

Ζαμβιά

"You'll Be Fired if You Refuse"

Labor Abuses in Zambia's Chinese State-owned Copper Mines

HUMAN RIGHTS WATCH



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Map of Zambia



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Summary

Over the past decade, China has rapidly increased its investment throughout Africa. But while many commentaries have examined the ambivalent relationship between China and Africa, few have systematically examined what Chinese investment means in human rights terms, particularly for Africans employed by China's state-owned companies. By investigating the specific practices of particular Chinese employers, the conditions of a given set of workers, and the enforcement of labor laws by a particular African government, it is possible to begin to paint a picture of China's broader role in Africa. To this end, this report examines the labor practices of Chinese state-owned companies in Zambia, a landlocked country in southern Africa, focusing on the country's long-thriving copper mining industry and its well-established organized labor.

Based on three research missions to Zambia, it draws on more than 170 interviews, including with 95 mine workers from the country's four Chinese copper operations, 48 mine workers from other multinational copper mining operations, management representatives from Chinese-run mines, mining union officials, government representatives, police, medical professionals, journalists, and foreign diplomats. The report examines primarily how practices in the Chinese-run copper mines compare to relevant domestic and international labor and human rights standards, as well as how they compare to those of other copper mining companies in Zambia.

Human Rights Watch found that while Zambians working in the country's Chinese-run copper mines welcome the substantial investment and job creation, they suffer from abusive employment conditions that fail to meet domestic and international standards and fall short of practices among the copper mining industry elsewhere in Zambia. Miners at several Chinese-run companies spoke of poor health and safety standards, including poor ventilation that can lead to serious lung diseases, hours of work in excess of Zambian law, the failure to replace workers' personal protective equipment that is damaged while at work, and the threat of being fired should workers refuse to work in unsafe places. Injuries and negative health consequences are not uncommon, although many incidents are not reported to the government, contrary to Zambian and international labor law. The troubling situation stems largely from the attitude of Chinese-owned and run companies in Zambia, which have tended to treat safety and health measures as trivial.

Efforts to address these and other issues of concern to workers—particularly pay, which is higher than Zambia's monthly minimum wage but much lower than that paid by other

international copper mining firms—is hampered by the curtailment of union activity: several Chinese operations suppress workers' right to join the labor union of their choice and retaliate against outspoken union representatives.

Incidents reported to Human Rights Watch strongly suggest that regulations are considered more of an imposition than an important component of a well-run copper mining operation. Indeed, China's state-owned enterprises in Zambia's copper mines appear to be exporting abuses along with investment, with some issues in Zambia strikingly similar to safety and labor problems that plague China's domestic mining industry.

Primary responsibility for ensuring that Zambia's copper mines operate in accordance with international standards rests with the Zambian government, which has largely failed to enforce the country's labor laws and mining regulations. In the September 20, 2011, presidential election, Michael Sata, an opposition politician known for criticizing Chinese company labor practices, defeated incumbent President Rupiah Banda. Sata's stated commitments to protect workers' rights are encouraging. But simply demanding that Chinese companies improve their practices is insufficient if not accompanied by more effective regulation of the mines. Above all, this requires addressing inadequacies in the Mines Safety Department—which is understaffed, under-resourced, and faces allegations of corruption—and boosting fines for breaching safety regulations and labor laws that are currently so small they offer little deterrent effect.

History of Zambia's Copper Industry

Dating back to 1928, when the country was the British colony of Northern Rhodesia, copper mining—particularly along the Zambian-Congolese "Copperbelt" border—has long been essential to the country's economic development. Times are good at the moment, with record high copper prices in late 2010 and 2011: on July 1, 2011, the World Bank declared that Zambia had moved back up from low to low-middle income status.

There is a proud mining culture in the country, where copper mining extends back generations in families, and many miners attend trade schools to learn the mining craft. There is also a strong union tradition, with the Mineworkers Union of Zambia (MUZ) and the National Union of Miners and Allied Workers (NUMAW) representing more than 50,000 miners throughout the industry. Finally, there is a detailed and robust set of mining regulations, safety standards, and labor laws that, at least on paper, control every aspect of the industry and generally conform to International Labor Organization standards.

Chinese-run Copper Mining Companies

In 1997, after decades of control by Zambian state-owned enterprises, or "parastatals," the government sold the copper mines to private investors. Two decades of falling copper prices and low capital investment had left the industry a shell of its lucrative past. Copperbelt towns today look like 1960s models that have aged with difficulty and never been updated, with buildings from that era's boom times now shuttered or dilapidated and tennis courts and cricket fields once provided and maintained by the Zambian parastatals now overgrown with weeds.

Right after privatization, China entered the Zambian copper mining industry, along with competitors from India, South Africa, Switzerland, and Canada. In 1998, China Non-Ferrous Metals Mining Corporation (CNMC) purchased the copper mine in Chambishi for Non-Ferrous China Africa (NFCA); some US\$132 million later, the mine reopened for production in 2003 after being dormant for 13 years. CNMC is overseen by China's State-owned Assets Supervision and Administration Commission (SASAC), a body that controls state-owned enterprises under the government's State Council—the country's highest executive authority in charge of the state's administration. CNMC therefore has direct links to the Beijing government.

Since 2003, CNMC has opened three mining operations in Zambia in addition to NFCA: Sino Metals Leach Zambia (Sino Metals), a copper processing plant; Chambishi Copper Smelter (CCS), a copper smelting plant; and China Luanshya Mine (CLM), an underground and open-cast mining operation. The four employers currently provide around 6,000 jobs and are undertaking substantial expansion, with several thousand more jobs expected to be filled in the next few years. Mine shafts have been upgraded with modern equipment, the smelter is deemed state-of the-art, and computers have replaced pencils in planning.

Labor Abuses

Miners in these companies who spoke to Human Rights Watch repeatedly expressed gratitude to the Chinese investors for their jobs and the enormous investment being made. Yet each measure of praise was invariably followed by a string of complaints about working conditions. Copper production carries serious health and safety risks from mining through processing and smelting. Underground copper mining is particularly dangerous, with at least 15 recorded fatalities in Zambia every year since 2001. While accidents are not unique to Chinese-run mines, nearly all the Zambian workers and union officials who spoke to Human Rights Watch said the Chinese copper operations were the country's worst when it comes to health and safety. Miners at several Chinese-run companies told Human Rights Watch that they often risk their health working under demanding conditions for lengths of time that extend beyond what is permissible under Zambian law, or risk being fired. Some reported spending virtually an entire week handling acid and inhaling noxious fumes and dust. Most miners at Sino Metals and CCS reportedly work 12-hour shifts, compared to the eight-hour shifts outlined in Zambian law and standard in every other copper mining and processing operation in the country. Miners in certain departments at Sino Metals work 78-hour weeks without sufficient overtime, while those in other departments work 365 days a year, or have pay docked from already low salaries.

Company safety officers of Zambian nationality described lacking power to halt work in unsafe areas, saying that Chinese managers consistently overruled them. Workers told countless stories of working under the threat of being fired should they refuse to work in areas they reasonably perceived as dangerous. Such threats are not empty: in several instances when workers did stand up to their Chinese boss, they suffered lost pay, "charges" (written warnings) for insubordination, and even termination. Desperate to keep their job in an economy where one is hard to find, most sacrifice safety concerns for employment. And while the Chinese operations provide workers with personal protective equipment (PPE), several of them refuse to replace it even when it is damaged during work.

The result is preventable accidents and health problems. For example, underground miners suffer broken limbs, crushed fingers, and other injuries from rock falls when there is inadequate support in blast sites. In rare cases, miners are crushed and killed by falling rocks, or electrocuted underground by improperly placed cables. At processing and smelting operations, workers suffer acid burns. Across the copper operations, workers develop serious lung disease, including silicosis, due to poor ventilation and constant exposure to dust and chemicals. Workers and union officials say that many accidents are never reported to the government, contrary to Zambian and international labor law, because they believe Chinese managers have adopted a policy of active concealment— not reporting minor injuries by bribing hurt workers as necessary.

At its most extreme, a 2005 explosion at a Chinese-owned explosives manufacturing plant in Chambishi killed 46 Zambian workers; the following year, riots in Chambishi over work conditions culminated in the shooting of at least five miners, allegedly by a Chinese manager.

While at least one union exists at each Chinese-owned copper mine, several companies have barred workers from joining the Mineworkers Union of Zambia (MUZ)—despite clear provisions in Zambian labor law that allow workers to be represented by the union of their choice and a court ruling in MUZ's favor on the establishment of a branch office at these specific companies. Union representatives at the Chinese-run operations also described prejudicial acts taken against them for union activities, which violate Zambian and international labor law. These include verbal threats to fire an employee, transfer to jobs that are outside a union representative's training and expertise, and "charges"—which can lead to deductions of monthly pay and even termination of employment—for attending union meetings. Union leaders at several non-Chinese mines also cited problems, indicating a broader failure by the Zambian government to protect union representatives as required under Zambian and international law.

However, on certain issues in recent years, the practices of Chinese-run copper mining companies have improved. Personal protective equipment is now provided to almost all employees working in these mines, though several Chinese-run copper mines continue to not promptly replace it when damaged. Physical abuse by Chinese supervisors appears to have decreased substantially, and is now rare at NFCA and mostly obsolete at other Chineserun copper operations. Unions are now accepted as a permanent feature of the enterprise. These improvements show the Chinese companies can and do respond to the local environments in which they operate, but it takes committed action from the host government.

Zambian Government's Responsibilities

The Zambian government appears to have applied little pressure on the Chinese copper mining companies to meet national and international labor standards beyond the flashpoint events that generated broad anti-Chinese sentiment. Miners, journalists, union officials, and others referred to the "special relationship" between Banda's government and the Chinese government, including the state-owned companies. As a result, while miners who spoke to Human Rights Watch often expressed contempt for the Chinese management, many blame equally the previous Zambian government for its regulatory failures.

Zambia's Mines Safety Department (MSD) in the Ministry of Mines is supposed to ensure compliance with health and safety regulations. But understaffed, underfunded, and facing allegations of corruption—it provides little effective regulation of mining companies. The Ministry of Labor appears equally weak in protecting those in the copper industry, endorsing collective bargaining agreements that appear inconsistent with Zambian law. President Sata has promised to take action to ensure the improvement of workers' conditions; he would do well to start by empowering these ministries to rigorously enforce labor standards across the copper mining industry, not just in the Chinese-run mines.

The International Labour Organization (ILO) has promulgated several conventions that outline minimum conditions in the mining industry to which Zambia is a state party. These

include the Safety and Health in Mines Convention (ILO Convention No. 176), and its related Recommendation 183, which define safety standards in detail. These same ILO provisions, along with article 7 of the International Covenant on Economic, Social, and Cultural Rights (ICESCR), enshrine safeguards against excessive hours at work. ILO Conventions Nos. 87, 98, and 135 guarantee workers the right to join a union of their choice—also protected by the ICESCR and International Covenant on Civil and Political Rights—and shield union representatives from prejudicial acts due to their union role.

Efforts Needed to Protect Miners' Rights

Human Rights Watch urges the new Sata government to adopt the necessary measures to enforce Zambia's labor laws, and to ensure its laws conform with international standards. To begin, Human Rights Watch recommends that the government work to improve mine safety by ensuring there is sufficient staffing and equipment at the Mines Safety Department (MSD). Many inspectors have left their posts to pursue employment in the private sector, where remunerations are higher, and a government imposed hiring freeze has crippled the body's effectiveness.

To improve adherence to safety regulations, Human Rights Watch also calls on the government to increase fines and other penalties that the MSD can impose, which currently provide no deterrent effect on multinational corporations. The government should likewise consider criminal prosecutions against supervisors who force workers to work in unsafe areas that threaten health and safety.

Human Rights Watch also calls on the Ministry of Labor to immediately investigate antiunion activity by Chinese and other multinational copper mining companies, including the denial of MUZ's presence at Sino Metals and CCS. The Ministry of Labor should impose appropriate sanctions against those threatening union representatives or other unlawful anti-union activity. It should also more critically examine future collective bargaining agreements to ensure they adhere to ILO standards on issues like hours and overtime.

For its part, the Chinese government through its control of the Non-Ferrous Metals Mining Corporation, as well as the companies themselves, should ensure their operations meet Zambian and international labor standards. This should include authorizing company safety officers to halt dangerous activities and rewarding, rather than punishing, workers who act to promote safety. Meeting international standards for health, safety, and the right to organize is not only legally required for Chinese copper mining companies in Zambia, it is good business for Chinese investment and enterprises throughout Africa.

Recommendations

To the Government of Zambia

- Ensure that the Mines Safety Department, in which only 13 of 28 inspector positions are currently filled because of a hiring freeze, has sufficient staff to effectively fulfill its mandate to monitor safety and health conditions in the mining industry.
- Seek to improve the staffing and equipment of the Mines Safety Department so that it can better carry out its monitoring role. In particular, the Mines Safety Department should be able to investigate accidents and perform other duties without requiring financial and material assistance from the copper mining companies it is tasked to monitor.
- Increase the fines that the Mines Safety Department can impose against mining operations that violate safety regulations or labor laws to ensure they have a deterrent effect.
- Direct the police to investigate and prosecute as appropriate mining company officials who use threats and other forms of intimidation to force miners to work in areas they reasonably consider unsafe.

To the Ministry of Mines and Mineral Development, including the Mines Safety Department

- Ensure that safety inspectors perform proactive, unscheduled inspections—rather than respond only to reported accidents—to enforce safety regulations and better prevent future accidents.
- Liaise better with company safety officers and miners, and introduce measures that will facilitate efforts to report accidents anonymously, without threat of reprisals from management. Ensure stiff penalties against any company that punishes workers for reporting safety violations.
- Alert and assist local police when miners or safety officers inform inspectors of cases in which management forces miners to work in unsafe areas or commit physical abuse against them.
- Ensure that companies promptly replace personal protective equipment when damaged during the normal course of work, without any cost to the employee.

To the Ministry of Labor and Social Security

- Investigate immediately the refusal of Sino Metals and Chambishi Copper Smelter to sign a recognition agreement with the Mineworkers Union of Zambia (MUZ), in spite of court rulings that require those companies to allow for union branch offices. Sanction, as necessary, those companies for improper actions taken against the unions and individual workers to deny MUZ's access.
- Ensure that union representatives at companies throughout the copper mining industry are not subject to prejudicial acts for their union activities, in violation of Zambia's obligations under International Labour Organization conventions.
- Work with miners and management at Sino Metals and Chambishi Copper Smelter, as well as the mine unions, to ensure that hours of work meet international standards, in particular ILO Recommendation 183. Focus particularly on eliminating situations where miners work 365 days a year, six 12-hour shifts a week, or 18-hour shifts.
- Thoroughly review collective bargaining agreements for provisions that violate Zambian labor law, and seek to eliminate such provisions.

To the Chinese Government

- Integrate international human rights standards into foreign investment and foreign infrastructure and development initiatives, particularly with regard to labor rights.
- Ensure that China Development Bank and China Export-Import Bank foreign investment and development initiatives include criteria that make international human rights standards, and particularly labor rights, a key component of all such investment decisions.
- Convene a meeting of the Forum on China-Africa Cooperation to discuss laborrelated problems with Chinese investment initiatives in Africa and to establish mechanisms to address these problems.

