' measures to protect access to water, including by monitoring water levels and quality, making public monitoring data, and explaining any potential health impacts.
 - Only approve ESIAs and environmental and social management plans
 (ESMP) if they contain adequate measures to protect natural water
 resources and/or to provide communities with alternatives water sources.
 - Require companies to conduct monitoring of water levels and quality that meets industry best practices and to publish the data.
 - O Where government or company monitoring suggests mining is impacting access to clean water, ensure companies take immediate steps to address the cause. If necessary for public health or to protect access to water, suspend mining activities until the problem has been addressed.
- Monitor and protect air quality: Monitor air quality in residential areas affected by mining, publish the monitoring results and publicly explain potential public health impacts.
 - Partner with international public health experts to improve the BGEEE's
 capacity to conduct air quality monitoring, including by improving the
 equipment used for monitoring and significantly increasing the frequency
 of monitoring.
 - Do not approve ESIAs unless they include quantitative estimates of the impact of mining operations, including the transport of bauxite, on air quality.
 - Require companies to conduct air quality monitoring that meets industry best practices and to publish air quality data.

- Where government or company monitoring suggests that levels of particulate matter or other emissions exceed the World Health
 Organizations' recommended levels, ensure companies take immediate steps to address the source of the emissions. If necessary for public health, suspend mining activities until the source of emissions has been addressed.
- o In coordination with the Guinean health ministry, assess whether adequate health services are in place to address the health impacts of reduced air quality, especially for children and older people.
- Adopt the Voluntary Principles on Security and Human Rights: Adopt and fully
 implement the standards of the Voluntary Principles on Security and Human Rights,
 a multi-stakeholder initiative by governments, major multinational extractive
 companies, and NGOs that seek to address the risk of human rights abuses arising
 from security arrangements in the oil, gas and mining industries.

To Mining Companies

- Address weaknesses in past ESIAs: Redo impact assessments that did not
 involve effective consultation with local communities or which did not adequately
 assess or propose mitigation for the environmental and social consequences of
 mining. Ensure the consultation process is inclusive of women and other
 marginalized members of the community.
- Improve internal monitoring of social and environmental impacts: Ensure that existing community relations teams and health, safety and environment staff are adequately staffed, resourced and trained to effectively monitor the environmental, social and human rights impacts of mining.
- Conduct independent monitoring: Commission independent monitors, paid for
 by the company but operating as a separate entity, to periodically (every six
 months) evaluate the environmental, social and human rights impact of mining
 operations and publish periodic reports by those monitors.
- Improve transparency: Publish environmental and social impact assessments, environmental and social management plans and periodic environment monitoring reports. Summaries and full reports should be translated into local languages, made available online, and posted in public buildings, including at prefectures and subprefectures in directly affected communities.

- Respect rural land rights: Ensure that, where land is acquired for mining, fair compensation is paid, including to individuals and communities with customary land rights, and that land acquisitions do not negatively impact local communities' livelihoods.
 - o Consider alternatives to one-off financial payments that better promote economic self-sufficiency in the long-term.
 - Combine financial payments with provision of replacement land or livelihood restoration assistance.
 - Pay special attention to impacts of land acquisitions on women, and ensure they are appropriately compensated for their losses.
 - Monitor the impact of land acquisitions on communities' livelihoods and living standards and provide additional assistance if over time monitoring shows communities have been negatively impacted.
 - Before expropriating land, develop an agreement for returning land to the individuals or communities it is acquired from, including details as to the condition in which land should be returned. Ensure that land is rehabilitated in a manner that allows it to be farmed and utilized by local communities.
 - Develop an approach for addressing historical land acquisitions that did not respect Guinean law or international human rights law, including through land rehabilitation programs and other forms of compensation.
- Monitor and protect access to clean water: Follow international best practices to
 prevent or mitigate the impact of mining on access to water, and monitor the
 impact of mining on water levels and quality. Immediately end any activities that
 have been shown to prevent communities accessing adequate water for their
 needs, until access to water has been secured. All ESIAs and ESMPs should include:
 - Baseline monitoring of water levels and quality before mining operations begin, including mapping of existing surface and underground water sources, as well as a comprehensive monitoring plan once mining operations begin.
 - A water balance for mining operations, describing how mining will occur without altering local water levels and quality.
 - A stream crossing plan describing how, where mining infrastructure crosses rivers or streams, the impact on water levels and quality will be minimized.

- A water supply plan, as required by the mining code, detailing the steps the company will take to maintain and improve water supply for local communities.
- Adequate measures to prevent sediment run-off from mines and mining roads.
- Monitor and protect air quality: Monitor air quality in residential areas affected by mining, publish the monitoring results and publicly explain potential public health impacts.
 - Where particulate matter or other emissions exceed the World Health
 Organizations' recommended levels, take immediate steps to address the source of the emissions.
 - If necessary for public health, suspend mining activities until the source of emissions has been addressed. Mitigation measures that should be implemented immediately include paving mining roads passing close to towns, villages or other inhabited areas.
 - o In coordination with the Guinean health ministry, assess whether adequate health services are in place to address the health impacts of reduced air quality, especially for children and older people.
 - Assist the Guinean government to develop a public health response to the impact of its operations on air quality that is proportionate to, and addresses, the impacts of its activities.
- Develop effective grievance processes: Establish effective grievance mechanisms so that individuals affected by mining projects can complain directly to companies in addition to the government.
 - Ensure that social and economic barriers, including illiteracy, do not prevent at-risk populations, including women, from filing complaints.
 - Regularly publish complaints-related data, including disaggregation by sex and by the nature of the complaint, and the number of cases resolved.
 - Ensure there is no retaliation, in any form, against community members or company employees bringing complaints.
- Adopt the Voluntary Principles on Security and Human Rights: Adopt and fully
 implement the standards of the Voluntary Principles on Security and Human Rights,
 a multi-stakeholder initiative by governments, major multinational extractive
 companies, and NGOs that seek to address the risk of human rights abuses arising
 from security arrangements in the oil, gas and mining industries.

To Companies Sourcing Bauxite from Guinea

Establish a thorough due diligence process, including regular monitoring, to ensure
that exporters respect the rights of communities where mining occurs. If there are
reports of human rights violations companies should specifically investigate these
reports. The due diligence process should also include procedures to address
adverse human rights impacts.

To the National Assembly of Guinea

- Where mining conventions are submitted to the National Assembly for ratification, only approve proposed extractive industries projects after duly assessing human rights, social and environmental risks.
- Undertake regular site visits to mining-affected communities and ensure that resulting reports are made public and debated in plenary sessions of the National Assembly.
- Initiate a Parliamentary Commission of Inquiry into the environmental, social and human rights impact of bauxite mining in the Boké region.

To International Financial Institutions, including the IFC and OPIC

- Regularly monitor client companies' compliance with performance standards and work with them to achieve compliance where it is not yet met.
- Where land is acquired for mining, work with clients to ensure that fair compensation is paid to individuals with legal and customary land tenure, including for the value of land. Ensure that clients provide replacement land or livelihood restoration assistance to landowners or occupants who lose land to mining.
- Work with client companies to ensure that they revisit past land acquisitions that
 did not meet IFC standards, but which occurred after IFC involvement, including by
 surveying households in affected villages to determine whether they maintain the
 same standard of living as before land was acquired for mining. Ensure companies
 take steps to improve households' social and economic rights until they exceed
 pre-mining levels.

To the Government of Guinea's International Partners

- Provide financial and technical assistance to strengthen robust environmental,
 social and human rights monitoring in the extractive industries.
- Provide more support to civil society organizations providing legal or advisory services to mining-affected communities, including the conduct of community-level or civil-society led parallel ESIAs and monitoring reports; support for communities and individuals filing complaints in companies' grievance mechanisms, national or regional courts, or before accountability mechanisms at international financial institutions; and community-led air and water-quality testing.

Methodology

This report documents how the practices of mining companies, when combined with inadequate government oversight, upend the lives and livelihoods of rural communities. It is based on research conducted between March 2017 and April 2018, including field visits to Guinea in March, April and July 2017, and January and April 2018, and advocacy trips in October 2017 and July 2018. Our research focused on two mining projects, those of La Société Minière de Boké (SMB) and La Compagnie des Bauxites de Guinée (CBG). These projects were chosen because they were the two biggest exporters of bauxite in Guinea in 2017.

Research for this report was conducted in the Boké region, the capital of Guinea's bauxite belt. The Boké region is divided into five prefectures. Most of Human Rights Watch's research was conducted in the Boké prefecture, which comprises the city of Boké and nine other subprefectures.

Local Government in Guinea

Boké is one of Guinea's eight administrative regions, which are subdivided into 33 prefectures. Local government officials in Guinea include those nominated directly by the executive, whose role is to represent the central government at the regional level (through a governor), in prefectures (through prefects) and in subprefectures (through subprefects). Guinea's efforts to decentralize government, however, also means that there are elected officials, who head local councils (collectivités locales), called urban communes in towns and cities (Communes Urbaines) and rural development communities (Communautés Rurales de Développement, (CRD)) in rural areas. These elected officials, which are led by a mayor in urban communes and a president in a CRD, manage the budget and development program of the local area. There are 38 urban communes in Guinea's towns and cities (including five in Conakry) and 303 CRDs, or approximately one in each subprefecture.

In total Human Rights Watch conducted interviews in more than 30 villages in the Boké region, as well as in the city of Boké itself. In areas where the SMB consortium operates, we conducted research in communities around the consortium's ports at Dapilon and Katougouma, its mines at Kaboe and Malapouya and along the mining roads linking

Katougouma port to the Kaboe and Dabis mines and Dapilon port to the Malapouya network of mines. In total, we visited 17 communities. These are Dapilon, Diakhabia, Djoumayah, Kaboe, Kakissa, Kakoumba, Kandouga, Kanfarende, Kakoui, Katougouma, Lansanayah, Mamaya, Noumouya, Soleya, Songuebouyni, Tintima, and Toukerem. We also conducted research in Kolaboui, a town located on SMB's mining road from Dapilon port to Malapouya.

Human Rights Watch visited 12 communities around CBG's mines in Sangaredi, including several villages close to the railway used by CBG. We also conducted research in the town of Kamsar, where CBG's port is located. In total, we visited 12 villages: Boundou Waadé, Danta Fonye, Fassaly Foutabe, Hafia, Hamdallaye, Kalinkolé, Kankalaré I, Kankalaré II, Kogon Lengue, M'Bororé, N'Koussi, and Parawol.

Human Rights Watch typically began visits to communities, including repeat visits, with a group interview with community leaders, before conducting individual interviews with community members impacted by mining, including women. Group interviews lasted one to three hours. Individual interviews lasted 30 minutes to two hours. Interviewees were not compensated. Human Rights Watch conducted most interviews with community members in local languages, with translation into French. Group interviews were typically conducted in village meeting places, often in the open air. Individual interviews were conducted in a variety of locations, including homes or in secluded open-air settings.

Human Rights Watch also met local mining, environment and agriculture officials in Boké and Sangaredi. In Conakry, we met with officials from the Ministry of Mines and Geology, Ministry of the Environment, Water and Forests, Office of Environmental Studies and Evaluation, and members of parliamentary Commission on Natural Resources, the Environment and Rural Development. We also interviewed independent human rights analysts, researchers, environmental scientists, medical personnel, public health experts, civil society organizations, activists, and lawyers working on mining issues in Guinea. In April 2018, we also sent the Guinean government a list of questions, and the government's response is annexed to this report.

Respondents verbally consented to be interviewed and were informed of the purpose of the interview, its voluntary nature, and the ways in which the data would be used. Human

Rights Watch informed interviewees that they could decline to answer questions or could end the interview at any time.

Community members we interviewed typically asked not to be identified, fearing reprisals from the government or mining companies, but agreed that we could use the name of their village, which we have done in this report. While some government officials agreed to be identified, the name of others, particularly those discussing sensitive information, have been withheld to prevent possible reprisals.

We met on several occasions with the SMB consortium's leadership, principally its director-general, Fréderic Bouzigues, to discuss our findings, and visited CBG's headquarters in October 2017, April 2018 and July 2018, where we met the company's director-general, Souleymane Traoré, and community relations and health, security and environment teams. In May 2018, we sent a list of questions to both CBG and SMB. Their responses were integrated into this report, while the complete letters are available on our website. We also met with the leadership of several other mining companies and representatives of the International Finance Corporation, both in Guinea and in Washington, D.C. in the United States.

We took measures to ensure that our investigations accurately reflected women's distinctive experiences with mining. Such measures included working with Guinean female researchers and interpreters, meeting with women individually and in groups to explain the aims of the research and seeking advice from experts on gender and mining.

Human Rights Watch also reviewed secondary data sources, including laws, government documents, reports from nongovernmental organizations (NGOs) and research institutes, and maps. We used satellite imagery to assess how mining has affected land use and to understand when mining projects began construction and exploitation.

As discussed above, this report focuses on the practices of two mining projects, CBG and SMB, as well as the government's regulation of those projects. We have sought to make clear where differences exist in the practices of CBG and SMB. While at times in the report Human Rights Watch has drawn on research related to the bauxite sector as a whole, the report does not purport to draw specific conclusions on other mining companies or projects operating in Guinea.

Background

Guinea's Mining Industry

Guinea is a small, resource-rich country in West Africa, with a population of approximately 12.5 million people. After gaining independence from France in 1958, Guinea endured more than 50 years of authoritarian rule, with President Alpha Condé winning the country's first democratic elections in 2010. He was reelected in 2015.

Guinea possesses the world's largest bauxite reserves, with more than one-third of the Earth's known deposits, as well large amounts of iron ore, gold and diamonds. Much of Guinea's vast bauxite deposits are found near the surface, making them easy to extract. Mining companies use heavy machinery to remove any earth covering the bauxite, before using dynamite blasting to break up the ore found underneath. The bauxite is then loaded by excavators onto trucks and taken to a storage location before being transported by specially-constructed railways or mining roads to ports. Bauxite from Guinea is exported to refineries across the world, including in China, North America, and Europe, where it is refined into aluminum for use in car and airplane parts and consumer products like beverage cans and tin foil.

¹ United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2017 Revision, custom data acquired via website, https://esa.un.org/unpd/wpp/DataQuery/ (accessed March 20, 2018).

² International Crisis Group, "Guinea: Putting the Transition Back on Track," 2011, https://www.crisisgroup.org/africa/west-africa/guinea/guinea-putting-transition-back-track (accessed March 20, 2018) p. 1. See also Human Rights Watch, "We Have Lived in Darkness," 2011, https://www.hrw.org/sites/default/files/reports/guinea0511webwcover_1.pdf.

³ "Guinea president Conde wins re-election-electoral commission," *Reuters,* October 17, 2015, https://www.reuters.com/artic le/uk-guinea-election/guinea-president-conde-wins-re-election-electoral-commission-idUKKCNoSBoKU20151017 (accessed March 20, 2018).

⁴ Ministry of Mines and Geology, "Bauxite: Become a Leader in Global Production," (Undated) http://mines.gov.gn/ressources/bauxite/ (accessed May 22, 2018).

⁵ CBG, for example, exports its bauxite to refineries that include locations in North America and in Europe. Johannes Knierzinger, *Bauxite Mining in Africa, Transnational Corporate Governance and Development* (New York: Palgrave MacMillan, 2018, p. 148. The SMB consortium's exports are shipped to China, where the bulk of the material is refined by China Hongqiao, a member of the SMB consortium and at writing the world's largest aluminum producer.



Bulldozers move bauxite at the Sangaredi mine operated by Compagnie des Bauxites de Guinée (CBG) near Boké, Guinea on September 8, 2015. © 2015 Getty Images.

Mining has long been a major contributor to the Guinean economy, with mining revenues making up almost 20 percent of Guinea's gross domestic product and almost 90 percent of its exports in 2014.6 But despite its abundant mineral wealth, Guinea remains one of the world's poorest countries, ranking 183 of 188 states in the 2015 Human Development Index.7

After first winning election in 2010, Condé highlighted the richness of Guinea's mineral resources and embarked on an ambitious reform program targeting the mining sector.8 His

⁶ United States Geological Survey "2014 Minerals Yearbook: Guinea," September 2017, https://minerals.usgs.gov/minerals/pubs/country/2014/myb3-2014-gv.pdf (accessed March 20, 2018) para. 21.1.

⁷ United Nations Development Program, Human Development Report 2016 (New York: United Nations Development Program 2016), http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf (accessed March 22, 2018), p. 200. And United Nations Development Program, Human Development Report 2016, Briefing note for countries on the 2016 Human Development Report, Guinea (New York: United Nations Development Program 2016) http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/GIN.pdf, at p. 6.

⁸ "Alpha Conde: En Guinee tout est a faire," *Le Figaro*, November 16, 2010, http://www.lefigaro.fr/international/2010/11/16/01003-20101116ARTFIG00704-alpha-conde-en-guinee-tout-est-a-faire.php. See also National Resource Governance Institute, "Country Strategy Note, Guinea," May 2016, https://resourcegovernance.org/sites/default/files/documents/nrgi_guinea-strategy_20160629.pdf (accessed March 20, 2018), p.3.

government in 2011 promulgated a new mining code, which was already in development when he came into office, envisioned to give the Guinean government a greater share of mining revenue and improve governance of the mining sector, including by increasing the transparency of the process through which mining titles are awarded. The new code also introduced new requirements to make mining projects more respectful of social and environmental standards, including setting out more clearly companies' obligation to conduct detailed environmental and social impact assessments.

The government's efforts to grow the mining sector during Condé first term, however, encountered obstacles. Pushback from mining companies about the level of taxes they were expected to pay led to the passage of an amended code being passed in 2013.¹¹ Development of vast iron ore deposits in Guinea's southeast region have long been undermined by corruption allegations, as well as the enormous costs of exporting the ore from an area more than 700 kilometers from Guinea's coast.¹² The devastating 2014-2016 Ebola epidemic, which cost more than 2,500 Guineans their lives, also caused many investors to freeze planned projects.¹³ This meant that, when added to a slump in the global price of bauxite, Guinea's bauxite sector barely grew during Condé's first term, with production marginally increasing from 17.6 million tons in 2011 to 18 million in 2015.¹⁴

⁹ Ibid. See also Natural Resource Governance Institute, "Guinea's New Mining Code Heralds Good Governance," September 12, 2011, http://archive.resourcegovernance.org/news/guineas-new-mining-code-heralds-good-governance (accessed March 21, 2018). Beginning in 2013, the government also conducted a review of 19 mining contracts negotiated and signed under previous presidents. This review led to two mining licenses covering massive iron ore deposits in Guinea's southeast region being withdrawn in 2014 due to evidence of corruption.

¹⁰ For operating permits, Mining Code, Article 30-II. For mining agreements, Mining Code, Article 37-II. Mining Code of the Republic of Guinea, Ministry of Mines and Geology, 2011, http://mines.gov.gn/assets/uploads/2016/02/Republique-de-Guinee-Code-minier-FR-EN-1.pdf, (henceforth, "Mining Code", Article 217).

¹¹ National Resource Governance Institute, "Country Strategy Note, Guinea," May 2016, https://resourcegovernance.org/site s/default/files/documents/nrgi_guinea-strategy_20160629.pdf (accessed March 20, 2018), p.3.

^{12 &}quot;Inside Simandou: The mining project that has cursed all who come near it," *Telegraph*, June 5, 2017, http://www.telegraph.co.uk/business/2017/06/05/inside-simandou-mining-project-has-cursed-come-near/ (accessed March 20, 2018); See also "Buried Secrets," *New Yorker*, July 8, 2013, https://www.newyorker.com/magazine/2013/07/08/buried-secrets (accessed March 20, 2018). See also, "SFO says it is investigating Rio Tinto over Guinea operations," *Guardian*, July 25, 2017, https://www.theguardian.com/business/2017/jul/24/rio-tinto-sfo-investigation-guinea-suspected-corruption (accessed March 20, 2018).

¹³ Center for Disease Control, "2014-2016 Ebola Outbreak in West Africa," undated, https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html (accessed March 20, 2018); Center for Disease Control, "2014 Ebola Outbreak in West Africa-Case Counts," April 13, 2016, https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html#modal ldString_cases-former-widespread (accessed March 201, 2018).

¹⁴ World Bank, "2014-2015 West Africa Ebola Crisis: Impact Update", May 10, 2016, http://www.worldbank.org/en/topic/mac roeconomics/publication/2014-2015-west-africa-ebola-crisis-impact-update (March 20, 2018); United States Geological Survey "2011 Minerals Yearbook: Guinea," September 13, 2011, https://minerals.usgs.gov/minerals/pubs/country/2011/my b3-2011-gv.pdf (accessed March 20, 2018) para. 4; "Guinee: la bauxite peut-elle tenir toutes ses promesses ?" Le Point

The Bauxite Boom

Guinea's bauxite sector has grown rapidly since 2015. The demand for Guinean bauxite in global markets has increased in recent years as other countries, notably Indonesia in 2014 and Malaysia in 2016, have banned exports.¹5 By the end of 2017, Guinea was already among the world's top three producers of bauxite.¹6 Guinea's bauxite boom now shows no signs of slowing down: there were, at time of writing, at least 10 more projects preparing to begin exports, on varying timelines, including companies from Australia, Britain, the United Arab Emirates, Russia and China.¹7 Guinea's mining ministry states that the country ultimately hopes to export 100 million tons of bauxite per year.¹8

Demand from China has been a key factor in the bauxite sector's recent growth. China is the world's largest aluminum producer, producing more than 50 percent of global supply, and by early 2018, Guinea was the largest supplier of bauxite to China. Much of the recent increase in exports to China has been driven by a single producer, La Société Minière de Boké (SMB), a consortium bringing together a company linked to China's

Afrique, January 27, 2018, http://afrique.lepoint.fr/economie/guinee-la-bauxite-peut-elle-tenir-toutes-ses-promesses-27-01-2018-2190139_2258.php (accessed March 201, 2018).

¹⁵ Indonesia, which in 2013 supplied 65% of all China's bauxite imports, banned bauxite exports in January 2014 to stimulate producers to refine the raw material in Indonesia, keeping a larger share of the profits inside the country. "Update 2: Indonesia Bans Mineral Ore Exports, All Eyes on Nickel Impact," Reuters, January 11, 2014, http://www.reuters.com/article/in donesia-minerals-idUSL3NoKMo1W20140112 (accessed March 20, 2018). The ban remained in effect until January 2017, when the government agreed to allow some bauxite exports. "Indonesia Eases Export Ban on Nickel Ore, Bauxite," Reuters, January 12, 2017, http://www.reuters.com/article/us-indonesia-mining-exports-idUSKBN14W1TZ (accessed March 2018). See also "The Life and Death of Indonesia's Mineral Export Ban," Inside Indonesia, October 19, 2017, http://www.insideindonesi a.org/the-life-and-death-of-indonesia-s-mineral-export-ban (accessed March 201, 2018). The Indonesian ban in turn led demand for Malaysian bauxite to mushroom, with bauxite exports to China increasing from around 154,000 tons in 2013 to 24 million tons in 2015. A series of scandals about the environmental impact of Malaysia's largely unregulated bauxite mining sector, however, led the government to enact its own ban on bauxite mining in January 2016. Jonathan Head, "Malaysia bauxite ban after mining surge," video report, BBC News, January 20, 2016, http://www.bbc.com/news/av/worldasia-35358452/malaysia-bauxite-ban-after-mining-surge (accessed March 20, 2018). The January 2016 ban was only for three months, but has been extended multiple times, most recently until June 2018. "Malaysian Bauxite Ban Extended Through June 30, But Exceptions to Be Made," Aluminum Insider, December 26, 2017, https://aluminiuminsider.com/malaysianbauxite-ban-extended-june-30-exceptions-made/ (accessed March 20, 2018).

¹⁶ "La Guinée entre dans le Top 3 des plus grands producteurs de bauxite au monde (Banque mondiale)," *Agence Ecofin,* June 6, 2018, https://www.agenceecofin.com/bauxite/0606-57538-la-guinee-entre-dans-le-top-3-des-plus-grands-producteurs-de-bauxite-au-monde-banque-mondiale (accessed June 11, 2018).

¹⁷ "Guinée: la bauxite peut-elle tenir toutes ses promesses ?" *Le Point Afrique*, January 27, 2018, http://afrique.lepoint.fr/ec onomie/guinee-la-bauxite-peut-elle-tenir-toutes-ses-promesses-27-01-2018-2190139_2258.php (accessed March 20, 2018).

¹⁸ Ministry of Mines and Geology, "Bauxite: Become a Leader in Global Production," (Undated) http://mines.gov.gn/ressources/bauxite/, (accessed May 22, 2018).

¹⁹ "China Aluminum Capacity Cuts Boost Market Leader, Prices," *Reuters,* August 3, 2017, https://www.reuters.com/article/us-china-metals-aluminium/china-aluminum-capacity-cuts-boost-market-leaders-prices-idUSKBN1AJoQO (accessed March 20, 2018); "Chinese bauxite imports in February down by 13.4% MOM," *Asian Metal*, March 27, 2018.

largest aluminum producer, China Hongqiao Group, as well as a Singaporean shipping company, Winning International Group, and a Guinean logistics company, United Mining Services International.²⁰ Chinese involvement in the bauxite sector is likely to continue to expand. In September 2017 Guinea signed a \$20 billion donor partnership with the Chinese government under which Guinea receives loans from China for major infrastructure projects that are secured against future bauxite exploitation by Chinese companies.²¹

SMB is in many ways the poster child of Guinea's bauxite boom. Although it often takes years for a new operator to begin exports, it took SMB only six months—the consortium first obtained a research permit on January 9, 2015, obtained an exploitation permit on July 7, 2015 and shipped its first exports on July 20, 2015.²² As discussed below, the government's willingness to allow the SMB consortium to begin construction of major infrastructure months before it had secured operating permits—and before environmental and social impact assessments were reviewed and approved by the environment ministry—was a key factor in this rapid growth. SMB has since expanded further, acquiring the rights to new mining territory by snapping up licenses from other companies and striking deals with competitors.²³ SMB says it exported 31 million tons in 2017—approximately twice its 2016 output—meaning it would have become Guinea's biggest bauxite exporter, and one of the largest in the world, in only three years.²⁴ "We've shown that you can quickly and profitably exploit bauxite in Guinea," Fréderic Bouzigues, SMB's Director-General, told Human Rights Watch.²⁵ All of SMB's bauxite is exported to China, where it is purchased by China Hongqiao Group, a member of the SMB consortium.

²⁰ Société Minière de Boké, "Groupe," undated, http://smb-guinee.com/compagnie-bauxite (accessed March 20, 2018). China Hongqiao holds its stake in SMB through several wholly owned subsidiaries. The direct owner of the stake in SMB is Shandong Weiqiao Aluminum and Electricity (sometimes translated as Power), a wholly owned subsidiary of Shandong Hongqiao New Material, whose ultimate parent is China Hongqiao. Initiative pour la Transparence dans les industries Extractives, "Rapport ITIE 2015, République de Guinée" https://eiti.org/sites/default/files/documents/finergies_-_itie_guine e_-_rapport_itie_2015_-_version_finale_signee_1.pdf (accessed March 20, 2018). See also China Hongqiao Group, Group Structure. China Hongqiao Group Limited, "Group Structure," undated, http://hongqiaochina.com/en/jtjg.aspx (accessed March 20, 2018).

²¹ "Mines: la Chine et la Guinée signent un accord a 20 milliards dollars" *Jeune Afrique*. September 8, 2017, http://www.jeu neafrique.com/472655/economie/mines-la-chine-et-la-guinee-signent-un-accord-a-20-milliards-de-dollars/ (accessed March 20, 2018).

²² Société Minière de Boké, "Groupe," undated, http://smb-guinee.com/compagnie-bauxite (accessed March 20, 2018), para. 4.

²³ Human Rights Watch interview with mining executive, Conakry, July 27, 2017, and senior mining ministry official, October 9, 2017.

²⁴ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, October 11, 2017.

²⁵ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, October 11, 2017.

The SMB consortium operates multiple open-sky mines throughout the Boké region. Once excavated, bauxite is transported to ports for export along specially-constructed mining roads, which are largely unpaved, with hundreds of lorries traveling to and from the consortium's mines each day. ²⁶ The SMB consortium operates two ports, one in Katougouma, serving mines like that at Dabis about 35 kilometers northwest from Boké, and another at Dapilon, serving mines like those around Malapouya, 20 kilometers northeast of Boké. ²⁷ Both of SMB's ports are located on the Rio Nunez river, and are not capable of being traversed by ocean-going transport vessels. Instead, the ore is transferred from stockpiles into barges, each carrying approximately 8,000 tons, which in turn transfer the bauxite into transport vessels at a deep-sea port off the Guinean coast. ²⁸ The SMB consortium's ports are principally operated by consortium member and shipping company Winning International Group, while road transport is led by consortium member United Mining Services International.

The other project examined in this report, CBG, was created in 1963 but has been exporting bauxite since 1973. Although CBG operates as an independent company, it is jointly owned by the Guinean government, Alcoa (headquartered in the United States), Rio Tinto (United Kingdom), and Dadco (Channel Islands).²⁹ CBG operates multiple open-sky mines around the town of Sangaredi, about 70 kilometers from Boké. CBG uses a 125-kilometer rail line to transport bauxite from the mines around Sangaredi to a deep-sea port in Kamsar, at the mouth of the Rio Nunez river.³⁰

²⁶ "UMS: SMB Winning Consortium- Où en sommes nous en 2017 ?" video clip, Youtube, https://www.youtube.com/watch?v=Bf5ryLXW8Rg, (accessed March 22, 2018).

²⁷ Ibid.

²⁸ Ibid.

²⁹ CBG was formed in 1963 by the Guinean government and Halco Mining Inc. to develop bauxite in the Boké region. The Government of Guinea owns 49%, and Boké Investment Company owns 51% of CBG. Halco owns 100% of Boké Investment Company. Alcoa, "Guinea," undated, http://www.alcoa.com/guinea/fr/default.asp (accessed March 20, 2018). Halco is owned by Alcoa, Rio Tinto and Dadco. Ramboll Environ, "CBG Bauxite Mine Expansion Project, Guinea: Environmental and Social Due Diligence Technical Report," UK14-21611 (2015), para. 1. Rio Tinto and Alcoa both own 45% of Halco, and so 22.95% of CBG itself. Rio Tinto, "Sangaredi," undated, http://www.riotinto.com/aluminium/sangaredi-8198.aspx (accessed March 20, 2018). For more details on the history of CBG, see Johannes Knierzinger Bauxite Mining in Africa, *Transnational Corporate Governance and Development* (New York: Palgrave Macmillan, 2018), p. 151.

³⁰ Each train has approximately one hundred and twenty wagons, each carrying over eighty tons of bauxite. The train typically makes five journeys to Kamsar each day. EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Background, December 2014, pp. 1-13.

CBG exported 14.4 million tons in 2017 and plans to export a similar amount in 2018.³¹ CBG is currently implementing a \$1 billion expansion project to help it increase production to 18.5 million tons per year and, eventually, to 27.5 million tons.³² CBG's expansion is partly financed by a \$200 million loan from the International Finance Corporation, a World Bank affiliate, which in turn helped the company attract loans or underwriting from the US government's Overseas Private Investment Corporation, the German government's United Loan Guarantees of Germany (UFK) and private banks and investors.³³

Boké: The Explosive Center of Guinea's Bauxite Industry

Bauxite mining has made the Boké region, which is in lower Guinea (*La Basse Guinée*), along the country's western coast and bordering Guinea Bissau, the center of Guinea's mining-driven economic growth. Although only one of Guinea's bauxite producers currently refines the raw material in the country, the industry still generates significant tax revenue for the Guinean government.³⁴ SMB said it estimates that its overall contribution to the Guinean economy in 2017 was \$400 million.³⁵ CBG said that it paid \$90 million in taxes to the Guinean government in 2017 and estimates that, through taxes and dividends, it provides the government approximately 10 percent of its operating budget.³⁶

³¹ Memorandum, CBG to Human Rights Watch, July 10, 2018.

³² EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Background, December 2014, pp. 1-13.

^{33 &}quot;IFC Invests \$200 Million in Guinea's Bauxite Mining Sector to Support Broad-Based Growth," International Finance Corporation press release, September 6, 2016, https://ifcextapps.ifc.org/ifcext/pressroom/ifcpressroom.nsf/o/864D5DEE19 FDD00985258027003A2866 (accessed March 20, 2018); Compagnie des Bauxites de Guinée, "Environmental and Social Impact Assessment of the CBG Mine Expansion Project," December 2014, http://www.cbg-guinee.com/environnement-social /esia (accessed March 20, 2018), pp. 1-8; Human Rights Watch interview with IFC staff, October 10, 2017. See also "White & Case Advises on Financing for CBG Bauxite Mine Expansion in Guinea," White & Case press release, November11, 2016, https://www.whitecase.com/news/white-case-advises-financing-cbg-bauxite-mine-expansion-guinea (accessed March 20, 2018).

³⁴ A long dormant alumina refinery owned by a Russian exporter was due to reopen in 2018, while a new Chinese operator said in January 2018 that it would construct an alumina factory and aluminum refinery at a cost of \$2.9 billion. "Guinée: le groupe Chinois TBEA finance une chaîne de production de la bauxite et d'aluminium," *La Tribune Afrique*, January 4, 2018, https://afrique.latribune.fr/entreprises/industrie/2018-01-04/guinee-le-groupe-chinois-tbea-finance-une-chaine-de-product ion-de-la-bauxite-et-d-aluminium-763555.html (accessed March 20, 2018). See also "Guinée: la bauxite peut-elle tenir toutes ses promesses?" *Le Point Afrique*, January 27, 2018, http://afrique.lepoint.fr/economie/guinee-la-bauxite-peut-elle-tenir-to utes-ses-promesses-27-01-2018-2190139_2258.php (accessed March 20, 2018). The SMB consortium in December 2017 announced plans to build an alumina refinery in 2019. "Guinee: SMB Winning annonce un investissement de 3 milliards de dollars US," Mines, December 4, 2017, https://www.agenceecofin.com/bauxite/0412-52601-guinee-smb-winning-annonce-u n-investissement-de-3-milliards-de-dollars-us (accessed March 20, 2018).

³⁵ Memorandum, SMB to Human Rights Watch, September 12, 2018.

³⁶ Memorandum, CBG to Human Rights Watch, July 10, 2018.

Guinea's bauxite boom has generated thousands of jobs in the Boké region. SMB told Human Rights Watch that the consortium directly employs 7,663 people, and a further 10,000 people indirectly.³⁷ CBG in May 2018 employed 2,284 people directly and a further 2,254 through subcontractors.³⁸

Despite the creation of jobs, however, the influx of mining companies into the Boké region has caused resentment among the local population. In April and September 2017, Boké was paralyzed by riots, as thousands of young people ransacked government buildings and stopped mining companies from operating. Security forces clashed with protestors, at times using live ammunition, resulting in the deaths of at least one person in April 2017 and two more in September 2017.³⁹ "If frustrations accumulate, it can be anything that sparks the powder," a senior ministry of mines official told Human Rights Watch.⁴⁰ "The population sees the financial investment a company is making, they see taxes being collected, trucks taking bauxite from their farmland abroad, they breathe the dust, and they ask, 'what do we get out of it?'"

The protests demonstrated deep-rooted anger driven by a perception that Boké residents had not only insufficiently benefited from mining but also endured the negative impact of mining on people's livelihoods, health and environment. In an April 2017 memorandum addressed to the Guinean government, local officials, religious leaders, civil society activists and youth leaders from Boké described the factors motivating resentment toward the government and mining companies. The memorandum referenced a lack of drinking water and electricity in Boké, and referred to the impact of mining on health, livelihoods and the environment, decrying "the destruction of forests, biodiversity, grazing fields and agricultural land from clearing and exploitation by mining...the pollution of the environment which affects the health of the population...the inadequacy of social structures in view of the growing population," and "the systematic exclusion of affected populations from the financial benefits of mining exploitation."⁴¹

³⁷ Memorandum, SMB to Human Rights Watch, September 12, 2018.

³⁸ Memorandum, CBG to Human Rights Watch, July 10, 2018.

³⁹ "One dead as riots in Guinea mining hub enter fourth day," *Reuters*, April 27, 2017, https://www.reuters.com/article/us-guinea-mining/one-dead-as-riots-in-guinea-mining-hub-enter-fourth-day-idUSKBN17T2EJ?il=0 (accessed March 22, 2018).

⁴⁰ Human Rights Watch interview with senior mining ministry official, October 9, 2017.

⁴¹ The memorandum was signed by, among others, the president of the Conseil Préfectoral de Développement, the president of the Conseil Préfectoral des Organisations de la Société Civile, le Président du Conseil Communal de la Jeunesse, the Répresentative des Conseils de Quartiers, and a Représentante des Femmes et Les Confessions Religieuses. Copy of memorandum on file with Human Rights Watch.

Regulatory Framework

National Law

Although neither Guinea's 2011 mining code nor its 1989 environment code explicitly mention human rights, they both impose obligations on companies to avoid or remedy the negative social and environmental impacts of mining.⁴² Guinea's 2011 mining code requires companies to, "ensure the rational exploitation of mineral resources in harmony with the protection of the environment and the preservation of health," as well as work for the "promotion or maintenance of the living conditions and general good health of the population."⁴³ Guinea's environment code requires that companies, "take all necessary measures to manage and avoid the pollution of the environment."⁴⁴

Prior to obtaining government approval for a mining project,⁴⁵ the 2011 mining code requires mining companies to submit an environmental and social impact assessment (ESIA) that examines the likely consequences of mining on local communities.⁴⁶ Companies must also formulate a strategy, known as an environmental and social

⁴² CBG's original mining agreement with the Guinean government was signed in 1963, before being amended in 2005. This in principle exempts CBG from the provisions of the 2011 Mining Code, which do not apply to mining agreements agreed prior to the Code's entry into force (Mining Code, Article 217) and even potentially from the provisions of the 1989 Environment Code, given that the 1963 agreement was not intended to be modified by later changes to Guinean law. The 2011 Mining Code requires companies and the Guinean government to negotiate amendments to existing mining agreements—bringing them into line with the 2011 code—within 24 months of the Code's entry into force (Mining Code, Article 217). At writing, however, CBG and the Guinean government had not negotiated or signed an amendment (Human Rights Watch interview with senior mining ministry official, October 9, 2017). The SMB consortium, having begun operating in 2015, is subject to the full requirements of the 2011 Mining Code and the 1989 Environment Code.

⁴³ Mining Code, Article 143.

⁴⁴ Code on Protection and Fulfillment of the Environment, 1989 (Henceforth, "Environment Code"), Article 68.

⁴⁵ Companies in Guinea obtain approval to mine bauxite (and other material) by signing a mining agreement with the government or obtaining an operating permit. A mining agreement (*convention minière*) is a contract between the government and company that sets out the geographical area in which the company can operate, for a set period (maximum 25 years), while also spelling out in detail the company's tax and environmental and social obligations. Negotiating mining agreements in theory gives mining companies the benefits of a stable regulatory framework, because, even if future tax regimes and other regulations change, agreements often state that the company remains bound by its prior agreement with the Guinean government. The 2011 mining code states that, to be eligible for a mining agreement, bauxite mining companies must be investing at least \$1 billion in Guinea. Mining Code, Articles 37, 39. Operating permits (*permis d'exploitation*) are granted for 15-year terms, although they can subsequently be renewed for further 5-year periods. Unlike mining agreements, operating permits provide no additional detail on companies' environmental and social obligations, and the legal framework governing companies' behavior is that contained in the 2011 mining code and other related legislation. Mining Code, Article 32.

⁴⁶ For operating permits, Mining Code, Article 30-II. For mining agreements, Mining Code, Article 37-II.

management plan (ESMP), to prevent and mitigate negative impacts.⁴⁷ Once an ESIA is submitted to the Guinean government, it is assessed by a 23-person inter-ministerial committee, which includes representatives of civil society organizations.⁴⁸ Only upon the committee's approval can a company obtain the environment ministry certificate (a Certificate of Environmental Conformity) necessary for the project to proceed. Companies are required to reapply annually to the environment ministry for renewal of the certificate, which should only be renewed if the company demonstrates adequate compliance with its ESMP.⁴⁹

In conducting impact assessments and preparing ESMPs, the mining code requires companies to integrate internationally-accepted mining industry standards. The code requires that ESIAs be conducted, "in accordance with the environment code and its implementing regulations, as well as internationally-accepted standards," and that, "appropriate techniques and methods must be used to protect the environment and the safety of workers and the local community in accordance with the environment code or international best practices in this area." ⁵⁰ 2014 government regulations describing how impacts assessments in the mining sector should be conducted state that companies must demonstrate compliance with national environmental standards or, in their absence, with international best practices. ⁵¹

In discussing relevant international best practices, the Guinean regulations on ESIAs refer to the policies and performance standards established by the International Finance Corporation (IFC).⁵² This suggests that, while these standards are not in and of themselves binding under Guinean law, they may be useful in setting out the kinds of best practices companies should respect. Companies that accept loans from the IFC, like CBG, are more clearly required to comply with the IFC's performance standards as a condition of receiving

⁴⁷ Ibid.

⁴⁸ The Technical Committee for Environmental Analysis (Comité Technique d'Analyse Environnementale (CTAE)) is a 23-person committee of relevant ministries and non-governmental experts, including civil society organizations. The CTAE can either approve the ESIA unconditionally, approve it subject to further conditions being fulfilled, or reject it. Ministry of the Environment, Water and Forests and Ministry of Mines and Geology, Directive on the Implementation of Environmental and Social Impact Assessments in Mining Operations, 2014, para. 3.7. Human Rights Watch interview with BGEEE staff, May 4, 2017.

⁴⁹ Human Rights Watch interview with BGEEE staff, May 4, 2017.

⁵⁰ Mining Code, Article 142.

⁵¹ Ministry of the Environment, Water and Forests and Ministry of Mines and Geology, Directive on the Implementation of Environmental and Social Impact Assessments in Mining Operations, 2014, p. 21.

⁵² Ibid.

a loan from IFC.⁵³ The World Bank group, of which the IFC is part, has also developed detailed environmental, health and safety guidelines for all industries, as well as guidelines specific to the mining sector.⁵⁴ These guidelines are intended as general and industry-specific good practices and represent measures, "considered to be achievable in new facilities at reasonable costs by existing technology."⁵⁵

The Ministry of Environment, Water and Forests is the agency primarily responsible for overseeing companies' compliance with Guinea's environmental laws. An environment ministry agency, the Guinean Office of Environmental Studies and Evaluation (*Bureau Guinéen d'Etudes et d'Evaluation Environnementale*, (BGEEE)), is responsible for analyzing the quality of ESIAs and coordinating their review and approval by government. Once mining begins, the BGEEE also conducts annual inspections of mining companies, which help the environment ministry to decide whether to reissue each year a company's Certificate of Environmental Conformity, which is, in theory, required for the company to continue operating each year. The mining ministry has also, since 2017, begun to play an active role in auditing companies social and environmental practices, although it does not have a formal role in certifying companies' compliance with their environmental obligations.

Although oversight by both the mining and environment ministries is led by officials in Conakry, both ministries have representatives at the prefectural level, in local government offices in the city of Boké, and in certain subprefectures, including in Sangaredi, where CBG's mines are located. The local representatives of both ministries are supposed to

April 26, 2018.

⁵³ International Finance Corporation, "Environment and Social Performance Standards," https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards (accessed March 22, 2018). To be eligible for IFC funding, the IFC and CBG developed an environmental and social action plan to bring company's practices in line with the IFC's standards, with some changes required to be implemented immediately and others in future years. CBG-IFC, "Environmental and Social Action Plan," December 14, 2015. Copy on file with Human Rights Watch.

World Bank Group, "Environmental, Health, and Safety Guidelines," 2007, https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines (accessed May 20, 2018).
 Ibid.

⁵⁶ Human Rights Watch Interview with staff of Guinean Office of Environmental Studies and Evaluation (BGEEE), May 4, 2017.

⁵⁷ Human Rights Watch Interview with staff of Guinean Office of Environmental Studies and Evaluation (BGEEE), May 4, 2017.

Human Rights Watch Interview with Seydou Barry Sidibé, Secretary-General, Ministry of the Environment, Water and Forests,

⁵⁸ Human Rights Watch Interview with Ahmed Keita, Chief of Staff, Ministry of Mines and Geology, April 25, 2018.

provide additional oversight of companies' activities and report periodically to their superiors in Conakry.

International Human Rights Standards

The Guinean government has an obligation under human rights law to protect and secure human rights against abuses by businesses, such as mining companies, including through the enforcement of laws requiring companies to respect human rights.⁵⁹

Guinea has ratified several United Nations and African human rights treaties that protect rights applicable to the issues discussed in this report. For example, the International Covenant on Economic, Social and Cultural Rights (ICESCR) protects the right to healthy natural environments as part of the right to health. 60 The United Nations Committee on Economic, Social and Cultural Rights (UN CESCR), the committee of experts that monitors the implementation of the ICESCR, has stated that this requires states to take measures to prevent pollution by third parties, such as mining companies. 61 A state's, "failure to enact or enforce laws to prevent the pollution of water, air and soil by extractive and manufacturing industries" can therefore constitute a violation. 62 The African Charter on Human and Peoples' Rights states that "[all] peoples shall have the right to a general satisfactory environment favorable to their development. 63 The African Commission has interpreted this to require that, "states take reasonable and other measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources. 64

⁵⁹ UN Human Rights, Office of the High Commissioner, "Guiding Principles on Business and Human Rights," HR/PUB/₁₁/₀₄, adopted June 16, 2011, http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf (accessed March 28, 2018), pp. 3-4.

⁶⁰ International Covenant on Economic, Social and Cultural Rights, adopted December 16, 1966, G.A. Res.2200A (XXI), 21 UN GAOR Supp. (No.16) at 49, UN Doc. A/6316 (1966) 993 U.N.T.S. 3, entered into force January 3, 1976, ratified by Guinea in 1978. Article 12. UN Committee on Economic, Social and Cultural Rights, General Comment 14, The Right to the Highest Attainable Standard of Health (Twenty-second session, 2000), August 11, 2000, UN Doc. E/C.12/2000/4, para. 15.

⁶¹ UN Committee on Economic, Social and Cultural Rights, General Comment 14, The Right to the Highest Attainable Standard of Health (Twenty-second session, 2000), August 11, 2000, UN Doc. E/C.12/2000/4, paras. 34, 51.

⁶² Ibid., para. 51.

⁶³ African Charter on Human and Peoples' Rights (ACHPR), adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force October 21, 1986, ratified by Guinea in 1982. Article 24.

⁶⁴ African Commission, "Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) vs. Nigeria," 155/96, para. 52, http://www.achpr.org/files/sessions/30th/comunications/155.96/achpr3o_155_96_eng.pdf (accessed April 4, 2018).

International human rights standards also increasingly require corporations, including in the mining sector, to respect human rights. The United Nations Guiding Principles on Business and Human Rights state that: "Business enterprises should respect human rights. This means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved." The Guiding Principles also encourage companies to ensure that they account for human rights impacts throughout their supply chain. 66

The need for human rights diligence has also been integrated into regional and national guidelines. In 2009, as part of a directive designed to harmonize standards regulating mining in West Africa, the West African regional body, the Economic Community of West African States (ECOWAS), declared that states and mining companies have an "obligation to respect and promote recognized human rights including the rights of women, children and workers arising from mining activities." Guinea's corporate social responsibility policy encourages companies "to sign up to a commitment to prevent any threat to human rights through evaluation and the management of impacts and risks factors as regards their activities on local populations." 68

Organizations in countries where multinational companies are headquartered have also developed non-binding standards which recommend that multinationals, including mining companies, respect human rights in the countries where they are operating. The Organization for Economic Co-operation and Development (OECD), for example, has

Where business enterprises identify that they have caused or contributed to adverse impacts, they should provide for or

⁶⁵ UN Human Rights, Office of the High Commissioner, "Guiding Principles on Business and Human Rights," HR/PUB/11/04, adopted June 16, 2011, http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf (accessed March 28, 2018), p. 13. To avoid negative human rights impacts, companies should conduct due diligence processes that assess actual and potential human rights impacts, and then should integrate and act upon the findings to address negative consequences. Guiding Principles on Business and Human Rights, p. 16. Although due diligence assessments should be conducted throughout the life of the project, the principles state that: "Human rights due diligence should be initiated as early as possible in the development of a new activity or relationship." Guiding Principles on Business and Human Rights, pp. 18-19. In identifying potentially adverse human rights impacts, companies are required to conduct, "meaningful consultation with potentially affected groups and other relevant stakeholders." Guiding Principles on Business and Human Rights, p. 19.

cooperate in their remediation through legitimate processes. Guiding Principles on Business and Human Rights, p. 24.

66 Guiding Principles on Business and Human Rights, p. 17. The Guiding Principles state that human rights due diligence should: "cover adverse human rights impacts that the business enterprise may cause or contribute to through its own activities, or which may be directly linked to its operations, products or services by its business relationships."

⁶⁷ ECOWAS Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector, entered into force May 27, 2009, Article 15 (1).

⁶⁸ National Policy on Corporate Social Responsibility in the Mining Sector in Guinea, Part 1 (*Politique Nationale de Responsabilité Sociétale des Entreprises (RSE) dans le secteur minier en Guinée*), p. 17.

developed Guidelines for Multinational Enterprises that reflect the content of the United Nations Guiding Principles on Business and Human Rights.⁶⁹ OECD members include the United Kingdom and the United States, where CBG's co-owners Rio Tinto and Alcoa are headquartered.⁷⁰ The China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters has published voluntary Guidelines for Social Responsibility in Outbound Mining Investments that are targeted at mining projects that Chinese companies invest in. The Guidelines state that companies should "ensure that all operations shall be in line with the UN Guiding Principles on Business and Human Rights during the entire lifecycle of the mining project."⁷¹

When asked about the social, environmental, and human rights consequences of mining, the Guinean government and mining companies often state that mining has generated thousands of jobs in the Boké region and highlight the considerable money and time that they invest in community development projects, from building or refurbishing local schools to partnerships with local women's cooperatives. These efforts, however, while commendable, do not relieve mining companies of their responsibility to exercise due diligence to prevent mining operations—the core of their business—from infringing on the rights of local communities, and to provide redress where damage is caused. The United Nations Guiding Principles on Business and Human Rights state that: "Business enterprises may undertake other commitments or activities to support and promote human rights, which may contribute to the enjoyment of rights. But this does not offset a failure to respect human rights throughout their operations."72

⁶⁹ Organization for Economic Co-Operation and Development, "Guidelines for Multinational Enterprises," 2011, http://www.oecd.org/daf/inv/mne/48004323.pdf (accessed March 22, 2018).

⁷⁰ Organization for Economic Co-Operation and Development, "List of OECD Member Countries-Ratification of the Convention on the OECD," undated, http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm (accessed March 22, 2018).

⁷¹ China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters, "Guidelines for Social Responsibility in Outbound Mining Investments," 2015, https://www.emm-network.org/wp-content/uploads/2015/03/CSR-Guidelines-2nd-revision.pdf (accessed March 22, 2018), p. 10.

⁷² UN Human Rights, Office of the High Commissioner, "Guiding Principles on Business and Human Rights," HR/PUB/11/04, adopted June 16, 2011, http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf (accessed March 28, 2018), p. 13.

Loss of Land and Livelihoods

Dozens of farmers from 16 villages located near mines, ports and mining roads described how mining companies have expropriated ancestral farmlands without adequately addressing the impact on farmers' ability to support and feed their families. These practices are facilitated by the inadequate protections afforded by Guinean law to customary land tenure rights, particularly in rural areas, where mining has the biggest impact. The Guinean government has, since the passage of the 2011 mining code, failed to pass regulations establishing compensation standards for land acquisitions in the mining sector—a missed opportunity to provide clearer protection to rural farmers and communities.

Community leaders from several villages adjacent to bauxite mines walked Human Rights Watch researchers across the exposed red earth that indicates where the mining company has removed topsoil and then extracted the ore underneath. "They've expanded into our fields, the areas we depended on for food. And now much of our fertile land has been taken from us," said a community leader from Boundou Waadé, a village surrounded by five CBG mines.⁷³ "The company has destroyed our means of subsistence."

The SMB consortium's mines and infrastructure have expanded particularly rapidly since it began operating in 2015, and on several occasions Human Rights Watch researchers returned to a village after only a few months to find that SMB had added a new mining site. Communities as yet untouched by mining are concerned that their land is also at risk. "We don't know where the limit of the mine will fall," said one farmer. "SMB are in the process of doing surveys everywhere, and we just don't know where they are going to exploit next."

Although the compensation mining companies do pay—at times to the entire community, at times to individual farmers or families—can be a short-term windfall. In the absence of training or other assistance it is difficult for subsistence farmers to use the money to develop sustainable sources of food or income in the longer term. "My priority has always been finding food for my family," said a farmer from Dapilon.75 "You can use compensation

⁷³ Human Rights Watch interview with community leader, Boundou Waadé, January 14, 2018.

⁷⁴ Human Rights Watch interview with community leader from Toukerem, April 29, 2017.

⁷⁵ Human Rights Watch interview with community leader from Dapilon, April 26, 2017 and January 11, 2018.

to improve your house, but now that your farmland has gone you still have to put food on the table."



Farmers from Dapilon village, in the Boké region, look out over land, on the banks of the River Nunez, cleared for the construction of a mining port belonging to the La Société Minière de Boké consortium. © January 2018. Ricci Shryock for Human Rights Watch.

Communities said that the effect of land losses was exacerbated by the impact of mining projects on other sources of income, like fishing, as well as the consequences of the dust from SMB's operations on the productivity of remaining agricultural land. "There were at least 100 adults in the village who exploited land here," said a community leader from Lansanayah, a village near SMB's Malapouya mine. "But we lost land to the mine and last year we couldn't farm much of what we have left because the dust makes trees unproductive." Guinean law does not currently require companies to provide communities who lose land with livelihood assistance to maintain or improve their income and living

⁷⁶ Human Rights Watch interview with community leader from Lansanayah, April 28, 2017 and January 10, 2018.

standards, threatening community members' rights to food and to development, protected under the African Charter on Human and Peoples' Rights.⁷⁷

While mining has brought thousands of jobs to the Boké region, residents of rural villages said that jobs in the mining sector cannot offset the food and income that the community previously derived from land. Community leaders said that too few villagers are employed by mining companies and, in any case, the pay that individual employees receive doesn't offset the benefit that entire households, families or communities derived from land. "The whole village—young and old—used to be able to farm the land, and get food and income from it," said one village elder from Dapilon, an SMB consortium port. "The young men employed by the mine are focused on their own needs, or their wives and children, so it's not the same thing." Current and former mine workers also underscored that residents of rural villages often lack the education needed to obtain anything other than unskilled jobs (such as security guards or laborers), often with subcontractors, and frequently lack job security.⁷⁹

Although women participate in farming, the bulk of compensation for communal or familial land is often paid to men considered household heads. Land that men and women depended on and exploited is therefore replaced by financial compensation distributed only to a handful of largely male community leaders and household heads. While some men can at least obtain jobs at mining companies to replace lost income, women are rarely employed by mining companies, even though they are often responsible for finding alternative sources of food where land is lost to mining.

⁷⁷ The right to development is protected under the African Charter on Human and Peoples' Rights, Article 22. The right to food is recognized under art. 25 of the UDHR; under art. 11 of the ICESCR as interpreted by the UN CESCR, General Comment No. 12, Right to Adequate Food (Twentieth session, 1999), UN Doc. E/C.12/1999/5 (1999). The African Commission on Human and Peoples' Rights in The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria, Communication No. 155/96, 27 May 2002, para. 64, also found implicit rights to food within the right to life (art. 4), the right to health (art. 16), and the right to economic, social and cultural development (art. 22).

⁷⁸ Human Rights Watch interview with community leader, Dapilon, January 10, 2018.

⁷⁹ Human Rights Watch interview with current employee of SMB consortium member, Katougouma, May 1, 2017; Human Rights Watch interview with former employee of SMB consortium member, Katougouma, May 1, 2017; Human Rights Watch interview with employee of subcontractor to SMB consortium, Kakissa, May 1, 2017; Human Rights Watch interview with employee of subcontractor to SMB consortium, Soleya, April 30, 2017.

Human Rights Protections for Customary Land Rights

Rural land in Guinea is typically organized by reference to customary (i.e. traditional) laws. 80 Customary laws in Guinea generally recognize the family, linage or community that first founded a village and exploited the surrounding land as the ultimate owner of agricultural land. 81 As time passes, the village's land is subdivided, and new families are granted the right to farm specific plots of land and to pass on this right to their children. 82 Village land that isn't exploited by a particular family or household can be used by all community members for the purpose of hunting or picking wild fruits, leaves, backs of trees or crops. 83

International and African human rights instruments protect individuals and communities, including those with customary land tenure, from arbitrary interference with their rights to property and land.⁸⁴ Under the UN Basic Principles and Guidelines on Development-Based Evictions and Displacement, states may, as a last resort, involuntarily remove occupants of

⁸⁰ Pascal Rey, "Droit foncier, quelles perspectives pour la Guinée? Réflexion sur la réforme foncière à partir de l'exemple de la Guinée Maritime," *Annales de Géographie* (2011), pp. 298-319, p. 300.

⁸¹ Ibid.

⁸² Ibid., pp. 300-301. Alternatively, community leaders may allocate farm land among local families on a seasonal basis, with the land returning back to collective ownership after crops have been planted and harvested. For recent arrivals in the area, however, access to land is more complicated. In the last few decades, the practice of granting plots of land to new families has largely ended, as increasing scarcity of land means there is less available to farm. Newly-arrived farmers must therefore try to lease land from other families, overlaying a more commercial transaction onto the existing customary system of land management. Human Rights Watch Interview with Nestor Fara Leone, Rural Development Service, Sangaredi, July 24, 2017; see also EEM, "Environmental and Social Impact Assessment of the CBG Mine Expansion Project," Socioecononic Baseline, December 2014, pp. 5-122.

⁸³ Pascal Rey, "Droit foncier, quelles perspectives pour la Guinée? Réflexion sur la réforme foncière à partir de l'exemple de la Guinée Maritime," *Annales de Géographie* (2011), pp. 298-319, p. 302.

⁸⁴ Constitution of the Republic of Guinea, 2010, Article 13. The Universal Declaration of Human Rights states that stating, "Everyone has the right to own property, alone as well as in association with others and no one shall be arbitrarily deprived of his or her property," Universal Declaration of Human Rights (UDHR), adopted December 10, 1948, G.A. Res. 217A(III), UN Doc. A/810 at 71 (1948), art. 17. The African Charter on Human and Peoples' Rights (Banjul Charter) also guarantees the right to property, and a right to economic, social, and cultural development. African [Banjul] Charter on Human and Peoples' Rights, adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force October 21, 1986, arts. 14, 20, 21, 22. Ratified by Guinea, February 16, 1982. In the case of COHRE v. Sudan, the African Commission found that "[i]t doesn't matter whether they had legal titles to the land, the fact that the victims cannot derive their livelihood from what they possessed for generations means they have been deprived of the use of their property under conditions which are not permitted by Article 14 [right to property]." African Commission on Human and Peoples' Rights: Center on Housing Rights and Evictions (COHRE) v. Sudan, Communication No. 296/2005, July 29, 2009, para. 205. In the context of the right to housing, The UN Committee on Economic, Social and Cultural Rights (UN CESCR) notes in its General Comment No. 4 that legal security of tenure "takes a variety of forms, including ... occupation of land or property. Notwithstanding the type of tenure, all persons should possess a degree of security of tenure which guarantees legal protection against forced eviction, harassment and other threats." UN CESCR, General Comment No. 4, The Right to Adequate Housing (Sixth session, 1991), UN Doc. E/1992 /23, annex III, art. 114 (1991). See also Food and Agriculture Organization of the United Nations, "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security", paras. 9.1-9.12.

land where evictions are, "authorized by law," provide, "full and fair compensation," and do not result in a community's regression in the enjoyment of other human rights, including the right to health, food and water. 85 The UN Basic Principles on Evictions state that, irrespective of whether people hold title to property, they are entitled to compensation for lost land as well as for material damage and loss of earnings. 86

Inadequate Protection of Customary Land Rights in Guinea

Guinea's 1992 property law can arguably be interpreted to recognize customary rights under a provision that says that property owners include occupants of land who can demonstrate "peaceful, personal, and continuous occupancy in good faith." In practice, however, obtaining legal protection requires communities or individuals with customary land tenure to have formally registered their land tenure rights or recorded them in local land maps. Very few rural farmers, however, have done this—in large part due to the government's failure to adequately roll out a 2001 rural land policy to facilitate land registration and the mapping of land boundaries in rural areas.

⁸⁵ UN Human Rights Committee, "Basic Principles and Guidelines on Development-Based Evictions and Displacement," A/HRC/4/18. UN Human Rights Council, "Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context Raquel Rolnik," A/HRC/25/54/Add.1, December 26, 2013, paras. 6 and 21. See also the right to economic, social and cultural development under Article 22 of the African Charter on Human and Peoples' Rights.

⁸⁶ UN Human Rights Committee, "Basic Principles and Guidelines on Development-Based Evictions and Displacement," A/HRC/4/18, p. 13. The ECOWAS Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector states that, "Where land has been acquired for the development of a mineral resource, the owner or lawful occupier shall be paid adequate and prompt compensation." It continues, "The computation of any compensation for the acquisition of land to develop a mineral resource should take into consideration the loss to be suffered by the user of the land area, the inconveniences which can be assessed according to legal principles in monetary terms caused to the land owner or lawful occupier, the losses and damages suffered by the immovable assets and their appurtenances, the loss of revenue, including expected losses of agricultural income; and other reasonably proven losses, by providing compensation in accordance with the best international practices," ECOWAS Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector, entered into force May 27, 2009, Article 4.

⁸⁷ Land Code, Article 39. The World Bank's Land Governance Assessment Framework for Guinea (Conakry), when referring to Article 39, states that, "in principle all customary rights are recognized by law." World Bank, "Land Governance Assessment Framework for Guinea (Conakry)," 2015, http://documents.worldbank.org/curated/en/881871504866008675/pdf/119612-WP-P095390-FRENCH-PUBLIC-7-9-2017-9-59-21-GuineaFinalReportFrench.pdf (accessed May 20, 2018), at p. 42. Pascal Rey, "Droit foncier, quelles perspectives pour la Guinée? Réflexion sur la réforme foncière à partir de l'exemple de la Guinée Maritime," *Annales de Géographie* (2011), pp. 298-319, p. 305.

⁸⁸ World Bank, "Land Governance Assessment Framework for Guinea (Conakry)," 2015, http://documents.worldbank.org/cur ated/en/881871504866008675/pdf/119612-WP-P095390-FRENCH-PUBLIC-7-9-2017-9-59-21-GuineaFinalReport French.pdf (accessed May 20, 2018), pp. 43-44. Pascal Rey, "Droit foncier, quelles perspectives pour la Guinée? Réflexion sur la réforme foncière à partir de l'exemple de la Guinée Maritime," *Annales de Géographie* (2011), pp. 298-319, p. 305.

⁸⁹ Republic of Guinea, Declaration of Land Policy in Rural Areas (2001), paras. 12-14, 23-30, 42-58. On the non-application of the policy, see World Bank, Land Governance Assessment Framework for Guinea (Conakry), pp. 44, 57. CBG told Human Rights Watch in July 2018 that not one person who they had compensated for land losses has presented CBG with legal title over their land. Memorandum, CBG to Human Rights Watch, July 10, 2018.

For individuals or communities with legally-recognizable property rights, Guinean laws do on paper provide some protection from interference with these rights by mining companies. Guinea's constitution states that land can only be expropriated in the public interest and with payment of fair compensation in advance. 90 The mining code states that the arrival of a mining project does not extinguish property rights and that, "no right to prospect or operate is valid without the consent of the individual with property rights or his or her successors, with regard to activities involving the surface or affecting it."91 Where a mining company cannot obtain consent, the mining code does give the state the right to require mining to occur, but only after adequate compensation is paid.92 The code states that the amount of compensation owing is, "determined as for expropriation,"93 which suggests that companies may be required to follow the same legal mechanism through which land can be expropriated in the public interest, a process that is in principle overseen by the judiciary.94 An inter-ministerial committee led by the Ministry of Cities and the Management of Land in 2017 drafted and validated, with several international organizations, a detailed set of guidelines on how such public interest expropriations should occur, but they had not yet, at time of writing, been approved and adopted by Guinea's government.95

Even if the guidelines were already incorporated into Guinean law, it is in any case unlikely that mining companies would follow the process they set out for compulsory public interest expropriation of land. Because very few rural farmers have been able to register their property rights, many mining companies maintain that, in strict legal terms, rural land remains the "property of the state," minimizing or negating the rights of communities with customary land tenure rights. 96 By adopting this interpretation, companies can acquire

⁹⁰ Constitution of the Republic of Guinea, 2010, Article 13.

⁹¹ Mining Code, Article 123.

⁹² Mining Code, Article 125.

⁹³ Ibid.

⁹⁴ Land and Property Code of the Republic of Guinea, 1992, henceforth "Land Code," Articles 55-83. This is a formal process that requires the government to issue a decree certifying a project in the public interest, as well as to conduct a land survey specifying the plots of land that will be affected. Land Code, Articles 57 and 59. The land code also sets out a process for determining compensation for land expropriated in the public interest, and, if an attempt to agree compensation between the landowner and purchaser fails, provides that compensation will be determined by a judge. Land Code, Articles 66-68. See also Ministry of Cities and the Management of Territory, "Operations Manual with Guidelines for Public Utility Expropriations and Compensation for Land and Natural Resources in Guinea," September 2017, http://pubs.iied.org/pdfs/17609FIIED.pdf (accessed March 25, 2018).

⁹⁵ Interview, International Institute for the Environment and Development, January 23, 2018.

⁹⁶ World Bank, Land Governance Assessment Framework for Guinea (Conakry), p. 44, "One must note, in the end, that unregistered land (the majority of rural land) remains, in legal terms, the property of the state."

land without the informed consent of those who hold customary land tenure rights and without following a public expropriation process. Companies have in the past instead only acknowledged their responsibility to compensate the occupants of land for the crops and trees they have grown upon it, not—as required by human rights law—for the value of lost land and potential future loss of earnings.

The land law's ambiguous protection of customary rights would be less problematic if the Guinean government had established regulations setting out uniform standards for resettlements and land acquisitions in the mining sector, which could set out more clearly the compensation owed to anyone occupying land or holding customary land tenure rights. Although the mining code states that any lawful occupant of land should receive, "compensation for the disturbance of enjoyment suffered," it does not provide further detail and states that, "the amount, frequency, method of payments and other terms" relating to compensation are to be determined in accordance with the mining code and further implementing regulations.97 Although the mining code was first enacted in 2011, the Guinean government has not yet passed these implementing regulations. The mining ministry was, in July 2018, drafting regulations on this issue, although they may not be adopted for months.98

In the absence of more detailed guidelines, the only existing Guinean government guidance on compensation standards is a Ministry of Agriculture policy, originally developed in 1987, but partially updated in 2008.99 These guidelines, consistent with the ambiguous protection of customary rights in Guinea's land law, seem to assume that mining companies are only required to pay farmers for the value of trees and crops growing on land. This policy is so outdated, however, that companies set their own compensation frameworks, giving them significant discretion as to how much to pay and for what. "Each company has their own method for calculating compensation," said Nestor Fara Leone, the head of the Rural Development Service in Sangaredi, which supervises companies'

⁹⁷ Mining Code, Article 124. Note that the Mining Code also states that any resettlement plan for persons displaced by mining should, "include compensation for loss of income and means of subsistence resulting from such displacement." Mining Code, Article 142. This should arguably apply to economic displacement (i.e. loss of land) as well as physical displacement (resettlement of villages).