To China Non-Ferrous Metals Mining Corporation

- Ensure that workers face no reprisals for removing themselves from any location at a mine when circumstances arise that reasonably appear to pose a serious danger to their safety or health.
- Enter immediately into recognition agreements with the Mineworkers Union of Zambia at Sino Metals and Chambishi Copper Smelter and ensure that miners have the right to join the union of their choice.
- Ensure that company safety inspectors can overrule, without prejudice or reprisals, a boss or manager's decision to work in an area deemed potentially unsafe.

Reward managers and safety inspectors who correctly identify health and safety hazards, and punish those who work recklessly.

- Ensure there are sufficient company safety officers, first aid kits, and other safety staffing and equipment. Take steps to include Chinese managers and Zambian workers together in daily safety talks, as well as periodic safety trainings.
- Ensure adequate provision of potable drinking water at the worksite.

To the State-owned Assets Supervision and Administration Commission (SASAC) of China's State Council

- Establish an ombudsman in Chinese embassies where there are state-owned enterprises employing local workforces, allowing local employees in these companies to bring complaints of labor abuses. Investigate these complaints and, where relevant, take appropriate action against companies and management who oversee serious or frequent labor rights abuses.
- Add a provision to SASAC's commendable "Guidelines to the State-owned Enterprises" to ensure respect for local labor unions, and in particular workers' right to establish and join the union of their choice and the right of union representatives to operate freely and without prejudice.

Methodology

This report is based on three Human Rights Watch research missions conducted in November 2010 and July 2011 in Zambia's copper-mining towns of Chambishi, Luanshya, Kitwe, Chingola, Solwezi, Mufulira, Kalulushi, and Ndola, as well as in the capital, Lusaka.

With China's burgeoning investment in Africa, Human Rights Watch undertook this work to assess what the impact was in human rights terms for those directly employed by Chinese companies. The goal of this report is therefore not to assess or criticize the nebulous concept of "China in Africa," but to look strictly at labor practices in specific Chinese government-owned companies. Zambia, a country where Chinese parastatals have been intensively engaged in mining and employing a local workforce for almost a decade, provides a useful starting point. The findings presented in this report are limited to Zambia's copper industry.

This report draws from interviews with 143 miners, including 95 from the four Chinese copper operations and 48 from non-Chinese copper mining operations. Human Rights Watch also spoke with management representatives from the Chinese-run mines; officials from the Mineworkers Union of Zambia (MUZ) and the National Union of Miners and Allied Workers (NUMAW); officials in Zambia's Ministry of Labour and Social Security and Ministry of Mines and Minerals Development, including the Mines Safety Department; police officials; medical professionals at the Sino-Zam Friendship Hospital that serves miners from the Chinese copper operations in Chambishi; the Zambian Human Rights Commission; representatives of national and international aid organizations; journalists; and foreign diplomats. The field research was supplemented by a review of academic publications and nongovernmental organization reports on China's role in Africa, particularly in Zambia, and on Zambia's copper industry, as well as meetings with experts on China's engagement in Africa.

Most of the copper miners were interviewed individually, though a few were interviewed in small groups based on their request. Interviews were conducted away from the mining sites in order to protect the workers from reprisals by management. The interviews were conducted primarily in English, though in a few cases were conducted in a local language and translated into English by an interpreter.

Human Rights Watch has withheld names and identifying information to protect the miners from reprisal. Many expressed serious concern of being fired if management identified

them as having spoken to Human Rights Watch. Details, including age, experience, and specifics of an accident have been withheld where they could expose the identity of individuals interviewed.

Among the management representatives from the Chinese-run mines, Human Rights Watch spoke principally with Zambian nationals. When they were asked if meetings could be arranged with Chinese high-level management, they all responded that it would not be possible—that meetings with groups like Human Rights Watch were conducted only by Zambian nationals. Human Rights Watch made further attempts, in Chinese, to interview Chinese managers and lower-level workers from the Chinese-run copper mines. However, Human Rights Watch was denied access to the work sites and to compounds where the Chinese workforce spends non-working hours. The Chinese workers generally spend their time outside of work in Chinese-only walled compounds. In the few cases in which direct contact was made with a Chinese national involved in the copper mining industry, Human Rights Watch was generally refused interviews. During one brief interview with a Chinese corporate public relations officer from Sino Metals, for example, the officer went inside the compound and returned to say that her boss told her that she should not be speaking with our researcher.

Human Rights Watch also sent a letter with this report's principal findings to NFCA and China Non-Ferrous Metals Mining Corporation (CNMC). The letter to CNMC and CNMC's detailed response translated from Chinese are in Annex I. Additional letters with relevant findings were sent to Konkola Copper Mines, Mopani Copper Mines, and Kansanshi Mining. Mopani was the only company to reply, and its responses have been included in the report.

In interviews published throughout this report, Zambian miners refer to "the Chinese" in their discussions of workplace conditions at the four copper mining companies owned by CNMC. By printing this language, Human Rights Watch does not imply that all Chinese companies in Zambia or in Africa are involved in abusive labor practices—or that all Chinese managers in Zambia's copper industry are abusive. There are important differences among the four Chinese-owned copper mining companies and among each company's individual managers, some of whom maintain good working relations with their Zambian employees. However, the reference to "the Chinese" as if a monolithic entity is common in Zambian discourse and, in representing what interviewees told Human Rights Watch, is important to reflect in this report.

While this report often provides both the relevant international and Zambian law for the labor abuses documented, Human Rights Watch was not able to obtain Zambia's specific

mining regulations that deal with a variety of safety issues. The mining regulations are not accessible online and, during field research, Human Rights Watch researchers were told by interviewees that they were not readily available outside of the Ministry of Mines. Human Rights Watch asked the permanent secretary of the Ministry of Mines for assistance in obtaining both the regulations and information on accidents at the various mines, and he drafted a letter requesting the Mines Safety Department to provide such assistance. A Mines Safety Department official provided the requested accident information, but, despite acknowledging having the regulations on file in print and electronically, told Human Rights Watch that he could not provide the mining regulations. The official said that only the ministry's permanent secretary could do so. Repeated calls to the permanent secretary's office elicited no response to requests to provide the regulations.

Monetary figures throughout this report are calculated using the rate of 4,800 Zambian Kwacha to the United States dollar.

I. Background

China's role in African industry is neither as new nor as vast as often depicted by the media and some Western scholars, but there is no question that the last decade has seen enormous growth in Chinese investment throughout the continent. State-owned and private Chinese companies have become active in Africa in industries as wide-ranging as construction, telecommunications, manufacturing, farming, and mining—and the direct employment of local workers is likely to continue to grow in coming years. It is within this framework that Human Rights Watch has undertaken this work—not to assess "Chinese investment" or "China in Africa"—but to evaluate human rights and labor practices in specific Chinese government-owned companies.

Zambia's copper industry provides a useful magnifying lens into Chinese labor practices in Africa because of the historic relationship between the two countries, the relative length of time that Chinese state-owned companies have been engaged in Zambian industries, and the number of Zambians directly employed by these companies. One scholar on China's role in Zambia has called the Chinese mining operations there "politically embedded in China's Africa policy."¹ Zambia is one of the world's biggest copper producers, with an industry that dates back to the 1920s. It enjoys a workforce highly educated in mining, historically strong labor unions, and detailed mining regulations. Zambia is home to a multiparty democracy since 1991 and has never faced internal armed conflict. It represents, in many ways, one of the most potentially protective environments for labor in the developing world. Unfortunately, the reality is quite different, and Zambians working for Chinese-owned copper mines find themselves vulnerable to a range of abuses.

Chinese engagement in Zambia's copper industry comes through China Non-Ferrous Metals Mining Corporation (CNMC). CNMC, which owns the four Chinese subsidiaries that control daily operations in Zambia, is, like other Chinese state-owned enterprises, "under the management of [China's] State-owned Assets Supervision and Administration Commission [SASAC] of the State Council."² The State Council, in turn, is China's "highest executive organ of State power, as well as the highest organ of State administration," run by authorities including a premier appointed by China's president

¹ Dan Haglund, "In It for the Long Term? Governance and Learning among Chinese Investors in Zambia's Copper Sector," The China Quarterly, vol. 199, September 2009, p. 637.

² China Nonferrous Metal Mining (Group), About CNMC, http://www.cnmc.com.cn/p375.aspx.

and the ministers of foreign affairs and labor.³ Given that CNMC is state-owned, the Chinese government is more directly responsible for the wage, health, and union policies that affect the Zambian workforce.

A Body of Work on Business and Human Rights

Human Rights Watch has investigated patterns of human rights abuse linked to multinational companies around the world, with a particular focus on mining, oil, and other extractive industries. That work has included research on patterns of human rights abuse linked to the operations of several multinational oil and mining companies in countries including Nigeria, Sudan, Papua New Guinea, and the Democratic Republic of Congo. We have also documented abuses connected to the logging industry in Indonesia and alleged violations of labor rights in the United States by Wal-Mart and by several major European companies, as well as human rights problems caused by corruption in oilrich countries including Equatorial Guinea and Angola. We have used that research to advocate for better government regulation of companies' human rights practices and to advocate directly with companies themselves to acknowledge and ensure accountability for past abuses and to improve their human rights records. In addition, Human Rights Watch participates in several voluntary initiatives designed to bring companies, governments, and civil society advocates together to ensure greater respect for human rights, such as the Voluntary Principles on Security and Human Rights.

China in Africa

In 2001, the Chinese government formalized a policy of "going out" (*zou chuqu*, in Mandarin), in which the central government actively supported Chinese companies in economic investment abroad that fit "with one or more of four objectives: providing a market for Chinese products, improving resource security, enabling technology transfer, and promoting research and development."⁴ Chinese engagement in Africa did not begin at this point—as just one example, the Chinese government financed and constructed between 1970 and 1975 the US\$500 million Tanzam Railway that linked Zambia's mines to Dar es Salaam's port—but the direct engagement in industry across the continent has grown steadily throughout the last decade. In 2006, the Forum on China-Africa Cooperation, which has organized four summits involving China and African states, published "China's African policy," which includes:

³ *People's Daily Online*, "The State Council," http://english.peopledaily.com.cn/data/organs/ statecouncil.shtml, accessed August 23, 2011.

⁴ Haglund, "In It for the Long Term?," p. 631.

[The Chinese government] supports competent Chinese enterprises to cooperate with African nations in various ways on the basis of the principle of mutual benefit and common development, to develop and exploit rationally their resources, with a view to helping African countries to translate their advantages in resources to competitive strength, and realize sustainable development.⁵

China's increasing role in Africa has spawned a breathtaking number of academic articles, books, media reports, documentaries, and commentary.⁶ At its best, this attention has critically examined the positive and negative implications of this "going out" for Africans. This includes China's role in highly abusive states like Sudan and Zimbabwe, as well as the greater access to cheap goods that Chinese exports often bring, though at times with negative impacts on local production. At its worst, some publications have turned unsupported assertions into fact and drastically overstated the size of Chinese investment and its relationship to natural resource exploitation. Many publications have also treated every "Chinese" company the same—and also as a representation of the Chinese government—whether state-owned or run by a private Macau businessman.⁷ At times, this has been exploited by Western politicians and investors to create a false dichotomy between "good" Western investment and "bad" Chinese investment. While there are concerning patterns to Chinese employment practices, this should not malign or ignore the positive potential for Chinese investment in improving economic conditions in Africa.

There is a growing body of research analyzing specific labor and human rights abuses by Chinese employers abroad. The African Labour Research Network said in a 2009 report that while there were differing labor conditions in Chinese-owned companies across

⁵ Forum on China-Africa Cooperation (FOCAC), "China's African Policy," January 2006,

http://www.focac.org/eng/zfgx/dfzc/t481748.htm, accessed August 23, 2011.

⁶ For a few general pieces on China in Africa, see Firoze Manji and Stephen Marks, eds., *African Perspectives on China in Africa* (Pambazuka Press, 2007); Serge Michel and Michel Beuret, *China Safari: On the Trail of Beijing's Expansion in Africa* (Nation Books, 2009); Robert I. Rotberg, ed., *China into Africa: Trade, Aid, and Influence* (Brookings Institution Press, 2008); Deborah Brautigam, *China in Africa: What Can Western Donors Learn?* (Oslo: Norfund, 2011); "The Chinese in Africa: Trying to Pull Together," *The Economist*, April 20, 2011; Giles Mohan, "China in Africa: A review essay," *Review of African Political Economy*, vol. 35 (2008), pp. 155-73; "China's Influence in Africa: Implications for the United States," The Heritage Foundation backgrounder no. 1916, February 22, 2006; Stephanie Hanson, "China, Africa, and Oil," Council on Foreign Relations backgrounder, June 6, 2008; "When China Met Africa," BBC Four, July 2010; "The Chinese Are Coming," BBC Two, February 2011; Justin Rowlatt, "China follows British footsteps to African wealth," *BBC News Online*, September 23, 2010, http://news.bbc.co.uk/2/hi/programmes/from_our_own_correspondent/9023642.stm.

⁷ For a strong discussion of myths and realities related to Chinese investment in Africa, see Deborah Brautigam, *The Dragon's Gift: The real story of China in Africa*, January 2010. Brautigam also highlights common faulty reporting on China in Africa in her blog, http://www.chinaafricarealstory.com/.

African countries and industries, "there are some common trends, such as tense labour relations, hostile attitudes by Chinese employers towards trade unions, violations of workers' rights, poor working conditions and unfair labour practices."⁸

In September 2009, the United Kingdom-based Rights and Accountability in Development (RAID) released a report on Chinese mining operations in the Katanga region of the Democratic Republic of Congo. While it found abusive labor practices across the industry, RAID's survey showed that conditions in the Chinese companies ranked worse than competitor companies from the United States and Europe, "with unanimous agreement that Chinese companies do not comply with the Congolese mining code and other laws and regulations."⁹ This resulted in, among other things, commonplace accidents and health hazards.¹⁰ The Chinese companies in the RAID study were almost all privately owned and relatively small; those in Zambia, by contrast, fall under the enormous Chinese state-owned company (or parastatal) CNMC.

In response to recurring labor complaints, and the "risks that limited oversight brings to China's long-term interests in Africa," China's Ministry of Commerce issued in August 2006 "a set of policy guidelines 'to strengthen regulations in order to avoid conflicts … in order to protect the national interest."¹¹ In January 2008, SASAC, which oversees state-owned companies including the one operating in Zambia's copper mines, likewise issued "instructing opinions" on corporate social responsibility, urging parastatals to improve labor rights, safety and health standards, and environmental protection.¹² Guideline 7 of the instructing opinions admonishes state-owned enterprises to "give top priority to ensuring work safety, safeguarding the legal interests of employees, [and] promoting career development," while guideline 13 says that "safe and healthy working conditions and living environment are necessary to ensure the health of employees, prevent any harm of occupational and other diseases to employees."¹³ In Zambia, CNMC is failing to follow the SASAC guidelines, and it is unclear what efforts the company is making or has made to follow them.

⁸ African Labour Research Network, *Chinese Investments in Africa: A Labour Perspective*, Anthony Yaw Baah and Herbert Jauch, eds. (Windhoek: African Labour Research Network, 2009), p. 13.

 ⁹ RAID, *Chinese Mining Operations in Katanga, Democratic Republic of Congo*, September 2009, p. v, 8.
 ¹⁰ Ibid.

¹¹ Haglund, "In It for the Long Term?," p. 632 (quoting People's Republic of China, Ministry of Commerce, "Explanation regarding the suggestions for strengthening the human safety and protection of workers for Chinese enterprises and organizations overseas," August 31, 2006, http://hzs.mofcom.gov.cn/aarticle/bk/200608/20060803022750.html).

¹² Peter Bosshard, "China's environmental footprint in Africa," SAIIA Policy Briefing No. 3, April 2008, p. 6; Haglund, "In It for the Long Term?," p. 632.

¹³ SASAC, "Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities," guidelines 7, 13.

History of Zambia's Copper Industry

Copper mining began in the British colony of Northern Rhodesia, now Zambia, in 1928 and immediately dominated the country's economy.¹⁴ The stretch along the Zambian and Congolese border became known as the Copperbelt for the enormous deposits located there. More than 80 years later, the Copperbelt remains the "backbone of the Zambian economy," contributing to nearly 75 percent of the country's exports and two-thirds of the central government revenue during years of strong copper prices.¹⁵

At Zambia's independence in 1964, copper mining was controlled by two private companies: the UK (and later Roan) Selection Trust and the British-South African owned Anglo American Corporation. With high copper prices in the 1960s and early 1970s, Zambia grew to a middle-income country, with one of Africa's highest Gross Domestic Products.¹⁶ Zambia's first president, Kenneth Kaunda, was quickly concerned with the little money that the companies invested in the country's long-term growth, however. The government sought higher taxes and the companies demurred; in 1969, following a constitutional referendum, Kaunda responded by nationalizing the industry.¹⁷ The two copper mining companies were reorganized and became Nchanga Consolidated Copper Mines Limited (NCCM) and Roan Consolidated Mines Limited (RCM).¹⁸ In 1982, NCCM and RCM merged to form Zambia Consolidated Copper Mines (ZCCM).

Prior even to nationalization, the copper mining companies were expected to provide housing, foodstuffs, and health care for employees. After nationalization, the amenities grew further as companies "operated 'a cradle to grave' welfare policy" in which they offered free education for miners' children and subsidized housing, food, electricity, water, transport, and family burial arrangements.¹⁹ Services were provided to entire mining communities, with companies maintaining roads, street lights, and trash collection and offering social and sporting clubs as well as skills training for women and youth. The mining units also maintained town hospitals, often where no government hospital existed. The mining divisions, and ZCCM as a whole, essentially replaced the government in providing social services. The powerful union, the Mineworkers Union of Zambia (MUZ), was influential in obtaining many of these benefits.²⁰

¹⁴ Alastair Frasier and John Lungu, *For Whom the Windfalls?: Winners & losers in the privatisation of Zambia's Copper Mines*, 2007, p. 7.
¹⁵ Charles Bweendo Muchimba, *The Zambian Mining Industry: A Status Report Ten Years After Privatization*, 2010, pp. 3, 5; Frasier and Lungu, *For Whom the Windfalls*, p. 7.

¹⁶ Frasier and Lungu, *For Whom the Windfalls,* p. 7.

¹⁷ Ibid ("All rights of ownership of minerals as well as exclusive prospecting and mining licenses reverted to the state... [and] [t]he mining companies were forced to give 51% of shares in all existing mines to the State."). See also Muchimba, *The Zambian Mining Industry*, p. 5.
¹⁸ They both operated under the parastatal Zambia Industrial and Mining Corporation (ZIMCO).

¹⁹ Frasier and Lungu, *For Whom the Windfalls*, pp. 7-8.

²⁰ For discussion of social services, see Ibid., pp. 7-8; Muchimba, *The Zambian Mining Industry*, pp. 14-16.

The crash of copper prices in the mid- and late 1970s led to a downward spiral of Zambia's economy. By 1994, Zambia had become one of the poorest countries in the world, with per capita income down 50 percent from 1974.²¹ The copper industry's revenues could no longer meet the costs of salaries and benefits. Production also collapsed, from 750,000 metric tons in 1973 to just over 250,000 tons in 2000.²² By the 1980s, Zambia faced massive debts. With pressure from the World Bank and the International Monetary Fund, Zambia entered into structural adjustment programs that sought a reduction in government expenditures and the privatization of certain state assets.²³ Trade unions, including MUZ, supported the privatization—as by this time new investment was deemed crucial to revitalize the industry.²⁴ The copper mines, as the most valuable country asset, were central to privatization. After an extended fight between the government, union, and financial institutions over whether the mines would be sold to a single investor or broken up and sold separately, the latter course was taken.²⁵ Sales began in 1997 (see text box for current owners of main mining assets).

Copper Mining Operations in Zambia			
Company	Private Investors	Nationality of Investor	
Konkola Copper Mines (KCM)	Vedanta Resources (79%)	Indian	
Mopani Copper Mines	Glencore International (74%), First Quantum Minerals (16%)	Swiss, Canadian	
Kansanshi Mining	First Quantum Minerals (79%)	Canadian	
Chambishi Metals	Eurasian Natural Resources Corporation (90%)	Kazakhstani, British	
Lumwana Copper Mine	Barrick Gold Corporation (100%) ²⁶	Canadian	
Chibuluma Mines	Metorexgroup (85 %)	South African	
China Luanshya Mine, NFCA (Chambishi Copper Mine), Chambishi Copper Smelter, Sino Metals	China Non-Ferrous Metals Mining Corporation (CNMC) (85 %)	Chinese	

²¹ Ibid., p. 8.

²² Ibid., p. 8. See also Muchimba, *The Zambian Mining Industry*, p. 5.

²³ For a broader discussion of the structural adjustment programs in Zambia, including both positive and critical evaluations, see World Bank, Zambia: Country Assistance Evaluation, Report No. 25075, 2002; Oliver Campbell-White & Anita Bhatia, Privatisation in Africa, IBRD, Washington, D.C., 1998; J. Craig, "Evaluating privatisation in Zambia: a tale of two processes," *Review of African Political Economy*, 2000, pp. 355-66.

²⁴ Frasier and Lungu, p. 9.

²⁵ Ibid., pp. 10-13.

²⁶ Barrick Gold purchased the previous owner of the Lumwana mine, Equinox Minerals, in April 2011, after competing in the bid with China Minmetals Corporation—another Chinese parastatal. BBC News, "Barrick Gold beats Minmetals to buy Equinox Minerals," April 25, 2011. In late May 2011, Zambia approved Barrick's takeover of the Lumwana mine. Anthony Mukwita, "Zambia Approves Barrick Gold's Take Over of Equinox's Lumwana Copper Mine," Bloomberg, May 27, 2011.

Copper prices rose steadily from 2003 to 2008, before plummeting in 2008 to 2009 with the global economic crisis. A number of workers in Zambia's copper mining industry were laid off, and several mines closed or threatened to close.²⁷ Prices recovered to previous highs by late 2010 and, in early 2011, reached new records—selling at over \$10,000 per metric ton (see graph in Annex II). Current copper prices have led to further expansion of Zambia's copper industry, with several new mines recently opening or about to open. Moreover, on July 1, 2011, the World Bank declared that Zambia had moved back to lowmiddle income status.²⁸ As of 2009, Zambia was the world's eighth-largest copper producer, and, with the recent growth, it is predicted to enter the top five by 2014.²⁹

Through its long history in copper mining, Zambia developed strong mining regulations and labor laws. A professor at Zambia's Copperbelt University who specializes in the industry, told Human Rights Watch that following a serious mining accident in 1970 at the Mufulira mine, the Zambian government adopted extensively from Canadian mining regulations. As a result, he said, almost every activity underground—from the equipment miners are supposed to wear in certain sections, to the employment of safety officers, to relevant safety procedures—is tightly regulated under law.³⁰ Godwin Beene, the permanent secretary in the Ministry of Mines and Minerals Development, likewise said:

In Zambian mining, whether open-cast or underground, the industry is regulated tightly by mine safety regulations. If there are any abuses of those regulations, the actors can be punished.... We are a country well versed in mining, and no one is above the law.³¹

The tight regulation of the Zambian copper industry should protect its workers from companies with poor safety practices—unfortunately, this has not been the case with the Chinese-run mines.

²⁷ Muchimba, *The Zambian Mining Industry*, pp. 17-18.

²⁸ Charles Kenny and Andy Sumner, "How 28 poor countries escaped the poverty trap," *Guardian* (UK), July 12, 2011.

²⁹ Leia Michele Toovey, "The Top 10 Copper Producing Countries," Copper Investing News, November 17, 2010, http://copperinvestingnews.com/4147/the-top-10-copper-producing-countries/; Miningreview.com, "Zambia set to enter world's top five copper producers," July 12, 2011, http://www.miningreview.com/node/19655; Nicholas Bariyo, "Zambia's January Copper Output Up 60% On Year-Central Bank," Dow Jones Newswires, March 2, 2011. Zambia is also in the top five for cobalt production. See Muchimba, p. 3.

³⁰ Human Rights Watch interview with John Lungu, professor at Copperbelt University, Kitwe, November 16, 2010.

³¹ Human Rights Watch interview with Godwin Beene, Lusaka, July 18, 2011.

Zambian Government as Minority Owner

While no longer the principal owner of the Zambian copper mines—nor involved in the dayto-day operations—the Zambian government maintains a minority ownership in the country's copper mines. When it sold the mines during privatization, the parastatal mine operator ZCCM became ZCCM Investments Holdings (ZCCM-IH) and retained minority interests. ZCCM-IH's primary shareholder, at 87.6 percent, is the Zambian government, with private equity holders accounting for the rest.³² At present, ZCCM-IH owns, for example, 10 percent of Mopani and Chambishi Metals, 15 percent of the Chinese-run underground mines, and around 20 percent of KCM.³³

While the government's ownership is meant to protect the state's financial interests, it also places a greater responsibility on the government to prevent and address abusive labor conditions. As one Zambian journalist who follows the copper industry told Human Rights Watch, "They can't pretend to not know what's going on. They have representation on the board of these companies."³⁴ The conventions of the International Labour Organization (ILO) are often framed in terms of workers' rights, employers' obligations to provide adequate conditions, and governments' responsibility to ensure that employers follow these requirements. In Zambia, with partial ownership of each mine, the government takes on both the direct responsibility of providing adequate conditions and the more traditional governmental responsibility of monitoring their fulfillment.

Chinese Investment in Zambia, Copper Industry

By the end of 2010, China's investment in Zambia was around \$2 billion, according to the Chinese state-run news agency Xinhua, placing Zambia third for Chinese investment after South Africa and the United Kingdom.³⁵ Moreover, the annual growth rate of China-Zambia bilateral trade stayed above 30 percent since 2000, topping \$2.5 billion in 2010.³⁶ Although China is active in construction, agriculture, energy supply, manufacturing, and telecommunications, the heart of its involvement in Zambia remains mining.

In 1998, as the Zambian government was selling the copper mining assets during privatization, China Non-Ferrous Metals Mining Corporation (CNMC) purchased the Chambishi Copper Mine in an open bid. Non-Ferrous China Africa (NFCA) began production

³² ZCCM-IH, About ZCCM-IH, http://www.zccm-ih.com.zm/ (accessed August 16, 2011).

³³ ZCCM-IH, Investments, http://www.zccm-ih.com.zm/ (accessed August 16, 2011).

³⁴ Human Rights Watch interview with Zambian journalist, Lusaka, July 18, 2011.

³⁵ Xinhua, "Chinese investment energizes Zambia's development," August 19, 2011.
³⁶ Ibid.

for CNMC in 2003—13 years after the Chambishi mine was last in active production.³⁷ In 2006, CNMC opened Sino Metal Leach Zambia (known as Sino Metals) near the NFCA underground mine to provide lower-level processing into exportable copper cathode through its tailings leach plant and Solvent Extraction/Electrowinning (SX/EW) plant.³⁸

The following year, Zambia became the first African site for China's special economic zones, or SEZs, announced originally at the 2006 Forum on China–Africa Cooperation.³⁹ Known in Zambia as the Zambia-China Economic and Trade Cooperation Zone (ZCCZ), SEZs are designed to provide "a combination of world-class infrastructure, expedited customs and administrative procedures, and (usually) fiscal incentives that overcome barriers to investment in the wider economy."⁴⁰ The zone was placed in Chambishi, with the goal to spur additional investment in the copper industry and related production.

CNMC began construction on the Chambishi Copper Smelter (CCS) soon thereafter, and the plant opened in early 2009. In January of that year, the investor at Luanshya Copper Mine closed its operations and announced the mine was for sale; CNMC purchased it several months later. The mine reopened in December 2009 after hundreds of millions of dollars in investment; more than 2,000 miners are employed at China Luanshya Mine (CLM).⁴¹

The four copper mining companies owned by the parastatal CNMC are:

- NFCA, an underground mine and surface-level plant in the town of Chambishi;42
- CLM, an underground mine, processing facility, and open-cast mines in Luanshya;
- CCS, a copper smelting plant in Chambishi; and
- Sino Metals, a copper processing plant in Chambishi.

³⁷ Xinhua, "CNMC kicks off production at copper mine in Zambia," November 28, 2010. NFCA spent around \$132 million to restore the mine and the concentrator, with more than 2,000 jobs created by the start of production. Frasier and Lungu, *For Whom the Windfalls*, p. 48.

³⁸ For a summary of copper production from mine to export, see Copper.org, Copper Production from Ore to Finished Product, http://www.copper.org/education/production.html (accessed September 28, 2011); International Copper Study Group, Definitions, http://www.icsg.org/index.php?option=com_content&task =view&id=23&Itemid=64 (accessed September 28, 2011).

³⁹ Haglund, "In It for the Long Term?," p. 634.

⁴⁰ Deborah Brautigam, Thomas Farole, and Tang Xiaoyang, "China's Investment in African Special Economic Zones: Prospects, Challenges, and Opportunities," *Economic Premise* (the World Bank), March 2010, p. 2.

⁴¹ Kelvin Kachingwe, "Controversial Chinese Firm Given Another Copper Mine," Inter Press Service, June 2, 2009, http://www.ipsnews.net/africa/nota.asp?idnews=47065; "Chinese to pump \$150m into Luanshya Copper Mine rehab," *Times of Zambia*, December 10, 2009.

⁴² As of early 2011, underground mining at NFCA has been taken over in name by JCHX, which is also owned by China Non-Ferrous Metals Mining Corporation. The management from NFCA Underground Mining remained intact when transferred to JCHX, as did the general workforce. The only change, on its face, is the CNMC subsidiary's name. Miners protested the change, as it happened without any notice. "12 protesting miners arrested," *Lusaka Times*, January 19, 2011. Throughout this report, Human Rights Watch will refer to the company as NFCA, rather than JCHX, since that is what the miners themselves, union officials, government officials, and business representatives all still call the company.