⁹⁸ Human Rights Watch interview with international donor, July 22, 2018.

⁹⁹ Ministry of Agriculture, Cattle, Environment and Water and Forests, Technical Note on Agricultural Compensation, (2008) No 281/MAEEEF/CAB/DNA/2008.

compensation payments during land acquisitions. 100 "We'd like the authorities in Conakry to propose a unified approach."

CBG's Land Policies

Since it began exporting bauxite in 1973, CBG has progressively excavated and mined large tracts of land surrounding the town of Sangaredi, where its mining operations are concentrated, moving between different pits to find the necessary quality of bauxite to meet suppliers' demands. 101 Although much of its infrastructure, including a railway line and the port in Kamsar, was first constructed in the 1960s, CBG's current expansion project means it is now acquiring land for new infrastructure. 102

Satellite imagery reviewed by Human Rights Watch shows the land that CBG has expropriated for mining. Human Rights Watch visited four villages around Sangaredi—Hamdallaye, Boundou Waadé, Danta Fonye and Kogon Lengue—where community leaders said they had lost significant portions of their ancestral lands to mining; two more recent settlements, Kankalaré I and II, that CBG relocated in 2017 and early 2018; and three other villages, Parawol, Fassaly Foutabé and M'Bororé, who stand to lose land as CBG's operations expand.

Human Rights Watch interview with Nestor Fara Leone, Rural Development Service, Sangaredi, July 24, 2017. An environment ministry official shared a similar opinion in response to a German-funded study of land expropriations in Guinea's mining sector: "There's a gap in the legal framework that we all recognize. Sometimes politics prevails, but if there was a normative framework everyone would have to follow it." INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 21.

¹⁰¹ Human Rights Watch interview with CBG staff member, July 21, 2017.

¹⁰² EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Background, (December 2014), pp. 1-7.





Two satellite images, one from May 2002 and another from April 2018, show how the mining operations of La Compagnie des Bauxites de Guinée (CBG) have encroached onto the ancestral lands of Hamdallaye village. The ancestral lands are marked with a yellow border. © 2018 Human Rights Watch.

Community leaders described the impact of land losses on farming. "Before the mine every family member had a plot of land they could farm," said one Hamdallaye elder. "But now we have to decide who can have land and who can't." Satellite imagery reviewed by Human Rights Watch shows that since 2005, CBG has expropriated some 10 square kilometers of Hamdallaye's ancestral farmlands, or around 40% of the land, taking land for open-sky mines and, since 2016, to build a bauxite storage area and new sections of railway and roads to expand its operations. There's nobody in this community who hasn't lost land to CBG," said a community leader. Mining will in 2019 also force the community to relocate their homes, although the community hopes to continue to farm the land that has so far been spared by mining.

In Boundou Waadé, an adjacent community to Hamdallaye that was also established before CBG's arrival, satellite imagery shows how the village has been progressively surrounded by CBG's mines since approximately 2000. Farmers said that the lack of remaining land threatens to destroy their system of crop rotation—in which fields are only farmed every seven or more years—needed to keep land fertile. "As we lose our land, we're forced to more frequently farm other areas, and so our land is becoming less productive," said one farmer. 106 "In less than 10 years, I think the land will be exhausted." Residents who stand to lose land as CBG's operations expand expressed fears of the impact on their own livelihoods. "I'm scared about what will happen when my land is destroyed—that's what we live from," said a villager from M'Bororé. 107

¹⁰³ Human Rights Watch interview with community leader, Hamdallaye, January 13, 2018.

¹⁰⁴ Human Rights Watch reviewed a time series of satellite imagery recorded by the following satellite systems: Landsat 2, 5, 7 and 8 (US National Aeronautics and Space Administration - NASA); Sentinel 2 (European Space Agency - ESA); Dove 1 (Planet Labs); WorldView 1, 2, 3 (DigitalGlobe); Pleiades 1 A/B (Airbus).

¹⁰⁵ Human Rights Watch interview with community leader, Hamdallaye, January 13, 2018.

¹⁰⁶ Human Rights Watch interview with community leader, Boundou Waadé, July 25, 2017.

¹⁰⁷ Human Rights Watch interview with community leader, M'Bororé, July 21, 2017.



Farmers from Hamdallaye village, in the Boké region, look out over the village's ancestral lands, which have been cleared by La Compagnie des Bauxites de Guinée for an expansion of mining operations. January 2018. © Ricci Shryock for Human Rights Watch.

CBG's Past Compensation Practices

Community leaders, farmers and even local officials told Human Rights Watch that, until approximately 2015, CBG expropriated land without compensation. 108 "When CBG needed land, they just took it," said a community leader from Kogon Lengué. 109 "CBG only really started paying compensation in 2015," said Nestor Fara Leone, the head of the local government's rural development service in Sangaredi. 110 A 2014 CBG-commissioned stakeholder consultation found that:

In the mine zone, the village residents and local authorities met insisted that CBG has been grabbing their land for decades without informing or

¹⁰⁸ Human Rights Watch interview with community leaders, Hamdallaye, July 25, 2017; Human Rights Watch interview with community leaders, Boundou Waadé, July 20, 2017; Human Rights Watch interview with community leaders, Kogon Lengué, July 21, 2017; Human Rights Watch Interview with Nestor Fara Leone, Rural Development Service, Sangaredi, July 24, 2017.
¹⁰⁹ Human Rights Watch interview with community leaders, Kogon Lengué, July 21, 2017.

¹¹⁰ Human Rights Watch Interview with Nestor Fara Leone, Rural Development Service, Sangaredi, July 24, 2017.

consulting them beforehand, far less compensating them materially or financially.¹¹¹

CBG staff said the company did pay compensation for many of the land acquisitions that occurred before 2015. The company said it could not guarantee that compensation was paid in all cases, but showed Human Rights Watch documentation indicating the compensation paid for several historical land acquisitions, from 2003 to 2014. They said that the company had paid compensation for the value of crops and trees growing on the land, with an additional 10 percent added to the valuation to reflect the cost to farmers of obtaining new land and 10 percent for the inconvenience suffered and for potential errors in valuation.

Even where applied, however, this approach to compensation had several problems. First, until 2016, when CBG developed its own compensation standards, the company appears to have applied the tariffs set out in the agricultural ministry's 1987 policy, even after they were clearly outdated. This meant that the value of crops and trees was not adjusted for inflation or changes in the market value of crops and trees. In one case documented by Human Rights Watch, a farmer who received compensation in 2003 was paid according to the valuation set in the 1987 compensation matrix. He received 576,000 GF for 16 fully-grown mango trees, which would have been worth \$1,404 in 1987 but by 2003 inflation meant it was only worth \$291. CBG's 2017 compensation matrix provided for a payment of 1,319,819 GF (\$127) for a fully-matured mango tree.

Second, limiting compensation payments to plants and crops also meant that farmers received no compensation for land that, although currently lying fallow, is a key part of their village's crop rotation system. "After seven years lying fallow, we were about to

¹¹¹ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Stakeholder Consultation (December 2014), pp. 6-22.

¹¹² Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, July 6, 2018.

¹¹³ Ibid.

¹¹⁴ Human Rights Watch interview with CBG staff, October 12, 2017. Human Rights Watch review of reports of compensation payments by CBG, from 2003, 2011 and 2014.

¹¹⁵ Human Rights Watch review of CBG compensation sheet for farmer, dated May 26, 2003.

¹¹⁶ 1987: US\$1 = 410 GNF. Treasury Report Rates of Exchange, March 31, 1987. 2003: US\$1 = 1980 GNF. Treasury Report Rates of Exchange, March 31, 2003.

¹¹⁷ INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, pp. 62-66.

prepare the fields again for farming. Almost everyone in the village had a plot there," said a farmer from Hamdallaye, describing land that CBG expropriated for mining in 2015. "We asked the company to compensate us, but they refused. And it spoiled our whole rotation process." CBG community relations staff told Human Rights Watch in October 2017 that CBG doesn't compensate fallow land. "19

Finally, the ten percent added to the valuation of crops and trees to reflect the value of the land likely significantly underestimated the real value of land to rural farmers, particularly if outdated compensation matrices were used to calculate the value of crops and trees. CBG told Human Rights Watch that the market value of land in Sangaredi, where the company's mines are located, is "difficult to ascertain," because land in the area is often loaned or given from one community or family to another.¹²º Human rights standards, however, make clear that where land is expropriated, "the evicted [person] should be compensated with land commensurate in quality, size and value, or better," suggesting that CBG should have found ways to provide communities with alternative land, such as by rehabilitating areas already exploited, or converting areas of unproductive land to farmland.¹²¹

CBG told Human Rights Watch that it has rehabilitated almost 16 square kilometers of land, which are often planted with cashew trees. 122 Analysis of satellite imagery by Human Rights Watch, however, suggests that there are at least 30 square kilometers of land that either remain under exploitation or have not been rehabilitated. 123 Furthermore, where CBG does rehabilitate land after mining activities are completed, typically by replacing top soil and replanting trees, community leaders said that the land is not returned to the family or community that previously owned or exploited it. Indeed, villagers said CBG frequently returns to re-exploit rehabilitated land. 124 "We asked the company, 'why can't you give [rehabilitated] land back to the family it belonged to," said a community leader from

¹¹⁸ Human Rights Watch interview with community leaders, Hamdallaye, July 25, 2017.

¹¹⁹ Human Rights Watch interview with members of CBG community relations team, October 12, 2017.

¹²⁰ Memorandum, CBG to Human Rights Watch, July 10, 2018.

¹²¹ UN Human Rights Committee, "Basic Principles and Guidelines on Development-Based Evictions and Displacement," A/HRC/4/18, para. 6o.

¹²² Memorandum, CBG to Human Rights Watch, July 10, 2018. The company said in July 2018 that, "The process for occupying land [in bauxite mining] is temporary and reversible. The low depth of the quarries and the removal of rocks and stone...creates conditions permitting the rehabilitation of the areas exploited into agricultural land."

¹²³ Ibid.

¹²⁴ Human Rights Watch interview with community leader, Kogon Lengué, July 21, 2017.

Kogon Lengué.¹²⁵ "But they said, 'we don't do that because then the land will belong to the community, and perhaps we'll need to mine it again in future.""

At the root of CBG's past failure to adequately compensate and restitute land was the company's embrace of the lack of clear protection given to customary land rights under Guinean law. When asked in October 2017 by Human Rights Watch why CBG didn't provide replacement land or pay farmers for the value of land, a CBG staff member said, "It's not like the local people have legal title." ¹²⁶ A community leader recalled that, when he complained in 2016 about land seizures, a senior CBG official said, "this land was given to us by the state in the 1970s [when CBG began mining]." ¹²⁷ The community leader replied, "No, we've been living here for more than a hundred years, since the 1800s, and this is our land." ¹²⁸ A February 2018 environmental and social audit found that: "CBG has never directly compensated land users and occupiers for land on the basis that all land belongs to the state. Thus, no land user or occupier has a recognizable legal right of 'ownership' of the land used/occupied unless in possession of a land title issued by the appropriate level of government (that is, the state)." ¹²⁹

CBG's Updated Compensation Policy

In October 2015, CBG issued a new land policy (Resettlement and Livelihoods Restoration Policy Framework) that was supposed to establish a new approach—consistent with the IFC's performance standards—to compensating land lost or damaged to mining. ¹³⁰ In line with IFC Performance Standard 5, which recognizes customary rights to land, ¹³¹ the

¹²⁵ Human Rights Watch interview with community leader, July 25, 2017. See also Johannes Knierzinger, *Bauxite Mining in Africa, Transnational Corporate Governance and Development* (New York: Palgrave MacMillan, 2018), p. 188.

¹²⁶ Human Rights Watch interview with members of CBG community relations team, October 12, 2017. See also Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–February 2018," May 2018, p. 52.

¹²⁷ Human Rights Watch interview with community leader, Kogon Lengué, July 21, 2017.

¹²⁸ lbid. CBG's limited acceptance of customary land rights is also reflected in the legal agreement that farmers sign with CBG when land is acquired. Sample agreements seen by Human Rights Watch, and dated September 2016, make no reference to farmers' customary land rights, instead noting that a farmer has "assets" (i.e. crops) in CBG's mining concession. On accepting CBG's compensation, the agreement commits the farmer to "leave indefinitely" the land. Transaction Agreement Protocol (agreement to purchase land), CBG, September 17, 2016 (Copy on file with Human Rights Watch).

¹²⁹ Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–February 2018," May 2018, p. 52.

¹³⁰ CBG, "Resettlement and Livelihoods Restoration Policy Framework," 2015, p. 17; International Finance Corporation, "Performance Standard 5 Land Acquisition and Involuntary Resettlement (henceforth IFC Performance Standard 5)," January 1, 2012, p. 2.

¹³¹ IFC Performance Standard 5 states that, where persons have legal rights or claims to land that are "recognizable under national law...replacement property (e.g., agricultural or commercial sites) of equal or greater value will be provided, or,

framework says the company should provide individuals with customary land tenure, with "land for land compensation where possible," or "financial compensation for land where land for land compensation is not possible." 132 It also explicitly requires that fallow land and even uncultivable land be compensated. 133

Despite the adoption of the new policy in 2015, however, Human Rights Watch's research suggests that CBG did not begin applying key parts of it until late 2017 or early 2018. As late as October 2017, CBG staff described a compensation approach that was not consistent with the 2015 policy framework: "CBG does not compensate land; it is land in CBG's concession, so we just compensate plants. We do not compensate fallow land, or that was just cleared as is about to be farmed...We have no system of replacement land." A February 2018 environmental and social audit stated that: "The Resettlement Policy Framework (RPF) states that cash compensation will be provided for land acquired by CBG. However, in practice CBG has not compensated for loss of land and there is a contradiction between stated CBG 'policy' commitments and actual practice." 135

In early 2018, CBG announced that it would modify its compensation practices and that, where land is permanently acquired from communities or families with customary land tenure rights, replacement land will be provided from rehabilitated land reclaimed from past mining sites. "Agricultural lands are compensated with lands of similar or better type and potential," CBG told Human Rights Watch. "37 Only where this option is not possible will financial compensation will be paid for land. Both financial and land-forland compensation will be accompanied by initiatives to help communities develop alternate livelihoods that improve the long-term wellbeing of affected persons or groups.

where appropriate, cash compensation at full replacement cost." IFC Performance Standard 5, para. 27. Rights that are recognizable under national law can be derived "from customary or traditional tenure arrangements." IFC Performance Standard 5, para. 17, footnote 19.

¹³² CBG, "Resettlement and Livelihoods Restoration Policy Framework," 2015, p. 39.

¹³³ Ibid.

¹³⁴ Human Rights Watch interview with members of CBG staff, October 12, 2017.

¹³⁵ Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–February 2018," May 2018, p. II.

¹³⁶ Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–February 2018," May 2018, p. 53.

¹³⁷ Memorandum, CBG to Human Rights Watch, July 10, 2018.

¹³⁸ Memorandum, CBG to Human Rights Watch, July 10, 2018.

¹³⁹ CBG, "Resettlement and Livelihoods Restoration Policy Framework," 2015, p. 34. IFC standards require that, whenever companies acquire land, persons, "whose livelihoods or income levels are adversely affected will also be provided

While this approach could, if well implemented, be an improvement, Rio Tinto, Alcoa and Dadco–CBG's private sector shareholders–presented it to Human Rights Watch as CBG's settled land policy.¹⁴⁰ In reality, however, CBG has only adopted this approach since early 2018 and the company has not yet demonstrated it can implement a workable land-forland compensation program.

CBG's lenders, including the IFC, told Human Rights Watch that the revised policy of landfor-land compensation should apply retrospectively to all land acquisitions that have
occurred since the adoption of CBG's Resettlement and Livelihoods Restoration Policy
Framework in 2015. 141 CBG's leadership contends, however, that the only large land
acquisition that has occurred since 2015 concerns agricultural land expropriated as part of
the company's expansion project, particularly on the ancestral lands of Hamdallaye
village. 142 A comparison of satellite images showing the Sangaredi region from December
2015 to April 2018 suggests, however, that CBG's operations may have expanded
significantly in several other areas (outside of Hamdallaye) since 2015. 143 Human Rights
Watch recommends that CBG and its lenders ensure that CBG's revised compensation
policy is applied to all areas where CBG permanently acquired land since its adoption in
2015.

CBG's Response to the Impact of Its Past Land Acquisitions

As well as ensuring that its new compensation policies are correctly applied, CBG should address the decades-long legacy of its past land acquisitions and their potential impact on the livelihoods of villages around its mines in Sangaredi.

opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living." IFC standards first require companies to try to find replacement land that, "equivalent to that being lost should be offered as a matter of priority," but if that is not possible, "alternative income earning opportunities may be provided, such as credit facilities, training, cash, or employment opportunities." IFC Performance Standard 5, para. 28.

¹⁴⁰ Letter from Halco (Mining) Inc. to Human Rights Watch, August 1, 2018.

¹⁴¹ Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report—February 2018," May 2018, p. II; Human Rights Watch interview with IFC environment, social and governance staff, March 15, 2018.

¹⁴² Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, April 19, 2018. Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–February 2018," May 2018, p. 53.

¹⁴³ When CBG staff were shown these images, they told Human Rights Watch that they represented areas of land that had previously been cleared or exploited by the company, and so did not constitute new land acquisitions. In reviewing historical satellite imagery, however, Human Rights Watch could not identify previous mining or land clearance in these areas. Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, April 19, 2018.

CBG has, as part of its commitments to the IFC, agreed to ensure that land expropriations from 2010 to 2015 are not associated with a reduction in living standards for the households and communities that lost land. IFC and CBG staff said that it was difficult to review land acquisitions prior to 2010 because neither CBG, local government officials, nor community leaders kept adequate records of whose land was seized and whether compensation was paid. CBG's leadership also said that, for past land acquisitions, it was hard to consider the true impact of mining on livelihoods, particularly in view of demographic and other environmental changes in the area. CBG staff also expressed concern that any attempt to compensate a specific individual or community for land acquisitions before 2010 would mean that many other communities would also seek compensation or other assistance.

CBG's leadership told Human Rights Watch that any complaint regarding past land acquisitions, even dating before 2010, would be considered by CBG's grievance mechanism which, as discussed later in this report, has been considerably strengthened in recent years. CBG said that in 2015 seven complaints were filed for inadequate compensation for land acquisitions, and that they have all been dealt with. They said that no further complaints have been filed, although they said the complaints mechanism had been, "widely publicized in all the relevant communities." 148

Given the number of families and communities who expressed dissatisfaction to Human Rights Watch regarding CBG's past compensation processes, however, and the limited number of complaints filed so far, CBG should take additional steps to ensure that

¹⁴⁴ CBG, "Resettlement and Livelihoods Restoration Policy Framework," 2015, p. 30. CBG-IFC, "Environmental and Social Action Plan," December 14, 2015 (Copy on file with Human Rights Watch). The plan states that CBG will: "Undertake review and assessment of past compensation and resettlement for the period January 2010 to January 2015. Ensure past compensation payments are not associated with a reduction in livelihood status for the recipients and recommendations are built into implementation measures in compliance with PS5. Compliance is defined as a confirmation of no negative change in livelihood status for previous recipients of compensation payments." CBG told Human Rights Watch in July 2018 that it had, "commissioned an independent study to evaluate if compensation paid under the old compensation process (2010-2015) could have had a negative impact on the living standards of households." The company said that, "The report has not identified any critical cases demonstrating a deterioration in living standards, but as a precautionary measure, people who might be at risk of vulnerability will be further monitored in 2018." Memorandum, CBG to Human Rights Watch, July 10, 2018.

¹⁴⁵ Human Rights Watch interview with members of CBG community relations team, October 12, 2017; Human Rights Watch interview with IFC environment, social and governance staff, November 10, 2017. Human Rights Watch email correspondence with IFC staff, December 5, 2017.

¹⁴⁶ Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, April 19, 2018.

¹⁴⁸ Memorandum, CBG to Human Rights Watch, July 10, 2018.

communities understand that the complaints mechanism can deal with historical land acquisitions. CBG should publish a policy describing how the company will resolve complaints over past land acquisitions, including the proof communities need to substantiate claims, how the claims will be adjudicated and what successful complainants will receive in compensation. Civil society organizations should provide assistance to communities to help them file complaints. CBG should resolve newly-filed grievances related to pre-2015 land acquisitions according to an updated compensation framework that respects farmers' customary rights by providing land-for-land compensation or payments for the value of land.

In view of the large amounts of unrehabilitated land in CBG's concession, CBG should also develop a program, in consultation with affected communities, for rehabilitating land and restituting it to affected communities. Communities or families receiving rehabilitated land, especially women, should receive documentation of their land tenure rights. Mining companies, including CBG, underscore that there are significant challenges with developing land restitution programs, including resolving overlapping claims to land, but CBG should partner with civil society and private sector organizations with expertise on this issue to develop a workable approach.

Finally, CBG told Human Rights Watch that the company is implementing a program, which costs \$1.9 million annually, in 10 communes impacted by its operations to help develop new sources of income in mining-affected communities. 149 CBG should consider expanding this program and focusing a significant part of it on communities that have lost significant amounts of land to mining.

SMB's Land Policies

Human Rights Watch interviewed dozens of residents, from 13 villages, who have lost land to ports, mines or mining roads as the SMB consortium's operations have expanded rapidly since 2015. "It was land that my father had farmed, and that my father's father had farmed," said a community leader from Katougouma, where an SMB consortium port replaced dozens of hectares of highly fertile land on the banks of the Rio Nunez river. 150

¹⁴⁹ Ibid.

¹⁵⁰ Human Rights Watch interview with community leaders from Katougouma, March 18, 2017.

Satellite imagery of the site of the consortium's other port, Dapilon, shows how before the port was constructed land was cultivated in the wetlands close to the river, with paths leading from Dapilon village and also nearby Diakhabia. The port site had, as of May 2018, taken up approximately 2.25 square kilometers of this land and cut off villagers' access to farmlands. "The land supported people from three villages—more than 200 families," said a community leader, walking Human Rights Watch alongside a wall that marks the boundary of the port. "While we have other land left, the land taken by SMB for the port was our richest land, where we grew rice near the river, and cashew and mango trees near the village. We're worried about what will happen to the rest of our land if the port expands."

Financial Compensation Inadequate Replacement for Lost Land

The financial compensation that SMB has paid to rural farmers during its rapid expansion is often more generous than that of other mining companies, including CBG. SMB, for example, has paid farmers for the market value of their land¹⁵² as well as the crops and trees growing on it.¹⁵³ But SMB's cash-for-land approach,¹⁵⁴ while central to the company's ability to acquire land quickly, has left farmers without the resources, support or training needed to find new land or new livelihoods.

¹⁵¹ Human Rights Watch interview with community leaders from Dapilon, April 26, 2017 and January 11, 2018.

¹⁵² To calculate the market value of land, SMB staff said the consortium distinguishes between different types of land according to their potential utility as farmland. The most productive land, low-lying land near water (*bas-fond*), was in 2015 valued by SMB at between 15,000,000 (\$1,646) and 17,500,000 GF (\$1,920) per hectare, and uncultivable land at 4,200,000 GF (\$460) per hectare. Payments are made to individuals for land owned or exploited by a family or an individual and to community leaders for land exploited by the whole community. SMB initially paid compensation in cash but at writing had begun making dispersals by check. Winning Alliance Port (SMB Consortium Member), "Report of Compensation for Extension of River Port and Mining Road," July 27, 2015. INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 61. Human Rights Watch interview with Fréderic Bouzigues, SMB Director-General, January 15, 2018.

¹⁵³ In calculating compensation for crops, the SMB consortium compensates farmers with seasonal crops for the market value of one year's lost harvest. Winning Alliance Port (SMB Consortium Member), "Report of Compensation for Extension of River Port and Mining Road," July 27, 2015. In 2016, SMB's compensation matrix assumed that a one-hectare rice field would produce 1,500 kilograms of rice, with each kilogram valued at 5,000 GF (\$0.55). A farmer would therefore have received 7,500,000 GF (\$823) for one hectare of rice, although the SMB consortium then pays an additional amount to reflect the value of the land itself. INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 66. For perennial trees or crops, SMB also paid farmers the amount it would cost to replace the crops, including an assessment of the time it would take for the tree to reach maturity. Winning Alliance Port (SMB Consortium Member), "Report of Compensation for Extension of River Port and Mining Road," July 27, 2015.

¹⁵⁴ Having made payments in cash for the first two years of its operation, SMB recently moved towards paying compensation by check. Farmers still receive one-off payments, however.

Community leaders said that the one-off payments farmers received from SMB was often a huge sum when compared to the typical income of rural communities who have lived for generations as subsistence farmers. "We thought we had become rich," one farmer said, showing Human Rights Watch the new home that he had constructed with the compensation money he received. The stark contrast with his prior residence, a dilapidated structure only a few yards away, exemplified the fast money that mining has brought to some rural communities.

Dozens of farmers, however, said that one-off financial payments cannot replace the loss of land that was the foundation of communities' way of life and livelihoods. Community leaders and officials said that, for the majority of villagers, it was hard to understand how to use compensation to develop new income sources. "People aren't used to managing this amount of money and so it ends up being badly managed," said Seydou Barry Sidibé, the Secretary General of Guinea's environment ministry. 156

Civil society leaders said that farmers often shared money with family members, constructed new houses, bought material goods or even used the money to send children to Europe through the North African migration route. "Everyone who received financial compensation, they either sent their son to Europe...or constructed something, got married or bought scooters," a civil society leader told consultants writing a report on compensation processes in the Boké region. ¹⁵⁷ A father whose land was taken for construction of an SMB mining road told Human Rights Watch that, having failed to find two of his sons employment with the consortium or its subcontractors, he had used his compensation money to send them to Europe through Libya:

I was hoping that my sons would be employed at the mine—they were on a list of about 25 people this village sent to SMB. But only one person was recruited, and so I used about 40,000,000 GF (\$4,390) of the compensation to send my sons to Libya. They left about 10 months ago, and I would get news from them while they made their journey. But since

¹⁵⁵ Human Rights Watch interview with farmer, Dapilon, April 26. 2017.

¹⁵⁶ Human Rights Watch Interview with Seydou Barry Sidibé, Secretary General, Ministry of Environment, Water and Forests, April 26, 2018.

¹⁵⁷ INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 51.

they arrived in Libya I've not had any news for about two months. I'm worried they are in prison or dead. 158

None of the landowners or farmers interviewed by Human Rights Watch said that they had received training from SMB or the Guinean government on how to effectively use the compensation they received to ensure long-term financial security.

Where compensation for land used by the entire community was paid by the SMB consortium to community leaders, in some cases it was used to construct infrastructure such as local roads, schools or mosques, while in others it was distributed among households in the community. Several villagers complained, however, that the money was not distributed equitably, or was wasted on projects that do not adequately replace the income or resources the community has lost to mining. "I was only given 250,000 Guinean Franc (GF) (\$27), but I don't know who the money was given to, nor how it was divided," said one farmer. 159 "It was all kept secret." A 2018 German-government funded report on land expropriations in the bauxite sector found that:

When money is given (in check or cash) to a single representative of the community, it creates: significant tensions within the community; major risks of corruption; the loss of authority of local leaders when they try to resolve tensions; and ultimately not a productive use of the money received.¹⁶⁰

International standards are clear that cash compensation is not an adequate replacement for lost land. The UN Basic Principles and Guidelines on Development-Based Evictions and Displacement state that: "Cash compensation should under no circumstances replace real compensation in the form of land and common property resources.." The IFC's guidance notes on Performance Standard 5 states that: "Short-term consumption of cash compensation can result in hardship for subsistence-based economies or poor

¹⁵⁸ Human Rights Watch interview, Soleya, April 30, 2017.

¹⁵⁹ Human Rights Watch interview with farmer, Katougouma, March 18, 2017.

¹⁶⁰ INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 56.

¹⁶¹ UN Human Rights Committee, "Basic Principles and Guidelines on Development-Based Evictions and Displacement," A/HRC/4/18, para. 60.

households."¹⁶² The SMB consortium itself told Human Rights Watch in September 2018 that:

We understand that the money [paid to individuals or communities] represents a very large amount of money that can suddenly destabilize the budget of some households and villages. Experience has taught us that people receiving these sums can spend them in a way that some people consider unreasonable (lack of budgetary vision in the medium and long term; lack of investment in potential revenue-creating activities.)¹⁶³

The SMB consortium did note that, although the majority of people use compensation money in a way that doesn't tend to create new revenue sources, there is a "nonnegligible" number of initiatives that do provide longer-term financial returns, such as the purchase of farming equipment. 164

Several community leaders said that they had asked SMB to landscape currently uncultivated areas of land to replace land lost to mining, but that the consortium had not done so. "We've asked the company to find a new location and landscape it so that we can farm there," said a village elder from Dapilon. "But that was never done." SMB has committed to rehabilitate land where mining has been completed, and has begun to do so in some areas, such as the now unused Kaboe mine. "66 Residents are skeptical, however, that the replaced soil will be fertile enough to sustain the trees and worry that SMB has no system for returning the land to the individual or family who exploited it before mining began. "167"

In September 2018, SMB sent Human Rights Watch a compensation framework that it said the consortium uses to "guarantee" respect for individual's and communities' customary

¹⁶² International Finance Corporation, "Guidance Note 5, Land Acquisition and Involuntary Resettlement," 2012, https://www.ifc.org/wps/wcm/connect/4b976700498008d3a417f6336b93d75f/Updated_GN5-2012.pdf?MOD=AJPERES (accessed March 28, 2018) Performance Standard 5, GN25.

¹⁶³ Memorandum, SMB to Human Rights Watch, September 12, 2018.

¹⁶⁴ Memorandum, SMB to Human Rights Watch, September 12, 2018.

¹⁶⁵ Human Rights Watch interview with community leader from Dapilon, July 6, 2017.

¹⁶⁶ Camen Resources, "Environmental and Social Impact Assessment–Mine Component SMB," April 2015, p. 258. Human Rights Watch interview with international journalist, April 17, 2018.

¹⁶⁷ Human Rights Watch interview with community leaders from Lansanayah and Djoumayah, April 20, 2018.

land rights. ¹⁶⁸ The framework includes a commitment to provide farmers with customary land tenure rights with, "the replacement of agricultural land through land with an equal potential agricultural value situated an acceptable distance from the person's residence." ¹⁶⁹ The framework also states that farmers with customary land tenure rights, "will receive measures of accompaniment...such as training or capacity building, with a view to improving the lives of project-affected persons." ¹⁷⁰

At writing, however, Human Rights Watch is only aware of one location, Katougouma village, in which SMB has provided alternative farmland at the time a village lost land for mining operations. In that case, SMB could not reach agreement with the community on how the land should be used and the land remained, at writing, unoccupied. Human Rights Watch is also not aware of SMB systematically providing livelihood assistance support to communities who lose land to mining. SMB itself told Human Rights Watch that, "We are ready to provide technical assistance, and always indicate this, but so far all communities have refused our technical assistance in the creation of livelihood-generating activities." ¹⁷¹

Notwithstanding the SMB consortium's past practices, if the compensation framework shared in September 2018 represents a genuine commitment by the consortium to provide replacement land or other livelihood assistance where land is acquired for mining, Guinean civil society and community groups should consider engaging with SMB to find a workable model for implementing this policy. More broadly, the Guinean government, mining companies and civil society groups should devote significant resources to examining alternatives to financial compensation, including replacement land and land rehabilitation, including best practices from other countries, and to field-testing new approaches and sharing monitoring data on their strengths and weaknesses.

Damage to Remaining Land and Revenue Sources

Dozens of farmers said that, since the SMB consortium began operating in 2015, the impact of loss of land has been compounded by the damage caused by mining to remaining farmland, and other sources of food, like fishing. Community leaders said that

¹⁶⁸ Memorandum, SMB to Human Rights Watch, September 12, 2018.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

¹⁷¹ Ibid.

the consortium does not consistently provide compensation for the reduced productivity of agricultural land or reduced income from fishing.

Communities frequently said that dust produced by SMB's mining roads during the months-long dry season had a particular impact on plants' productivity. Residents of several villages showed Human Rights Watch researchers cashew plantations growing near SMB's mining road, in which almost every leaf was covered in reddish, brown dust.⁴⁷² "All the fruit trees have been damaged by dust," said a farmer from a roadside village, mirroring a complaint Human Rights Watch heard in at least 10 villages near to the SMB consortium's roads, mines or ports. "This village has been here for two centuries, and we've never experienced anything like this." ¹⁷³ Satellite imagery from February 2017, during the dry season, reviewed by Human Rights Watch shows a layer of dust on vegetation bordering SMB's mining roads. Studies show that dust, where deposited on vegetation, can reduce productivity, including by denying light to the cells responsible for photosynthesis.¹⁷⁴ SMB's leadership said that, where land is acquired for mining roads, compensation is also paid for a portion of land either side of the road or mines, thereby providing compensation to farmers most directly impacted by dust. 175 But community leaders said that the damage extends beyond the buffer zone and that they have not received compensation for this land.

Satellite imagery reviewed by Human Rights Watch also shows that farmland and trees located close to the SMB consortium's ports at Katougouma and Dapilon are covered with dust, and that each port contains large uncovered storage piles of bauxite. A community leader from Katougouma told a government inspection mission in February 2018 that: "This locality lives today with a level of pollution linked to the dust particles that are deposited on the leaves of plants. These impacts should have been explained to us before the launch of this company's activities." Dapilon residents said that, while they had

¹⁷² Human Rights Watch interview with community leaders, Djoumayah, April 29, 2017; Human Rights Watch interview with community leaders, Dapilon, April 26, 2017; Human Rights Watch interview with community leaders, May 1, 2017.