CNMC continues to make large-scale investment in these companies, with CLM set to begin production in the fourth quarter of 2011 in the Muliasha open-cast mines; the recent opening of a second underground mining shaft at NFCA; ongoing construction at CCS to both increase the tons of copper it can produce and add cobalt processing capabilities; and improvements and expansion at the Sino Metals plant.⁴³

In a November 2010 article in the Chinese newspaper *Southern Weekend*, the general manager of CNMC said that the NFCA mine was "[t]o date ... China's only overseas mine that is already producing regularly and at a profit." The paper said that NFCA had annual profits of \$40 million and, by 2008, had "recouped its 2003 investment."⁴⁴

Labor Problems and Low Wages in the Chinese Mines

Almost immediately after production began at NFCA in 2003, the Chinese companies faced complaints about labor abuses, particularly low pay, poor safety conditions, and union busting. While some of the anti-Chinese vitriol seemed to reflect racism fueled by cultural differences, the Chinese companies were—and, as this report shows, remain—the biggest violator of workers' rights among Zambian copper industry employers.⁴⁵

In April 2005, in the most deadly event in the history of Zambian copper mining, 46 Zambian workers were killed in an explosion at a CNMC-owned factory manufacturing cheap mining explosives near NFCA. The public outrage at that event spurred some changes, including slightly improved safety practices and greater acceptance of the country's two mining unions—MUZ and the newly established National Union of Miners Allied Workers (NUMAW).

On July 25, 2006, workers rioted in protest of the failure to improve their salaries and working conditions. Beginning during the night shift, workers destroyed equipment and attacked a Chinese manager. The next day, some miners moved the protest toward the Chinese managers' living quarters; shots were fired, with five miners reportedly wounded. Union officials told Reuters at that time that the shots came from a Chinese manager, a claim also reported by others.⁴⁶ A sixth person was shot earlier that day by a security officer or

⁴³ Kabanda Chulu, "CNMC to invest \$270m in Muliashi Mines," *The Post* (Zambia), May 25, 2010; Xinhua, "CNMC kicks off production at copper mine in Zambia," November 28, 2010; "CNMC plans to bring Muliashi back into production by 2012," *MetalBulletin*, April 20, 2010; Nicholas Bariyo, "Zambia Chambishi Copper Smelter Workers End Strike; Talks To Resume," Dow Jones Newswires, March 26, 2011.

⁴⁴ "Beyond Controversy, Development in Africa: China's Actual Situation in Zambia," *Southern Weekend* (Nanfang Zhoumo), November 4, 2010 (translation by Human Rights Watch).

⁴⁵ See Frasier and Lungu, For Whom the Windfalls, pp. 48-53.

⁴⁶ Shapi Shacinda, "Workers shot during Zambia mine riots," Reuters, July 26, 2006. Information also comes from Deborah Brautigam, *The dragon's gift: the real story of China in Africa*, January 2010, pp. 5-6.

policeman. Although the police investigated, its findings were never made public and no charges were filed. Many of the workers who participated in the strike or riots were fired.⁴⁷

A similar event occurred on October 15, 2010, in the town of Sinazongwe, when two Chinese managers at Collum Coal Mine shot 11 workers protesting poor conditions.⁴⁸ Collum Coal Mine is owned by a private investor—not a Chinese parastatal like the copper industry's CNMC—but the event mobilized an outcry against Chinese labor problems more generally. Like the earlier Chambishi event, no one was ultimately prosecuted. A Zambian journalist for an international media outlet told Human Rights Watch:

It just confirmed how powerful the Chinese are in Zambia. The Chinese, you hear them say, we can do anything; this has been proven after the shooting in Sinazongwe. The state dropped the charges, it just negotiated a compensation package. The message was, "Give them money, and any problems will be solved." They constantly speak in these undertones.⁴⁹

Labor strife continued at the copper mines in January and March 2011, as workers went on strikes that approached full-scale riots at both NFCA and CCS.⁵⁰ Workers at both companies demanded significantly higher pay increases than were offered during collective bargaining negotiations, ultimately ending their strike after management slightly improved its offer.

In response to the persistent confrontations with employees over labor abuses, Chinese business leaders in Zambia have at times blamed the country's regulatory structure. Zan Baosen, the vice general manager of the Zambia-China Economic and Trade Cooperation Zone, was quoted by a Chinese newspaper as saying:

[The laws are] really "too sound"—the standard of the legal system is a little too ahead of its time... Almost 50 percent of the people are unemployed and yet they still want to have so many housing allowances, education allowances and transportation allowances. Also, employees

⁴⁷ Human Rights Watch interviews with former NFCA miners whose contracts were terminated after the strike, Chambishi, July 2011.
Anger at the shootings remained so deep that China's president, Hu Jintao, was kept from attending the February 2007 inauguration of the Zambia-China Economic and Trade Cooperation Zone (ZCCZ) for fear of large-scale demonstrations. Brautigam, *The dragon's gift*, p. 7.
⁴⁸ See Mutana Chanda, "China in Zambia: Jobs or exploitation?", BBC News, December 12, 2010; Barry Bearek, "Zambia Uneasily Balances Chinese Investment and Workers' Resentment," *NY Times*, November 20, 2010; Tao Duanfang, "Gunshots in Zambia mine: The fine line between hell and heaven," October 19, 2010, http://star.news.sohu.com/201010/n275994958.shtml; "Development in Africa beyond controversy - China's actual situation in Zambia," *Nanfang Zhoumo*, November 4, 2010.

⁴⁹ Human Rights Watch interview with Zambian journalist, Lusaka, July 18, 2011.

⁵⁰ Nicholas Bariyo, "Zambia Chambishi Copper Smelter Workers End Strike," Dow Jones Newswires, March 26, 2011; Nicholas Bariyo, "Zambian Miners Riot Over Labor Dispute," *Wall Street Journal*, January 19, 2011.

can't be dismissed without good reason. They can only be dismissed when their work record is poor.... It is necessary to have some laws in the early stages of development; equality gets sacrificed. Inequalities are a reality at every stage of development. They should learn to accept this.⁵¹

Another longstanding issue invariably at the top of the list of concerns of Zambian mine workers is wages. Chinese copper mining companies often pay base salaries around one-fourth of their competitors' for the same work. Although the Chinese copper mines do pay more than the Zambian monthly minimum wage, raised in early 2011 to 419,000 Kwacha (US\$87), workers and union officials who spoke to Human Rights Watch consistently said that the pay was insufficient to meet their basic needs. A miner at Chambishi Copper Smelter (CCS) explained problems to Human Rights Watch echoed by his colleagues:

Before the [2009] global crisis, I worked at KCM's [Konkola Copper Mine, owned by an Indian mining conglomerate] smelter. At the time I was laid off, I was making 2.9 million Kwacha (US\$604) there as my basic pay.... Now, for working in the CCS smelter, I make just over 640,000 (\$133). The pay here at CCS, it's peanuts. It's a drop in the ocean....

The money is very difficult with the economy here. I have a wife and three kids. A two-room house in the township is 500,000 Kwacha (\$104) a month to rent. So even when you count my allowances, that leaves maybe 500,000 for food, cooking oil, electricity, water, [children's] education, and anything else. It's just not possible. The only way I am surviving is from money I saved when working at KCM. That and I borrow money. It's *Kalaba*, which means borrowing money that you have to pay back with 25, 50 percent interest.... I'm falling into serious debt, but it's the only way to survive. At KCM, I used to save money, advance my family, and I was doing the same job.⁵²

Pay has grown steadily since CNMC first opened their copper mining operations. The lowest monthly salaries that existed at Sino Metals and CCS two years ago, around 350,000 Kwacha (\$73), would not meet the recently raised national minimum wage.⁵³ NFCA

⁵¹ "Beyond Controversy, Development in Africa: China's Actual Situation in Zambia," *Southern Weekend* (Nanfang Zhoumo), November 4, 2010 (translation by Human Rights Watch). The article states further: "When asked about the difficulties in investing in Zambia, besides referring to the limited local market and a low-quality workforce, Chinese businesspersons most often point out how local labour laws are 'too stringent."

⁵² Human Rights Watch interview with miner A at CCS, Kitwe, July 16, 2011.

⁵³ The monthly minimum wage was previously 268,000 Kwacha (US\$56).

underground mining has more than doubled its lowest pay range since initiating full-scale operations in 2004. However, inflation in Zambia has also increased by between 8 and 18 percent every year since 2004, which means the rising salaries have led to little real increase.⁵⁴ Moreover, the competitors of the Chinese companies have increased their own salaries at the same or even greater rate, meaning that the relative gap in pay has actually widened over this period. (For a comparison of wages at different copper mining companies in Zambia as of September 2011, see Annex IV.)

Exporting Abuses?: Similar Labor Problems in China's Mining Industry

The closest corollary to Zambia's copper industry in China is the country's massive coal mining sector. Its problems provide telling indicators of the challenges faced by workers in the foreign mining operations of Chinese parastatals. China's coal miners constitute China's poorest and most marginalized social groups: migrant workers from the rural countryside and laid-off former employees of restructured or closed down state firms.⁵⁵ Safety risks including fires, floods, and gas explosions have plagued Chinese coal mines for decades and claim the lives of thousands of Chinese workers every year.⁵⁶ Those deaths are linked to what Chinese labor rights activists have described as the "reckless disregard for miners' lives" exercised by state-owned mine operators in their pursuit of greater production and higher profits.⁵⁷ A 2008 report uncovered abuses and safety risks in Chinese coal mines including the denial of mandatory safety equipment such as respirators, the manipulation or sabotage of safety equipment such as toxic gas meters to ensure uninterrupted production, and threats of dismissal or fines against workers who protest safety shortcomings.⁵⁸

Those problems appear to persist. An August 2011 state media report on coal mine safety linked the sector's safety risks and resulting high death tolls on "mine bosses [who] were frequently forcing workers to boost mining, defying safety rules ordered by the government."⁵⁹ Official data from China's State Administration of Coal Mine Safety Data indicates that in 2010 coal mine accidents claimed the lives of 2,433 Chinese miners, a decline from 2,631 deaths in 2009.⁶⁰ That reduction is due to unspecified "headway in coal

⁵⁴ International Monetary Fund, World Economic Outlook Database: Zambia, Inflation, average consumer prices, April 2010, http://www.imf.org/external/pubs/ft/weo/2010/01/weodata/index.aspx.

⁵⁵ China Labour Bulletin, "Bone and Blood: The Price of Coal in China," CLB Research Report No. 6, March 17, 2008, p. 17, http://www.clb.org.hk/en/files/File/bone_and_blood.pdf (accessed August 31, 2011).

⁵⁶ "Two coal mine disasters kill 3, trap 40," Xinhua News Agency, July 3, 2011.

⁵⁷ China Labour Bulletin, "Bone and Blood," p. 18.

^{5&}lt;sup>8</sup> Ibid.

⁵⁹ "Two coal mine disasters kill 3, trap 40," Xinhua News Agency, July 3, 2011.

⁶⁰ Ibid.

mine safety work," the director of the State Administration of Coal Mine Safety, Zhao Tiechui, told state media in June 2011.⁶¹ However, Chinese government efforts to improve safety and reduce fatalities in coal mines have had little impact on illegal, unlicensed mining operations where worker safety remains a low priority for mine owners.⁶²

A February 2011 article in *21st Century Business Herald*, a newspaper in southern China, described the influence of these domestic problems on labor tensions in Zambia and the perception among some Chinese businesspeople that "African trade unions and labor laws are … very troublesome:"

A key reason why some Chinese enterprises [in Zambia] would commit such atrocities [referencing the Collum Coal Mine shooting] is that no form of mature worker-management relations has yet developed in China itself. The disregard for labor rights that some local governments [in China] show, their tendency to side with management, and an environment where abuses by the management in domestic labour disputes go unmonitored, have caused a culture of "alienation" of sorts. This has also cultivated the tendency of certain Chinese investors to feel "culture shock" in Africa.⁶³

Politicization of Chinese Investment, 2011 Election

While the role and impact of Chinese investment is frequently politicized throughout Africa—by Western governments and media, local governments, and the Chinese government itself—it may have been most hotly debated in Zambia. In the lead-up to the 2006 presidential election between incumbent President Levy Mwanawasa and his principal challenger, Michael Sata, Sata tried to capitalize on the anti-Chinese fervor following the Chambishi explosion and shootings. He visited Taiwan at that government's invitation and, in a direct affront to Beijing, made a campaign promise to recognize Taiwan's independence if elected.⁶⁴ China's ambassador responded by saying that China might sever diplomatic ties if Sata won and halt its investment.⁶⁵ Mwanawasa won the election handily, but Sata's Patriotic Front proved popular in the Copperbelt.

⁶¹ "China's coal mine safety record improves this year, says official," China Daily, June 29, 2011.

⁶² "Rescue efforts continue to find 3 missing in flooded NE China coal mine," Xinhua News Agency, August 31, 2011.

⁶³ Guo Kai, "Reasonable Regulation of Chinese Businesspersons in their Overseas 'Alienation of Labor,'" *21st Century Business Herald* (China), February 19, 2011.

⁶⁴ See Brautigam, *The dragon's gift*, pp. 150-51; Joseph J. Schatz, "Zambian Hopeful Takes a Swing at China," *Washington Post*, September 25, 2006; Haglund, "In It for the Long Term?," p. 635; Miles Larmer and Alastair Fraser, "Of Cabbages and King Cobra: Populist politics and Zambia's 2006 election," *African Affairs*, Vol. 106, 2007, pp. 611-37.

⁶⁵ Schatz, "Zambian Hopeful Takes a Swing at China"; BBC News, "Profile: Zambia's 'King Cobra,'" September 29, 2006, http://news.bbc.co.uk/2/hi/africa/5378726.stm.

After Mwanawasa died in August 2008, another presidential election was held that October—this time between Sata and Vice President Rupiah Banda, who became acting president upon Mwanawasa's death. While he continued to decry poor working conditions in the copper industry, Sata promised to protect China's investments in Zambia.⁶⁶ Banda won an extremely close election, with Sata claiming fraud.⁶⁷

On September 20, 2011, Zambians returned to the polls, with Banda and Sata the two main candidates. While his anti-Chinese demagoguery was nowhere near the 2006 levels, Sata remained outspoken against Chinese investment practices in the prelude to elections.⁶⁸ When election results had not been announced by September 22, riots broke out in the main Copperbelt towns⁶⁹—where dozens of miners interviewed by Human Rights Watch had threatened "problems" should Banda remain in power. The following day, the electoral commission proclaimed Sata the winner, with around 43 percent of the vote. Banda, with 36 percent of the vote, conceded and called on Zambians "to unite and build tomorrow's Zambia together."⁷⁰

In his inaugural speech, Sata said that foreign investment in the mining sector would still be welcomed, but companies must respect the country's labor laws.⁷¹ The first weeks of his administration have been marked by frenetic activity related to the copper mining industry in particular, and the economy more generally. Sata immediately called on the labor ministry to increase the monthly minimum wage from the current 419,000 Kwacha (\$87).⁷² He also quickly replaced the head of the anticorruption commission and the police chief, dismissed the governor and board of Zambia's central bank, and announced that he would further disband the boards of four state-owned companies.⁷³

On October 4, the government announced a ban on metal exports, including copper, due to fears that companies were misreporting their exports. The government said that new

72 "Zambian workers set to strike," AFP, October 10, 2011.

⁶⁶ Shapi Shacinda, "Zambia opposition warms to Chinese investment," Reuters, September 8, 2008.

⁶⁷ Shapi Shacinda, "Zambia election fraud, says Sata," IOL News (South Africa), November 14, 2008.

⁶⁸ See, e.g., "Transcript of Sata's controversial Interview," Lusakatimes.com, March 22, 2011,

http://www.lusakatimes.com/2011/03/22/transcript-satas-controversial-interview/.

⁶⁹ BBC News, "Zambia poll: Riots in Kitwe and Ndola over slow results," September 22, 2011.

 ⁷⁰ "Zambia Election Results: Opposition Wins, China Watches Warily," *International Business Times*, September 23, 2011.
 ⁷¹ Nicholas Bariyo, Dow Jones, "Zambia President: Mining Firms Must Respect Labor Laws," September 23, 2011. See also Andrew England, "Sata gives Chinese investors guarded welcome," *Financial Times*, September 26, 2011 (quoting Sata as saying, "We welcome your investment, but as we welcome your investment, your investment should benefit Zambians and not the Chinese.").

⁷³ Chris Mfula and Clara Ferreira-Marques, "Zambia lifts metal exports ban after two days," Reuters, October 7, 2011; Nicholas Bariyo and Devon Maylie, "Zambia Lifts Ban on Copper Exports," *Wall Street Journal*, October 7, 201; "Editorial: Lessons for SA in Sata's Zambia," *Business Day* (South Africa), October 11, 2011.

regulations to improve transparency would be established by October 16. On October 6, however, the government lifted the ban and implied that the regulations might take longer to finalize.⁷⁴ Then on October 13, Sata's minister of mines, Wylbur Simuusa, said that the government was looking to increase its shareholding ownership in the copper mining operations to 35 percent in order to receive "more benefits from the mines." Simuusa stressed that this was not a step toward nationalization, and any changes would be done in negotiations with the mining companies.⁷⁵

At the same time that the Sata government was announcing widespread changes at the national level, workers throughout Zambia went on wildcat strikes in demand for better working conditions.⁷⁶ While strikes were not confined to the copper industry or to Chinese-run companies,⁷⁷ the Chinese-owned copper mines were quickly among the hardest hit. On October 5, workers at NFCA walked out and refused to return underground, demanding a 100 percent pay increase to reach similar wage levels as competitor copper mining companies.⁷⁸ On October 7, workers at Sino Metals likewise went on strike, followed by a strike at Chambishi Copper Smelter that began on October 12.⁷⁹ Miners at NFCA returned to work on October 10 after receiving assurances for their requested pay increase, but then went back on strike on October 17 when the promise appeared to fall through.⁸⁰ The following day, NFCA management drafted a memorandum demanding that the miners return to work; according to local news reports, they offered workers a 200,000 Kwacha monthly salary increase (\$42), with promises to continue negotiations after work restarted.⁸¹ When the strike continued on October 19, NFCA fired at least 1,000 miners and told them they had 48 hours to appeal the decision.⁸² Zambia's deputy labor minister

⁷⁴ Chris Mfula and Clara Ferreira-Marques, "Zambia lifts metal exports ban after two days," Reuters, October 7, 2011; Nicholas Bariyo and Devon Maylie, "Zambia Lifts Ban on Copper Exports," *Wall Street Journal*, October 7, 201.

⁷⁵ Chris Mfula, "Zambia eyes 35 pct stake in mine projects: Minister," Reuters, October 13, 2011.

⁷⁶ An editorial in South Africa's *Business Day* linked the two, saying that the "abrupt and radical changes Sata has taken since he became President ... seem to foster an anti-foreign populism that has led to the many wildcat strikes throughout the country." "Editorial: Lessons for SA in Sata's Zambia," *Business Day* (South Africa), October 11, 2011.

^{77 &}quot;Zambian workers set to strike," AFP, October 10, 2011.

⁷⁸ Nicholas Bariyo, "Copper Miners in Zambia Demand Pay Rise," *Wall Street Journal*, October 7, 2011; Chris Mfula, "Zambian workers strike over pay at Chinese mine," Reuters, October 6, 2011.

⁷⁹ Nicholas Bariyo, "Copper Miners in Zambia Demand Pay Rise," *Wall Street Journal*, October 7, 2011; Chris Mfula, "Pay protest paralyses Zambia Chinese copper plant," Reuters, October 13, 2011.

⁸⁰ Chris Mfula, "Zambia miners at Chinese firm strike again over pay," Reuters, October 18, 2011. In doing so, they blocked a main road between the two main Copperbelt towns and demanded that the deputy labor minister address their grievances. Stanslous Ngosa, "'There's need to address mine's work stoppages," *Times of Zambia*, October 19, 2011.

⁸¹ Davies M.M Chanda, "2,000 striking workers fired in Chambishi," *Times of Zambia*, October 20, 2011.

⁸² Human Rights Watch telephone interview with miner at Sino Metals, Kitwe, October 20, 2011; Nicholas Bariyo, "Chinese-Owned Miner in Zambia Fires 1,000 Striking Workers," *Wall Street Journal*, October 20, 2011; Andrea Hotter, "Zambia's Sata Faces Test of Mining Mettle," post to "The Source" (blog), *WSJ.com*, October 20, 2011,

http://blogs.wsj.com/source/2011/10/20/zambia%E2%80%99s-sata-faces-test-of-mining-mettle/ (accessed October 21, 2011). Zambian press reported that 1,000 miners were fired from NFCA and 1,000 more were fired from the Chinese-run

quickly requested that the company reinstate the fired workers to solve the dispute amicably, and meetings were planned involving the government, management, and the unions.⁸³ At time of publication, the outcome was not yet clear.

At CCS, miners appeared to slowly return to work with the promise that the government and their unions would quickly take up these issues during yearly collective bargaining negotiations that were due to begin in early November.⁸⁴ In the meantime, production ground to a halt at all three Chambishi-based Chinese copper mining operations.

subcontractor JCHX that does most of the underground mining work at NFCA—meaning 2,000 dismissals in total. Davies M.M Chanda, "2,000 striking workers fired in Chambishi," *Times of Zambia*, October 20, 2011.

⁸³ Davies M.M Chanda, "2,000 striking workers fired in Chambishi," *Times of Zambia*, October 20, 2011; Nicholas Bariyo, "Chinese-Owned Miner in Zambia Fires 1,000 Striking Workers," *Wall Street Journal*, October 20, 2011; Andrea Hotter, "Zambia's Sata Faces Test of Mining Mettle," post to "The Source" (blog), *WSJ.com*, October 20, 2011,

http://blogs.wsj.com/source/2011/10/20/zambia%E2%80%99s-sata-faces-test-of-mining-mettle/ (accessed October 21, 2011).

⁸⁴ Nicholas Bariyo, "Zambia Chambishi Copper Smelter Resumes Partial Output – Union," Dow Jones Newswires, October 19, 2011; Chris Mfula, "Zambia miners at Chinese firm strike again over pay," Reuters, October 18, 2011; Nicholas Bariyo,
"Zambia Seeks Talks With Chambishi Copper Smelter Over Pay Dispute," Dow Jones Newswires, October 17, 2011.

"Good Investors, but Bad Employers": Dichotomy between Welcomed Chinese Investment and Abusive Labor Practices

While almost every miner from Chinese mining operations interviewed by Human Rights Watch complained about their conditions of service, particularly pay and safety practices, many expressed appreciation for the large amount of capital investment that the Chinese investors have brought to the copper industry. As noted in the background, CNMC has taken over several operations that previous investors abandoned. In addition to reopening these mines, the Chinese-run mines are drastically expanding operations. Miners, including an electrician at China Luanshya Mine (CLM), repeatedly expressed gratitude to the Chinese for the investment, noting that it had saved or created thousands of jobs: "The investment has changed greatly with this investor. So much more money is coming into the mine. The last one [Enya Holdings] completely neglected the mine, letting it fail; we were dormant for a year. Now, the Chinese have come and we're growing, we're set to open up a new mine."⁸⁵

A management representative from CLM told Human Rights Watch that the Chinese were investing US\$170 million to upgrade the Baluba underground shaft that was originally constructed in 1936; another \$350 million was being invested to create the Muliashi open-pit mines that will begin production in late 2011 and add more than 1000 new jobs.86 The Chinese constructed Chambishi Copper Smelter from scratch, opening in 2008 and now employing 900 workers—with ongoing construction to expand further. The smelter, according to union officials and miners who work there, is state-of-the-art.⁸⁷

In addition to appreciation for the renovation and expansion work, several miners and union officials noted that the Chinese investors have also made welcome improvements to equipment and technology in the current mines. A NUMAW union leader told Human Rights Watch that the Chinese companies are "modernizing the mines, making them more efficient and making the jobs easier. The CCS smelter, for example, is fantastic, largely computerized."⁸⁸ A draftsman, responsible for planning the drilling underground at CLM, said similarly: "They have brought a lot of computers and technology. In the past, we used a pencil to plot out the drilling pattern; now, each

⁸⁵ Human Rights Watch interview with miner working in the high-voltage section at CLM, Luanshya, November 11, 2010.
⁸⁶ Human Rights Watch interview with Tambian management CLM, Luanshya, November 11, 2010.

⁸⁶ Human Rights Watch interview with Zambian manager at CLM, Luanshya, November 10, 2010.

⁸⁷ Human Rights Watch interviews with miners at CCS, Kitwe, November 2010 and July 2011; with NUMAW union official, Kitwe, July 12, 2011; and with MUZ union official, Kitwe, July 12, 2011.

⁸⁸ Human Rights Watch interview with NUMAW union official, Kitwe, July 12, 2011.

of us in planning has our own computer. This is a big improvement. They have really improved the technology and machinery."⁸⁹

But the praise for the investment was almost always followed by frustration that the Chinese companies could spend so much on improved equipment, new smelting or processing operations, or even new mines, yet not pay workers anywhere near the salaries that other copper mining companies pay. One underground miner at NFCA said simply, "The Chinese think bringing investment alone is sufficient."90 A miner at CLM felt similarly, "These people have brought investment. They are opening Muliashi open-pit. They are hard workers. We appreciate this. But they don't care about Zambians. If they change that, we'll be happy. They are good investors, but they are bad employers."91

Finally, a miner at CCS told Human Rights Watch: "The new investor is bringing materials, looking at how to reap lots of money from the mines. But he is not caring after us. When you look at the cost of machinery the investor is bringing in, compared to what he is giving me, it is totally unacceptable. I should also have value.... Why can't they return some profits into personnel, safety, and CSR [corporate social responsibility], as well as into the new investments for mines and machinery?"⁹²

Numerous miners from the Chinese operations said that while people took the jobs in Chinese mines over being unemployed, poor work conditions and wages meant they left as soon as an opportunity existed in another copper mine.

⁸⁹ Human Rights Watch interview with draftsman at CLM, Luanshya, November 11, 2010.

⁹⁰ Human Rights Watch interview underground drill operator A at NFCA, Chambishi, November 5, 2010.

⁹¹ Human Rights Watch interview with employee in the supply department at CLM, Luanshya, July 17, 2011.

⁹² Human Rights Watch interview with smelter operator A in CCS plant, Kitwe, July 16, 2011.

II. Health and Safety

Sometimes when you find yourself in a dangerous position, they tell you to go ahead with the work. They just consider production, not safety. If someone dies, he can be replaced tomorrow. And if you report the problem, you'll lose your job.

-Underground miner at NFCA, November 201093

Copper mining carries serious health and safety risks in both the mining and processing operations. Underground copper mining is particularly dangerous, with at least 15 recorded fatalities in Zambia every year since 2001 and numerous other serious injuries and long-term health problems incurred. While accidents are not unique to the Chinese-owned mines, union officials, miners who had worked in Chinese and non-Chinese operations, and even government representatives who spoke to Human Rights Watch all said that the Chinese copper operations were the worst for health and safety conditions.

Miners from the Chinese-owned operations describe safety regulations that are routinely flouted. While the companies employ Zambian safety officers officially tasked with monitoring compliance with national safety procedures, they are given almost no authority; final decisions on whether to work in potentially dangerous areas rests with the manager, generally the Chinese manager, alone. Those who spoke with Human Rights Watch said Chinese bosses routinely force workers to continue in areas considered unsafe—under threat of being fired should the worker refuse—resulting in health problems and accidents. In order to hide the extent of the safety problems, several Chinese-run copper operations appear to deliberately underreport accidents; at times, they bribe workers—often without difficulty, given low salaries—not to report them.

The government's Mines Safety Department, situated in the Ministry of Mines and Mineral Development, is tasked with enforcing the country's mining regulations.⁹⁴ However, the department's grossly inadequate staffing and funding as well as the very low fines that can be imposed—eliminating any real deterrent effect—have made the agency largely ineffective.

As discussed below, Zambia has not effectively enforced either domestic or international labor law in the Chinese-owned copper mines in Zambia. The International Covenant on

⁹³ Human Rights Watch interview with mechanic at NFCA underground mine, Kitwe, November 15, 2010.

⁹⁴ See generally, Republic of Zambia, Chapter 213 of the Laws of Zambia: Mines and Minerals Act, 1995 Edition (Revised).

Economic, Social, and Cultural Rights (ICESCR) obliges states to ensure "[s]afe and healthy working conditions.⁹⁵ International Labour Organization (ILO) Convention No. 176 concerning Safety and Health in Mines sets out the basic obligations of states and employers regarding mine safety, as well as the rights and duties of workers and their unions.⁹⁶

Health and Safety Hazards

Workers throughout Zambia's copper mining industry are exposed to a variety of health and safety hazards that lead to accidents, including fatal accidents, and long-term health consequences, particularly affecting their lungs. ILO Convention No. 176, as well as the related ILO Recommendation 183 concerning Safety and Health in Mines, was drafted specifically to deal with the risks that come with mining—with the goal "to prevent any fatalities, injuries or ill health affecting workers or members of the public."⁹⁷ While accidents and some health consequences are likely to occur even when companies follow—and governments enforce—safety regulations, the failure to take seriously health and safety precautions leads to far greater problems.

A nurse at Sino-Zam Friendship Hospital, where miners at the three Chinese-owned Chambishi operations receive free medical care, described the injuries she sees from NFCA miners:

Rock falls are the most frequent of the severe problems. They are at times fatal, or result in crushed bones. We've had to do traumatic amputations of fingers, for example.... There are other injuries from [chemical] gassing, also acid and electric burns. And then there are common problems when the concentrate dust shavings get in the miners' eyes.... We also see general health problems from the contact with dust and fumes, due to poor ventilation. Pneumoconiosis [black lung] and particularly silicosis occur.⁹⁸

⁹⁵ International Covenant on Economic, Social and Cultural Rights (ICESCR), December 16, 1996, G.A. Res. 2200A(XXI), 21 U.N. GAOR Supp. (No. 16) at 49, U.N. Doc. A/6316 (1966), entered into force January 3, 1976, art 7. Zambia ratified the ICESCR on in April 1984.
⁹⁶ ILO Convention No. 176: Convention concerning Safety and Health in Mines, adopted June 22, 1995. Zambia ratified Convention No. 176 in January 1999. ILO Recommendation 183 concerning Safety and Health in Mines was drafted as a supplement to ILO Convention No. 176. When Zambia ratified the Safety and Health in Mines Convention, it tacitly indicated an acceptance of Recommendation 183 as well.
⁹⁷ ILO Convention No. 176, preamble.