¹⁷³ Human Rights Watch interview with community leaders, Kakoumba, April 30, 2017.

¹⁷⁴ David Doley, "Airborne particulates and vegetation: Review of physical interactions," *Clean Air and Environmental Quality* 40 (2) (2006), pp.36-41; David Doley, "Report on the Potential Effects of Quarry Dust on Selected Vegetation Communities on the Gold Coast, Queensland," 2013. See also EEM, "Environmental and Social Impact Assessment of the CBG Mine Expansion Project," Biological Impact Assessment, December 2014, pp. 4-22.

¹⁷⁵ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, November 29, 2017.

¹⁷⁶ Ministry of Mines and Geology/Ministry of Environment, Water and Forests, "Evaluation Report of the Level of Emissions and Dispersion of Dust at SMB," February 2018, p. 15.

received compensation for the land acquired for the port itself, they had received no compensation for what they see as the reduced productivity of the surrounding land. 1777

Farmers from several other villages said that the construction of the SMB consortium's infrastructure, including dredging of the Rio Nunez, had caused fields to be contaminated with mud, oil or gas. "At least six families' plots have been flooded by mud carried from storm water runoff that flows through the pipes under the mining road," said one farmer, from Katougouma. "My own field used to produce 50 bags of rice, but now I can't even get a single one." He said he had received no compensation from the consortium or the government.

Community leaders in villages bordering the Rio Nunez said that the SMB consortium's activities had affected fishing, a vital supplement to the food and revenue obtained from farming. "There used to be dozens of fishermen around here, but now nobody wastes money on doing it," said a community leader from Mamaya, a riverside village. "The noise of the barges has caused the fish to go into deeper water and the nets are damaged by the barges going back and forth. Our pirogues don't have motors, so it's difficult to navigate safely in the channel to avoid the barges." A 2018 report on the social and environmental impact of Guinea's mining sector, commissioned by the Guinean government estimated that, with SMB's two riverside ports soon to be joined by that of another mining project, more than 50 barges, each of 8,000 tons, will be going back and forth on the Rio Nunez each day. The report continues: "The impacts on the area are both static (destruction of mangrove [trees growing on river banks] and dynamic (vibrations linked to the loading and moving of barges and tugboats). All that will probably influence the catches of fishermen on the Rio Nunez, who are already complaining about this." "181

¹⁷⁷ Human Rights Watch interview with community leader from Dapilon, April 26, 2017 and January 11, 2018.

¹⁷⁸ In villages bordering mining roads constructed by SMB, several farmers also said that poorly constructed drainage systems had caused their rice fields to be covered in mud and non-productive. Human Rights Watch interview with community leader, Katougouma, March 18, 2017. Other farmers complained that mining roads had blocked water ways, preventing them from effectively irrigating their land. Human Rights Watch interview with community leader, Kounissa, April 30, 2017. In at least four villages surrounding the two ports operated by the SMB consortium, landowners allege that the consortium's use of the Rio Nunez river, and particularly the dredging necessary for the consortium's boats to pass unimpeded, has displaced water and mud into their rice fields bordering the river, contaminating the fields with oil and gas.

¹⁷⁹ Human Rights Watch interview with community leaders, Katougouma, March 18, 2017.

¹⁸⁰ Human Rights Watch interview with community leaders, Mamaya, April 27, 2017.

¹⁸¹ Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018. The version of this report obtained by Human Rights Watch is marked, "Final Report," but Human Rights Watch was informed in August 2018 that Louis Berger is further revising the report. Human Rights Watch requested an

Several fishermen, including a port chief who represents local fishermen, said that the SMB consortium had not approached them to discuss the impact of mining on fishing. A fisherman said that SMB staff had come in 2016 to discuss the Dapilon port's impacts on fishing, but hadn't acted on communities' concerns. "We've not had any follow up from SMB—no equipment, for example, to allow us to fish further away." Another youth leader said both his village's rice fields and the local fishing industry had been affected by the consortium's arrival. We've met several times with representatives of the company," he said. And they'll make promises—for example to help us get motors so our fishing boats can go into deeper waters—but they're never kept." SMB said that two fishermen had been compensated for the impact of mining on fishing, between them receiving 20 million GF (\$2,220) and that four motorized barges had been given to help fishermen reach deeper water. Hundreds of local fishermen are potentially affected by SMB's project in the Boké region.

Impact of Land Dispossession on Women

The UN Basic Principles on Evictions recognize that loss of land might have a distinctive impact on women, underscoring the importance of ensuring that women have access to land titles and security of tenure. When land is expropriated, the UN Basic Principles state that, "Women and men must be co-beneficiaries of all compensation packages. Single women and widows should be entitled to their own compensation." 188

updated version of the report from Louis Berger and the mining ministry but no additional version was forthcoming. Louis Berger staff told Human Rights Watch, however, that they did not anticipate substantial changes to the technical portions of the report that discuss SMB and CBG.

¹⁸² Ibid.

¹⁸³ Human Rights Watch interview with fisherman, Dapilon, April 26, 2017.

¹⁸⁴ Human Rights Watch interview with youth leader, Kanfarende, March 17, 2017.

¹⁸⁵ A 2018 German-government funded study in the Boké region found that: "Multiple mining companies compensated some impacted villages. Representatives of fishermen say that they have received some motorized pirogues, other villages a bonus in the form of rice sacks. However, for the entire region of Boké, these measures seem to be insufficient to permit families of fishermen to restore their means of subsistence and so their past living standards. The current measures used to compensate these impacts are described by project-affected persons and local authorities interviewed as: arriving too late and not applying retrospectively (several fishing seasons have already been affected); being poorly calculated (underestimated) when compared to the impacts and losses caused." INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 58.

¹⁸⁶ Memorandum, SMB to Human Rights Watch, September 12, 2018.

¹⁸⁷ UN Human Rights Committee, "Basic Principles and Guidelines on Development-Based Evictions and Displacement," A/HRC/4/18, paras. 7, 15.

¹⁸⁸ Ibid., para. 62.

Although women regularly work alongside men to farm their family's or community's land, the patriarchal nature of communities in the Boké region, as elsewhere in Guinea, means that women rarely hold any form of title to land (customary or otherwise) and usually access land through husbands or male relatives. ¹⁸⁹ In cases, however, where women farmed their own distinct portions of land, such as gardens with vegetables to sell at local markets, women often said they received compensation directly from mining companies, even if they were not satisfied with the amount they were given.

Where compensation is paid for land farmed by and benefitting a whole linage or household, however, women said that the compensation was typically paid to male heads of linage or household. A communal or family asset is therefore replaced by financial compensation utilized at the discretion of the male leader. "The products that came from this land were used by all of us, but the company gave the money to our husbands," said a woman from a village near an SMB mine. "It's only the men who are compensated," said another woman. "Even our own husbands said that we shouldn't participate in the compensation process."

For many women, the loss of access to land deprived them of an independent source of revenue, making them wholly dependent on their husband and extended family. "If I'm getting by now, it's because some of my grandchildren, who are security guards in the mine, give me a little bit of money," said a woman whose land was taken for the construction of an SMB consortium port. 192

¹⁸⁹ The management of land through customary laws is heavily male dominated. Within a single family, all the male descendants of the original occupier have the right to farm the land, with the oldest brother coordinating the division of the land among his brothers. Land plots are gradually subdivided as each generation passes, with each original inheritor divided his share of the among his male children. EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Socioeconomic Baseline Study, (December 2014), pp. 5-91-92. See also World Bank, "Land Governance Assessment Framework for Guinea (Conakry)," 2015, http://documents.worldbank.org/curated/en/881871504866008675/pdf/119612-WP-P095390-FRENCH-PUBLIC-7-9-2017-9-59-21-GuineaFinalReportFrench.pdf (accessed May 20, 2018), at p. 51.

¹⁹⁰ Human Rights Watch interview, Lansanayah, July 5, 2017.

¹⁹¹ Human Rights Watch interview, Hamdallaye, July 25, 2017.

¹⁹² Human Rights Watch interview, Tintima, April 27, 2017.



Women prepare food in Hamdallaye village in the Boké region. Compensation payments for land lost to mining are often paid to male heads of household or linages, even where the land is utilized by entire families or households. © January 2018. Ricci Shryock for Human Rights Watch.

A widow said compensation for her household's land was awarded to her husband's family, denying her the revenue she used to support her children. "I used to grow rice and maize in the land where the port is now," she explained. Because the compensation was paid after my husband died, it was his family who participated in the census that SMB conducted, and they are the ones who received the money from the company. I know who's got the money, but I can't go and claim it. Female elders said this had happened to several other widows in the same village.

Women also complained that they had been denied equal access to compensation where money was paid to community leaders to reflect land that was owned and used by the whole community. "Women hardly got any of the compensation—our local leaders offered me 10,000 GF (\$1.11) but that was so little that I refused to accept that," said a woman

¹⁹³ Human Rights Watch interview, Diakhabia, April 26, 2017.

¹⁹⁴ Human Rights Watch interviews with community leaders, Diakhabia, April 26, 2017.

whose village received a lump sum payment from SMB for land used for a mining road.
"When the time came to decide how to use the money, the men in the village divided it all up among themselves, and we didn't even have a say."

Many women said that they were excluded from meetings on land acquisitions between the company and community leaders, and that they have to rely on male local leaders to relay information. "The whole process was decided by the men of the area," said a woman where the village's communal land was taken by SMB for a new quarry. "As [women], we didn't have any information about how much compensation the village got from the company."

Many women also noted that, while at least a handful of men in each village can get employment with mining companies to replace lost land, there are very few such jobs open to women. In May 2018, only 10 percent of the people employed directly by CBG were women. 197 Of the more than 7,600 people employed directly by SMB in September 2018, only 274 were women. 198

CBG told Human Rights Watch that the company, "ensures that compensation is paid for the right person regardless of their gender." CBG staff acknowledged that the patriarchal structure of rural communities means that compensation for land belonging to households or linages is often paid to male leaders, but said it was difficult for mining companies to bypass existing traditional structures. The company said that its concession-wide community development programs focus on women and young people, and said that future livelihood assistance programs for communities who lose land to mining would also target women.

The SMB consortium told Human Rights Watch that compensation is paid to the actual user of land, whether a man or a woman.²⁰² The consortium also underscored that the

¹⁹⁵ Human Rights Watch interview, Djoumayah, April 29, 2017.

¹⁹⁶ Human Rights Watch interview, Kakoui, April 28, 2017.

¹⁹⁷ Memorandum, CBG to Human Rights Watch, July 10, 2018. 226 women of 2,284 employees.

¹⁹⁸ Memorandum, SMB to Human Rights Watch, September 12, 2018.

¹⁹⁹ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁰⁰ Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, July 6, 2018.

²⁰¹ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁰² Memorandum, SMB to Human Rights Watch, September 12, 2018.



²⁰³ Memorandum, SMB to Human Rights Watch, September 12, 2018.

Reduced Access to Water

Community leaders from 19 villages said that bauxite mining had reduced water levels and quality in the local rivers, streams and wells that people rely on for washing, cooking and drinking, threatening access to water for thousands of people.²⁰⁴ Residents said that the construction of mining roads and other infrastructure had obstructed rivers and streams while run-off from the exposed earth on open-sky mines and on dirt roads had brought sediment into waterways. Villagers also told Human Rights Watch that the expropriation of land by mining companies had prevented communities from accessing streams and natural springs where they previously found water, while an influx of people seeking jobs in mines increased local populations and put pressure on remaining water resources.²⁰⁵

Water scarcity means that women and girls, who are primarily responsible for fetching water, are forced to walk longer distances than they would ordinarily, or wait longer to use overburdened remaining sources. A woman from a village near the SMB consortium's Dapilon port said she wakes up at 4 or 5 a.m. to get in line for water. "I take my children with me so that by the time we're finished they can go to school," she said.²⁰⁶

Mining companies underscore that there are multiple reasons for inadequate access to water in the Boké region, including population migration, climate change-related factors, and the aridity of the area, particularly in the dry season. They also highlight their work to build boreholes and wells in mining-affected communities. The absence of public government or company data regarding the impact of mining on water levels and quality, however, makes it extremely difficult for communities and civil society groups to assess the adequacy of companies' mitigation measures.²⁰⁷ Despite operating for decades in the Boké region, CBG only developed an effective mechanism for monitoring the impact of mining on water in 2017. SMB conducted little or no monitoring of water quality or

²⁰⁴ A CBG-commissioned 2014 impact assessment found that in rural areas around CBG's mines more than half of villages obtain water from rivers and ponds, with only 47% having access to pump or well. EEM, "Environmental and Social Impact Assessment of the CBG Mine Expansion Project," Socioecononic Baseline, December 2014, pp. 5-64.

²⁰⁵ Human Rights Watch interview with community leaders, Katougouma, March 18, 2017, May 1, 2018; Human Rights Watch interview with community leaders, Tintima, April 27, 2017; Human Rights Watch interview with community leaders, Diakhabia, April 26, 2017; Human Rights Watch interview with community leaders, Dapilon, April 26, 2017, January 11, 2018.

²⁰⁶ Human Rights Watch interview, Diakhabia, April 26, 2017.

²⁰⁷ Human Rights Watch discussion with Guinean civil society organizations, April 24, 2018.

availability for several years, although it began a limited monitoring program in 2018. The Guinean government in 2017 commissioned a yet-to-be-published study into the cumulative impacts of bauxite mining in the Boké region, which should provide useful information on the impacts of mining on water levels, availability and quality.²⁰⁸



A boy fetches water from a tank used to store water delivered to Lansanayah village, in the Boké region, by tankers of Société Minière de Boké's (SMB) consortium. Villagers say that SMB's arrival damaged local natural water sources, forcing them to rely on the consortium to provide alternatives. © January 2018. Ricci Shryock for Human Rights Watch.

Risk of Damage to Water Sources from Bauxite Mining

Unless managed appropriately, studies show that bauxite mining can produce significant impacts on the hydrology of the surrounding landscape, threatening access to water.²⁰⁹

²⁰⁸ Human Rights Watch interview with mining ministry official, April 24, 2018.

²⁰⁹ Aristeidis Mertzanis, "The opencast bauxite mining in N.E. Ghiona: Ecoenvironmental impacts and geomorphological changes (Central Greece)," *Journal of Geography and Regional Planning*, vol. 5 (2011), pp. 21-35; Noor Hisham Abdullah et. al, "Potential Health Impacts of Bauxite Mining in Kuantan," *The Malaysian Journal of Medical Sciences*, vol. 23 (2016), pp. 1-8. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4934713/ (accessed March 26, 2018); Metro Mining Ltd, "Bauxite Hills Project: Initial Advice Statement," October 2015, https://www.ehp.qld.gov.au/management/impact-assessment/eisprocesses/documents/bauxite-hills-ias.pdf (accessed March 26, 2018), pp. 3-58.

The construction of mines and mining roads can alter the routes of rivers and streams.²¹⁰ Surface mining, by clearing vegetation and earth to reach deposits, can increase the volume and speed of surface water drainage, which can reduce the amount of water percolating down to groundwater aquifers.²¹¹ These factors can, in turn, aggravate soil erosion, sending sediment into nearby rivers and streams, rendering them turbid (murky) and gradually blocking or obstructing their flow.²¹² Although bauxite mining does not involve the use of toxic chemicals or metals, the flow of sediment into rivers can also bring with it aluminum and iron compounds and naturally occurring heavy metals that can be dangerous at high concentrations.²¹³

Mining companies also frequently require water for their own use, such as to water mining roads to reduce dust levels. Guinea's water code grants people an inalienable right to access to water and to use it for domestic purposes, which include water for drinking and cooking, for hygiene, for laundry and for subsistence farming.²¹⁴ While under the water code mining companies can apply for a permit from the government to utilize local water resources, a company's use of water cannot deny local communities access to water for domestic use.²¹⁵ Guinea's mining code also requires companies to take steps to avoid "the

²¹⁰ Aristeidis Mertzanis, "The opencast bauxite mining in N.E. Ghiona: Ecoenvironmental impacts and geomorphological changes (Central Greece)," *Journal of Geography and Regional Planning*, vol. 5 (2011), pp. 21-35.

²¹¹ World Bank Group, "Environmental, Health and Safety Guidelines for Mining," 2007, p. 2; Aristeidis Mertzanis, "The opencast bauxite mining in N.E. Ghiona: Ecoenvironmental impacts and geomorphological changes (Central Greece)," *Journal of Geography and Regional Planning*, vol. 5 (2011) pp. 21-35; Noor Hisham Abdullah et. al, "Potential Health Impacts of Bauxite Mining in Kuantan," *The Malaysian Journal of Medical Sciences*, vol. 23 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4934713/ (accessed March 26, 2018), pp. 1-8.

²¹² Aristeidis Mertzanis, "The opencast bauxite mining in N.E. Ghiona: Ecoenvironmental impacts and geomorphological changes (Central Greece)," *Journal of Geography and Regional Planning*, vol. 5 (2011), pp. 21-35; Metro Mining Ltd, "Bauxite Hills Project: Initial Advice Statement," October 2015, https://www.ehp.qld.gov.au/management/impact-assessment/eisprocesses/documents/bauxite-hills-ias.pdf (accessed March 26, 2018), pp. 3-58.

²¹³ Noor Hisham Abdullah et. al, "Potential Health Impacts of Bauxite Mining in Kuantan," *The Malaysian Journal of Medical Sciences*, vol. 23 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4934713/ (accessed March 26, 2018), p. 7; Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018. For discussion of the health risks posed by heavy metals, including after deforestation, see Lixin Ma et. al, "Human Health Risk of Metals in Drinking-Water Source Areas from a Forest Zone after Long-Term Excessive Deforestation," *Human and Ecological Risk Assessment: An International Journal*, vol. 20 (2013), pp. 1200-1212. For a discussion of the potential risks of aluminum in drinking water, see World Health Organization, "Water Sanitation Hygiene," 2010, www.who.int/water_sanitation_health/publications/aluminium/en (accessed March 26, 2018). For a discussion of the potential risks of iron in drinking water, see World Health Organization, "Iron in Drinking-water," 2003, www.who.int/water_sanitation_health/dwq/chemicals/iron.pdf (accessed March 26, 2018).

²¹⁴ Water Code of the Republic of Guinea (Henceforth "Water Code"), 1994, Article 6.

²¹⁵ Water Code, Articles 6, 7, 8 and 10. See also American Bar Association Rule of Law Initiative, "Mining and Communities: Supporting human rights-based development in the context of industrial mining in Guinea," 2015, https://www.americanb

pollution of water...and the degradation of ecosystems."²¹⁶ The United Nations special rapporteur on the rights to water and sanitation has also noted that violations of the right to water can come from government's failures, "to regulate excessive exploitation of water resources by third parties [such as businesses] that leads to deprivation of water necessary for personal and domestic uses and failure to develop and enforce regulation to protect water resources from contamination."²¹⁷

Best Practices for Preventing or Mitigating Impact on Water Resources

The Guinean government's 2014 regulation on environmental and social impacts assessments requires mining companies requesting permission to begin mining to map out surface and underground water sources and take baseline measures of flow rates, sediment and water quality.²¹⁸ The regulation also states that companies should study the current availability of water for domestic use and its existing users.²¹⁹ This information should be used to evaluate the likely impact of mining on access to water and to propose methods for addressing it.²²⁰

Industry best practices, including the World Bank Group Environmental, Health and Safety Guidelines for Mining, also suggest measures that companies should use to prevent and mitigate damage to water sources.²²¹ Prior to beginning construction, for example, the Guidelines state that mining companies should establish a water balance for the mine, which describes how mining will occur without altering the overall water levels and quality in the region.²²² Environmental scientists told Human Rights Watch that establishing a

ar.org/content/dam/aba/directories/roli/guinea/aba-roli-guinea-practical-guide-mining-communities-2015.auth checkdam.pdf (accessed March 26, 2018), p. 14.

²¹⁶ Mining Code, Article 143.

²¹⁷ United Nations, Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, "Common violations of the human rights to water and sanitation," June 30, 2014, UN Doc. A/HRC/27/55, para. 29. The human right to water is protected by the International Covenant on Economic, Social and Cultural Rights as an aspect of the right to an adequate standard of living, which entitles everyone, without discrimination, "to have access to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use." United Nations General Assembly, "The human rights to safe drinking water and sanitation," Resolution 70/169 (2015), UN Doc. A/RES/70/169. UN CESCR, General Comment No. 15, The Right to Water (Twenty-ninth session, 2003), UN Doc. E/C.12/2002/11 (2003), para. 7.

²¹⁸ Ministry of the Environment, Water and Forests and Ministry of Mines and Geology, "Directive on the Completion of Environmental and Social Impact Assessments for Mining Operations," January 2014, p. 37.

²¹⁹ Ibid., p. 39.

²²⁰ Ibid., pp. 40-42.

²²¹ For example, World Bank Group, "Environmental, Health and Safety Guidelines for Mining," 2007, p. 2.
²²² Ibid.

water balance requires companies to create a model showing the rivers, streams and groundwater channels that flow into the local area and the likely impact of mining on those inputs and outputs.²²³

Once companies have developed an understanding of local water resources, and the proposed water balance for the mine, they should use this information to inform the design of infrastructure (e.g. route taken by mining roads) to minimize impacts on surface and ground water.²²⁴ The World Bank Group Environmental, Health and Safety Guidelines for Mining also recommend that where mining infrastructure will cross streams or waterways, procedures should be established to minimize impacts on surface water, including by reducing erosion and sediment flows into waterways.²²⁵ Any use of water by the company–for example for dust suppression–should consider the impact on water availability.²²⁶

Once mining begins, and to minimize run-off from open mines and mining roads, the World Bank Guidelines state that mining companies should create a system of canals and drains to ensure rainwater carrying sediment or pollutants does not flow into nearby rivers and streams.²²⁷ Settlement ponds, where rainwater is directed and stored to remove sediment, should be used to prevent contamination of rivers and streams.²²⁸ Both the World Bank's Guidelines, and Guinean regulations on environmental and social impact assessments, state that companies should, throughout the life of a mining project, monitor mining's impact on water quality and availability.²²⁹

SMB's Water Management

Interviews with community members, review of government inspection reports and audits, and interviews with environment ministry officials suggest that the SMB consortium has

²²³ Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018.

²²⁴ World Bank Group, "Environmental, Health and Safety Guidelines for Mining," 2007, pp. 2-4.

²²⁵ Ibid., pp. 3-4.

²²⁶ Ibid., p. 2

²²⁷ Ibid., pp. 3-4.

²²⁸ Ibid., pp. 3-4.

²²⁹ World Bank Group, "Environmental, Health and Safety Guidelines, Wastewater and Ambient Water Quality," 2007, p. 30. See also Guinean Ministry of the Environment, Water and Forests, "General Guide on Environmental and Social Impact Assessments," 2013. p. 21.

taken inadequate measures to mitigate the impact of mining on waterways, potentially affecting thousands of rural villagers' access to and use of water.

Dozens of people across more than 13 villages said that the water sources they rely on for drinking, washing and cooking had been negatively impacted by the arrival of SMB's mining operations. In several villages, residents said that the routes chosen for mining roads have blocked or obstructed waterways, or that sediment from rain-water run-off has flowed into rivers streams, discoloring water and gradually filling the riverbed with sediment.²³⁰ "The company cut across the rivers where we get water when they dug their mining road, without giving any warning," said a community leader from Djoumayah, a village near SMB's Malapouya mine.²³¹ "And now there's sediments and rocks that are washed down from the road into the water source." He said that it took SMB almost a year to build the village a borehole, which then broke down. Community leaders said that, although they were worried about the health impacts of drinking water containing runoff from mines and mining roads, they were not aware of the SMB consortium conducting any monitoring of water quality.

Residents also said that, while the SMB consortium had installed pipes, tunnels, and bridges to allow waterways to pass underneath its mining road, these are at times too poorly constructed to allow water to flow freely.²³² "SMB has tried to put some pipes in so the river can flow across, but it doesn't pass properly through them," said one farmer from Kakoumba.²³³ "The river serves land farmed by more than 300 people."

The SMB consortium's environmental and social impact assessments and management plan should have been the mechanisms through which the consortium assessed the likely impact of its operations on water resources and sets out a plan to address them. However, as discussed elsewhere in this report, satellite imagery shows that the Guinean government permitted the consortium to begin the construction of its first major port and

²³⁰ Interview, Kakoumba, April 30, 2017, January 11, 2018; Interview, Noumouya, January 11, 2018; Interview, Djoumayah, April 29, 2017.

²³¹ Human Rights Watch interview with community leader from Djoumayah, April 29, 2017 and January 10, 2018.

²³² For example, Human Rights Watch interview with community leaders from Kakoumba, April 30, 2017; Human Rights Watch interview with community leaders from Katougouma, March 18, 2017; Human Rights Watch interview with community leader from Djoumayah, April 29, 2017 and January 10, 2018; Human Rights Watch Interview with community leaders, Lansanyah, July 5, 2017 and January 10, 2018.

²³³ Human Rights Watch interview with community leader from Kakoumba, April 30, 2017.

mining roads months before the government had verified that the ESIAs and ESMP set out adequate steps to prevent damage to water resources.

Even once finalized in April 2015, the impact assessment for SMB's first mine, at Kaboe, offered few details as to how the consortium planned to mitigate the impact of mining on surface water or groundwater.²³⁴ A 10-page ESMP acknowledged the potential for, "sedimentation of waterways," but provided little detail on how SMB would prevent or mitigate this risk.²³⁵ The document instead stated that, "SMB will compile additional specific management plans before the preparation of the site"—although the preparation of the site was already well underway when the ESIA was finalized—and noted that, "one of the most important plans concerns the management of water."²³⁶

The next round of ESIAs conducted for the SMB project, completed in May 2016 for an expansion of mining to Malapouya and the opening of a port in Dapilon, contained more detail on how the consortium would mitigate potential impacts on surface and groundwater. The ESIA for SMB's Malapouya mine acknowledged that water quality could be impacted by, "the dispersion of sediments from areas disturbed by mining...the interruption or modification of the hydrological profile," and the "flow of contaminated rainwater into rivers." To mitigate these impacts, the ESMP states that, "surface water [i.e. rivers and streams] will be deviated from mining areas in order to reduce the amount of water affected by the project" and that rainwater will be treated to remove sediment. It also promises water quality monitoring to verify the effectiveness of mitigation measures. The ESMP for SMB's Malapouya to Dapilon road network states that the consortium will create a drainage network for rainwater.

²³⁴ Camen Resources, "Environmental and Social Impact Assessment–Mine Component SMB," April 2015. Human Rights Watch did not obtain a copy of the environmental and social impact assessment conducted for SMB's first mining road. The SMB consortium's ESMP for its port at Katougouma discusses the potential impact of dredging on sea/river water quality, the potential impact of building breakwaters on water quality and the effect of barges and port operations on water. It also suggests that the consortium planned to build reservoirs to collect rainwater with suspended sediment. Camen Resources, "Environmental and Social Impact Assessment–Component for River Port at Katougouma for Winning Alliance Port," April 2015, pp. 103, 138.

²³⁵ Camen Resources, "Environmental and Social Impact Assessment–Mine Component SMB," April 2015, p. 268. ²³⁶ Ibid.. p. 275.

²³⁷ Camen Resources, "Environmental and Social Impact Assessment for Exploitation of Bauxite in Malapouya–SMB Mine Component," May 2016, p. 236.

²³⁸ Ibid., p. 237.

²³⁹ Ibid., p. 238.

²⁴⁰ Ibid., p. 150.

Despite these commitments, however, inspections by the BGEEE in October 2016 and April 2017, and an audit of social and environmental practices commissioned by the Ministry of Mines in 2017 and finalized in 2018, found that the SMB consortium was still failing to take the steps necessary to avoid or mitigate the impact of mining on water sources. The BGEEE reports, for example, found that at several locations SMB had failed to construct reservoirs to collect muddy rainwater and remove sediment. The April 2017 BGEEE inspection report concluded that, "SMB has not taken any effective measure to reduce pollution of surface water by the transport of sediments into waterways that renders them murky and further contaminates them." A BGEEE staff member who has visited SMB's concession told Human Rights Watch, "There's very little sediment control along the roads, rainwater just flows straight into local waterways, and that's true at the mines as well." The 2018 mining ministry-commissioned audit found that, "[SMB's] mining roads demonstrate some important environmental limitations," including several technical deficiencies that could result in sediment flowing into rivers and streams.

The SMB consortium's director-general, Fréderic Bouzigues, told Human Rights Watch that he was only aware of one example, at the consortium's Malapouya mine, where sediment run off from the mine had damaged water sources and that the consortium had acted quickly to ensure rainwater did not flow into rivers. In its September 2018 response to Human Rights Watch's research, the SMB consortium told Human Rights Watch that it already has, or is constructing, mechanisms for intercepting rainwater run-off from its mines, mining roads and ports. Indeed, several of the measures that SMB said it is implementing to address weaknesses in its first round of ESIAs include those that can

²⁴¹ A report conducted by the Guinean Office of Environmental Studies and Evaluation (BGEEE) in October 2016 reported the lack of a decantation system at Kaboe 2 plateau (p. 7), Kaboe 1 plateau (p. 11) and Katougouma mining road (p. 19). Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," October 30, 2016 (Copy on file with Human Rights Watch). Six months later, in its April 2017 report, the BGEEE noted the same problem again at Kaboe (p. 10), on the Katougouma to Dabis road (p. 14) and on the Malapouya–Dapilon road (p. 27). Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report–Société Minière de Boké," April 22, 2017 (Copy on file with Human Rights Watch).

²⁴² Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," April 22, 2017 (Copy on file with Human Rights Watch), p. 37.

²⁴³ Interview, BGEEE staff member, July 26, 2018.

²⁴⁴ Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018, SMB analysis, p. 8.

²⁴⁵ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, January 15, 2018.

²⁴⁶ Memorandum, SMB to Human Rights Watch, September 12, 2018.

reduce sediment run-off, such as reinforcing the banks of mining roads, constructing decantation basins to collect sediment, and planting trees along mining roads.²⁴⁷

The SMB consortium has not, however, conducted the necessary monitoring of water levels and quality to provide evidence that mining has not had a more widespread impact on local water resources. In the first several years of its operations, the SMB consortium conducted little or no monitoring of water quality and levels in the area. The 2018 government audit stated that: "No environmental monitoring is currently conducted by SMB. The HSSE [Health, Safety, Security and Environment] teams do not have the equipment necessary to monitor...water quality."248 Furthermore, prior to beginning its operations SMB did not conduct the baseline monitoring of water levels and quality, including groundwater, needed to subsequently understand how mining has affected local water sources.²⁴⁹ SMB said in April 2018 that it had commissioned a consultancy to investigate the impact of mining on, among other issues, access to water and water quality in villages around one of its major mining sites.²⁵⁰ This has included monthly monitoring of water quality of the water sources used by the population.²⁵¹ An interim report is expected in October 2018 and an annual report in April 2019. SMB said there is no existing information available regarding groundwater flows in the region, and time and cost constraints meant that it wasn't possible to include analysis of groundwater in the environmental and social impact assessments.252

CBG's Water Management

CBG has for decades built, operated and maintained a water treatment system and pipe network that provides running water to large areas of Sangaredi town and the

²⁴⁷ Ibid.

²⁴⁸ Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018, SMB analysis, p. 9.

²⁴⁹ A 2018 mining ministry-commissioned audit stated that SMB's ESIA contained: An identification of the different water sources without mention of their organization, nor the potential interference from the project, nor a map of the different drainage basins...not testing of water characteristics likely to be affected by the project, such as turbidity or particles in suspension. Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018, p. 35.

²⁵⁰ Human Rights Watch is not clear whether this investigation will/does extend to other areas of SMB's concession.

²⁵¹ Memorandum, SMB to Human Rights Watch, September 12, 2018.

²⁵² Ibid.

neighborhoods where its workers live in the port town of Kamsar.²⁵³ But in the communities that surround CBG's mines in Sangaredi, residents from half a dozen villages said that, since CBG began operating in 1973, mining has damaged the rivers, streams and wells they rely on for water. A CBG-commissioned 2014 social impact assessment noted the risk that mining will damage water sources and identified two villages as possible examples of areas where mining has already impacted access to water:

Given that most households use wells, natural springs, streams and rivers as sources of water for drinking and daily living activities, mining operations could well have a very high negative impact on access to water. The villages of Boundou Wandé and Hamdallaye are typical of the villages that have seen their springs and streams extensively affected by mining operations. When new pits are opened, it is likely that there will be a deterioration in access to water...in the vicinity of the pits.²⁵⁴

Human Rights Watch visited Boundou Waadé and Hamdallaye on several occasions during research for this report. "Our village shares the name of the river that runs through this area," said a community leader from Boundou Waadé.²⁵⁵ "We used the river for drinking water, for washing and fishing—it was clean water. But CBG has exploited near the source of the river, reducing its flow, and red mud from the mines flows into it during the rainy season." Villagers from Hamdallaye, as well as describing the historical impact of mining on rivers and streams, said that damage to rivers and streams caused by mining had occurred as recently as 2016 or 2017.²⁵⁶

²⁵³ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Social Impact Assessment, (December 2014), p. 7-8-7-9. In Sangarédi, the water network was initially installed by CBG in 1996 to supply water to the workers' housing, and no longer has the capacity to meet the needs of the entire town. Some households can nonetheless connect to the system if they assume the cost of installing the connection, after which water is distributed free of charge. Ibid., pp. 7-110. In Kamsar, in areas outside of the "worker's town" in Kamsar there is less access to water, and the local population complains about the differential treatment they suffer compared to CBG workers. Ibid., pp. 7-8.

²⁵⁴ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Social Impact Assessment, (December 2014), pp. 7-123.