⁹⁸ Human Rights Watch interview with nurse at Sino Zam, Kitwe, November 11, 2010. According to the US Centers for Disease Control and Prevention (CDC), "Silicosis is a disabling, nonreversible and sometimes fatal lung disease caused by overexposure to respirable crystalline silica. Silica is the second most common mineral in the earth's crust and is a major component of sand, rock, and mineral ores. Overexposure to dust that contains microscopic particles of crystalline silica can cause scar tissue to form in the lungs, which reduces the lungs' ability to extract oxygen from the air we breathe....There is no cure for the disease, but it is 100 percent preventable if employers, workers, and health professionals work together to reduce exposures." CDC, Preventing Silicosis,

http://www.cdc.gov/niosh/topics/silica/silfact1.html (last accessed October 18, 2011). The US Occupational Safety and Health Administration (OSHA) identifies effects of silicosis, including bronchitis; increased susceptibility to tuberculosis; and lung cancer, as silica is a "human lung carcinogen." OSHA, Silcosis, http://www.osha.gov/Publications/silicosis.html (last accessed October 18, 2011).

Underground miners likewise considered a rock fall the most dangerous event they faced. It occurs most often during blasting or drilling, when insufficient support has been created above or to the side of worksites. Accidents due to insufficient support can occur as a result of worker negligence or when mining bosses insist that workers continue past areas with sufficient support—so that production is not slowed for building new supports. Enormous rocks come crashing down during a rock fall, injuring and at times killing those caught underneath. Workers identified other fatalities as a result of electrocutions underground, though these occur far less frequently. At times, platforms on which workers are drilling or placing explosives, for example, can collapse, and workers suffer severe and even fatal injuries when plummeting. A worker died in one such accident at NFCA on December 30, 2010.

Among the less immediately dangerous sources of complaints at NFCA is the poor ventilation underground that can lead to both short-term and long-term health problems. ILO Convention No. 176 requires employers to take all necessary measures to ensure "adequate ventilation" underground. Recommendation 183 states that mines "should be ventilated in an appropriate manner to maintain an atmosphere ... in which working conditions are adequate," in accordance with applicable national and international standards on dust and gas.⁹⁹

An underground miner who works with explosives told Human Rights Watch:

The ventilation is very bad down there, as we drill deeper. There is lots of smoke, lots of dust, and yet we aren't given respirators. We just have a dust mask. We all have lung problems. I inhale the stuff all the time, because they don't give us a respirator; so my lungs and throat always hurt.¹⁰⁰

Another underground miner at NFCA, who worked with Konkola Copper Mines (KCM) until he was laid off during the 2008 global economic crisis, said that "some of the areas underground where we work would be off limits in other companies due to poor ventilation…. We can feel the lung problems already, even though our friends in other mines have been working for much longer. We know we're at risk for health problems because of the conditions here."¹⁰¹

One miner interviewed by Human Rights Watch from the Mufulira mine operated by Mopani Copper Mines likewise complained about poor ventilation underground, saying, "Even with the safety equipment, we just breathe in dust. We can feel it in our lungs; I've had lots of

⁹⁹ ILO Convention No. 176, art. 7(f); ILO Recommendation 183, para. 15.

¹⁰⁰ Human Rights Watch interview with underground boomer operator A at NFCA, Chambishi, November, 11, 2010.
¹⁰¹ Human Rights Watch interview with a machinist at NFCA, Kitwe, November 6, 2010.

problems. In some areas, they should improve the ventilation before we start work, but they don't."102 In a 2008 article in the International Journal of Environmental Research and Public Health, researchers took dust samples from Mopani's two underground mines and found that "59% and 26% of Mufulira and Nkana Mine samples, respectively, were above the calculated U.S. Occupational Safety and Health Administration permissible exposure limit." They concluded that "weak dust monitoring at these mines ... may increase the risk of nonmalignant disease in many miners" and recommended that "Zambian mining houses and the government establish crystalline silica analysis laboratory capacity and adopt dust mass concentration occupational exposure limits for more protective dust monitoring of workers."¹⁰³ In response to a letter from Human Rights Watch outlining concerns, Mopani's Chief Executive Officer David Callow said that the company takes the issue of silicosis "very seriously and is focused on reducing incidence" through measures including "improved localized dust management in work places"; programs raising employees' awareness on "dust control and personal protective equipment usage"; implementing "personalized dust monitoring techniques" for Mopani employees working in high-exposure areas; and more frequent medical checkups. Mopani's response continued:

Silicosis generally has a long latent period to manifest, which can be 20 years or more, so some of the benefits of [the company's] focus since privatisation may not yet be apparent. Even still, incidence has been almost halved since privatisation. Progress in this area is monitored closely by Mopani's board.¹⁰⁴

At the processing and smelting operations, miners work with acids and other noxious chemicals to separate the copper from the rock. Sulfuric acid is one of the most commonly used substances. As with underground miners, workers are also routinely exposed to dust, fumes, and other hazardous substances. In certain departments, often referred to as "hot metal" departments, miners work in environments of extreme heat. Fatal accidents are far less common in processing than in underground mining, but acid burns and lung disease, for example, can be common when companies do not comply with safety regulations.¹⁰⁵

¹⁰³ Patrick Hayumbu, Thomas G. Robins and Rosa Key-Schwartz, "Cross-Sectional Silica Exposure Measurements at Two Zambian Copper Mines of Nkana and Mufulira," *International Journal of Environmental Research and Public Health*, Vol.5, 2008, p. 86.

¹⁰² Human Rights Watch interview with underground drill operator at Mopani, Mufulira, November 15, 2010. A previous report on Mopani cited an interview in which the miner similarly complained about poor ventilation and also related that the company would purposefully show other parts of the operations when inspectors came. Les Amis de la Terre and Counter Balance, *The Mopani Copper Mine, Zambia: How European development money has fed a mining scandal*, December 2010, p. 17.

 ¹⁰⁴ Letter from Danny Callow, chief executive officer of Mopani Copper Mines Plc, to Human Rights Watch, October 12, 2011.
 ¹⁰⁵ Human Rights Watch interviews with miners at the Chinese-run smelting and processing plants, Chambishi and Kitwe, November 2010 and July 2010; with miners at the Konkola Copper Mines-run smelter, Chingola, November 2010; with mine union officials, Kitwe, November 2010 and July 2011.

To protect against problems associated with mining, ILO Convention No. 176 requires employers in mining operations to inform workers of the work's hazards; to "take appropriate measures to eliminate or minimize risks resulting from exposure to those hazards"; to ensure "adequate protection against risk of accident or injury to health," including through the provision and maintenance, at no cost, of personal protective equipment; and to provide first aid at the workplace as well as "access to appropriate medical facilities."¹⁰⁶ The biggest problems in the Chinese-owned mines are the second and third requirements, on minimizing risks and providing adequate protection. Rather than eliminating or minimizing the risks, Chinese mine owners and managers appear to increase the risks through threats against workers who would prioritize safety over production.

While these problems are discussed in more detail below, a doctor who had worked for more than a decade at the mine hospital for Luanshya Mine, which was owned and run by a Swiss-based investor until sold to CNMC in 2009, told Human Rights Watch:

The number of accidents under the Chinese has gone way up, we have seen this in the hospital. They're not concerned about safety. There have been several fatal accidents since they took over, and we did not see many at all before them. I see lots of cases of crushed fingers as well, one just last week.... I can tell you from the hospital side, accidents are a major problem now. We see more than ever before. And most of these could be prevented if safety was prioritized. We need to sensitize the Chinese about the safety rules, about the labor laws, and they need to start following these.¹⁰⁷

To bring attention to potential safety hazards, daily safety talks among work units—at the beginning of each shift—are fairly standard across the copper mining industry. A miner at the tailings and leach plant was one of several KCM employees to underscore their importance: "The company emphasizes safety talks before the job. These are done within our sections, for about five minutes in every shift before we start. Everyone takes part, and we talk about the dangers. These have reduced the number of accidents."¹⁰⁸ Miners at Mopani and Kansanshi likewise mentioned daily safety talks in various departments.¹⁰⁹

¹⁰⁶ ILO Convention No. 176, art. 9. See also ILO Recommendation no. 183, paras. 19-20.

¹⁰⁷ Human Rights Watch interview with medical professional at Luanshya Mine hospital, Luanshya, November 10, 2010.
¹⁰⁸ Human Rights Watch interview with operator at the tailings and leach plant at KCM, Chingola, November 14, 2010.
¹⁰⁹ Human Rights Watch interviews with an underground truck operator at Mopani, Mufulira, November 16, 2010; with operator A in the processing plant at Kansanshi, Solwezi, November 12, 2010.

A national-level official at the Mineworkers Union of Zambia told Human Rights Watch that there was a stark difference at NFCA in particular: "Most companies take safety talks seriously. This goes back to the days of ZCCM, they have been standard since. NFCA is the big exception."¹¹⁰ Miners at NFCA told Human Rights Watch that safety talks had been introduced in early 2011—showing, as elsewhere, that there have been improvements among the Chineserun companies—but one underground miner cited a remaining problem echoed by others:

The Chinese are never there for the safety talks, it's just the Zambians. Even when you have a Chinese manager, when he makes the decisions underground, he doesn't take part. Only the Zambian manager, who has no real authority, leads the morning safety talk.¹¹¹

The result, as stated by an underground mine truck operator, is that "what we hear during the safety talk and what they do underground is very different."¹¹²

In a letter from China Non-Ferrous Metals Mining Corporation (CNMC) in response to the main findings in this report, NFCA acknowledged that it had come under "repeated criticisms" from Zambian government departments including the Mines Safety Department. It blamed the failure of the Chinese subcontractor who does underground mining at NFCA to register "as an independent legal entity in Zambia," but said that this had been rectified for 2011 to 2013.¹¹³ NFCA also faulted "language and cultural differences during communication and interaction" with employees, which it said "could have possibly resulted in misunderstandings about the actual state of affairs."¹¹⁴ NFCA finally stressed that it had "supplemented and improved its measures" related to worker safety and protective equipment, including through new regulations implemented on January 1, 2011.¹¹⁵ As this report makes clear, miners interviewed by Human Rights Watch acknowledged that the situation is much improved from when NFCA started operations. However, the safety practices remain substandard both in relation to labor law and to other multinationals operating in Zambia's copper industry.

¹¹⁰ Human Rights Watch interview with MUZ safety official, Kitwe, July 18, 2011.

¹¹¹ Human Rights Watch interview with underground boomer operator D at NFCA, Chambishi, July 16, 2011.

¹¹² Human Rights Watch interview with miner truck operator B at NFCA, Chambishi, July 16, 2011.

¹¹³ Letter from China Non-Ferrous Metals Mining Corporation (CNMC) to Human Rights Watch, October 8, 2011.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

Failure to Provide Potable Water

Workers at several Chinese mining operations in Zambia complained that there was no drinking water available to them, despite working in hot and dusty environments. Since breaks are not allowed—or feasible, in terms of underground operations—workers described going an entire day in these environments without potable water, compounding heath impacts. Zambia's Employment Act requires "[e]very employer [to] ensure that there is at the place of employment an adequate supply of drinking water for the use of his employees."¹¹⁶ ILO Recommendation 183 likewise states that "employers should, where appropriate, provide and maintain at no cost to the worker ... adequate supplies of potable drinking-water."¹¹⁷

A worker in Sino Metals tailings plant contrasted the reality there:

There is no domestic water in tailings, which is not normal. There are more than 200 of us that work there and yet no water. There wasn't even a toilet for a long time. Just in the last couple months they've installed two toilets. In the crusher plant, there is also no water, no toilet. The only place with domestic water is the SX facility.... For the rest of us, we suffer. We're dealing with chemicals and dust all day, and we have nothing to drink.¹¹⁸

Another worker at Sino Metals said that the only water was for industrial use, not even for assisting in removing the dust from the environment. He said that the union had tried to raise the issue, but the Chinese management had been unresponsive.¹¹⁹

At NFCA, an underground miner said that his partner became so thirsty that he drank from the industrial water, for which he was physically assaulted by the Chinese manager:

We were deep underground, and it was hot. There's no water for us down there. My partner was exhausted and opened some of the mining water to refresh, to cool down. And when the boss saw that, he beat him. He punched him and beat him with a tool that was in his hand. It was reported to the police, but the Chinese guy is still working, nothing has been done.¹²⁰

¹¹⁶ Republic of Zambia, Chapter 268: The Employment Act (Act No. 57 of 1965, as last amended by Act No. 15 of 1997), Section 42: Water for use of employees, 1997.

¹¹⁷ ILO Recommendation 183, para 25.

¹¹⁸ Human Rights Watch interview with miner A in the tailings department at Sino Metals, Kitwe, November 8, 2010.

¹¹⁹ Human Rights Watch interview with miner in the crushing plant at Sino Metals, Kitwe, November 7, 2010.

¹²⁰ Human Rights Watch interview with underground boomer operator B at NFCA, Chambishi, November 11, 2010.

Personal Protective Equipment (PPE)

While there has been progress since when they first started mining in Zambia, the Chinese operations—NFCA underground mining, Sino Metals, and Chambishi Copper Smelter in particular—frequently fail to provide prompt replacement of "personal protective equipment" to employees. All too often, this leads directly to unnecessary workplace accidents and health consequences. In contrast to the practices at the Chinese-run copper mines, miners interviewed from the other multinational companies—specifically, Mopani Copper Mines, Konkola Copper Mines, and Kansanshi—said their companies have a standard procedure in which they were able to obtain a replacement when their PPE was damaged during work (see text box, below, on "Best practices in the Copperbelt").

ILO Convention No. 176 requires employers to "provide and maintain at no cost to the worker suitable protective equipment [and] clothing as necessary."¹²¹

Miners at the Chinese copper mining operations said that their employers had improved considerably at providing PPE since first starting work in Zambia. Until several years ago, the Chinese companies often did not provide any protective equipment; at best, workers might receive a few of the items they needed, as described by an underground miner at NFCA:

It was in 2008 and 2009 that the union really took up the issue of PPE, that the Chinese had to provide work suits and boots, hard hats, and the other necessary equipment. Before you were lucky to get a couple pieces, but you would never get close to what is required by the mining regulations. Those efforts in 2008 and 2009 paid off. But even though it's better, we still face problems with PPE that don't exist in other mines.¹²²

A worker in the Chinese-owned smelter, CCS, likewise said:

When we first started, the safety situation was very, very bad. They did not give us the required PPE. We worked with no equipment and were exposed to lots of problems. People were often burned from the acid.... The Mines Safety Department finally intervened after lots of complaints, and now we get leather suits, shoes for the smelter, leather gloves, and a face shield. It

¹²¹ ILO Convention No. 176, art. 9(c).