²⁵⁵ Human Rights Watch interview with community leader, Boundou Waadé, July 20, 2017 and January 14, 2018.

²⁵⁶ Human Rights Watch interview with community leader, Hamdallaye, January 13, 2018. For another perspective of the impact of mining on Hamdallaye, see Johannes Knierzinger, *Bauxite Mining in Africa, Transnational Corporate Governance and Development* (New York: Palgrave MacMillan, 2018), p. 188.

As well as Boundou Waadé and Hamdallaye, four other villages surrounding CBG's mines in Sangaredi complained about the impact of mining on access to natural water sources. "Since the mine arrived, we've seen the river gradually filling with red mud and sediment that flows off the mine," said a community leader from Kalinkolé, a village near CBG's railway line. "There are several large pipes that flow under the railway bringing water down off the hills where CBG's mines are. It's that water which flows into our river and which, we think, brings sediment down from the mines."

In responding to communities' concerns, CBG staff said that the company follows best practices in attempting to limit the impact of mining on surface and ground water, although they acknowledged that mining will always have some impact on local waterways.²⁵⁹ CBG said that the degradation of water sources in the Boké region, and particularly around the Sangaredi mine, has multiple causes, man-made and otherwise.²⁶⁰ "The whole of the Boké area has been getting dryer and dryer in the last 10 years or so, so it's difficult to say whether it's due to the mine," a member of CBG's health, safety and environment official told Human Rights Watch.²⁶¹ Halco (Mining) Inc., the holding company that comprises CBG's private-sector shareholders, told Human Rights Watch that: "CBG is unable to address claims of an unsubstantiated nature dating back as far as 1973."²⁶²

The responsibility for monitoring the impact of mining on local water sources, however, belongs to mining companies and the Guinean government, not local communities. Until 2017, CBG did not deploy the necessary tools—such as a model tracking the impact of mining on the flow of local rivers, streams and groundwater—to adequately monitor whether its mitigation measures were effective in preventing damage to water resources. The absence of historical data makes it difficult for communities to substantiate their claims that mining has affected access to water. CBG told Human Rights Watch in July 2018

²⁵⁷ Human Rights Watch interview with community leaders, Hafia, July 21, 2017; Human Rights Watch interview with community leaders, Kankalaré II, July 23, 2017; Human Rights Watch interview with community leaders, Kalinkolé, July 23, 2017; Human Rights Watch interview with community leaders, Parawol, July 24, 2017.

 $^{^{258}}$ Human Rights Watch interview with community leaders, Kalinkolé, July 23, 2017.

²⁵⁹ Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, July 6, 2018.

²⁶⁰ Memorandum, CBG to Human Rights Watch, July 10, 2018. Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, July 6, 2018.

²⁶¹ Human Rights Watch interview with member of CBG health, safety and environment team, October 12, 2017.

²⁶² Letter from Halco (Mining) Inc. to Human Rights Watch, August 1, 2018.

that, "there is no long-term study that so far permits the specific identification of the cause of a potential degradation of the quality and quantity of water in the region." ²⁶³

As part of the company's efforts to comply with the IFC's performance standards, ²⁶⁴ CBG in 2015 developed a new water management policy that requires the company to implement the tools necessary to track the impact of mining on water sources. ²⁶⁵ CBG staff told Human Rights Watch in July 2018 that: "As concerns the quality of available water [in CBG's concession], a follow up program is in place, since 2017, to measure, on a monthly basis, the flow and levels of water in multiple locations in CBG's concession as well as around mining activities." ²⁶⁶ CBG staff told Human Rights Watch that this improved monitoring now allows CBG to initiate or improve mitigation measures in a particular site where monitoring data suggests mining activities are impacting a water source. ²⁶⁷

CBG is also now developing a hydrological model that, in future years, will allow the company to understand the impact of mining on local water sources. CBG told Human Rights Watch in July 2018 that: "A model permitting the evaluation of the evolution of the groundwater table and surface water following mining activities has also been developed and at this point allows a conclusion that the impacts [on mining on water sources] are relatively limited, provided that the planned mitigation measures are put in place, which is what CBG is working on now." ²⁶⁸

CBG staff also told Human Rights Watch that the company had in the past monitored whether water in villages was safe for drinking, both in rivers and streams, wells and

²⁶³ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁶⁴ The Environmental and Social Action Plan that CBG agreed with the IFC includes the requirement for CBG to ,"Develop and implement a Water Management Plan (WMP) based on comprehensive baseline data (boreholes, wells, surface/groundwater, storm water runoff) and including a water balance and surface/groundwater model which considers the quality, quantity and availability of water resources to local communities as a result of CBG operations and associated increases in population (e.g. in Kamsar)." CBG-IFC, "Environmental and Social Action Plan," December 14, 2015 (Copy on file with Human Rights Watch).

²⁶⁵ Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017. The company is developing a map modeling the flow of surface and subterranean waterways in the Kogon water basin, where it operates, which will help the company understand the impacts of mining. Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–July 2017," p. 26. CBG staff also say that the company now measures the rate of flow of rivers in the area and is developing baselines to determine how the rate of flow evolves over time. Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017.

²⁶⁶ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁶⁷ Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, July 6, 2018.

²⁶⁸ Memorandum, CBG to Human Rights Watch, July 10, 2018.

boreholes and underground water.²⁶⁹ CBG's 2014 ESIA, however, makes no reference to past water quality monitoring data other than baseline readings taken in 2011 and 2014.²⁷⁰ Many residents and local officials said that CBG never made available to them water testing results.²⁷¹ CBG staff told Human Rights Watch that the company is in the process of strengthening its water quality monitoring, and had installed 36 water-testing wells for groundwater, but that updated results were not yet publicly available.²⁷² CBG told Human Rights Watch that, "the first qualitative results from a laboratory do not indicate any significant physical-chemical impact on water quality."²⁷³ They said that CBG's amended environmental and social management plan, which CBG is in the process of finalizing, will describe if and when data will be made public.²⁷⁴ Halco (Mining) Inc. told Human Rights Watch on August 1, 2018, that, "Halco is committed to supporting government-led initiatives by which evidence/science-based environmental monitoring information could be made accessible to local communities and stakeholders."²⁷⁵

²⁶⁹ Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017.

²⁷⁰ CBG's 2014 environmental and social impact assessment (ESIA) makes no reference to previous water quality monitoring other than baseline readings taken in 2011 and 2014 in preparation for the expansion project. Indeed, in relation to groundwater, the ESIA notes, "there is a paucity of groundwater [underground] monitoring at the Sangaredi mine site, where CBG has been operating for several decades." EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014, pp. 2-112. While a health risks assessment conducted as part of CBG's 2014 ESIA stated that the level of metals found in water courses around mining sites in Sangaredi were within WHO guidelines, CBG acknowledged that the limited amount of sampling meant that the data was of limited value. CBG, "Assessment of Health Risks to Nearby Communities and Workers due to Emissions from Compagnie des Bauxites de Guinée," (December 2014) p. 26; EEM, "Supplementary Information Package (SIP) to the ESIA of the CBG Expansion Project," (October 2015) p. 58. The 2014 ESIA also sought to develop a mathematical model to predict the amount of toxic metals that could infiltrate surface water from airborne dust (e.g. from Kamsar plant) as CBG's activities expand. The model predicted that the expected concentration toxic metals in surface water are expected to remain low, with the exception of aluminum, where the model predicts that the level could exceed US EPA guidelines in the Sangaredi area as operations expand. However, the model failed to account for potential contamination from sediment in muddy water in rainwater runoff, which many communities attribute as the biggest cause of contamination of rivers and streams. EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014, p. 2-106-2-110.

²⁷¹ Human Rights Watch interview with community leaders, Boundou Waadé, July 20, 2017; Human Rights Watch interview with community leaders, Kogon Lengué, July 21, 2017.

²⁷² Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017. A 2017 independent audit of CBG's social and environmental management states that: "Delays in water sampling has been a significant concern for the [auditors] and policy lenders that has been reported elsewhere, however, the first significant water quality monitoring campaign is scheduled to commence in mid-July [2017] upon the return from leave of the CBG Monitoring Specialist." Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report – July 2017," p. 26. Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁷³ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁷⁴ Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017; Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, April 19, 2018.

²⁷⁵ Letter from Halco (Mining) Inc. to Human Rights Watch, August 1, 2018.

Responses to the Impact of Mining on Access to Water

The Guinean government bears the primary responsibility for fulfilling its citizens' right to water and protecting against interference with access to water by third parties. ²⁷⁶ However, where mining companies own activities threaten access to water (or any other right), the United Nations Guiding Principles on Business and Human Rights state that companies should provide for, or cooperate, in their remediation. ²⁷⁷ Guinea's mining code also requires that, when seeking government approval for their project, mining companies submit, as part of a broader plan to further community development, details on how the company will develop local communities' water supply. ²⁷⁸ Companies should account for that fact that population migration to mining sites, often because of a perceived increase in employment opportunities, can increase demand for water. ²⁷⁹

Residents of more than a dozen villages, however, said that the government and mining companies either failed to provide adequate alternative water sources, or only did so months after water sources had been affected, putting pressure on remaining water sources. One woman from Tintima, a village near the SMB consortium's Dapilon port, described how an increased local population in surrounding villages, combined with the port blocking areas where people used to find water, increased demand on the village's few water sources. "With so many people dipping their buckets in, the water changed color," she said. "And the level was a lot lower than it would usually be." Community leaders said that the SMB consortium constructed a new borehole in Tintima in late 2017, well over a year after Dapilon port began operating.

Communities also said that they have been forced to develop coping mechanisms to adapt to reduced access to water.²⁸¹ Several villages that said they previously had access to

²⁷⁶ For details of states' obligations to fulfill the water to right and to protest it from interference by third parties, see United Nations, Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, "Common violations of the human rights to water and sanitation," June 30, 2014, UN Doc. A/HRC/27/55, paras. 25 and 35.

²⁷⁷ UN Human Rights, Office of the High Commissioner, "Guiding Principles on Business and Human Rights," HR/PUB/11/04, adopted June 16, 2011, http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf (accessed March 28, 2018), p. 24.

²⁷⁸ For operating permits, Mining Code, Article 30-II. For mining agreements, Mining Code, Article 37-II.

²⁷⁹ World Bank Group, "Environmental, Health and Safety Guidelines for Mining," 2007, p. 2.

²⁸⁰ Human Rights Watch interview, Tintima, April 27, 2017.

²⁸¹ Human Rights Watch interviews, Dapilon, April 26, 2017, July 6, 2017; Djeribiya, April 26, 2017, July 6, 2017; Katougouma, March 18, 2017; Boundou Waadé, July 20, 2017; Hafia, July 21, 2017; Kankalaré, II, July 23, 2017; Kalinkolé, July 23, 2017.

natural water sources said that they now rely on the SMB consortium to bring them water in tankers, forcing them to ration water or look for supplementary and more distant water sources. "SMB sends us water in tankers every two or three days, but it's not enough," said a community leader from Kandouga.²⁸² "So our young people are forced to drive motorbikes or scooters 2 kilometers to where there is borehole. And the villagers there charge people a small fee for each 20-liter container we fill."

Women and girls, who are often primarily responsible for getting water for the family, said they bore the largest burden in finding alternative water sources. "It's the women of the village who bear the brunt of work needed to get water," said one woman from a village near Sangaredi.²⁸³ "We have to get water for our families to drink, but also so the men can wash themselves before they pray." Several women said that the scarcity of water challenged social cohesion. "With the number of women who are at the well, there's often arguments as to who should go first," said one villager.²⁸⁴ A woman described a fight that broke out at the village well. "I'm on my feet from 4 a.m. looking for water in the village," she said.²⁸⁵ "One woman asked another to at least leave one bucket of water for her to take. When she refused, they threw themselves on each other. This type of thing happens pretty regularly—the lack of water puts us all on edge."

CBG told Human Rights Watch that the company has commissioned an independent impact assessment to evaluate the impact of mining on access to drinking water. The company said that only two villages had been identified as potentially impacted, and they had since been provided with boreholes.²⁸⁶ In view of the absence of historical data on the impact of mining on water levels and quality, however, Human Rights Watch is not sure what methodology was used to conduct this assessment. CBG also said that it has financed the construction of 36 wells and boreholes since 2015 as part of its community development efforts.²⁸⁷ CBG should ensure that, if its improved monitoring of water levels and quality identifies threats to access to water, it promptly provides alternative safe water sources. Civil society organizations should work with communities who say that they do

"WHAT DO WE GET OUT OF IT?"

²⁸² Human Rights Watch interview, Kandouga, April 28, 2017.

²⁸³ Human Rights Watch interview, Hafia, July 21, 2017.

²⁸⁴ Human Rights Watch interviews, Djoumayah, April 29, 2017.

²⁸⁵ Human Rights Watch interviews, Kounissa, July 6, 2017.

²⁸⁶ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁸⁷ Ibid.

not have adequate access to drinking water to file complaints to CBG's grievance mechanism.

The SMB consortium said that it has provided 80 boreholes and 8 wells to local communities and has repaired 40 more boreholes. The absence of monitoring data on the impact of mining on water sources, however, makes it difficult to assess the adequacy of SMB's response. Many residents told Human Rights Watch that SMB had not constructed enough alternative sources and that alternatives were only constructed months after natural sources are affected.²⁸⁸ "Our access to the places we used to draw water has been cut off by the port and the mining road," said a community leader in Dapilon, a village close to an SMB consortium port.²⁸⁹ "It took the company more than a year to construct boreholes for each village in this area, but it's still not enough—particularly because there's so many people who have moved here." Several villages also questioned the quality of the water that the SMB consortium has provided and said that SMB has either not conducted water testing or not shared the results.

²⁸⁸ Interview, Katougouma, March 18, 2017, May 1, 2018; Interview, Tintima, April 27, 2017; Interview, Diakhabia, April 26, 2017; Interview, Dapilon, April 26, 2017, January 11, 2018.

²⁸⁹ Human Rights Watch interview with community leaders from Dapilon, April 26, 2017. Several other villages said that the large amounts of land that the SMB consortium has acquired for its two ports and numerous mining sites has deprived communities of areas where they used to find water in rivers or wells. Human Rights Watch interviews, Katougouma, March 18, 2017, May 1, 2018; Tintima, April 27, 2017; Diakhabia, April 26, 2017.

Threats to Health from Reduced Air Quality

Scores of residents living adjacent to open-pit mines and mining roads in the Boké region described how their lives had been blighted by the dust produced by the mining and transport of bauxite, with dust entering villages and homes and covering crops in a layer of red dirt during the months-long dry season. "It gets everywhere, even into our food when we're cooking," said one woman from a village near SMB's Malapouya mine.²⁹⁰ Villagers, many of whom said they believe mining is already contributing to respiratory illnesses, worry about longer-term health impacts. "When you come back from your fields dirty, and covered in dust, even if an illness doesn't show straight away, it can certainly appear later," said one community leader.²⁹¹ Limited government monitoring and the almost complete absence of public data from mining companies on air quality means that communities have no way to verify if their fears are well founded.

Doctors and health workers said that the lack of reliable local health statistics makes it impossible to draw conclusions on associations between mining and respiratory illnesses.²⁹² They underscored, however, the risk that reduced air quality linked to mining could contribute to negative health outcomes. "When you look at the level of dust and pollution that is produced by mining, we will see an increase in respiratory illnesses," said Dr. Soumah N'Fansoumane, Deputy Director of Boké's regional hospital.²⁹³ Although the dust blown from open-sky bauxite mines and from transport roads is not typically more toxic than other forms of dust, the World Health Organization says that exposure to any

²⁹⁰ Human Rights Watch interview, Lansanayah, April 28, 2017. A 2018 mining ministry-commissioned audit of mining companies social and environmental practices stated that: "Dust deposits are also responsible for negative impacts such as the dirtying of homes (outside and inside), equipment, vehicles, clothes and bodies. If these impacts can be considered minor in itself, they are at least very poor perceived by the population, particularly because of the extra work they cause, particularly for women." Louis Berger, Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, May 2018, p. 56.

²⁹¹ Human Rights Watch interview with community leader, Toukerem, April 29, 2017.

²⁹² Dr. Theodore Monimo, the head of the medical center in Sangaredi, told Human Rights Watch that he had seen no evidence of a statistical correlation between the number of respiratory illnesses his center treated and mining activities, and that, in the absence of an epidemiological study of the impact of bauxite mining on public health, he could draw no conclusion on the impact of mining on respiratory illness. Human Rights Watch Interview with Dr. Theodore Monimo, head of the medical center in Sangaredi, January 13, 2018.

²⁹³ Human Rights Watch interview with Dr. Soumah N'Fansoumane, Deputy Director of Boké's regional hospital, January 12, 2018.

fine particle dust can cause, trigger, or exacerbate respiratory and cardiovascular diseases.²⁹⁴ Vehicle exhaust emissions are also a proven cause of respiratory illness.

The villages and homes located along the SMB consortium's unpaved mining roads, on which hundreds of trucks transporting bauxite travel every day, are the most acutely impacted by dust and vehicle emissions.²⁹⁵ A 2018 mining ministry-commissioned audit estimated the truck traffic on SMB's roads "as many as 4,000 or 5,000 vehicles per day."²⁹⁶ SMB told Human Rights Watch that, "the dust created by mining roads is one of our biggest concerns."²⁹⁷ After initially operating with far from adequate mitigation measures for limiting dust emissions, SMB significantly reduced dust levels ahead of the 2018 dry season by more frequently watering its mining roads. Communities remain concerned, however, about the impact on air quality of both exhaust emissions and dust and say that the watering is only partially effective.

CBG transports ore for export by train, but community leaders said that poor air quality also remains a source of concern for villagers located close to active mines operated by CBG and in residential neighborhoods close to a CBG processing plant where bauxite is stored, crushed and dried. CBG staff told Human Rights Watch in July 2018 that air quality in its concession is currently within the highest target established by the WHO, although it only began comprehensive air quality monitoring in 2017 and has not yet released updated public data.²⁹⁸ CBG aims to ensure that air quality reaches the WHO's lowest guideline level by 2024.²⁹⁹

²⁹⁴ "Tackling the global clean air challenge," World Health Organization press release, accessed July 21, 2017, http://www.w ho.int/mediacentre/news/releases/2011/air_pollution_20110926/en/. World Health Organization, "Health Effects of Particulate Matter," 2013, http://www.euro.who.int/__data/assets/pdf_file/0006/189051/Health-effects-of-particulate-matter-final-Eng.pdf (accessed July 21, 2017), p. 6.

²⁹⁵ "UMS: SMB Winning Consortium- Où en sommes nous en 2017?" video clip, YouTube, https://www.youtube.com/watch? v=Bf5ryLXW8Rg, (accessed March 22, 2018). Human Rights Watch conducted research in six villages located along the approximately 40 kilometers mining road connecting the SMB consortium's Dapilon port to Malapouya mine (Dapilon, Kounissa, Kakoumba, Soleyah, Djoumyah and Lansanayah), with some bisected by the road and others a few hundred meters away, as well as several villages on SMB's other mining road, from Katougouma port to the Dabis and Kaboe mines.

²⁹⁶ Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018, p. 57.

²⁹⁷ Memorandum, SMB to Human Rights Watch, September 12, 2018.

²⁹⁸ Memorandum, CBG to Human Rights Watch, July 10, 2018.

²⁹⁹ Ibid.

Impact of Dust on Daily Life

Villages living alongside the SMB consortium's road network described how the constant passage of heavy-duty trucks along unpaved roads had displaced dust into their communities. "There [were] four or five days in 2016 when the school was closed because of the amount of dust getting into it," said a parent from Kounissa, where the village school is some 200 meters from the mining road.³⁰⁰ "The mining road cut our village into two." A community leader from Djoumayah, a village in a valley close to SMB's mining road, said in 2017 that the constant truck traffic disturbed his families' sleep: "The trucks pass all day and night. It's been like since the mining route was installed, and it's only when there's a strike, or an event like that, when it stops."³⁰¹

Satellite imagery reviewed by Human Rights Watch shows that there are 40 settlements (which includes villages with dozens of households and hamlets with only a few) within 500 meters of SMB's Dapilon to Malapouya mining road, and 28 within 250 meters. There are another 12 settlements within 250 meters of the Katougouma to Dabis road, and 17 within 500 meters. When Human Rights Watch first drove on SMB's Dapilon to Malapouya mining road in March 2017, passing trucks kicked up so much dust that researchers struggled to see more than a few hundred yards ahead. Satellite imagery from February 2017, during the dry season, clearly shows dust displaced from the road onto surrounding trees, crops and homes, with a red shadow extending between 800 meters to 900 meters from the road. Although SMB has since taken measures to reduce dust, Human Rights Watch observed that trees and crops alongside large stretches of road remained, in April 2018 (the end of the dry season), coated in a thick layer of red dust.

Residents of several villages surrounding SMB's mining sites also complained about the amount of dust produced when the mines are active. Human Rights Watch researchers in March 2017 observed large quantities of dust blowing from SMB's Malapouya mine toward dozens of houses nearby, particularly from uncovered storage piles where large mounds of bauxite are stored. Because bauxite mining in Guinea occurs at a surface level, both the blasting of rock through dynamite and the use of surface miners, machines which cut out the ore without the need for blasting, can produce large amount of dust.³⁰²

³⁰⁰ Human Rights Watch interview, Kounissa, July 6, 2017.

³⁰¹ Human Rights Watch interview with community leader, Djoumayah, January 10, 2018.

³⁰² Human Rights Watch interview with environment ministry official, April 24, 2018.



A tree covered in dust next to a mining road operated by the La Société Minière de Boké consortium. Communities state that the dust kicked up by the hundreds of trucks transporting bauxite on mining roads has reduced the productivity of surrounding trees and crops. © January 2018. Ricci Shryock for Human Rights Watch.

Satellite imagery reviewed by Human Rights Watch also revealed large, uncovered piles of bauxite ore inside the SMB consortium's two ports, at Dapilon and Katougouma, and showed evidence that wind is blowing dust as far as two kilometers from the ports, reaching five villages close to Dapilon port and four close to Katougouma. "You can run your finger down the wall of any of the houses here, and there'll be dust," said a community leader from Katougouma. "You clean it off, and it just comes straight back." Another community leader from Katougouma told a government inspection mission in February 2018 that: "The dust here has created coughs among the inhabitants of Katougouma, especially for older people and newborns....help us to reduce the dust because the company itself doesn't want to do anything about it." The BGEEE in April 2017 stated that at Katougouma port: "The unloading of trucks, the loading of barges, the

³⁰³ Human Rights Watch interview with community leaders, Katougouma, March 18, 2017, May 1, 2018.

³⁰⁴ Ministry of Mines and Geology/Ministry of Environment, Water and Forests, "Evaluation Report of the Level of Emissions and Dispersion of Dust at SMB," February 2018.

mineral stocks and port activities don't show any real measures to fight against the control of dust."³⁰⁵ The report does commend the SMB consortium for continually watering areas at Dapilon port where trucks and other vehicles are passing.³⁰⁶

Dozens of community members said that they believed that the dust produced by the SMB consortium's activities had already impacted their families' health or would do so in future. "My three children often have coughing fits at night, so much so that they cough until they throw up," said a woman from Lansanayah, a village close to an SMB mine.³⁰⁷ "When the company mines here, it sends lots of dust in our direction."

Worried about the potential health impacts of mining, families, especially women, at times use part of their already meager resources on hospital fees and medicines. "We're the ones—the women—who have to take our children to [the] hospital," said a village elder from Lansanayah.³⁰⁸ "We've asked numerous times that the company give us the materials to better equip the local health center, but they've never given us anything," said a woman from a neighboring village.³⁰⁹ "So we have to go to Boké to buy medicines or for tests, which is more than 40 kilometers away and costs 20,000 GF (\$2.20) each way." The SMB consortium established a health center in Katougouma in 2015, although the Guinean government only provided the medical staff needed to open it in July 2017.³¹⁰

While communities in CBG's concession, which transports bauxite by train, complained much less frequently about dust levels than those living near SMB's mining roads, poor air quality remains a source of serious concern for villages located close to active CBG mines. "During the dry season, we suffer a lot from the dust, which comes from the roads inside the mining site, dynamiting at the mines and dust blown down from the exposed rock," said a community leader from Boundou Waadé.³¹¹ "It deposits itself on all the trees here,

³⁰⁵ Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," April 22, 2017 (Copy on file with Human Rights Watch), p. 19.

³⁰⁶ Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," April 22, 2017 (Copy on file with Human Rights Watch), p. 36.

³⁰⁷ Human Rights Watch interview, Lansanayah, January 10, 2018.

³⁰⁸ Human Rights Watch interview, Lansanayah, April 28, 2017.

³⁰⁹ Human Rights Watch interview, Djoumayah, January 10, 2018.

³¹⁰ Human Rights Watch interview with community leaders, Katougouma, July 7, 2017.

³¹¹ Human Rights Watch interview with community leader, Boundou Waadé, July 20, 2017 and January 14, 2018.

and on some days you'll struggle to see any real distance in the village."³¹² A 2014 CBG-commissioned socioeconomic impact assessment stated that:

Mine machinery that is on the move day and night in the pits constitutes a health nuisance where mining areas are located near inhabited areas. This machinery exposes the local population to high dust levels (outside the wet season) because the roads are neither sufficiently paved nor sufficiently watered.³¹³

Community leaders in Kamsar, where CBG's port is located, also remain concerned about the effect on air quality of CBG's port and bauxite processing plant, although they said that CBG's air quality management had improved in the last two decades.³¹⁴ CBG said that in 2005 it spent \$17 million on an upgrade to its Kamsar plant that the company said reduced emissions by 80 percent.³¹⁵ "When CBG first arrived here, there was a lot of dust in Kamsar, at times enough to turn the sky murky and red," said Hadja Keita, the president of a women's microcredit cooperative in Kamsar.³¹⁶ "In the 2000s, CBG began to reduce dust and emissions to reduce the impact on local people, but we still worry about the factory's health implications."

Health Risks from Reduced Air Quality

Bauxite dust is not toxic in itself.³¹⁷ However, exposure to any type of fine particle dust, known as particulates, has been proven to cause, trigger, or exacerbate the occurrence of

³¹² Human Rights Watch interview with community leader, Boundou Waadé, July 20, 2017 and January 14, 2018.

³¹³ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Social Impact Assessment (December 2014) pp. 7-83. An academic conducting research in Boundou Waadé observed in a 2017 book: "When I entered the village...I was shocked by the amount of dust in the air. All villagers had red eyes. Their complaints were similar to those of other villages around the mines, but their needs seemed to be much more urgent as the dust rendered agriculture unviable and even the domestic animals did not survive due to the blastings and a lack of nutrition." Johannes Knierzinger, *Bauxite Mining in Africa, Transnational Corporate Governance and Development* (New York: Palgrave MacMillan, 2018), p. 196.

³¹⁴ Human Rights Watch interview with local officials, Kamsar, January 10, 2017.

³¹⁵ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Social Impact Assessment (December 2014) pp. 7-82.

³¹⁶ Human Rights Watch interview with Hadja Keita, President of the Cooperative for the Development and Training of Women in Kamsar, January 10, 2018.

³¹⁷ Bauxite is generally regarded as biologically inert, and so is classified for occupational hygiene purposes as a nuisance dust, or "particle not otherwise specified. Donoghue, A. Michael, Neale Frisch, & David Olney. "Bauxite Mining and Alumina Refining: Process Description and Occupational Health Risks." Journal of Occupational and Environmental Medicine, 56.5S (2014): S12-S17.

respiratory and cardiovascular diseases.³¹⁸ Particulates of 10 micrometers or less (PM₁₀) can penetrate the lungs or enter the bloodstream, and can lead to heart disease, lung cancer, asthma, and acute lower respiratory infections.³¹⁹ PM_{2.5} are smaller fine particles, with diameters that are 2.5 micrometers and smaller, that are inhaled deeper into the lungs and so create additional health risks.³²⁰ Both PM₁₀ and PM_{2.5} particles can be transported in the air, with PM_{2.5} potentially remaining airborne for long periods and PM₁₀ particles, which do not carry as far, often deposited downwind of emissions sources.³²¹ The WHO has issued guidelines setting out target levels to protect public health for both PM₁₀ and PM_{2.5}.³²² In 2015, the Guinean government adopted national standards for atmospheric pollution that included standards on air quality.³²³ The standards include air quality targets for particulate matter less than 10 micrometers and smaller (PM₁₀).³²⁴

Globally, there is a dearth of data on the impact of bauxite mining or the transport of bauxite on the air quality and health of nearby communities.³²⁵ Studies have shown, however, that surface mining produces large quantities of particulate matter, both because of the dust produced during mining itself and the loading and road transport of raw material, although most (but not all) of the dust is larger than the dangerous PM₁₀ size and below.³²⁶ Furthermore, several studies show that, during the transport of raw material from mines, haul roads in particular are a major source of airborne particulate matter due to the

^{318 &}quot;Tackling the global clean air challenge," World Health Organization press release, accessed July 21, 2017, http://www.w ho.int/mediacentre/news/releases/2011/air_pollution_20110926/en/. World Health Organization, "Health Effects of Particulate Matter," 2013, http://www.euro.who.int/__data/assets/pdf_file/0006/189051/Health-effects-of-particulate-matter-final-Eng.pdf (accessed July 21, 2017), p. 6.
319 lbid.

³²⁰ Douglas Dockery and C. Arden Pope, "Acute respiratory effects of particulate air pollution," *Annual Review of Public Health*, vol. 15 (1994), pp. 107-132; Douglas Dockery et. al, "An association between air-pollution and mortality in United States Cities," *New England Journal of Medicine*, vol. 329 (1993), pp. 1753-1759.

³²¹ United States Environmental Protection Agency, "Particulate Matter Emissions."

³²² World Health Organization, "WHO Air Quality Guidelines for Particulate Matter, Ozone, Nitrogen Dioxide and Sulfur Dioxide- Global Update 2005," 2006, p. 279.

³²³ Regulation Harmonizing Six Guinean Standards on Protection of the Environment, February 27, 2015. The standard was itself formulated in 2012. Guinean Institute for Standards and Measurement, Guinean Standard, Atmospheric Pollution, 2012.

 $^{^{324}}$ The ambient air quality standard for PM₁₀ is 230 μg/m³ for an average level over a 24-hour period, and 50 μg/m³ at the annual average. Guinean Institute for Standards and Measurement, Guinean Standard, Atmospheric Pollution, 2012, p. 15.

³²⁵ Human Rights Watch interview with Guy Marks, Professor of Respiratory Medicine, Woolcock Institute of Medical Research and University of New South Wales, March 26, 2018.

³²⁶ Aditya Kumar Patra, Sneha Gautam, and Prashant Kumar, "Emissions and human health impact of particulate matter from surface mining operation—A review," Environmental Technology & Innovation, vol. 5 (2016), pp. 233-249, at p. 237.

interaction between roads and tires, including particles (PM_{10} and under) small enough to damage human health. 327

Exhaust emissions from diesel and gas-powered vehicles used on mining roads can also cause adverse impacts on respiratory health.³²⁸ Diesel powered-vehicles, which make up the majority of the SMB consortium's road truck fleet,³²⁹ emit both sulfur and nitrogen oxides, which have been linked to a range of negative respiratory and cardiac illnesses and overall increased mortality.³³⁰ Vehicle emissions are also an additional source of PM_{2.5} and PM₁₀ particles.³³¹ Studies have indicated links between exposure to traffic-related air pollution, which covers both particulate matter and other exhaust emissions, and negative health outcomes, including asthma and other respiratory illnesses.³³² Studies have shown stronger statistical associations between negative health impacts and truck traffic than with automobiles.³³³

Local Health Workers' Observations

Human Rights Watch spoke to local health workers about the risks of dust and other pollutants produced by the mining and transport of bauxite, including at three clinics in villages near the SMB consortium's operations, as well as with senior staff at the regional hospital in Boké and at the medical center in Sangaredi, where CBG's mines are located.

³²⁷ Ibid. See also Subrato, Sinhaa and S.P. Banerjee, "Characterization of haul road dust in an Indian opencast iron ore mine," *Atmospheric Environment*, vol. 31 (1997), pp. 2809-2814.

³²⁸ Health Effects Institute, "Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects," January 2010.

³²⁹ Camen Resources, "Environmental and Social Impact Assessment for Exploitation of Bauxite in Malapouya – SMB Mining Road Component," May 2016, p. 72.

³³⁰ The World Bank, "Reducing Black Carbon Emissions from Diesel Vehicles: Impacts, Control Strategies, and Cost-Benefit Analysis," 2014, http://documents.worldbank.org/curated/en/329901468151500078/pdf/864850WPooPUBLolorepor too2April2014.pdf (accessed March 29, 2018), p. 48.

³³¹ Ibid. Health Effects Institute, "Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects," January 2010, p. vii.

³³² A 2010 study of the available literature on traffic-related air pollution conducted by the Health Effects Institute found that there is sufficient evidence to support a causal relationship to traffic-related air pollution and exacerbation of asthma. It also found suggestive evidence of a causal relationship with onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, total and cardiovascular mortality, and cardiovascular morbidity, although the data are not sufficient to fully support causality. Health Effects Institute, "Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects," January 2010, p. XV.

³³³ Brunekreef, B. et al., "Air pollution from truck traffic and lung function in children living near motorways," Epidemiology, vol. 8 (1997), pp. 298–303; Nicole Janssen et al., "The Relationship between Air Pollution from Heavy Traffic and Allergic Sensitization, Bronchial Hyperresponsiveness, and Respiratory Symptoms in Dutch Schoolchildren," Environ Health Perspectives (12) (2003), pp. 1512-1518.

Several health workers from rural clinics who serve communities near SMB's operations on a daily basis stated that they believed that reduced air quality due to the dust and emissions produced by mining and mining roads had contributed to an increase in respiratory illnesses.³³⁴ "The dust leads to lots of illnesses—eye irritations, coughs and other respiratory issues," said a health worker from Djoumayah, a village near SMB's Malapouya mine.³³⁵ "We don't keep statistics on bronchitis, but I think we get more cases than we did before."

Health workers are particularly concerned about the potential risk from reduced air quality to children, who are more susceptible to respiratory illness from exposure to particulate matter. "Since the arrival of the mine, I think bronchitis for children has been a problem," said a health worker from Diakhabia, a village near the SMB consortium's Dapilon port. "But as we send children with serious illnesses for treatment in Kamsar or Boké, I don't have records or statistics as to what children are diagnosed with." Environmental factors, including air pollution, are a key cause of childhood disease and mortality worldwide. "Lower respiratory infections are among the largest causes of mortality in children globally. "338"

Best Practices for Monitoring and Mitigating Impacts on Air Quality

The World Bank Group's Environmental, Health, and Safety Guidelines (EHS Guidelines) state that companies should estimate the likely impact of their activities on air quality prior to beginning a project.³³⁹ This requires companies to conduct "baseline quality assessments"—which measure air quality before mining operations begin—and to use "atmospheric dispersion models to assess potential ground level concentrations"—models that use the baseline data to quantitatively estimate how emissions from mining operations will change air quality in populated areas.³⁴⁰

³³⁴ Human Rights Watch interviews with health workers, Djoumayah, April 29, 2017; Katougouma, May 1, 2017; and Diakhabia, April 26, 2017.

³³⁵ Human Rights Watch interview with health worker, Djoumayah, April 29, 2017.

³³⁶ Human Rights Watch interview with health worker, Diakhabia, April 26, 2017.

³³⁷ World Health Organization, "Don't pollute my future! The Impact of the Environment on Children's Health," 2017, http://apps.who.int/iris/bitstream/10665/254678/1/WHO-FWC-IHE-17.01-eng.pdf?ua=1 (accessed March 29, 2018), p 1. 338 lbid., p. 2.

³³⁹ World Bank Group, "Environmental, Health, and Safety Guidelines, Air Emissions and Ambient Air Quality," 2007, p. 4.
³⁴⁰ Ibid.

The Guinean government's 2014 regulations on environmental and social impact assessments in the mining sector recommends that companies, "used recognized models" as the basis for their evaluation of likely environmental impacts, including as regards air quality.³⁴¹ International environmental scientists and respiratory health experts told Human Rights Watch that, once the likely impact of mining on air quality is known, companies should conduct health risks assessments, which use statistical models to estimate the consequences of a change in air quality on the health of the local population.³⁴²

Because of the potential effect of mining on air quality and health, companies should devise mitigation measures to ensure that they will meet air quality standards and protect the health of local populations. The EHS guidelines note that particulate matter can be released during, "the transport and open storage of solid materials, and from exposed soil surfaces, including unpaved roads," and so recommend the use of dust control measures such as spraying water on roads.³⁴³ The guidelines recognize, however, that the effectiveness of watering is variable, and can reduce particulate matter by as much as 98 percent to as little as 12 percent.³⁴⁴ They underscore the need to ensure that, "emissions and air quality monitoring programs provide information that can be used to assess the effectiveness of emissions management strategies."³⁴⁵ Monitoring data should be used to make corrective actions to ensure that mitigation measures are effective.³⁴⁶

SMB's Management of Air Quality

Interviews with government officials, review of government inspection reports, and analysis of the SMB consortium's environmental and social impact assessments suggest that SMB did not properly anticipate the impact of its operations on air quality, nor implement adequate mitigation measures and monitor their effectiveness.

³⁴¹ Ministry of the Environment, Water and Forests and Ministry of Mines and Geology, Directive on the Implementation of Environmental and Social Impact Assessments in Mining Operations, 2014, p. 21.

³⁴² Human Rights Watch interview with Guy Marks, Professor of Respiratory Medicine, Woolcock Institute of Medical Research and University of New South Wales, March 26, 2018. Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018.

³⁴³ World Bank Group, "Environmental, Health, and Safety Guidelines, Air Emissions and Ambient Air Quality," 2007, p. 8.

³⁴⁴ Ibid., p. 17.

³⁴⁵ Ibid., p. 10.

³⁴⁶ lbid., p. 10.

The ESIAs commissioned by the SMB consortium did not follow international best practices by modeling the quantitative change in air quality that SMB's operations, including mining and road transport, would produce. Several of the impact assessments did conduct a very limited amount of baseline air quality monitoring but did not estimate the impact of SMB's operations on the baseline readings.³⁴⁷ This meant that, when the project began, neither SMB nor the Guinean government knew the extent of the consequences for air quality and public health.

The SMB consortium was, however, in general aware that its project posed a risk to local air quality. The ESIA for SMB's Dapilon to Malapouya mining road stated: "The construction work of the mining road already foretells the problems that it could cause to people living along the route, notably the overloading of the route, the increase in risk of traffic accidents, altered air quality (dust, smoke)....This situation is made more worrying by the fact that all along the road there are a certain number of plantations, schools, lodgings, water sources etc."³⁴⁸ Addressing air quality specifically, the ESIA states: "In total, all the emissions and pollutants in the air lead de facto to pollution of the air and the risk of eye and lung illness in the population and workforce situated in the immediate environment."³⁴⁹

Despite this warning, however, SMB began its operations with far from adequate mitigation measures. In the first two years of SMB's operations, from 2015 to at least April 2017, SMB's watering of its mining roads fell far short of that needed to reduce dust levels. "They water the part of the road that's close to their base, but it has such an ephemeral effect," said one farmer in April 2017.³⁵⁰ "An hour later it's dried up and you're back where you started." The BGEEE in April 2017 concluded that the, "low frequency of watering of the road [from SMB's mine in Malapouya to its port in Dapilon—about 40 kilometers] means that this section is less wet and as a result is a source of dust emissions." The report did commend SMB on frequent watering of its other principal mining road, from Katougouma

³⁴⁷ For example, Camen Resources, "Environmental and Social Impact Assessment for Exploitation of Bauxite for Guinea Mineral Resources Company–Mining Road Component," May 2016, pp. 47-53.

³⁴⁸ Camen Resources, "Environmental and Social Impact Assessment for Exploitation of Bauxite in Malapouya–SMB Mining Road Component," May 2016, p. 10.

³⁴⁹ Ibid., p. 126.

³⁵⁰ Human Rights Watch interview, Kakoumba, April 30, 2017.

³⁵¹ Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," April 22, 2017 (Copy on file with Human Rights Watch), p. 27.

to Dabis, although it noted that SMB failed to adequately limit the speed of its trucks and cover the cargo containers in which bauxite is transported, both of which contribute to increased dust levels.³⁵²

Despite communities' beliefs that mining companies' operations are impacting their health, the SMB consortium until 2018 conducted little or no air quality monitoring, including in residential areas.³⁵³ A mining ministry-commissioned audit undertaken in 2017 concluded that SMB then conducted no monitoring of air quality and that the company didn't at the time have the equipment necessary to do so.³⁵⁴

Fréderic Bouzigues, SMB's Director-General, acknowledged that it had taken SMB one or two years to integrate what he called "an effective anti-dust program." Bouzigues said that the consortium had in the second half of 2017 increased the frequency of watering of roads, and the consortium in 2017 purchased a fleet of water tankers to conduct this watering. Bouzigues also said that, as of 2017, the consortium more successfully enforced speed limits for truck drivers and paved limited sections of the mining road, including the approaches to the consortium's ports at Katougouma and Dapilon. The consortium in 2017 also paved a 15 kilometer stretch of public road linking the town of Boké to Katougouma port, after complaints that company-related traffic had increased dust emissions on the road. Bouzigues told Human Rights Watch that SMB did not pave the rest of its mining roads because of the cost involved and the likelihood that, with such frequent traffic from mining trucks, the road would deteriorate rapidly.

However, while residents acknowledged that SMB's mitigation measures had, since mid-2017, reduced dust levels, dozens of residents said that the consortium has still not done enough to address poor air quality. Several communities showed Human Rights Watch

³⁵² Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," April 22, 2017 (Copy on file with Human Rights Watch), pp. 13, 15.

³⁵³ Human Rights Watch interview with environment ministry official who participated in two inspections of SMB's facilities, April 24, 2018. Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," October 30, 2016 (Copy on file with Human Rights Watch), p. 19. In discussing dust on the Katougouma mining road, the report notes, "a total absence of monitoring of dust levels."

³⁵⁴ Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018, SMB analysis, p. 9.

³⁵⁵ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, October 11, 2017.

³⁵⁶ Ministry of Mines and Geology/Ministry of Environment, Water and Forests, "Evaluation Report of the Level of Emissions and Dispersion of Dust at SMB," February 2018.

³⁵⁷ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, November 29, 2017.

researchers how vegetation on the sides of mining roads remained totally coated in red dust during the dry season, with even trees one or two hundred meters away clearly reddened. "It's true that there's much more watering now, and that's helped reduce dust levels," a health worker from Djoumayah told Human Rights Watch in January 2018.³⁵⁸ "But the watering doesn't follow a strict program and we're still seeing the same respiratory problems." Another community leader from Kakoumba, a roadside village, also acknowledged limited improvement: "The watering that they've done so far has helped, but it's not enough. We want the road to be paved, or for SMB to transport material by train. Our health should be the most important thing here."³⁵⁹

To assess SMB's progress in mitigating dust and other emissions, the mining ministry and environment ministry in February 2018 jointly conducted a mission to the areas where the SMB consortium operates. A report issued after the mission stated: "The joint inspection team found proven cases of dust pollution generated by the exploitation, transport and shipping of the bauxite mineral from this company on neighboring communities in their agricultural activities and in their daily lives." Nine of the ten air quality measures conducted during the 2018 inspection exceeded the WHO's highest target level (i.e. the most generous to companies) for PM₁₀ particles for a 24-hour period, in four cases several times over. Four of the ten measurements were conducted in residential areas, and in each case the WHO's highest target level was exceeded.

The results of the February 2018 mission mirrored those of earlier government inspections of SMB conducted by the BGEEE in October 2016 and April 2017. Seven of nine air quality measurements conducted in 2016 and 2017 exceeded the WHO's highest target level for a

³⁵⁸ Human Rights Watch interview with heath care worker, Djoumayah, January 10, 2018.

³⁵⁹ Human Rights Watch interview with community leader, Kakoumba, January 12, 2018.

³⁶⁰ Ministry of Mines and Geology/Ministry of Environment, Water and Forests, "Evaluation Report of the Level of Emissions and Dispersion of Dust at SMB," February 2018, p. 22.

³⁶¹ Ibid., p. 23.

 $^{^{362}}$ Ibid., p. 23. The WHO's highest target level for a 24-hour period is 150 µg/m3. The mission's dust measurement in the village of Djoumayah was 523.4 µg/m3, in Baniré village 238.4, in Katougouma village 240.6 and Diakhabia village 190.1.

24-hour period for PM₁₀, although none were conducted in residential areas.³⁶³ Four of the measurements would have exceeded the target many times over.³⁶⁴

Environmental scientists who reviewed the government inspection data for Human Rights Watch noted that there were significant limitations with the monitoring methodology employed. Dust levels were only recorded once at each testing location, and for a short space of time, often a matter of minutes, meaning that they offer no indication of how dust levels would fluctuate over the course of a day, let alone a longer period.³⁶⁵

Fredéric Bouzigues, SMB's Director-General, told Human Rights Watch that he questioned the rigor and reliability of the BGEEE's air quality measurements. BGEEE staff, while acknowledging that their methods have limitations, said that their role is only to identify areas of potential concern, and it is ultimately for mining companies to conduct continuous or regular monitoring of air quality.³⁶⁶

Bouzigues said that the consortium is in the process of developing an air quality monitoring system as part of a strengthened environmental and social management program.³⁶⁷ The SMB consortium told Human Rights Watch in September 2018 that in villages who complain about dust levels, the consortium now takes monthly measurements of particulate levels.³⁶⁸ This monitoring began in December 2017, but SMB said initial results would be made public in an annual report at the end of 2018.³⁶⁹

An effective monitoring program would require frequent measurements in residential areas and other public locations in proximity to the SMB consortium's mines, roads and ports, as well as consideration of seasonal variations and prevailing wind directions.³⁷⁰

³⁶³ Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," October 30, 2016. Copy on file with Human Rights Watch. Guinean Office of Environmental Studies and Evaluation, "Environmental and Social Inspection Report - Société Minière de Boké," April 22, 2017. Copy on file with Human Rights Watch.

³⁶⁴ Ibid.

³⁶⁵ Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018.

³⁶⁶ Human Rights Watch interview with BGEEE staff, May 4, 2017.

³⁶⁷ Human Rights Watch interview with Fréderic Bouzigues, SMB's Director-General, November 29, 2017.

³⁶⁸ Memorandum, SMB to Human Rights Watch, September 2018.

³⁶⁹ Ibid.

³⁷⁰ World Bank Group, "Environmental, Health, and Safety Guidelines, Air Emissions and Ambient Air Quality," 2007, p. 12.

Environmental scientists said monitoring should not be limited to particulate matter, but should include other potentially harmful substances, such as nitrogen dioxide or sulfur dioxide.³⁷¹ Air quality testing should also be conducted in accordance with a monitoring methodology that meets international standards.³⁷² SMB should also make public the results of air quality monitoring.³⁷³

CBG's Management of Air Quality

As discussed above, although CBG transports bauxite by train, communities remain concerned over air quality where they are located close to active CBG mines, storage areas or the mining roads that link mines to the company's railway, as well as in households closest to CBG's processing plants in Kamsar.

The environmental and social impact assessments completed in 2014 for CBG's ongoing expansion project provided some evidence of existing air quality in areas where CBG operates, as well as potential future impacts as mining activities intensify. Consultants in 2014 conducted limited baseline monitoring of air quality at sites located close to residential dwellings near CBG's operations in Kamsar and at two active mines (Hamdallaye and Petoun Boundou Waadé).³⁷⁴ Consistent with international best practices, CBG also commissioned a scientific model of the likely particulate matter and other

³⁷¹ Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018. World Health Organization, "Monitoring ambient air quality for health impact assessment," 1999, http://www.euro.who.int/__data/assets/pdf_file/0010/119674/E67902.pdf (accessed April 2, 2018), pp. 99-106.

³⁷² Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018. World Health Organization, "Monitoring ambient air quality for health impact assessment," 1999, http://www.euro.who.int/__data/assets/pdf_file/0010/119674/E67902.pdf (accessed April 2, 2018), pp. 99-106.

³⁷³ China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters, "Guidelines for Social Responsibility in Outbound Mining Investments," 2015, https://www.emm-network.org/wp-content/uploads/2015/03/CSR-Guidelines-2nd-revision.pdf (accessed March 22, 2018), p. 19.

³⁷⁴ CBG, "Assessment of Health Risks to Nearby Communities and Workers due to Emissions from Compagnie des Bauxites de Guinée," (December 2014) p. 17. See also EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014, pp. 2-12 for Kamsar, and pp. 2-19 for Sangaredi. Mark Chernaik, an environmental scientist at the Environmental Law Alliance Worldwide (ELAW), noted that the air quality readings in the ESIA were conducted over a relatively short period (from 5-12 sample days), and would need to be revised to reflect potential fluctuations in dust levels over the course of the year. Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018. This comment is also reflected in EEM, "Supplementary Information Package (SIP) to the ESIA of the CBG Expansion Project," (October 2015), p. 29. Chernaik also noted that the readings do not reflect only emissions from CBG's activities, but also other local potential emissions sources, such as cooking fires.

emissions produced by CBG's operations, including in residential areas, both at current production levels and as production increases during the expansion project.³⁷⁵



A chimney emits smoke at a bauxite treatment plant operated by Compagnie des Bauxites de Guinee (CBG) in Kamsar, Guinea, on September 7, 2015. Local leaders have long expressed concerns about the impacts of the emissions on local air quality. © 2015 Getty Images.

The baseline readings recorded during the 2014 ESIA in residential areas around the Kamsar plant found that the area is "already burdened with fine particulates," with average PM₁₀ levels above the WHO's guideline level and maximum daily concentrations significantly higher.³⁷⁶ Satellite imagery from March 2018 reviewed by Human Rights Watch shows that dust from the plant, and from open-air areas where bauxite is stored, has been

³⁷⁵ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014, p. 2-32-49. Mark Chernaik, an environmental scientist at the Environmental Law Alliance Worldwide (ELAW) noted that the model focused only on CBG's predicted emission and did not consider the combined effect of both emissions from CBG's operations and dust from other sources, such as cooking fires. Human Rights Watch interview with Mark Chernaik, Ph.D., Staff Scientist, Environmental Law Alliance Worldwide (ELAW), November 22, 2017 and December 4, 2017; Email correspondence between Chernaik and Human Rights Watch, February 23, 2018.

³⁷⁶ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014, pp. 2-14.

blown into Kamsar town, particularly neighborhoods adjacent to storage and processing areas.

A 2014 CBG health assessment, although arguing that the company contributes only a fraction of the particulate matter found in Kamsar, with the rest coming from other human sources, concluded:

CBG's estimated contribution to all the particulate matter collected, while moderate, is significant in light of WHO guidelines. The air quality we observed in Kamsar does not meet WHO guidelines and could increase the risk of health effects on the respiratory system, for example. These would be accentuated in more vulnerable individuals, such as infants or [older people].³⁷⁷

Baseline readings in villages around the Sangaredi mine similarly showed that the area has high levels of particulate matter, although the study, again, partly attributed this to sources unrelated to CBG.³⁷⁸ CBG's modeling of future air quality levels showed that, as CBG's mining operations expand, air quality might exceed safe levels in at least two villages near Sangaredi, as well as in residential areas close to mining roads.³⁷⁹

In view of the existing levels of particulates in Kamsar and Sangaredi, and potential for increases in some areas as mining expands, CBG's 2014 draft environmental and social

³⁷⁷ CBG, "Assessment of Health Risks to Nearby Communities and Workers due to Emissions from Compagnie des Bauxites de Guinée," (December 2014) p. i. The assessment concluded that CBG's contribution to particulate matter in the Kamsar area (as opposed to the contribution from other emissions sources) is "a small percentage" (about 4%). CBG, "Assessment of Health Risks to Nearby Communities and Workers due to Emissions from Compagnie des Bauxites de Guinée," (December 2014), p. 23. See also EEM, "Supplementary Information Package (SIP) to the ESIA of the CBG Expansion Project," (October 2015), p. 17: "The atmosphere of Kamsar is therefore still loaded with fine particles from various sources other than CBG such as traffic (roads), burning, and other industrial or commercial operations. The low percentage of aluminum measured in collected dust samples corroborated this fact (about 2% while CBG's ore contains more than 48%). The contribution of CBG in the concentrations obtained in the background studies would therefore be less than 10%." However, later responses to supplemental questions from the IFC and other lenders state that the air quality readings conducted in residential areas near the Kamsar plant, "are considered to be very influenced by CBG operations," and that the correlation between predicted emissions from CBG's plant and the actual levels of particulate matter, "suggests that the processing facility is the primary source of fine particulate" at the two monitoring sites. EEM, "Supplementary Information Package (SIP) to the ESIA of the CBG Expansion Project," (October 2015) p. 34.

³⁷⁸ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014, pp. 2-19.

³⁷⁹ CBG, "Assessment of Health Risks to Nearby Communities and Workers due to Emissions from Compagnie des Bauxites de Guinée," (December 2014) p. 24.

management program recommended that the company implement a series of mitigation measures to reduce dust.³⁸⁰ This includes watering the mining roads that carry bauxite from mines to storage areas and the railway, limiting vehicle speeds and paving roads in the vicinity of high-risk villages.³⁸¹ CBG and IFC staff acknowledge that the Kamsar plant requires further upgrading of its emissions controls, and CBG has committed to introduce the necessary changes by 2024.³⁸² CBG's 2014 health impact assessment states that, if the necessary improvements to the Kamsar plant are made, air quality modeling suggests that the Kamsar operations will meet WHO guideline levels once production expands.³⁸³

Evaluating the effectiveness of these mitigation measures, however, requires monitoring of air quality data. Despite communities' longstanding concerns over air quality, CBG only began conducting systematic and rigorous air quality monitoring in 2017. CBG had previously only conducted limited monitoring of air quality, 384 and IFC staff said that, when CBG accepted IFC financing in 2016, the company's air quality monitoring "required strengthening." 385

CBG staff said the company in 2017 installed a station that measures air quality 24 hours per day, including in locations close to residential areas in Kamsar.³⁸⁶ CBG staff also said the company is now conducting more regular monitoring of particulate levels in residential areas near mines in Sangaredi.³⁸⁷ CBG's leadership in April 2018 told Human Rights Watch that the air quality data resulting from this monitoring shows that the company is

 $^{^{380}}$ CBG, "Environmental and Social Management Program," December 2014, p. 19.

³⁸¹ lbid.

³⁸² Human Rights Watch interview with IFC environment, social and governance staff, November 10, 2017. Human Rights Watch email correspondence with IFC environment, social and governance staff, December 5, 2017.

³⁸³ CBG, "Assessment of Health Risks to Nearby Communities and Workers due to Emissions from Compagnie des Bauxites de Guinée," (December 2014), p. 23.

³⁸⁴ The 2014 ESIA conducted in advance of CBG's expansion project makes no reference to air quality data recorded by the company other than baseline readings taken in 2011 and 2014, suggesting that the company had no systematic mechanism for recording air quality prior to the assessment being conducted. EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Physical Environment Study, December 2014.

³⁸⁵ Human Rights Watch interview with IFC environment, social and governance staff, November 10, 2017. Human Rights Watch email correspondence with IFC environment, social and governance staff, December 5, 2017.

³⁸⁶ Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017. See also Ramboll Environ, "CBG Bauxite Mine Expansion, Environmental and Social Monitoring Report–February 2018," p. 29. See also Memorandum, CBG to Human Rights Watch, July 10, 2018.

³⁸⁷ Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017. See also Memorandum, CBG to Human Rights Watch, July 10, 2018.

"compliant" with industry standards.388 Local residents, however, said that, while they had seen CBG employees conduct sampling of air quality in recent years, they'd never been informed of the results. "They'll put machines up to measure the dust for two or three days, but we're never told of the results," one community leader told Human Rights Watch.389 Doctor Theodore Monimo, the head of the medical center in Sangaredi, told Human Rights Watch that he believed that the absence of public information regarding air quality in the Sangaredi region contributed to fears over health impacts.390 A 2014 ESIA commissioned by CBG stated that communities' concerns over the health impact of emissions from the Kamsar plant are, "are fueled by recurring symptoms and diseases and a set of fears that have never been challenged owing to a dearth of information."391

Human Rights Watch asked CBG to share the preliminary results of its improved air quality testing, but the company said it was unable to do so because it is still in the process of determining a methodology for analyzing CBG's contribution to air pollution.³⁹² CBG's amended environmental and social action plan, which CBG is in the process of finalizing, will describe if and when data will be made public.³⁹³

³⁸⁸ Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, April 19, 2018.

³⁸⁹ Human Rights Watch interview with community leader, Boundou Waadé, July 20, 2017.

³⁹⁰ Human Rights Watch interview with Dr. Theodore Monimo, head of medical center, Sangaredi, January 13, 2018.

³⁹¹ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Social Impact Assessment (2015), pp. 7-82.

³⁹² Human Rights Watch interview with members of CBG health, safety and environment team, October 12, 2017.

³⁹³ Ibid. Human Rights Watch interview with Souleymane Traoré, CBG Director-General, and staff, April 19, 2018.

Access to Remedies from Companies

Residents of mining-affected communities said that, where they complain about the impacts of mining on their livelihoods, access to water, and health, too often companies fail to promptly respond to and remediate their concerns. "I'm fed up with meeting with the company representatives," said a community leader from a village near an SMB mining road.³⁹⁴ "We always have meetings with them, and nothing changes."

When communities asked local government officials, such as prefects or subprefects, to intervene to resolve disputes, many residents said that this often did not lead to an issue being resolved. "Each time it's the same speeches that are made," said one community leader from a village near an SMB mine.³⁹⁵ "The government asks us to show the company respect, and then our own concerns will be considered. But there's no follow up, so we think it's all for show. We don't think the authorities are really fighting our side in all this."

Women face distinctive barriers in lodging complaints over the impacts of mining, often due to strong social norms that discourage women from participation in village governance. "It's rare for women to lodge complaints against the company," said a local official.³⁹⁶ "I think there is a social barrier, particularly the supremacy of men in the conduct of activities in the area." Mining companies said that they make sure to include women in community meetings, and to ask them for their views, but women said that it is difficult to speak frankly in the presence of their husbands or male elders and that the solutions agreed on rarely address women's needs. "We often don't even know a meeting with the company is happening, let alone have the chance to get our views across," said one woman.³⁹⁷

SMB's Grievance Mechanism

SMB told Human Rights Watch that the consortium has a Stakeholders Consultation and Dialogue Plan through which the company conducts, "an uninterrupted process between the consortium stakeholders (local government, communities, traditional leaders) that

³⁹⁴ Human Right Watch interview with community leader, Kakoumba, January 11, 2018.

³⁹⁵ Human Rights Watch interview with community leader from Kandouga, April 28, 2017.

³⁹⁶ Human Rights Watch interview with local official, Sangaredi, July 20, 2017.

³⁹⁷ Human Rights Watch interview with community leader from Lansanayah, July 5, 2017.

involves a large range of activities from the sharing of information and consultation to participation, negotiation, and partnership."398 The consortium said that SMB's community development staff visits each community at least once a week.399 Human Rights Watch asked SMB for a copy of the consortium's grievance policy or process but the consortium did not provide one and no reference was made to a grievance policy in correspondence with Human Rights Watch.

Community leaders acknowledged that SMB's community relations team frequently visits villages to listen to communities' concerns. They said, however, that SMB staff rarely follow up on complaints and that SMB frequently makes promises that are not met. As discussed elsewhere in this report, the SMB consortium's failure to address the impacts of its activities on livelihoods, including fishing and farming, water resources and health, were a key theme of the conversations Human Rights Watch had with community members.

The SMB consortium told Human Rights Watch that nine complaints had been filed by communities or individuals in 2017, concerning issues like the degradation of non-mining roads, the pollution of a water source, and employment issues.⁴⁰⁰ None of the complaints had been filed by women. SMB said six complaints had been resolved. In view of the limited number of complaints filed, and the widespread frustration communities expressed with the consortium's failure to resolve complaints, SMB should immediately develop and publish an effective grievance process and ensure that it is widely understood and utilized by communities.

CBG's Grievance Mechanism

Community leaders said that, until about 2015, CBG did little to consult with them about the impacts of mining and remedy negative consequences.⁴⁰¹ "We didn't really have any relations with CBG, they'd only come here if there was a problem," said a community

³⁹⁸ Memorandum, SMB to Human Rights Watch, September 12, 2018.

³⁹⁹ Ibid.

⁴⁰⁰ Ibid.

⁴⁰¹ Many residents said that prior to CBG's 2014 social and environmental impact assessment, the company had rarely or never consulted with them about its activities and its impacts. Indeed, many participants in the company's 2013 assessment said the consultations were the first CBG had conducted since its creation 40 years ago. EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Stakeholder Consultation (2015), pp. 6-17.

leader.⁴⁰² A CBG-commissioned stakeholder analysis, published in December 2014, found that:

Many [community members] testified to the fact that all complaints addressed directly or indirectly to CBG went astray and did not result in any remedial action. When asked how they channeled their requests and complaints to CBG, those consulted confessed that they did not know to whom they could turn. A mechanism is supposed to work at the level of the communes where authorities are to submit to CBG complaint forms available for the public to complete. This mechanism is poorly understood, if even known, and does not work.⁴⁰³

In 2015, as part of its efforts to strengthen its environmental and social management and meet the IFC's standards,⁴⁰⁴ CBG published a new grievance procedure, in which minor complaints are dealt with by community relations staff but serious or persistent problems are elevated to senior management.⁴⁰⁵ If a complaint still remains unresolved, the grievance procedure states that complainants could take the matter to court, where they can request access to a lawyer, "to continue the procedures for the settlement of the complaint."⁴⁰⁶ The grievance policy gives complainants the right to choose a lawyer, "from a selection of 10 lawyers duly recognized and accredited by the Minister of Justice and an independent accredited support NGO by the stakeholders during the formulation of the Project."⁴⁰⁷ CBG staff told Human Rights Watch that this mechanism for providing legal

⁴⁰² Human Rights Watch interview with community leader, Kogon Lengué, July 21, 2017.

⁴⁰³ EEM, "Environmental and Social Impact Assessment of the CBG Mine Extension Project," Stakeholder Consultation (2015), pp. 6-17.

⁴⁰⁴ IFC performance standards require companies to develop an effective grievance mechanism that can facilitate early indication of, and prompt remediation for those who believe that they have been harmed by a company's actions. International Finance Corporation, "Performance Standards on Environmental and Social Sustainability," January 1, 2012, http://www.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf? MOD=AJPERES (accessed March 28,2018). p. 1.

⁴⁰⁵ CBG, "Grievance Mechanism Procedure," September 1, 2015. The procedure sets out a series of possible mechanisms for resolving complaints, depending on their gravity, beginning with a meeting with the complainant by a single member of CBG's community relations staff and, for the most serious complaints, providing for a coordinated response by CBG's management. A repeated or unresolved complaint can be moved up through the different complaints mechanisms. CBG, lbid., p. 7.

⁴⁰⁶ Ibid., p. 8.

⁴⁰⁷ Ibid., p. 8.

assistance does not exist in practice, but that, "CBG's grievance mechanism must be effective because all complaints received so far have been resolved amicably." 408

Local officials said that, where a complaint is sent to CBG, they believed that the new complaints mechanism is working relatively effectively. "CBG doesn't resolve complaints quickly, but I do think it's at least trying to respond to them," said a representative of Sangaredi's communal authorities.⁴⁰⁹ At least one local official in Sangaredi directly attributed CBG's increased responsiveness to their connections to the IFC. "CBG is an old company," he said.⁴¹⁰ "But it's in the process of changing its practices because there's external pressure to do so from the IFC."

Although CBG's grievance policy requires the company to communicate extensively with affected communities about its new complaints mechanism, local officials interviewed in Sangaredi in July 2017 expressed doubts about how well known the mechanism is.⁴¹¹ CBG told Human Rights Watch that it had received 26 complaints from communities in 2016 and 2017, relating to both environmental problems (e.g. rehabilitation of quarries) and economic (e.g. destruction of crops or lack of jobs).⁴¹² The company said 23 of these complaints had been resolved.⁴¹³

Protests Due to Lack of Adequate Remedy

Many villagers said that, in the absence of an effective remedy from companies or local government, they were forced to stage protests to air their frustrations. Residents, often young men from the villages in question, said they used large stones, tires, or wood to block mining roads or access to ports or mines. One local official said in April 2017 that there had been more than 30 demonstrations in his subprefecture since SMB's arrival in 2015: "In the past, we would be able to calm things down. But as the project has progressed, and as the demonstrations have multiplied, we found it hard to keep a lid on

⁴⁰⁸ Human Rights Watch interview with members of CBG community relations team, October 12, 2017. Memorandum, CBG to Human Rights Watch, July 10, 2018.

⁴⁰⁹ Human Rights Watch interview with local officials, Sangaredi, July 20, 2017.

⁴¹⁰ Ibid.

⁴¹¹ Ibid

⁴¹² Memorandum, CBG to Human Rights Watch, July 10, 2018.

⁴¹³ Ibid.

things."⁴¹⁴ Some protests dissipate within a few hours, while others–such as those in Boké in April 2017 and September 2017–last for days.

Community leaders said that, in organizing protests and stopping mining companies' work, they usually forced local officials and mining companies to send a delegation to listen to their demands. "When the only borehole we have broke down, we asked SMB to fix it," said one community elder from Djoumayah, explaining that the village's alternative water sources had been damaged by mining.⁴¹⁵ "But we didn't get any response to our complaint and so we decided to block the mining route. That at least led SMB's leadership and the authorities to come to meet with us, although the borehole still hasn't been fixed."

In some cases, protests led to some action from the company or government to address communities' concerns. In most cases, however, villagers said that once the demonstration was over the underlying grievance remained unresolved. "We organized a demonstration in 2015 to stop CBG destroying one of the sources of the river we use for water," said a youth leader from Hamdallaye. 416 "But the local authorities said that, if we continued, we'd be arrested. Of course, once we left, CBG continued their work regardless." Several villages described interventions by the security forces to pressure protesters to stand down. "We've blocked CBG's railway twice, once in 2013 and again in 2014," explained an elder from a village bordering CBG's railways. 417 "The first time, once it was clear we weren't backing down, the military and police came, fired warning shots in the air, and arrested about five people. They were detained for 15 days, and we had to pool the village's money to pay to get them out. The second time, in 2014, it was a similar story, with 20 people arrested but released after a day."

The SMB consortium has operated a system for rewarding communities who do not disrupt their activities, where communities received "a bonus for harmonious development" if they avoided strikes or demonstrations for a three-month period.⁴¹⁸ The explanatory note that one community received along with the bonus read:

⁴¹⁴ Human Rights Watch interview with local official in Boké region, April 2, 2017.

⁴¹⁵ Human Rights Watch interview with community leader from Djoumayah, January 10, 2018.

⁴¹⁶ Human Rights Watch interview with youth leader from Hamdallaye, July 25, 2017.

⁴¹⁷ Human Rights Watch interview, Parawol, July 24, 2017.

⁴¹⁸ Human Rights Watch interview with journalist in Boké, October 12, 2017; Human Rights Watch interview with community leaders from Lansanyah, July 5, 2017.

There has been no negative event like a strike or barricade of the road in [this] village from April 1 to June 30 [2017]. According to the rules of a bonus for harmonious development, SMB will give this bonus to villages in which there has been no negative event. Our village is approved. We will distribute the bonus on July 5, 2017. This will be 16 bags of rice for the whole population of our village.⁴¹⁹

Several residents told Human Rights Watch that they see such measures as efforts to "buy" peaceful coexistence without addressing more fundamental problems. A ministry of mines-commissioned audit in May 2018 stated that: "SMB's practice of 'a bonus for harmonious development' is...emblematic of the buying of social peace."