¹²² Human Rights Watch interview with underground drill operator A at NFCA, Chambishi, November 5, 2010.

took lots of complaining. We were happy with the progress, but now we find ourselves again with PPE problems.¹²³

The "PPE problems" referenced by this worker were echoed by virtually every employee at the three Chambishi-based Chinese copper companies with whom Human Rights Watch spoke: the Chinese-run companies there refuse to issue replacement PPE, even when it is damaged during work; and also still fail to provide some protective equipment that is standard in other operations. Throughout the copper mining industry, there is a set "timeframe" for receiving new PPE; however, the Ministry of Mines permanent secretary made clear that under Zambian law—in addition to the ILO—companies are to replace PPE torn or damaged during work.¹²⁴ Workers from other copper mining companies in Zambia told Human Rights Watch that their employers follow this regulation. According to the miners in the Chambishi companies, Chinese bosses tell workers that, no matter how damaged their equipment is, they must wait until the timeframe has elapsed or purchase their own replacement. A surface miner at NFCA explained:

For those on the surface, we are given attire for a year—that's the timeframe. For boots, belt, hard hat, overalls, we get one for a full year. It's supposed to be six months, which is what it is for the underground workers. And then if there is a premature defect [in the PPE], you can't get a new one. No matter how bad, no matter if it happened during work use only, they won't give a new one. Your salary is deducted.... So most people continue working with the damaged PPE.¹²⁵

A fork-life operator at Sino Metals expressed similarly:

If the PPE breaks down before the timeframe, you either have to continue working with the damaged equipment or you have to cover a new one on your own. If we turn in a broken PPE, and receive a new one, they deduct the cost from our earnings.... This is not what the safety regulations say, but the Chinese don't care and our government does nothing.¹²⁶

¹²³ Human Rights Watch interview with miner A in the water treatment department of CCS, Kitwe, November 6, 2010.
¹²⁴ Human Rights Watch interview with Godwin Beene, permanent secretary in the Ministry of Mines and Minerals Development, Lusaka, July 18, 2011.

¹²⁵ Human Rights Watch interview with technician at NFCA, Chambishi, November 11, 2010.

¹²⁶ Human Rights Watch interview with forklift operator A at Sino Metals, Kitwe, July 13, 2011. The problem was also expressed repeatedly by workers at CCS, including an acid plant operator at CCS who said, "Even if [the Chinese manager] sees problems with the PPE, they will not give a new one until the timeframe is over. At CCS, the safety representative does

Miners told Human Rights Watch that a good pair of gumboots, for example, cost 165,000 Kwacha (US\$34), and work overalls cost around 78,000 Kwacha (\$16). For many of those working in the Chinese-run mines, that would together comprise between one-fourth and one-half of their monthly basic salary—meaning most miners choose to work with defective equipment, rather than pay for new PPE themselves.

Human Rights Watch documented dozens of injuries and health problems across CCS, Sino Metals, and NFCA as a result of the companies' failure to maintain PPE or provide all appropriate equipment. At CCS and Sino Metals, workers often described suffering acid burns as a result of management's refusal to replace gloves, boots, and other PPE that had been torn or burned through by acid during the course of work. The failure to provide sufficiently protective equipment in the first place contributed to additional acid burns, as explained by a worker in the smelter at CCS:

I've been burned four times from acid splashes that come inside my clothes. The shield that we're using is not good enough. It's supposed to have a cloth that goes down completely to the chest, to not leave anywhere exposed; but this shield that they give us leaves our neck exposed. We've gone to management about this, but nothing has been done. They've just said that they're giving us a shield, and we should be more careful.

It's similar with the suits and gloves. The leather starts developing holes from the acid burning through. For each PPE, there's a timeframe. Even if the protective equipment is worn out, or has had a hole burned through, the Chinese will say no if we ask for a new one—they say that we can get a new one when time expires. I've had acid splash on my hand where there was a hole in my glove.... It's happened to others who work with me.¹²⁷

Miners, both at the copper processing operations and NFCA's underground mine, also complained to Human Rights Watch of recurring lung problems as a result of defective respirators or the failure to provide a respirator. A miner at Sino Metals said:

I work in the copper tank house, where I'm exposed to a lot of fumes. Doctors I've spoken to say that it's dangerous.... [The company] provides a

not have the final say. The Chinese do." Human Rights Watch interview with acid plant operator A at CCS, Kitwe, November 6, 2010.

¹²⁷ Human Rights Watch interview with miner A in the smelter furnace at CCS, Kitwe, November 6, 2010.

[cotton cloth] mouth pad for us—not even a respirator like the ones other mines bring in from South Africa. It's just a cloth pad like a doctor uses, and the timeframe is two months, which is no good. Working in there, with all the fumes, it gets damaged in a week. You can tell the difference, you start coughing. If you take a broken one to the safety officer, he doesn't do his job. He says to wait two months and he'll give you a new one.... For gumboots, it's four months; for overalls, six months. No matter if they're damaged because of work, you can't get a new one.

I've had chest problems a few times. I went to the hospital, and they did an X-ray; the doctor said I had these things stuck to my lungs. He gave me medicines, and it's gotten better, but I can still feel pain sometimes. It's even worse for others. For some of the people in my group, I see them coughing blood and other things.... I worry that it will happen to me next. The Chinese just don't care. They don't care about accidents. They prefer that the job gets done, they don't care about accidents or health.¹²⁸

Another miner at Sino Metals explained similarly:

There's been too much acid, too many fumes in the plant for so long. And many of us suffer damage to our chest as a result. We are given what the Chinese call respirators after two months, yet I tell you, after two weeks they are damaged. They don't block out the fumes and dust anymore. A lot of people just stop using them as a result. Look at my teeth, they are damaged from the exposure to the acid. Look at my toenails, the same thing because the shoes break down and don't give enough protection. We all suffer chest pains and cough.... They don't give the safety attire at the agreed upon time, which itself is not good. They say that they are to give every six months, but it is more often a year.... And with other things, like the PVC gloves [coated with polyvinyl chloride, a form of plastic] for holding materials with acid, they are supposed to give these twice a month, but they only give them once. They won't replace them even if acid has partly gone through, has damaged them. Then you have to decide if it's worth the protection to buy your own on the outside. This leads to some acid burns. If the equipment was right, it wouldn't happen; if they'd replace broken PPE, it wouldn't happen.¹²⁹

¹²⁸ Human Rights Watch interview with miner A in the SX/EW plant at Sino Metals, Kitwe, July 13, 2011.
¹²⁹ Human Rights Watch interview with attendant at processing plant at Sino Metals, Kitwe, July 16, 2011.

While Sino Metals appears to be the worst Chinese company in Zambia in terms of providing PPE [see text box below on the treatment of casual workers], similar problems exist at NFCA and CCS. An underground miner at NFCA, who used to work at the Indianowned Konkola Copper Mines (KCM), contrasted the protective equipment workers were provided at the two companies and described health problems that he had experienced after working at NFCA:

We work underground and there are problems with the dust and the noise. The Chinese don't give me a respirator or ear pieces. At KCM, I received both for the same work.... The lack of respirator causes lots of lung problems. I cough all the time and have started feeling sharp pains in my chest after long hours underground.... NFCA only gives ear pieces to those who work directly with jackhammers, while KCM would give them if you were anywhere near one. They also gave us routine ear exams. I went on my own recently, and my hearing had gotten much worse. From a category 3 to a category 1. The union and the safety department have said they'll talk to the Chinese, but nothing happens. We are voiceless—if you push, you can be fired.¹³⁰

A worker at CCS, who had also worked previously at KCM, said that KCM provided and "made compulsory" goggles or tinted glasses for those working near the flame in the smelting plant. At CCS, by contrast, eyewear was not provided to miners performing the same jobs in the hot metal department; the vast majority work without any protection. Concerned about his eyesight, this worker purchased his own pair.¹³¹

Workers in the Chinese-owned copper mines, including this operator in the smelter at CCS, repeatedly stressed that the refusal to replace protective equipment was particularly problematic because the Chinese companies imported cheaper equipment to begin with:

In the smelter, you must understand that people are directly involved with the copper. We work with hot metal, with chemicals. Because of the heat, we're supposed to be given heat-resistant PPE. You should see the leather uniforms that people have to wear. People have been wearing them for a

¹³⁰ Human Rights Watch interview with underground artisan fitter A at NFCA, Chambishi, November 15, 2010. Another underground miner at NFCA similarly described suffering from the poor ventilation and lack of a working respirator. He said, "You should go underground, it's full of dust—there's no ventilation. They just give us a cloth for our mouth once a month. After a couple days, the thing is covered in dust and dirt. You might as well go down without it. So you struggle. You struggle. And then if you say, 'I don't have the mouth cloth, it's damaged, I can't go underground,' they say they'll terminate you." Human Rights Watch interview with mine truck operator A at NFCA, Chambishi, July 16, 2011.

¹³¹ Human Rights Watch interview with miner B in the electrical furnace at CCS, Kitwe, July 16, 2011.

year, and they are totally worn out. Same with the leather gloves, they are totally worn out. And for shoes, they give us normal boots as opposed to heat-resistant ones. We have pushed on all of these problems, but the manager told me, "We can't just give you everything." … We wear gloves that last for one week before developing holes, yet they say the timeframe is for a month, sometimes more. So you'll have a hole or a tear, and that's where you get burned. People get burned by acid or oxygen. If they gave us proper PPE, these injuries would go down.

Most PPE comes from China. They used to bring in respirators from South Africa, but they made an imitation in China and now that's what we get. What used to last for months, now doesn't work for very long.¹³²

In its letter to Human Rights Watch, CNMC outlined the different copper mining companies' policies in regards to providing and replacing PPE at established time intervals.¹³³ Human Rights Watch agrees that all of CNMC's companies in Zambia do this—which, as noted above, is an improvement from practices several years ago. The primary issue is the replacement of PPE damaged during work, a problem that appears particularly acute at NFCA and Sino Metals. For NFCA, the CNMC letter states, "Equipment damaged ahead of the scheduled date of replacement should be replaced, but depending on the specific circumstances, the costs incurred shall be borne either by NFCA or the worker himself."¹³⁴ The response provides no details on which circumstances necessitate the costs being incurred by the miner. For Sino Metals, the letter states, "Sino-Metals has continued to mandate that PPE damaged before distribution is due shall be replaced, and that it will only charge half the costs incurred."¹³⁵ Here the company acknowledges charging workers to replace damaged PPE.

Regarding the incomplete provision of PPE, the CNMC letter indicated that recent improvements had been made in giving equipment such as respirators and dust masks stressing that they meet relevant safety standards.¹³⁶ Human Rights Watch acknowledges improvements, including between its research missions. However, miners continued to state in July 2011 that certain protective equipment, deemed standard when they worked for other companies, is not provided—or replaced more infrequently—at the Chinese-run companies. They described injuries and health consequences that occur as a result.

¹³² Human Rights Watch interview with smelter operator A at CCS, Kitwe, July 16, 2011.

¹³³ Letter from CNMC to Human Rights Watch, October 8, 2011.

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ Ibid.

Casual Workers at Sino Metals: No PPE, Labor Law Loopholes

Casual (temporary) workers are common throughout Zambia's copper industry, not just with the Chinese companies.¹³⁷ Because of the low level of employment in Zambia as compared to the number of skilled workers, companies have found it easy to fill a number of positions with short-term hires who are generally paid less and not provided the benefits and allowances that regular employees receive. The country's employment law says that companies should not employ a person for more than six months without giving a longterm contract.¹³⁸ However, at present, the law only covers continuous employment; if a company fires a worker and then reemploys him, the six-month period starts again.

At the CNMC-owned Sino Metals, management has taken advantage of this loophole. Human Rights Watch interviewed three casual workers who had been repeatedly hired on three-month contracts, fired for periods ranging from several days to a month, and then rehired again as casuals. They had each spent over a year with the company—in one case, almost two years—yet remained casuals with no benefits. A member of Sino Metals' management told Human Rights Watch that there were around 50 casual workers in a similar situation, including 31 in the tailings department alone.¹³⁹

More problematic, however, these casual workers told Human Rights Watch that they received no PPE—despite often working in dangerous departments, side-by-side with those on contract. Other companies that take advantage of the Employment Act's loophole still provide protective equipment to casuals, as with any other worker in the plant. An operator in the thickener plant at Sino Metals who is a casual worker told Human Rights Watch:

I receive no PPE. I buy my own stuff—generally other workers' old PPE, already torn but better than nothing. I work with dust and chemicals, but I have no other choice. I don't use a respirator. All I have is the cloth piece to put over my mouth that one of the other workers gives me. It gets dusty after a couple of days.... The lack of PPE has caused me problems. I feel real pain in my lungs. And once I was carrying a heavy

¹³⁷ For a discussion of casual workers at the Indian-owned KCM, see Action for Southern Africa (ActSA), *Undermining Development? Copper Mining in Zambia*, October 2007.

¹³⁸ Republic of Zambia, Chapter 268: The Employment Act, art. 3 (defining "casual employee" as "any employee the terms of whose employment provide for his payment at the end of each day and who is engaged for a period of not more than six months"). Human Rights Watch interview with Venus Seti, assistant labor commissioner in the Ministry of Labour and Social Security, Lusaka, July 18, 2011.

¹³⁹ Human Rights Watch interview with Zambian manager at Sino Metals, Kitwe, July 13, 2011.

pipe without PPE, and because I didn't have the proper clothes that cover my neck, the pipe cut and burned along my neck.¹⁴⁰

Another casual worker at Sino Metals similarly described his problems, along with the company's efforts to conceal how they treat these workers when Zambia's former president came for a visit:

The Chinese bosses don't give us respirators or hard hats—nothing. We must provide our own safety equipment or go without. I have had chest pain, head pain, yet I don't have medical care with the company either. There is no PPE for casuals. The national union has been written [about this], but nothing has been done.... It's so bad that, when Rupiah [President Banda] came to the plant in March [2011], they put us in a room and locked it. I guess they weren't prepared for his arrival, I don't know. I heard later that some other casuals had been told to stay home that day. But we were there at the plant. And they took us into a room and locked it while the president was there, to keep us out of his sight, the casuals without PPE. I was in among them.

They don't even give us gloves, though we handle the copper.... The SX plant is where the copper cathode being produced is located. There are lots of fumes there. When there is something to lift, they call in the casuals. Yet when we go into the SX plant, we don't get PPE.... Casuals have no rights in general. If you try to get permission for anything, they say no. I wanted to go to my grandfather's funeral, and they said that if I went maybe I'd be fired. The Chinese boss said this, "If you go, maybe I'll fire you." I needed to keep my job, so I didn't go.¹⁴¹

A Zambian member of management at Sino Metals confirmed that while the company had a storage room full of PPE, casuals either work without it or buy it themselves—despite "taking positions that are supposed to be held by contract workers and being exposed to dust, noise, [and] to acid and fumes in the thickening plant where leaching takes place."¹⁴²

A Chinese national in Sino Metals' management, who briefly spoke to Human Rights Watch before cutting off the interview and saying that her boss said she should not

¹⁴⁰ Human Rights Watch interview with casual worker in the thickener plant at Sino Metals, Kitwe, July 17, 2011.