When, in July 2017, SMB sought to give 30 bags of rice to Dapilon, a village next to an SMB consortium port, village elders initially refused. "We don't need their rice," one villager said.⁴²¹ "They just need to face up to the things that we've asked them to fix. They refuse to resolve our problems and instead give us rice? They're coming to insult us." Residents from two villages told Human Rights Watch that they had been denied this bonus having participated in demonstrations against SMB.⁴²²

⁴¹⁹ SMB, Notice of Harmonious Development Bonus, July 5, 2017 (Copy on file with Human Rights Watch).

⁴²⁰ Study on the Implementation of Environmental and Social Management Plans for Mining Companies in Guinea, Louis Berger, May 2018, p. 67.

⁴²¹ Human Rights Watch interview, Dapilon, July 6, 2017.

⁴²² Human Rights Watch interview with community leaders, Djoumayah, January 10, 2018; Human Rights Watch interview with community leaders, Kakoumba, January 11, 2018.

Government Regulation of the Mining Sector

The widespread perception among residents of mining-affected communities interviewed by Human Rights Watch is that they have been abandoned by the state to resolve problems with mining companies on their own, with national and local authorities rarely willing to force companies to take remedial action for bad practices. "We know that the mining project is backed by the president himself," said one resident.⁴²³ "So how can we be expected to challenge it?"

Environment and mining ministry officials said that the capacity and resources of the government agencies that oversee the mining industry have improved significantly in recent years. Guinea's Office of Environmental Studies and Evaluation (BGEEE), for example, began conducting annual inspections of mining operations in 2015, and in 2017 conducted inspections of six companies, including CBG and SMB.⁴²⁴ Government institutions, however, still have nowhere near the personnel and resources to effectively oversee an ever-expanding list of projects.

The government's focus on growing the bauxite sector has also at times appeared to take priority over social and environmental protections. While the government is empowered to fine companies in breach of environmental obligations and can suspend or close a project in case of serious violations, the importance of mining to the Guinean economy protects companies from government sanctions. "We've got to be careful," one senior Ministry of Mines official told Human Rights Watch.⁴²⁵ "We've signed up to this whole concept of 'responsible mining,' but we need to be careful not just to be happy only with words on the page."

Shortcuts in Approvals Process

Environmental and social impact assessments (ESIAs), which the mining code requires companies to conduct to obtain approval for a project, are the foundation on which respect

⁴²³ Human Rights Watch interview with community leader from Katougouma, April 26, 2017.

⁴²⁴ Human Rights Watch interview with BGEEE staff, July 30, 2018.

⁴²⁵ Human Rights Watch interview with senior Ministry of Mines official, October 9, 2017.

for the environment and the rights of local communities is built.⁴²⁶ By consulting with communities about the likely impacts of mining, and drawing up a plan to address them, ESIAs provide a roadmap for companies to manage the social and environmental consequences of mining. Environment ministry officials and international donors told Human Rights Watch that the BGEEE has, since 2016, improved its capacity to analyze and evaluate the quality of ESIAs, including through training from international donors.⁴²⁷

Despite improved capacity among technical staff, however, Human Rights Watch's research suggests that the Guinean government's push to attract investment into the mining sector has led it to approve ESIAs that fall short of industry best practices. In the SMB project's case, for example, three government officials told Human Rights Watch that despite concerns over the quality of the consortium's first ESIAs (for the Kaboe mine, port in Katougouma and a mining road to connect them), Guinea's desire for investment in the bauxite sector meant they were approved when submitted in April 2015. 428 "For me, what SMB submitted was just a pre-feasibility study, the environmental and social study was discussed but not with sufficient accuracy," said a mining ministry official. 429 "But at that time a number of mining projects had broken down, and we had Ebola, the IMF was predicting negative economic growth, and with the exports bans in Malaysia and Indonesia the government saw an opportunity." A senior environment ministry official acknowledged that the environment ministry was, at the time, under pressure from other parts of the Guinean government to "speed up" the project. 430

The government also allowed the SMB consortium to circumvent the typical approval process by starting construction of major infrastructure, including its two ports and related mining roads, before the applicable ESIAs were complete and several months before they

⁴²⁶ For operating permits, Mining Code, Article 30-II. For mining agreements, Mining Code, Article 37-II. The government's review of ESIAs is coordinated by the Guinean Bureau of Environmental Studies and Evaluation (*Bureau Guinéen d'Etudes et d'Evaluation Environnementale*, BGEEE). The review process begins with the BGEEE visiting communities affected by the project to discuss the contents of the ESIA, culminating in a community meeting during which the proposed mining project and its likely impacts are presented by the mining company and the ESIAs' authors to local authorities, community members and civil society groups for comments. Human Rights Watch interview with BGEEE staff, May 4, 2017.

⁴²⁷ Human Rights Watch interview with BGEEE staff, July 30, 2018.

⁴²⁸ Human Rights Watch Interview with senior environment ministry official, October 10, 2017; Human Rights Watch Interview with senior mining ministry official, October 9, 2017; Human Rights Watch Interview with environment ministry official, April 24, 2018.

⁴²⁹ Human Rights Watch Interview with senior mining ministry official, October 9, 2017.

⁴³⁰ Human Rights Watch interview with senior environment ministry official, October 10, 2017.

were reviewed and approved by the government.⁴³¹ "It's true that the construction of a project shouldn't begin until ESIAs are complete, but for SMB there was a particular political environment at the time in which we needed the project's investment," said a senior environment ministry official.⁴³² This meant that, even before the government had fully evaluated the social and environmental consequences of SMB's operating model, the project was well underway. The Guinean government's 2014 regulation on environmental and social impacts assessments in the mining sector states that: "The realization of a good environmental evaluation requires the examination of all possible variations. Taking into account the different variations can mean that certain parts of the project are reconsidered in order to improve them."⁴³³ A senior mining ministry official told Human Rights Watch:

The ESIAs, if they had been done properly, should have set out the different alternatives in terms of how material would be transported, how construction would occur, to allow the government to properly reflect on that. If the road transport method used by SMB was for a small export company, limited in time, it's not surprising that they'd choose this method. But if it's more than that, or if other companies start to shift towards using the road, then it starts to be more of a problem. You can do that for a few years, but for more than that, that shouldn't be the case.⁴³⁴

The Guinean government, in a letter to Human Rights Watch, explained the decision to allow the SMB project to begin construction before completing its ESIAs:

⁴³¹ Human Rights Watch review of satellite imagery shows that major ground clearance for the port in Katougouma began in February 2015, with the related ESIA dated April 2015. The Guinean government told Human Rights Watch that it issued a Certificate of Environmental Conformity for SMB's first round of ESIAs, which includes Katougouma, on June 26, 2015. Review of satellite imagery showed that road construction from the port northwards started in March 2015. Major ground clearance for the Dapilon port started in April 2016, with the related ESIA dated May 2016. Construction of access roads to Dapilon started March 2016. Media reports suggest that the Dapilon ESIA was reviewed by the Guinean government in September 2016. "Guineé Minérale Ressource et la SMB-Malapouya présentent leurs études d'impact environnemental," *Africa Guinée*, September 11, 2016, https://www.africaguinee.com/articles/2016/09/11/mines-guinee-minerale-ressource-et-la-smb-malapouya-presentent-leurs-etudes-d (accessed March 20, 2018).

⁴³² See also Ministry of Cities and the Management of Territory, "Operations Manual with Guidelines for Public Utility Expropriations and Compensation for Land and Natural Resources in Guinea," September 2017, http://pubs.iied.org/pdfs/17609FIIED.pdf (accessed March 25, 2018), p. 15. The manual describes the construction phase of an infrastructure project should only occur after the ESIA has been approved.

⁴³³ Ministry of the Environment, Water and Forests and Ministry of Mines and Geology, Directive on the Implementation of Environmental and Social Impact Assessments in Mining Operations, 2014, p. 21.

⁴³⁴ Human Rights Watch interview with senior mining ministry official, October 9, 2017.

For the development of our country and the well-being of the Guinean people, the sovereign government can take exceptional measures to begin a project while staying in the spirit and principles of its international engagements and the applicable laws in Guinea. In this case, given that [the SMB project] concerned areas already known and studied, the environmental aspects that could constitute a prerequisite for development of a mining project were known in advance and were effectively taken into account.⁴³⁵

Saadou Nimaga, Secretary-General of the mining ministry, told Human Rights Watch: "We had a decision to make. If we had to wait for all these studies, the market wasn't going to wait. We already knew broadly what the impacts of mining would be."⁴³⁶

SMB told Human Rights Watch that the consortium, "is always looking for ways to improve its environmental and social impact, taking into account the problems that arise during the project...and is currently implementing various actions to address weaknesses in its initial set of ESIAs and ESMPs."⁴³⁷ SMB in February 2018 commissioned an international consultancy to update its impact assessments and revise its management plan, a process that it says will finish in February 2019.⁴³⁸ Environment ministry officials, however, said it was difficult for a mining company to remedy problems when it began a project without adequate environmental and social management practices. "Instead of planning in advance, SMB is now trying to catch up," said one official. "It should have been the other way around."⁴³⁹

In responding to the concerns that the government has approved poor quality ESIAs, government officials also told Human Rights Watch that the final version of ESIAs are discussed in a public meeting that gives affected communities the opportunity to comment on the report's contents. The outcome document from that meeting is signed by the

⁴³⁵ Ministry of Mines and Geology, "Response to Questions from Human Rights Watch," received by Human Rights Watch May 17, 2018.

⁴³⁶ Human Rights Watch interview with Saadou Nimaga, Secretary-General, Ministry of Mines and Geology, April 25, 2018.

⁴³⁷ Memorandum SMB to Human Rights Watch, September 12, 2018.

^{43&}lt;sup>8</sup> Ibid.

⁴³⁹ Human Rights Watch interview with environment ministry official, July 26, 2018.

relevant participants, which include officials from the affected areas, NGOs, representatives of women, young people, village elders and religious leaders are invited.440

However, Mamady Koivogui, Executive Director of Mines Without Poverty, a Guinean NGO which conducted a study in 2017 on community participation in ESIAs, said that it is very difficult for affected communities to participate in meetings to review ESIAs—which often run to hundreds of pages—without external support and preparation.⁴⁴¹ "You can't expect rural villages to discuss complex environmental and social questions without adequate preparation," he said.⁴⁴² He noted that participants in the review meeting may not even have seen a copy of the ESIA before the meeting begins.⁴⁴³ None of the community leaders interviewed by Human Rights Watch said that they had received independent advice, training or other forms of support during the ESIA processes conducted by CBG or SMB.

Government officials also pointed out that civil society organizations do participate in the government committee that reviews ESIAs and so have the power to influence the government's approval of new projects. Civil society activists said, however, while they make recommendations during these meetings, they struggled to follow whether the ESIA or ESMP was amended to reflect their recommendations.⁴⁴⁴ "It's ultimately for the government to decide whether to approve an ESIA," said one civil society leader.⁴⁴⁵ "We make our points during the committee meeting, and ask that the company make certain changes, but we don't have much ability to see if they have been implemented." The Guinean government said that it forms a seven-person committee, under coordination of the BGEEE, to review whether adequate corrections have been made to the ESIA to allow for the granting of a certificate of environmental conformity.⁴⁴⁶ Civil society organizations said that they rarely participate in this committee, as the government usually chooses its members from relevant government ministries.

⁴⁴⁰ Ihid

⁴⁴¹ Human Rights Watch interview, Mamady Koivogui, May 21, 2018.

⁴⁴² Ibid.

⁴⁴³ Ibid.

⁴⁴⁴ Human Rights Watch interview with civil society activist who has participated in the review of ESIAs, July 19, 2017.

⁴⁴⁵ Ibid.

⁴⁴⁶ Ministry of Mines and Geology, "Response to Questions from Human Rights Watch," received by Human Rights Watch May 17, 2018.

Inadequate Resources to Oversee Mining Operations

Despite recent efforts to strengthen the capacity of the mining and environment ministries to oversee mining, national and local-level officials in both ministries told Human Rights Watch that resource constraints remain a major obstacle to effective government oversight. They described a shortage of well-qualified personnel, insufficient vehicles and money for gas and lodging, and a lack of monitoring equipment. "Our means are limited given how many mining companies we cover," said a senior staff member at the BGEEE.⁴⁴⁷

The BGEEE is supposed to conduct an annual on-site inspection of companies, reviewing the entirety of a company's compliance with its ESMP.448 The BGEEE's inspectors lack sufficient personnel and resources to conduct inspections of every mining company, but they visited six in 2016 and 2017, largely through financial support from the World Bank.449 Visits typically last less than a week for each company, NS include consultations with affected communities, meetings with company officials, and tests of noise levels and air and water quality. 450 A report is produced after the mission, summarizing the findings, and, though a BGEEE staff member shared examples of inspections reports with Human Rights Watch, they are not currently widely publicized. 451 Fréderic Bouzigues, SMB's Director-General, told Human Rights Watch that he believes that, in view of the short missions conducted by the BGEEE, it is difficult for the agency to adequately monitor large-scale mining projects. "On a site as large as ours, how can two days of monitoring be effective?" he said.452 BGEEE staff said that the goal of these inspection is not to replace monitoring that should be conducted by mining companies, but to identify key areas of concern. "We're aiming to verify whether the company is broadly following its environmental and social management plan, and to get a snapshot of conditions on the ground," said one BGEEE staff member.⁴⁵³ "But ultimately the company should be doing its own monitoring." BGEEE staff also said that, as part of their environmental and social management plan,

⁴⁴⁷ Ibid.

⁴⁴⁸ Human Rights Watch Interview with environment ministry official, April 24, 2018. INSUCO, "Study on the Norms and Practices of Expropriation, Compensation, Removal and Resettlement for Communities Affected by Mining Projects in the Bauxite Region of Guinea," February 2018, p. 34.

⁴⁴⁹ Ibid.

 $^{^{450}}$ Human Rights Watch interview with BGEEE staff, May 4, 2017.

⁴⁵¹ Ibid.

⁴⁵² Human Rights Watch interview with SMB Director-General, Fréderic Bouzigues, November 29, 2017.

⁴⁵³ Human Rights Watch interview with BGEEE staff, July 26, 2018.

mining companies should provide financial support for the training and equipment of the BGEEE and local environment ministry staff.⁴⁵⁴

Although the mining ministry has no formal role in the renewal of a company's environmental certificate, it provides additional oversight of companies' environmental and social management practices. 455 In 2017, the ministry commissioned an external consulting service to conduct an audit of companies' compliance with their environmental and social management plans. 456 Although the report has not yet been made public, the Minister of Mines, Abdoulaye Magassouba, said that his ministry was working with companies to identify remedial actions to address problems identified in the report. 457

Oversight by the central authorities in Conakry is in principle complemented by that of local environment, mining, and agriculture ministry officials at the prefectural and subprefectural level, but these officials also often lack the resources and capacity to conduct meaningful oversight. "It's true that local level officials need more support," said a senior mining ministry official. 458 "Much of the recent training and strengthening supported by international donors has been focused on the national level." The environment ministry in 2012 enacted regulations creating prefectural-level committees (Prefectural Committees for Environmental and Social Monitoring, *Comités Préfectoraux de Suivi Environnemental et Social (CPSES)*) to monitor the social and environmental impacts of mining projects. 459 The mining ministry has also installed local consultation committees (*Comité de Concertation dans les Localités Minières (CCLM)*) in more than 100 subprefectures in Guinea, which are designed to nurture dialogue between communities and mining companies and, together with local officials, contribute to the resolution of conflicts. 460

⁴⁵⁴ Human Rights Watch interview with BGEEE staff, July 26, 2018.

⁴⁵⁵ Human Rights Watch interview with mining ministry official, July 26, 2017.

⁴⁵⁶ Ibid.

⁴⁵⁷ Remarks in response to question from Human Rights Watch at African Mining Indaba, February 7, 2018. Written record of notes on file with Human Rights Watch.

⁴⁵⁸ Human Rights Watch interview with mining ministry official, July 26, 2017.

⁴⁵⁹ Regulation (*Arrété*) on Creation, Attribution, Composition and Functioning of Prefectural Committees for Environmental and Social Monitoring, August 21, 2012. According to the decree, the committees, composed of local officials, civil society organizations and a representative from the company, are mandated to discuss with mining companies' problems related to the application of ESMPs. The committees are also supposed to report to the central government on companies' compliance with ESMPs, with a view to influencing whether or not the company's environmental certificate is renewed.

⁴⁶⁰ Human Rights Watch interview with Néné Moussa Camara, Director of Service for Community Relations and Local Content, Ministry of Mines and Geology, October 11, 2017.

Civil society organizations, however, said that many CPSES and CCLM lack the resources, such as vehicles and money for gas, to provide regular and effective oversight of mining companies. 461 "The authorities in Conakry say they have delegated the authority for overseeing environmental and social impact to the CPSES," one official in Sangaredi explained. 462 "But, the CPSES in Boké doesn't function. They say that they've not been given the necessary resources. I have been here since 2015 and they have never done a mission here." Many of the CCLM are similarly inactive. "The CCLM here works a little bit, but not completely," said a CCLM member in Sangaredi." 463

A senior environment ministry official acknowledged that some of the CPSES function "in a very mediocre manner," noting that companies are supposed to provide financial support to the committees operating in their locality, but rarely do so.⁴⁶⁴ "Because the companies aren't giving them any funds, the CPSES can only really do field visits when there's a real catastrophe," said another environment ministry official.⁴⁶⁵ Néné Moussa Camara, a mining ministry official responsible for the CCLM, said that with support from international donors, the ministry is planning to better equip CCLMs to travel within their locality.⁴⁶⁶ The ministry is also installing additional CCLM in the Boké region, one for each of the region's eight subprefectures.⁴⁶⁷

Lack of Transparency and Access to Information in the Mining Sector

Civil society activists and community leaders said the lack of transparency in the mining sector, exemplified by the difficulty they face in accessing ESIAs, ESMPs, government and company inspection reports, audits and monitoring data, made it hard to hold companies accountable to environmental and social standards.

⁴⁶¹ Human Rights Watch Interview with local mining official, May 2, 2017.

⁴⁶² Human Rights Watch interview with local official, Sangaredi, July 20, 2017.

⁴⁶³ Ihid

⁴⁶⁴ Human Rights Watch interview with senior environment ministry official, May 4, 2017. See also Regulation (*Arrétê*) on Creation, Attribution, Composition and Functioning of Prefectural Committees for Environmental and Social Monitoring, August 21, 2012, Article 3.

⁴⁶⁵ Human Rights Watch interview with senior Ministry of environment official, October 10, 2017. A World Bank-funded project, which has so far helped with the training and installation of 16 committees, with six more planned, was in October 2017 planning to provide more resources to the three CPSES, in Boffa, Siguiri and Mandiana, that have been the most active so far. Interview, Koly Sangno, Coordinator of World Bank, Program to Support Governance in the Mining Sector (*PAGSEM*), August 2, 2017.

 ⁴⁶⁶ Human Rights Watch interview with Néné Moussa Camara, Director of Service for Community Relations and Local Content,
 Ministry of Mines and Geology, October 11, 2017.
 467 Ibid.

Although ESIAs should in principle be public documents, companies often fail to disclose them, instead saying they are available at the environment ministry, and the BGEEE specifically. While the BGEEE should provide members of the public with copies of ESIAs and ESMPs on request, civil society activists said that it often does not do so, or that obtaining the necessary documents requires a modest payment to cover for printing costs. Neither SMB nor the BGEEE shared copies of the consortium's ESIAs or ESMP with Human Rights Watch, although Human Rights Watch was ultimately able to obtain copies of most of the SMB consortium's ESIAs from civil society activists. SMB said that it plans to put its ESIAs on its website once they have been revised and updated.468 CBG's 2014 ESIA and a draft ESMP is available in English, but not in French, on its website.

The African Commission on Human and People's Rights has interpreted the African Charter on Human and Peoples' Rights to protect the right of access to environmental information, and imposes obligations on states to publicize environmental and social impact studies prior to any major industrial development; to provide information to communities that were exposed to hazardous materials and activities; and to provide meaningful opportunities for individuals to be heard and to participate in development decisions affecting their communities.⁴⁶⁹

Environment ministry officials told Human Rights Watch that the government was planning to make ESIAs and the BGEEE's annual inspections reports more easily accessible to the public.⁴⁷⁰ The Guinean government said that, as of April 2018, a server is in the process of being installed at the BGEEE to store ESIA reports and environmental inspections, including readings on air and water quality and noise levels.⁴⁷¹ The government also said

⁴⁶⁸ Memorandum, SMB to Human Rights Watch, September 12, 2018.

⁴⁶⁹ African Commission on Human and Peoples' Rights, Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v. Nigeria, judgement of October 37, 2001, 155/96, at para. 53. The United Nations Conference on Environment and Development has also specifically recognized access to environmental information, public participation in decision-making over natural resources, and access to justice as important pillars of sustainable development. Rio Declaration on Environment and Development, adopted June 14, 1992, UN Doc. A/CONF.151/26 (vol. I), 31 I.L.M. 874 (1992), http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm (accessed March 18, 2016). Principle 10 of the 1992 Rio Declaration on Environment and Development emphasizes that "each individual should have appropriate access to information concerning the environment...including information on hazardous materials and activities in their communities."

⁴⁷⁰ Human Rights Watch interview with environment ministry official, April 24, 2018.

⁴⁷¹ Ministry of Mines and Geology, "Response to Questions from Human Rights Watch," received by Human Rights Watch May 17, 2018.

that the BGEEE is looking for financial support to create an internet site in order to store all these documents publicly.⁴⁷² The government also said that the BGEEE does make an effort to communicate the results of ESIAs and social and environmental inspection reports to affected communities.⁴⁷³

Civil society organizations said that, as well as disclosing its own inspection reports, the government should require mining companies to publicly disclose their own reports on compliance with environmental and social standards. IFC standards encourage companies to make public periodic reports on their environmental and social sustainability. The Guidelines for Social Responsibility in Outbound Mining Investments issued by the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters also state that companies are encouraged to "disclose environmental information regularly, publicize environmental protection systems and plans, and publicize what measures have been taken and what results have been achieved.

Lack of Accountability

Local environment officials and civil society organizations pointed to the lack of consequences for mining companies where their practices violate the rights of local residents as the most significant factor in allowing harmful conduct to continue.

Community leaders, civil society activists, and local government officials noted that, in other industries, the government has suspended or fined companies that consistently breach their environmental and social obligations. In the bauxite sector, however, mining and environment ministry officials consistently said that the government's approach is to work in private with companies to improve their practices. "We've opted for the principle of conciliation," said a senior Ministry of Environment official."476

⁴⁷² Ibid.

⁴⁷³ Ibid.

⁴⁷⁴ International Finance Corporation, "Performance Standards on Environmental and Social Sustainability," January 1, 2012, http://www.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf?MOD =AJPERES (accessed March 28,2018), para. 34.

⁴⁷⁵ China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters, "Guidelines for Social Responsibility in Outbound Mining Investments," 2015, https://www.emm-network.org/wp-content/uploads/2015/03/CSR-Guidelines-2nd-revision.pdf (accessed March 22, 2018), p. 20.

⁴⁷⁶ Human Rights Watch interview with senior Ministry of Environment official, October 10, 2017.

The primary mechanism for holding a company accountable is to refuse to renew a company's certificate of environmental conformity, which is, in theory, required for a company to continue operating. "If the certificate isn't renewed, the company is then in a position of illegality in relation to Guinea's environmental laws," said Seydou Barry Sidibé, the Secretary General of Guinea's environment ministry. 477 But the government's reluctance to suspend or close profitable projects means that the threat of a closure or suspension carries little weight. "We are a poor country, a country still developing, and so we need jobs for our young people, schools for our children," said Sidibé. 478 "So while some mining companies do not respect environmental and social norms, it's not easy for us to suddenly close these companies down."

An environment ministry official pointed out that, short of closing a project, the environment code gives the government a range of powers where a company isn't meeting its environmental obligations, including financial penalties. He noted, however, that many of the fines currently provided for in the 1989 environment code are outdated and derisory. Finished Environment ministry officials said that the environment code and implementing legislation need amending to make it clearer what ministry or agencies have the power to fine or suspend mining companies, and in what circumstances sanctions will be imposed.

Several national and local officials also said that in practice, the tax revenue generated by mining companies, as well as their perceived wider contribution to the Guinean economy, appears to protect companies from government sanctions over environmental or social practices.⁴⁸¹ "It's really in Conakry where the problems come," said a local environment official.⁴⁸² "You can have a technician who says something at the prefectural level, but if you have a politician who says something different, it's difficult to get anything done." A senior mining ministry official said:

⁴⁷⁷ Human Rights Watch Interview with Seydou Barry Sidibé, Secretary General, Ministry of Environment, Water and Forests, April 26, 2018.

⁴⁷⁸ Ibid.

⁴⁷⁹ Human Rights Watch interview with environment ministry official, April 24, 2018.

⁴⁸⁰ Human Rights Watch interview with environment ministry officials, July 26, 2018.

⁴⁸¹ Human Rights Watch interview with senior Ministry of Mines official, October 10, 2017; Human Rights Watch interviews with Mayor and Subprefect, Boké region, April 2, 2017; Human Rights Watch interview with Ministry of Mines official, Boké region, May 2, 2017.

⁴⁸² Human Rights Watch interview with local environment official, May 2, 2017.

To be honest, I think criticizing SMB has become taboo inside the government. There's a political pressure that the project goes fast, because they are getting things done, and their revenue is benefitting the government and the state. It's left little chance for the Guinean government to control what's happening on the ground.⁴⁸³

Officials from the mining and environment ministries told Human Rights Watch that Guinea was still trying to "find the middle ground" between nurturing mining investment and protecting the environment. "We don't want mining to destroy the environment, but at the same time, we don't want the environment to mean that we don't do any exploitation," said Saadou Nimaga, the Ministry of Mines' Secretary-General.⁴⁸⁴

Any effort to strengthen the laws and regulations setting out sanctions for companies who infringe on the rights of community members should include a clear set of criteria detailing when these sanctions will be applied, including financial penalties and suspension of operations. This will make it more difficult for other considerations, such as the need to attract or preserve mining investments, to trump environmental and social protection. If a company is seriously interfering with the rights of community members, a project should be suspended and, if the situation persists, closed. Anyone whose rights have been violated should have access to a remedy in court.

National Assembly Oversight

The current members of Guinea's National Assembly have been in office since 2013, with legislative elections scheduled for 2019.⁴⁸⁵ President Condé's party won 53 of 114 parliamentary seats in the 2013 elections, with an alliance with seven other deputies giving the ruling coalition a parliamentary majority.⁴⁸⁶

⁴⁸³ Human Rights Watch interview with senior mining ministry official, October 9, 2017.

⁴⁸⁴ Human Rights Watch interview with Saadou Nimaga, Secretary-General, Ministry of Mines and Geology, April 25, 2018.

⁴⁸⁵ "Guinea votes in long-delayed parliamentary election," *Reuters,* September 28, 2013, https://www.reuters.com/article/us-guinea-election-idUSBRE98R05220130928 (accessed March 20, 2018).

^{486 &}quot;Doutes autour du résultat des élections législatives," *L'Obs and Agence France Presse*, October 19, 2013, https://www.nouvelobs.com/monde/20131019.OBS1823/guinee-doutes-autour-du-resultat-des-elections-legislatives.html (accessed March 20, 2018).

Guinea's mining code requires the National Assembly to ratify all mining agreements between the government and mining companies. 487 However, negotiating a mining agreement with the government is not always a prerequisite to begin mining in Guinea, with the mining code also giving the government the option to grant companies operating permits that do not require National Assembly approval. Opposition parliamentarians told Human Rights Watch that this empowers the government to authorize large-scale mining exploitation without adequate National Assembly oversight. 488 As discussed above, for example, the SMB consortium operates through a series of operating permits that do not require National Assembly approval. SMB's leadership and mining ministry officials point out that the SMB project remains subject to all the provisions of the 2011 mining code, including its environmental and social protections. 489 They also underscored that mining companies who negotiate mining agreements typically ask for reduced tax rates. 490

Once mining begins, the National Assembly provides oversight of the mining sector through two parliamentary commissions, one on mining and another on natural resources, the environment and rural development.⁴⁹¹ Both commissions conduct visits to mining-affected areas and compile reports and recommendations for consideration by relevant government ministries.

Members of the Commission on Natural Resources, the Environment and Rural Development told Human Rights Watch that their ability to draw public attention to the environmental and human rights impacts of mining was hampered by the National Assembly's political composition, with the ruling coalition reluctant to sanction debates or actions that are critical of Condé's government.

In July 2016, for example, the Commission on Natural Resources, the Environment and Rural Development visited the Boké region, including CBG and SMB's operations. Nine

⁴⁸⁷ Mining Code, Article 18.

⁴⁸⁸ Human Rights Watch interview with members of National Assembly's Commission on Natural Resources, the Environment and Rural Development, October 9, 2017. Human Rights Watch interview with opposition politicians, March 15, 2017.

⁴⁸⁹ Human Rights Watch interview with SMB Director-General, Fréderic Bouzigues, October 11, 2017. Human Rights Watch interview with Senior mining ministry official, October 9, 2017.

⁴⁹⁰ Human Rights Watch interview with SMB Director-General, Fréderic Bouzigues, October 11, 2017. Human Rights Watch interview with Senior mining ministry official, October 9, 2017.

⁴⁹¹ Human Rights Watch interview with members of National Assembly's Commission on Natural Resources, the Environment and Rural Development, October 9, 2017.

⁴⁹² Ibid.

months before the April 2017 Boké riots, the commission's report, seen by Human Rights Watch, expressed serious concerns about the SMB consortium's environmental and social management:

All our interlocutors, men, women, young people, thought leaders, local officials denounced the lack of collaboration, the closed attitude of SMB officials, who don't seem concerned with their immediate environment...People say that they suffer enormously from pollution (from dust from mining roads in the dry season), cashew plantations, invaded [by] dust, that don't produce anymore, grazing and agricultural fields inaccessible and degraded, and fishing has become unproductive because the area of the Rio Nunez river is heavily degraded.

After the mission, opposition politicians said that the National Assembly had prevented them from debating the resulting report in a plenary session of the assembly, or establishing a commission of inquiry to investigate in more detail the conduct of mining companies in Guinea's bauxite belt.⁴⁹⁴ "We wanted to denounce what we saw on our mission," said Dr. Alpha Mamadou Baldé, an opposition parliamentarian.⁴⁹⁵ "But we're a bit limited in what we can do because we're not in the majority."

Several parliamentarians said that, by failing to take further action on the basis of the commission's reporting, the National Assembly was not fulfilling its role as a check on the government's actions in the mining sector.⁴⁹⁶ "If we, in the National Assembly, don't do anything about this kind of issue, we can't say that we're complicit in what's happening, but it's something like that," said, Ibrahima Diallo, an opposition legislator and member of the commission.⁴⁹⁷

⁴⁹³ Report of the Parliamentary Fact-Finding Mission Conducted by National Assembly's Commission on Natural Resources, the Environment and Rural Development, July 2016, p. 11 (Copy of file with Human Rights Watch).

⁴⁹⁴ Human Rights Watch interview with members of National Assembly's Commission on Natural Resources, the Environment and Rural Development, October 9, 2017.

⁴⁹⁵ Human Rights Watch interview with Dr. Alpha Mamadou Baldé, October 9, 2017.

⁴⁹⁶ Human Rights Watch interview with members of National Assembly's Commission on Natural Resources, the Environment and Rural Development, October 9, 2017.

⁴⁹⁷ Human Rights Watch interview with Ibrahima Diallo, parliamentarian, October 9, 2017.

Acknowledgments

This report was researched and written by Jim Wormington, researcher in the Africa Division of Human Rights Watch.

Corinne Dufka, West Africa director in the Africa Division, reviewed the report. Janet Walsh, deputy director, Women's Rights Division; Juliana Nnoko-Mewanu, researcher on women and land, Women's Rights Division; Arvind Ganesan, director, Business and Human Rights Division; Komala Ramachandra, senior researcher, Business and Human Rights Division; Marcos Orellana, director, Environment and Human Rights Division; Katharina Rall, researcher, Environment and Human Rights Division; Juliane Kippenberg, associate director, Children's Rights Division; and Diederik Lohman, director, Health and Human Rights Division provided specialist reviews. Clive Baldwin, senior legal adviser, and Babatunde Olugboji, deputy program director provided legal and program reviews. Gavin Millar QC, of Matrix Chambers, also reviewed the report.

Josh Lyons, satellite imagery analyst, produced satellite images and analysis for the report. Morgan Hollie, associate in the Africa Division, provided additional research and administrative assistance. Report production was done by Grace Choi, publication director, and Rebecca Rom-Frank, publications/photography coordinator. Fitzroy Hepkins, administrative manager, provided production assistance and support.

We are grateful for the guidance and support provided by L'Association Mines Sans Pauvrété (AMSP), le Centre du Commerce International pour le Développement (CECIDE), Mines et Développement Communautaire (MDC) and other Guinean NGOs. Mamady Koivogui, Mariama Barry, Aboubacarr Diallo and Fatoumata Kanté deserve particular thanks for their participation in research missions and support and guidance throughout our research.

We also thank representatives of the Guinean government, the International Finance Corporation, La Société Minière de Boké (SMB) and La Compagnie des Bauxites de Guinée (CBG) for their willingness to discuss this report and its findings.

Finally, we thank the residents of the Boké region who shared their time and stories with us.

Annex: Letters in Response to Human Rights Watch

Several interlocutors, including La Compagnie des Bauxites de Guinée and La Société Minière de Boké, sent Human Rights Watch memoranda that were too lengthy to be included in this annex. The responses contained in those memoranda were, where possible, included in our report. The full memoranda are available on our website.

Response from Ministry of Mines and Geology, May 17, 2018



REPUBLIQUE DEGUINEE

Travail - Justice- Solidarité

Réponses aux questions de HUMAN RIGHTS WATCH

ANNEXE 1

1. Etudes d'impact environnemental et social

Sur quels critères le gouvernement se base-t-il pour déterminer si une étude d'impact environnemental et social (EIES) permet d'identifier et d'atténuer de manière adéquate, les impacts négatifs de l'exploitation minière ?

Les critères de référence du gouvernement pour déterminer si une étude d'impact environnemental et social permet d'identifier et d'atténuer de manière adéquate les impacts négatifs de l'exploitation minière sont :

- la mise en œuvre effective et correcte du Plan de Gestion Environnementale et Sociale (PGES) qui accompagne l'EIES;
- la mise en œuvre du PGES-entreprise préparée par le Département Environnement de l'entreprise. Ce PGES-Entreprise ou plan opérationnel environnemental permet d'appréhender et de mitiger les impacts négatifs des activités en cours de réalisation.

• Le rapport de cadrage environnemental qui décrit tous les enjeux environnementaux.

Comment le gouvernement détermine-t-il que les habitants des zones qui seront affectées par l'exploitation minière, y compris les femmes et d'autres groupes vulnérables, ont pu participer pleinement aux études d'impact environnemental et social (EIES) ?

Le gouvernement détermine la participation des habitants des zones affectées par l'exploitation minière, y compris les femmes et d'autres groupes vulnérables par des informations et la consultation publique pendant tout le processus de réalisation et de validation du rapport de l'EIES c'est-à-dire depuis la phase du cadrage qui a abouti à l'élaboration des termes de référence jusqu'à la phase de présentation du rapport final pendant laquelle toutes les questions liées aux impacts négatifs, aux mesures d'évitement, d'atténuation, de compensation et d'appui aux groupes vulnérables sont débattues séance tenante et les conclusions sont dressées dans un procès-verbal signé par toutes les parties prenantes (autorités locales, ONG ou associations concernées, représentants des femmes, des jeunes, des sages et leaders religieux, représentants des ressortissants des localités affectées pour l'audience publique à Conakry organisée par le Comité Technique d'Analyse Environnementale).

Lorsque les études sont approuvées sous réserve que la société leur apporte des améliorations ou des corrections, quelles mesures le gouvernement prend-il pour s'assurer que ces modifications ont effectivement été apportées ?

Suite à l'approbation d'une étude sous réserve, un comité restreint de sept (7) personnes est mis en place sous la coordination du Bureau Guinéen d'Etudes et d'Evaluation Environnementale (BGEEE) pour recevoir le rapport final et s'assurer que les observations et suggestions formulées par les communautés concernées et par les membres du Comité Technique d'Analyse Environnementale sont effectivement prises en compte. Cela est une condition fondamentale pour la délivrance de l'autorisation environnementale.

Quand la première série de l'étude la Société Minière de Boké (SMB) a-t-elle été approuvée, et quand la SMB s'est-elle vu délivrer un premier certificat de conformité environnementale ?

La première série de l'étude de la SMB a été approuvée le 1er juillet 2015 et le premier certificat de conformité environnementale a été délivré le 26 juin 2015.

Pourquoi le consortium de la Société Minière de Boké (SMB) a-t-il été permis de commencer la construction de ses principales infrastructures, y compris son port à Katougouma et ses routes minières reliant Katougouma aux premiers sites miniers de la SMB, avant que le gouvernement n'ait passé en revue et approuvé les EIES du consortium?

Pour des raisons de développement de notre pays et pour le bien-être des populations guinéennes, le gouvernement étant souverain peut prendre des mesures exceptionnelles pour le démarrage d'un projet tout en restant dans l'esprit et les principes de ses engagements internationaux et des lois en vigueur au niveau de la République. En l'espèce, étant donné qu'il s'agit de zones déjà connues et étudiées, les éléments environnementaux susceptibles de constituer des préalables au développement d'un projet minier sont connus d'avance et ont été effectivement pris en compte.

Quelles mesures le gouvernement prendra-t-il pour s'assurer que les individus qui occupent ou dépendent des terres destinées à une exploitation minière puissent maintenir ou améliorer le niveau de vie dont ils bénéficiaient avant leur expropriation ?

L'article 142 du Code minier stipule : « Le plan de réinstallation des personnes déplacées en raison des activités minières doit, en plus de l'aspect infrastructurel, inclure une compensation pour la perte de revenus et les moyens de subsistance résultant de ce déplacement. Le règlement et la compensation connexe seront mis en œuvre aux dépens de la Société qui détient le titre ou l'autorisation de l'exploitation minière conformément à une procédure déterminée par l'Etat qui intégrera les principes internationaux de participation et de consultation de la communauté locale. »

Ainsi, l'expropriation n'est pas imposée à un ayant-droit en Guinée. Elle intervient suite à un accord négocié entre le propriétaire et l'entreprise minière sous l'assistance des représentants des services techniques et des autorités locales concernés selon les meilleures pratiques internationales, notamment les normes relatives aux Politiques et Critères de performance en matière de durabilité sociale et environnementale de la SFI, les principes de l'Equateur ainsi que les meilleures pratiques par les principes d'ICCM.

Cependant, l'évaluation permettant de déterminer si les conditions de vie d'une personne expropriée se sont améliorées ou pas est difficile à évaluer dans la mesure où maintes

personnes expropriées ayant reçu des montants suffisants en guise de compensation, ont investi dans d'autres secteurs d'activités économiques que dans l'exploitation agricole. Quelles mesures le gouvernement prendra-t-il pour s'assurer que les femmes qui occupent ou dépendent des terres reçoivent une compensation adéquate et puissent retrouver ou améliorer leur niveau de vie ?

Le Gouvernement s'assure que les Plans d'Action et de Réinstallation se font conformément aux meilleures pratiques internationales, notamment les normes relatives aux Politiques et Critères de performance en matière de durabilité sociale et environnementale de la SFI, les principes de l'Equateur ainsi que les meilleures pratiques par les principes d'ICCM.

A titre d'exemple, Le gouvernement a amené la SMB à aménager des superficies agricoles pour développer le maraîchage, activité principale des femmes de Katougouma et de Kaboé.

Par ailleurs, un centre de santé a été construit et équipé par la SMB pour améliorer la santé maternelle et infantile et faciliter les soins prénatal et natal.

2. Mesures concernant les pratiques déficientes

Si le gouvernement identifie des insuffisances dans le plan de gestion environnementale et sociale (PGES) d'une entreprise, ou dans la mise en œuvre de ce plan, quelles mesures prend-il pour y répondre ?

En cas d'insuffisances dans le plan de gestion environnementale et sociale (PGES) d'une entreprise, pendant les phases d'approbation de l'EIES, ces insuffisances sont décelées par le Comité Technique d'Analyse Environnementale (CTAE) et corrigées dans la version finale du rapport.

En cas d'insuffisances décelées dans la mise en œuvre du PGES au moment des inspections environnementales, la notification est faite à l'entreprise sur place et dans le rapport d'inspection. Par conséquent si les dispositions idoines ne sont prises pour corriger ces manquements, l'autorisation environnementale expirée ne sera pas renouvelée et l'entreprise se retrouvera dans la situation de non-conformité environnementale.

Si une entreprise s'abstient régulièrement de mettre en œuvre un PGES adéquat, quelles sanctions le gouvernement peut-il prendre à son égard ?

La sanction dans une telle situation est le non renouvellement de l'autorisation environnementale qui pourrait aboutir à la suspension des activités.

Y a-t-il eu des exemples de sociétés relatives auxquelles le gouvernement a appliqué ces sanctions ? Quand ?

Il y a bien des sociétés qui se sont retrouvées dans une telle situation de non-conformité à un moment donné.

Le gouvernement envisage-t-il d'élaborer d'autres sanctions, telles que des amendes punitives, visant les entreprises qui ne remplissent pas leurs obligations environnementales et sociales ?

Effectivement, dans le cadre de la réactualisation du Code de l'environnement, de nouvelles dispositions sont prévues comme l'arrêt des activités et des impositions financières.

3. Transparence

Quelles mesures le gouvernement prendra-t-il pour améliorer la capacité d'accès des communautés et des groupes de la société civile aux études d'impact environnemental et social et aux rapports périodiques de suivi environnemental et social réalisés par le gouvernement et les entreprises, y compris aux données sur la qualité de l'air et de l'eau?

Dans le cadre du Projet d'Appui à la Gouvernance dans le Secteur Minier, un Serveur est en train d'être installé au BGEEE pour bancariser tous les rapports d'IEIES, d'inspections environnementales tant sur la qualité de l'air, de l'eau, sur le bruit et le sol.

La création d'un site web rendra accessible toutes les EIES et leurs résumés non techniques.

Le gouvernement peut-il s'engager à créer un site Internet, à l'instar de http://www.contratsminiersguinee.org, pour regrouper ces documents dans un répertoire public ?

Le BGEEE est déjà engagé dans un projet de création d'un site Internet dans le but de regrouper tous les documents dans un répertoire public.

Quelles mesures le gouvernement prend-il pour communiquer de manière pro active les résultats des études d'impact et des rapports de suivi environnemental et social auprès des communautés concernées ?

La communication des résultats des études d'impact et des rapports de suivi environnemental et social auprès des communautés concernées est une pratique qui est en cours en Guinée depuis 2011 avec la création du BGEEE.

Pourquoi le ministère des Mines et de la Géologie n'a-t-il pas rendu public son audit des activités de « local content » de sociétés minières ?

Un atelier public de restitution médiatisé de l'audit des activités de « local content » des sociétés minières s'est tenu le 30 juin 2017 au Ministère des Mines et de la Géologie.

Le rapport provisoire, largement distribué auprès de l'ensemble des parties prenantes, est en lecture au niveau des services techniques concernés et sera soumis à un atelier de validation....

Le ministère rendra-t-il public l'audit qu'il a réalisé en 2017 sur le respect des plans de gestion environnementale et sociale par les entreprises ?

Toutes les dispositions seront prises pour la publication de ce rapport après validation. Un atelier de restitution médiatisé de ce rapport a été organisé du 16 au 17 mai 2018, au Ministère des Mines et de la Géologie, en présence de l'ensemble des acteurs. Le rapport prenant en compte les réactions sera largement diffusé.

Le gouvernement guinéen a-t-il adopté les Principes volontaires sur la sécurité et les droits de l'Homme, une initiative qui réunit de nombreuses parties prenantes afin de répondre au risque que des atteintes aux droits humains ne résultent des dispositions sécuritaires publiques et privées prises dans les secteurs pétrolier, gazier et minier?

Les Principes volontaires sur la sécurité et les droits de l'Homme sont bien adoptés par le gouvernement d'où la réalisation préalable des études d'impact environnemental et social avant l'exécution de tout projet de développement y compris les projets miniers.

ANNEXE 2

Synthèse des recherches de HRW concernant les impacts de l'exploitation minière sur les droits humains en Guinée

Les préoccupations exprimées par les populations à HUMAN RIGHTS WATCH sur la perte de terres et de moyens de subsistance, l'accès réduit à l'eau, les dangers sanitaires associés à une baisse de la qualité de l'air et l'accès à un mode de réparation sont bien représentatives des questions relatives aux droits humains qui se posent généralement dans le cadre de l'industrie minière, entre autres industries extractives.

Ainsi, s'appuyant sur ces différents sujets de préoccupation évoqués, la Guinée depuis quelques années a pris les initiatives ci-après :

- assumer pleinement ses fonctions de puissance publique notamment pour faire respecter sa réglementation (code minier, code de l'environnement, législation sociale, règles fiscales) et de contrôler les activités des entreprises;
- assurer l'intégration d'obligations sociales et environnementales lors de la négociation et la mise en œuvre d'accords d'investissement et les moyens de leur respect;
- faciliter l'adoption d'une convention collective offrant une protection étendue des droits des travailleurs du secteur minier;
- mettre en œuvre ses engagements liés à l'ITIE et en particulier de faire réaliser un rapprochement des revenus déclarés par les compagnies minières et par les différents organismes collecteurs de l'Etat;
- publier l'ensemble des chiffres concernant la production minière et les paiements effectués à l'Etat ;
- intégrer la société civile à la conception et au suivi du processus d'exécution de l'initiative;
- adopter des règlements visant la protection des droits humains et de l'environnement et de ne pas fournir des garanties financières aux entreprises dont les projets d'exploitation et de réhabilitation après fermeture de la mine ne respectent pas les exigences sociales et environnementales adoptées. En juin 2017, la Guinée a adopté des Lettres de Politique de la Responsabilité Sociétale des Entreprises (RSE) et de Promotion du Contenu Local. En plus d'adhérer au « Cadre Ruggie » des Nations-Unies : « Protéger, Respecter et Réparer », la Lettre de Politique de la RSE prend également en compte, dans le respect des meilleures pratiques et normes internationales, les principales thématiques suivantes :
 - o Droits de l'Homme;

- Normes internationales du travail;
- Conservation et protection de la biodiversité et gestion durable des ressources naturelles;
- o Participation au développement social et communautaire local;
- o Promotion du « contenu local « et des compétences nationales ;
- o Santé et sécurité des communautés ;
- o Prise en compte des femmes et des populations vulnérables ;
- Conditions d'acquisition des terres et gestion des déplacements involontaires;
- o Protection du patrimoine et héritage culturels ;
- Transparence et participation active des parties prenantes ;
- Soutien à la lutte contre la corruption.

Pour traduire l'importance qu'occupent les Droits Humains dans le secteur minier guinéen, l'axe stratégique n°1 de la promotion de la RSE est de favoriser le respect des droits humains en énonçant que : « L'entreprise minière s'engage à respecter les droits humains individuels et collectifs dans le cadre de ses activités et dans sa sphère d'influence. L'entreprise s'inscrit dans une démarche de prévention de toute atteinte aux Droits Humains par l'évaluation préalable et continue, la gestion des impacts et des facteurs de risque de ses activités pour les populations. Afin de remédier à toute atteinte, l'entreprise s'engage à se conformer aux instruments internationaux relatifs aux Droits de l'Homme ».

Ainsi, pour une mise en œuvre efficace de la RSE dans le secteur minier guinéen, le gouvernement guinéen a mis en place tous les instruments (légaux, règlementaires et contractuels) requis et adhéré aux principes des principales normes et meilleures pratiques internationales en termes de RSE.

Response from Halco (Mining) Inc., August 1, 2018



HALCO (MINING) INC. 323 North Shore Drive, Suite 510 Pittsburgh, Pennsylvania 15212

Mr. Jim Wormington Researcher, Africa Division Human Rights Watch 350 Fifth Avenue New York, NY 10118-3299

1 August 2018

RE: Human Rights Watch Research on Human Rights Impact of Bauxite Mining

Dear Mr. Wormington,

We are writing in response to your letters of 22 and 25 June 2018 addressed individually to each of the shareholders of Halco (Mining) Inc. We would also like to thank you again for receiving our representatives at your offices on 13 July and for the presentation on your work so far.

In your letters you ask the Halco shareholders for comments on HRW's initial findings related to certain aspects of the operations of Compagnie des Bauxites de Guinee (CBG), as set out in attachments to those letters. Rather than responding individually, the shareholders have requested that Halco respond to your inquiries collectively, in its capacity as shareholder of CBG. Following are comments and responses to your questions.

First, we would like to describe the context in which CBG is operating:

- With close to 2300 direct employees and a similar number of indirect jobs, CBG is one of the country's main private sector employers and main currency earners (74% of currency earned). CBG is also one of the main contributors to Guinea's tax revenue (approx. 10% of the government's operating budget). To date, CBG remains the largest private investor in development programs for communities in the Boké region. CBG also has a service agreement with the ANAIM hospital (in Kamsar) and supplies potable water and power to the communities of Kamsar and Sangaredi.
- As a resource-rich area, the Boké region enjoys higher income per capita and a
 lower rate of poverty than most other regions in Guinea. Positive benefits resulting
 from the presence of an important bauxite mining operation since 1973 have,
 however, been offset by very significant in-migration. For example, when CBG was
 established, there were only a few thousand inhabitants in the small town of
 Kamsar, which now has a population of about 400,000 people (and is still growing).
- In practice, population growth has magnified land access issues in the region and increased encroachment by new-comers on the mining concession with no sustainable solution in sight.
- Population growth has also drastically increased socio-economic disparities
 between those who are connected to mining operations and those who are not;
 those who have been living in the area and have customary land rights and the
 new-comers who do not. Moreover, this has led to increased demand for public
 infrastructure and utility services that have not received proportionate
 public/international investment. The resulting "expectation gap" has and
 continues to create social tensions.
- In relation to inclusive economic growth, it is worth noting that CBG has significantly increased its community investment contributions in support of income generation activities and has proactively committed to regional partnership initiatives aimed at addressing the above- mentioned gaps (e.g., World Bank regional planning initiative in Boké).
- Halco's shareholders are committed to encouraging improvement in the Boké region. Sustainable solutions to the current situation will, however, require a holistic response that is beyond our control, or that of CBG and other bauxite miners (see "Way Forward" section below).

PART I-Comments on Initial Findings

In your letters you ask that we comment on HRW's initial findings as set out in the attachment. We have the following comments presented in the same order as your initial findings.

Land Rights: We were surprised to hear that there are unreported complaints from community leaders and members, as a grievance mechanism has been established in accordance with the IFC Performance Standards (IFC PS). The procedure involves the CBG community relations department and is well known by local community leaders. Addressing grievances related to matters prior to 2015 is difficult due to intense population movement and the influx of migrants in the area. However, we encourage any community members with serious unresolved land rights complaints to raise them with CBG as soon as possible.

On the subject of payment for land acquisitions, CBG has implemented a consistent practice whereby an amount of compensation for investments made by an occupant are calculated to cover the loss, with the occupant receiving a corresponding amount of money. In cases involving the relocation of populations and where long-term land occupation is based on legal or customary rights, CBG employs compensation in kind. Agricultural lands are compensated by land with similar or better potential and affected community property is replaced with alternative community infrastructure and revenue-generating activity.

To address your concerns about women and land acquisitions, CBG pays warranted compensation directly to the correct person in each case, regardless of gender. CBG has also instituted programs designed to improve the opportunities and livelihood of women in the local communities.

Access to Water: Regarding the statements from rural communities on damage to watercourses, CBG has significantly improved the welfare of the local communities through programs to improve access to potable water via the drilling and equipping of wells. CBG is unable to address claims of an unsubstantiated nature dating back as far as 1973.

We understand that the 2014 report you cite relating to mud flows does not attribute all such flows to mining activity. In any event, muddy water from the plateaus is confined to

the area of the mine by CBG's Boundou Wandé dam, so it does not have a downstream effect.

We are confident that CBG has the intention and ability to manage watercourses under its responsibility to the advantage of all interested parties.

<u>Air Quality</u>: CBG regularly monitors air quality through several sampling stations in Kamsar and Sangaredi and reports the results. We understand that the required data will be made available to you. CBG is targeting appropriate air quality levels under the IFC performance standards. Dust abatement measures are actively implemented in relevant areas.

CBG has made significant advances in the areas in which HRW has expressed concern, due in part to its undertakings to strengthen its environmental and social management and to meet IFC performance standards. We are confident that, while implementation of the performance standards to date may not be perfect, practices have improved significantly with the adoption of new measures and efforts by the dedicated personnel at CBG.

PART II – Comments in response to specific questions

In your letters you also ask about the Halco shareholders' influence over CBG in terms of respect for human rights, as well as the identification, prevention and mitigation of harm and its remediation. In particular, you have queried the following:

- 1. Efforts made to ensure CBG respects Human Rights?
- 2. Due diligence into CBG's measures to identify and prevent harm?
- 3. Steps taken to ensure remedy (where harm has occurred)?

At the outset, it is important to emphasize that CBG is not controlled by Halco. The Directeur Général is responsible for day to day operations of CBG, which has its own independent staff, policies and procedures. The Board of Directors of CBG, which provides strategic direction and oversight to management, consists of 10 directors—five nominated by the Government of Guinea—with the Minister of Mines serving as Chairman—and five nominated by Halco. The Halco nominees to the CBG Board consist of two nominees from Alcoa, two from Rio Tinto and one from Dadco.

Therefore, any individual Halco shareholder's ability to influence the policies and practices of CBG is limited. Nevertheless, through a cooperative and focused contribution by us, best practices are encouraged and influenced at CBG.

Halco's involvement in CBG's expansion project (Phase 1 and 2) provides a recent and relevant example of the ways in which Halco (and its shareholders) have exercised due diligence, supported efforts to ensure the respect of human rights by CBG and promoted sustainable improvements in CBG's environmental and social performance.

It is useful to clarify that the primary way in which Halco (and its individual shareholders) can identify concerns and exercise due diligence in respect of CBG is through the Board and the various Committees that make up the governance structure of CBG. These include:

- CBG's Board of Directors and Advisory Committee, which both include an equal number of government and Halco appointees, provide opportunities to hold policy discussions.
- Halco has senior-level representatives on the CBG Audit Committee, Expansion
 Project Steering Committee and Technical Committee (in which environmental and social issues are discussed).

Meetings of the Board and Committees are held regularly and there are ongoing discussions of key issues, including the expansion project, held among Halco, CBG and the government, both at these meetings and in-between.

The Halco shareholders also use their own corporate assurance systems to monitor project risks and compliance. These systems include audits, which typically use company experts to review project studies and plans including environmental and social considerations, and general mitigation measures, which include potential human rights impacts.

In addition, CBG's expansion project lenders conduct regular audits per the loan covenants and submit public reports. We are in regular communication with the lenders to discuss and resolve any audit findings or other compliance issues that may arise.

This combination of Halco shareholder companies' assurance system and lenders' ongoing audits provides a robust assurance framework which has already led to significant

improvements in CBG's procedures, systems and on-the-ground outcomes for the expansion project and CBG operations generally.

Response to Questions 1. and 2. Measures to ensure CBG's respect of human rights and due diligence into CBG's measures to identify, prevent and mitigate harm

Since the outset of the expansion project, Halco has indicated to CBG and our government partner that the success of the project will require that CBG adopts and adheres to international standards in many respects. We also encouraged CBG to use the project as an opportunity to enhance its management systems in support of its ongoing operations.

The involvement of the expansion project lenders has reinforced the principle of strict adhesion to IFC standards and other relevant international guidelines which are consistent with our own.

Following are examples of measures taken by Halco and its shareholders to improve or ensure compliance with those standards and guidelines:

- Encouraging the development of a CBG corporate code of conduct which includes sections pertaining to communities and the environment.
- Supporting a full environment and social impact assessment (ESIA) be undertaken in compliance with IFC PS 1 on the assessment and management of environmental and social risks and impacts with IFC PS 2 to 6 and 8.
- Providing CBG with access to the Halco shareholders companies' environmental and social performance experts to support the ESIA study and Resettlement Action Plan (RAP) process.
- Supporting the selection of international ESIA study services providers with capabilities to meet IFC requirements and deploy a rigorous and independent consultation and engagement process. Additional Guinean expertise in land acquisition was also added to the team.
- Encouraging CBG's adherence to IFC PS 5 for all matters pertaining to land acquisition and involuntary resettlement.
- Encouraging and approving budgetary allocations to reinforce CBG's Communities team, to add resources required to conduct robust and sustained consultation and engagement work post ESIA and to drive new community and investment strategies.
- Approving a more than fourfold increase of CBG's annual community investment budget from USD 600,000 to 2.5 M per year; these investments include drilling

- and equipping wells and supporting improvements to schools and other community installations.
- Supporting the development of an integrated CBG Health, Safety, Environment & Communities management system that would apply to both the expansion project and its ongoing operations.
- Actively monitoring findings from CBG lenders' auditors conducting visits to Guinea and CBG's compliance performance and plans.
- Actively monitoring CBG's compliance with lender requirements, including complaints and grievances.
- Engaging with CBG's management on key compliance issues as they emerge.
- Conducting policy dialogue with the government on issues related to CBG's environmental and social impacts and the need for improvements in public policies and governance.

Response to Question 3. Steps taken to remedy where harm has occurred

- Initial environmental and social consultations conducted as part of the ESIA study in 2014 revealed that local communities had many questions and concerns about CBG's compensation programs.
- To respond to such concerns, Halco supported CBG's efforts to modernize and strengthen its complaint and grievance mechanism, which has now been in place for approximately three years. Its application covers any type of community complaint including those related to CBG's regular operations.
- The mechanism provides a framework for dealing with complaints that may exist
 with respect to compensation. Halco and CBG will continue to promote the use of
 the grievance mechanism in impacted communities as a means to remedy
 potential issues related to past compensation. Records of the grievances and
 outcomes are kept.
- Through existing committees, Halco requests information on how CBG manages general community complaints and grievances and those related to compensation in particular.

Alcoa's compliance support/monitoring under Management Assistance Agreement
In addition to its status as a non-controlling shareholder of Halco as described above,
Alcoa provides management assistance to CBG under a Management Assistance
Agreement covering a wide range of fields.

An integral part of that agreement is CBG's commitment to implementing a compliance policy and framework to establish and maintain the elements of an effective compliance program as articulated in the US Federal Sentencing Guidelines. This includes support for CBG's policies and actions on human rights and related matters.

In its role as management assistant under the Management Assistance Agreement, in 2016 Alcoa established a joint venture compliance initiative to track progress against an agreed compliance framework, and to share best practices and program updates for the respective companies. The initiative consists of regular meetings between Alcoa and CBG compliance personnel and the establishment of a working group. Matters that are tracked at the meetings include governance, ethics and compliance roles and responsibilities, policies and procedures, best practices and compliance with IFC conditions.

In 2018, Alcoa is expanding the scope of these meetings to encompass specific human rights program elements, including governance, roles & responsibilities, policy, due diligence, and remediation processes at CBG. The first meeting at which this expanded scope will be discussed is scheduled for September 2018.

Additional Questions: Supporting CBG's compliance with IFC PS 5 on land acquisition and involuntary resettlement

- 1. Measures taken to ensure that CBG respects IFC PS 5?
- 2. Measures taken to ensure that resettled people have their standard of living sustainably restored or improved over the long term?¹

With respect to compliance with the IFC PS 5, land acquisition, resettlement, compensation and livelihood restoration, we have taken the following additional measures:

- Providing CBG access to Halco shareholders' social performance experts with experience in resettlement in the Guinean context to support land acquisition work.
- Arranging for the sharing of experiences and lessons learned with other project teams facing similar issues in Guinea.
- Supporting initial scoping and detailed planning of the work to ensure compliance with IFC PS 5 including:

- Importance of properly assessing the specific impacts of land acquisition on women and youth and vulnerable groups.
- Importance of understanding the complexities associated with customary land rights in the rural Guinea context, the collective nature of land rights and their implications for compensation and livelihood restoration programs.
- Supporting discussions on resourcing strategies and the need to put together a CBG team supported by a group of consultants with international and Guinean expertise.
- Participating actively in conversations related to livelihood restoration options and strategies.
- Facilitating contacts with international organisations capable of helping CBG with its livelihood restoration program (e.g. CECI, a Canadian NGO, has been retained for the development of revenue-generating activities among the local population).
- Finally, Halco has also closely monitored progress of land acquisition and
 resettlement work through regular reports, board meetings and interactions with
 the lenders. Land acquisition impacts have been a focus in all our
 assurance/stage-gate reviews related to the expansion project.

Way forward

Halco is open to and interested in sustaining a dialogue with HRW, CBG and other key actors on ways the issues highlighted above can be constructively addressed.

Based on many years of experience, Halco shareholders acknowledge that individual corporate livelihood compensation programs are insufficient to address the root causes of livelihood issues and poverty in mining concessions communities and the broader Boké region. If the flow of migrants keeps growing, all improvements achieved could be offset by the negative impacts of the resulting social and economic pressure and the problem will eventually escalate beyond control.

Long term solutions to poverty and social tensions in the Boké area will require a combination of initiatives. These should include community-based programs to promote

¹ These questions were sent to Rio Tinto only.

broad-based inclusive economic growth and macro-level initiatives, led by the government and its partners (such as the World Bank), to address structural problems linked to inmigration and a short supply of infrastructure services (e.g., housing, infrastructure (e.g., water and power) and public services (health, education, etc.).

On issues pertaining to water and air impacts monitoring and your recommendations suggesting improvements in how information is shared and communicated to communities, Halco is committed to supporting government-led initiatives by which evidence/science-based environmental monitoring information could be made accessible to local communities and stakeholders.

We trust that Human Rights Watch will include our comments and responses in the final report. We remain available to answer any other questions you may have.

Yours truly, Halco (Mining) Inc.

Response from La Société Minière de Boké, September 11, 2018



Conakry, 11th of September 2018

Att.: Jim Wormington Researcher, Africa Division Human Rights Watch

Dear Jim,

It is my pleasure to have received and gone through your letter dated 27th July 2018. On behalf of the SMB- Winning Consortium, I would like to thank you for your continuous care and attention towards our project's effort on human rights.

The Consortium holds Respect, Mutual-Communication, Collaboration, and Development as our core value and vision. We address business development and social development equally in our practice. Not only do we create local employment and fulfill our legal duties, we also engage ourselves in the local community for their need to strive for a better living standard. Therefore, the respect of human rights forms the pillar of our value: Land Rights (in particular to improve the women's standard of living), Access to Water, Air Quality and Health, and Environmental and Social Management Practices have always been in the focus of our community management and are fundamental to our sustainable development strategy.

The Republic of Guinea is THE home of the Consortium. Our Mission is to have our Consortium's sustainable bauxite mining deeply rooted in a Guinea of high living quality, for decades to come. Safeguarding the human rights of the Guinea people and community is a must and has been our emphasis. We know that when we grow our business, we need to continuously recompense Guineans, our countrymen and countrywomen. To accomplish this mission, we adhere strictly to our sustainable mining principles (we have the honour of contributing our ideas to the International Aluminium Institute - IAI - for the institutionalisation of their Sustainable Bauxite Mining Guidelines). We believe that we shall not ONLY focus on legal and social obligations, we shall also do more to initiate positive social and economic development through the following strategic directions:

- Mutual Communication: since 2014, our community management teams have been frequently and regularly visiting the villages and people, to exchange ideas with them for drafting and fine-tuning our community development plan. The dialogue platform also serves the function of enhancing our countrymen's understanding of the outside world.
- Infrastructure Connectivity and Accessibility: on top of country roads and bridges, our Consortium has also constructed a 16km high standard paved the domestic road for all seasons passengers and goods traffic in between the Boke town and various villages. Our Asia-Guinea Maritime Corridor provides a reliable and economical dual trade for the flow of goods in between the two regions. We believe that these facilities will support the advancing from subsistence farming to

- higher value economic activities like industrialised agriculture, fish farming, and elementary industries.
- Upgrading and Transformation: A 135Km heavy duty rail connecting Boffa to our port in Dapilon, and an alumina refinery are in the blueprint, the projects will significantly improve the bauxite production and transformation chain in Guinea. On top of this, the rail can supplement the infrastructure connectivity of the Boke-Boffa region, and act as a catalyst for the agriculture development in Boffa.
- Full and sustainable earning skill: we fully agree that we shall not JUST disburse compensation to the communities. We shall give them the tool, equip them with the skill to use the tool, management knowledge to achieve high productivity, and marketing knowledge to get the most benefit from their production or harvest. So we have been cooperating with various NGOs in skill and management training in the area of agriculture, handicraft, and elementary industries so that the trained candidates can create more job opportunities for the youths and women.
- Improve Public Administrative Capability: To drive, organise and facilitate the people's effort in the right direction using the wealth unlocked from mining activities, a whole generation of capable civil servants with human rights deep in their mind are required. The Consortium's leader thus established a Sun Scholarship to train up qualified civil servants, every year there will be two batches of each 10-15 civil servants trained overseas, with a mentoring follow-up system to coach them in implementing in Guinea what they have learned.

The sustainable development of the Consortium in Guinea is inseparable from the support of the local people. At the same time, we also hope to cooperate with more enterprises and organizations to strive together for the better local human rights protection and social development.

Your research report on human rights issues of the Consortium will serve as the key direction and reference for our community project and strategies formulation.

Please allow me to express my appreciation again to your efforts. I hope that Human Rights Watch will understand the Consortium's human rights enhancement philosophy better through this letter and the meeting with us on July 30, 2018.

Best Regards,

Frédéric Bouzigues

SMB General Manager

On behalf the SMB-Winning Consortium



(above) Satellite imagery, from February 24, 2017, showing a mining road operated by the Société Minière de Boké (SMB) consortium. The hundreds of lorries transporting bauxite on the unpaved road cover trees and homes in dust.

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"What Do We Get Out of It?"

The Human Rights Impact of Bauxite Mining in Guinea

Bauxite mining in Guinea, one of the world's poorest countries, is booming. Guinea is one of the world's top exporters and the largest to China, where the bulk of global aluminum is produced. But although mining provides much-needed tax dollars and thousands of jobs, it has profound human rights consequences for communities where mining companies operate.

"What Do We Get Out of It?" documents how the practices of mining companies, when combined with inadequate government oversight, upend the lives and livelihoods of rural communities. It describes how companies expropriate ancestral farmlands without adequate compensation or in exchange for financial payments that cannot replace the benefits communities derived from land; how damage to water sources that residents attribute to mining reduces access to water; and how dust produced by the mining and transport of bauxite settles on fields and enters homes, leaving villagers worried for their health.

The report calls on the government of Guinea to take urgent steps to protect communities by conducting more stringent oversight of mining companies. Where mining companies flout Guinean laws or international human rights standards, the government should hold them accountable, including by fining, suspending or stopping mining projects, or mining will remain a major threat to the way of life and livelihoods of rural communities.

(front cover) A woman in Lansanayah, a village 750 meters from a bauxite mine owned by La Société Minière de Boké consortium.

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