¹⁴¹ Human Rights Watch interview with casual worker in the SX/EW plant at Sino Metals, Kitwe, July 15, 2011.
¹⁴² Human Rights Watch interview with Zambian manager at Sino Metals, Kitwe, July 13, 2011.

speak further, refuted that anyone worked without PPE. She said, "All our workers are provided with protective clothing and boots to ensure that they are safe from acid or other dangerous materials. We always obey the country's laws."¹⁴³

While Sino Metals does provide protective clothing and boots to employees on contract, Human Rights Watch was consistently told that casuals did not receive such equipment. Moreover, as described above, even Sino Metals' contract employees described serious problems with obtaining replacements for PPE damaged during work.

While in general the Chinese mining operation in Luanshya appears to have retained the policy of the previous mine owner in replacing damaged personal protective equipment, several miners still complained about a reduction of safety standards related to PPE. One surface worker, for example, said that the new Chinese managers had both extended the standard timeframe and made it more difficult to replace damaged PPE:

Before the Chinese came, we [surface workers] received PPE every six months. Now, it's every year. Imagine that on an overall... to have one overall for a year—it's not conducive to that.... If there is a tear or a problem, you must explain a lot to get a new one. Sometimes, if there's a tear, they will say, "You weren't careful in lifting the battery, so you don't get a new one." They've made it much more difficult than the previous employers.¹⁴⁴

When asked about problems with PPE, a Zambian manager from CCS said there were still problems getting replacements at NFCA and Sino Metals. However, he said that CCS had changed its policy in October 2010 after his "personal efforts." He also noted employees who try to cheat the company as a reason for stringent checks:

If the PPE is damaged during the work process, the person goes to the work supervisor and is given a new one for free. This became the policy in October 2010. If it's stolen and you bring in a police report, you get a new one. But often you have people coming in with other, broken shoes, saying it's their PPE. They lie, to then sell it or give it to someone else. We're a

¹⁴³ Human Rights Watch interview with Chinese manager at Sino Metals, Chambishi, July 30, 2011.

¹⁴⁴ Human Rights Watch interview with surface-level driver at CLM, Luanshya, July 17, 2011. In respect to PPE at China Luanshya Mine, CNMC's letter to Human Rights Watch states, "Upon approval from the safety management department, the workers shall collect the PPE, as per their request." Letter from CNMC to Human Rights Watch, October 8, 2011. This does not contradict what the miners told Human Rights Watch, namely that while the general policies from the previous investor remained in place, it was more difficult to obtain approval for replacement PPE under the Chinese management.

business, we need proof. If you haven't proven that it was genuinely torn or damaged during the work process, we're not going to pay. You have to convince with proof, otherwise the employee pays. It's to make sure people take care of their hard hats, their respirators. It's the same with loss—if you negligently lose the uniform, you have to pay.¹⁴⁵

Workers at CCS interviewed in July 2011 acknowledged that there had been a formal change in the policy, but said that it was still difficult in practice to receive a replacement. An operator in the smelter at CCS told Human Rights Watch:

It's better, but it's still difficult to get a new one. We'll report defective PPE to the supervisor, who is supposed to report it to the Chinese and get us a new one. But many of the safety officers and supervisors don't do their work, they're afraid of the Chinese, they're afraid of losing their jobs. So we still don't get replacements, because they know safety isn't valued.¹⁴⁶

In its letter to Human Rights Watch, similar to the statements of the CCS manager above, CNMC described problems at Sino Metals related to workers stealing and otherwise improperly using PPE provided to them. The letter, in also responding to worker complaints that the Chinese-provided PPE is of lower quality, states:

Sino-Metals has discovered that work clothes that it purchased from China are on sale in Chambishi's markets. Investigations have shown that some workers sell the work clothes which they had just collected from the company and show up for work in old and tattered ones; during inspections, they report that the company has not replaced their work clothes in a timely manner. In addition, some workers are extremely careless about the PPE from Sino-Metals. There are many occasions on which we have found that work clothes issued barely a week before are missing a sleeve, or where the worker continues wearing a torn pair of trousers. This is not a problem to do with quality, since most workers are able to use their uniforms for a long time, with no damage to the two sets of work clothes given to them every year.¹⁴⁷

¹⁴⁵ Human Rights Watch interview with Evan Mutali, assistant HR manager at CCS, Chambishi, July 2011. In respect to PPE at CCS, CNMC's letter to Human Rights Watch states, "Chambishi Copper Smelter has explicit processes for workers to file requests for the replacement of, and for their collection of, PPE that has been damaged or lost in production areas; these are implemented across all work units." Letter from CNMC to Human Rights Watch, October 8, 2011.

¹⁴⁶ Human Rights Watch interview with smelter operator A at CCS, Kitwe, July 16, 2011.

¹⁴⁷ Letter from CNMC to Human Rights Watch, October 8, 2011.

Godwin Beene, permanent secretary in the Ministry of Mines and a board member of ZCCM-IH, which retains a minority interest in each of the country's mining operations, also expressed the view that the real problem with PPE was workers trying to cheat their companies:

The law says they automatically get new PPE if broken or worn out. But the problem isn't the Chinese. It's the miners. You see, they'll ask for new PPE in order to give the overalls, the boots, to their father or brother.... The regulations are clear. Ear plugs must be provided and worn. PPE must be provided. But they trade the new one to get money or to give it to family, and then they come in with someone's worn old equipment and ask for a new one. It's a problem. A good supervisor can tell if the person is lying.¹⁴⁸

While some miners may try to cheat the company, miners at both NFCA and Sino Metals said their attempts to have PPE replaced were rejected out-of-hand, not after a procedure to determine whether they were being truthful. Moreover, as described in the "Best Practices" textbox, below, workers from mines run by other multinational corporations described relative ease in exchanging torn or damaged PPE—in stark contrast to the system described by workers in the Chinese-owned mines.

"How Can We Pick One Child?": Family Medical Care at Sino-Zam Friendship Hospital

As is standard across the copper mining industry in Zambia, the Chinese-owned companies have provided a hospital for miners. For the three companies based in Chambishi, miners have access to Sino-Zam Friendship Hospital in Kitwe. Although most workers with whom Human Rights Watch spoke expressed frustration at the distance to the hospital, several praised the hospital's staffing and equipment—saying it was much better than going to a government hospital, in particular in its supply of medicines. China Luanshya Mine also provides a hospital in Luanshya.

While offering an important benefit to their employees, the Chinese companies appear to provide the least among their multinational competitors. At Konkola Copper Mines and Mopani Copper Mines, for example, a spouse and all minor children are covered. While there have been gradual improvements, several Chinese companies limit the number of

¹⁴⁸ Human Rights Watch interview with Godwin Beene, permanent secretary in the Ministry of Mines and Minerals Development, Lusaka, July 18, 2011.

children covered. Workers at Chambishi Copper Smelter (CCS) are covered along with a spouse and, since 2011, one child. Miners from Sino Metals can have two children covered, up from one in 2010. One miner at CCS told Human Rights Watch,

Another big problem is medical [coverage]. Most companies cover all children, but in our case, it was only last year that they covered the spouse and this year they added one child. We said that it's not enough, how can we pick one child to receive care?¹⁴⁹

As in other areas, like pay, hours, and safety standards, the Chinese companies have made improvements, extending coverage to dependents. However, as in these same other facets, the progress is gradual and leaves them well behind other multinational mining companies in the country.

Company Safety Officers without Authority

Zambian law provides two lines of defense against abusive safety practices: safety officers employed by the mining companies themselves and government safety inspectors in the Mines Safety Department. The latter, discussed in more detail below, are largely ineffective due to a combination of underfunding, understaffing, and corruption. This puts pressure on the company safety officers to ensure that safety regulations are followed.

The ILO conventions make mine safety a priority. ILO Convention No. 176 gives workers the rights to "request and obtain, where there is cause for concern on safety and health grounds, inspections and investigations to be conducted by the employer and the competent authority" and "remove themselves from any location at the mine when circumstances arise which appear, with reasonable justification, to pose a serious danger to their safety or health."¹⁵⁰ Zambia, as a party to the convention, is obligated to "take all necessary measures, including the provision of appropriate penalties and corrective measures, to ensure the effective enforcement" of these provisions."¹⁵¹

Workers and union officials with whom Human Rights Watch spoke repeatedly voiced, however, that across the Chinese copper mining operations, these safety officers have almost no authority to protect workers. A national union official at NUMAW told Human Rights Watch:

¹⁴⁹ Human Rights Watch interview with smelter operator B at CCS, Kitwe, July 16, 2011.

¹⁵⁰ ILO Convention No. 176, art. 13.

¹⁵¹ Ibid., art. 16.

They have a safety officer in place, but the final say is with the Chinese. It should be with the safety officer, but it's not. He has no authority in the Chinese mines to say that work can't go ahead, that it's too unsafe. It's not like that elsewhere.... Other companies know the labor laws here; they may infringe them from time to time, but nothing like the Chinese. The Chinese don't know how to observe safety laws. They are the worst in accidents. Sometimes we don't even receive information about accidents there unless there's a fatality, as they'll cover it up.¹⁵²

A Zambian safety officer at NFCA, who previously worked in the same capacity in another mining company, described his difficulties to Human Rights Watch:

Our department supervises the working environment. Our job is to make sure that safety codes are complied with, but if we go to check these things, we meet resistance. Most of our work takes place underground, seeing if there are safety problems. We report to the supervisor when there are bad conditions, when there are places where people shouldn't work, but the Chinese supervisor doesn't listen. He doesn't care.... In other mines, it's left in the hands of the safety officers, the supervisor of the safety officers. But here at NFCA, there are supervisors outside the safety office that we must report to, the Chinese. And they have the ultimate say, not us. There are so many times that I advise the work to be halted until the conditions are made safe, or that I advise them to stop using certain equipment because it's broken and needs repair, but they don't listen. They rarely listen. They care about getting more [copper] out, whatever the cost.

For example, there was a vehicle underground that was broken. It had broken headlights. They didn't work. We said stop using this car underground, that's dangerous. They refused for months, they kept using it. We had to involve the mine police to get it out from underground, to get the Chinese to stop using it. Even now, they use it on the surface.¹⁵³

The same safety officer also described his department's lack of resources, stating that it was only in October 2010 that it received a vehicle to more easily move around the plant that stretches several kilometers. He likewise noted that it was more than five years after

¹⁵² Human Rights Watch interview with NUMAW official, Kitwe, July 12, 2011.

¹⁵³ Human Rights Watch interview with NFCA safety officer, Chambishi, November 11, 2010.

NFCA first began active operations that management purchased ambulances to get injured workers to the hospital in Kitwe, some 30 kilometers away.¹⁵⁴

At Sino Metals, the CNMC-owned processing plant in Chambishi, workers told Human Rights Watch that there was only a single full-time safety officer for the almost 400 employees. And several said that even his hiring showed just how little emphasis Sino Metals places on safety, as the person was formerly a driver, without any specific training in the country's safety regulations.¹⁵⁵ One mechanic there said: "We have plenty of people trained to perform these jobs in Zambia, yet this is who they hire. They don't take [safety] seriously. Improving safety is even more important than the salary issue, it has to be changed."¹⁵⁶

China Non-Ferrous Metals Mining Corporation took over China Luanshya Mine (CLM) in 2009, after it had lay dormant for just under a year. Several miners, in particular those who work underground, told Human Rights Watch that there has been a real change in the safety officers' authority and role—reflecting the overall decline in safety with the Chinese owner. A miner who works with explosives to blast new areas of mining explained:

A real change [with the Chinese owner] has been the enforcement of safety aspects. In the past, a safety officer would say, "You can't work here because of whatever regulation," and it would be followed. But now, safety officers can't stop operations. They always have to check with management. Management decides, not the safety officer, which is a problem. We've seen more accidents as a result. We have an average of about three accidents a week; last week we had six! For four years, back under [Swissbased] Enya, we were the safest mine in the country. We used to go a month with maybe one accident. But now it has gone way up.

Why? There is way too much pressure from the Chinese that permeates through the Zambian managers as well. They care about always pushing, pushing to get the most production, and that has made us less safe.... Second, the Chinese never slow down or look deeper at accidents when they happen. Once when I raised this with a Chinese manager he said, "Why are we talking about accidents when there are two or three in a week? That's nothing." They made clear that in China accidents are far more

¹⁵⁴ Human Rights Watch interview with NFCA safety officer, Chambishi, November 11, 2010.

¹⁵⁵ Human Rights Watch interviews with miner B at the SX/EW plant, Sino Metals, Kitwe, November 8, 2010; with mechanic A at Sino Metals, Kitwe, November 8, 2010; and with copper sampler A at Sino Metals, Kitwe, November 8, 2010.
¹⁵⁶ Human Rights Watch interview with mechanic A at Sino Metals, Kitwe, November 8, 2010.

frequent, that two to three a week is model. We have tried to convey that this isn't China, that standards are different, but it has been difficult.¹⁵⁷

Several other miners at CLM said the rise in accidents would have been even worse were it not for the considerable experience of the miners at CLM; indeed, almost every miner there interviewed by Human Rights Watch had worked in the mine, through various ownership changes, for more than 15 years. However, the Chinese management's treatment of safety officers had become so bad, according to one underground miner who was also a local union official, that three safety officers had recently resigned:

You cannot compare the Chinese [investors] to any of our previous employers on the enforcement of safety regulations, they are much worse. Normally, if you find an area that is not well ventilated, maybe the safety officer closes it off until the situation is better. But with the Chinese, they'll threaten the safety officer and then he'll rescind the decision. It's been so bad that three guys from the safety office have resigned because of differences with management; they couldn't work for the Chinese, they couldn't compromise themselves like they were having to.¹⁵⁸

The same miner noted that on December 31, 2010, the mine suffered a fatality when a side wall peeled off underground and crushed a miner. He felt that the accident could have been avoided had safety officers controlled adherence to safety regulations underground, without interference from management.¹⁵⁹

CNMC's letter to Human Rights Watch states that "it is impossible to say" that safety conditions have worsened since it took over China Luanshya Mine in 2009, as "safety management measures are essentially a continuation of previous systems."¹⁶⁰ Miners interviewed by Human Rights Watch agreed that the structural safety mechanisms were essentially maintained, but, as noted above, described far greater pressures to place production over strict adherence to these mechanisms. CNMC's letter also highlighted a number of investments that have improved the technology and mechanization of the mine.¹⁶¹ As noted in the *Good Investors, Bad Employers* text box, the capital investment at

¹⁵⁷ Human Rights Watch interview with blast engineer A at CLM, Luanshya, November 10, 2010.

¹⁵⁸ Human Rights Watch interview with surface and underground electrician for high-voltage areas at CLM, Luanshya, July 17, 2011.

¹⁵⁹ Ibid.

¹⁶⁰ Letter from CNMC to Human Rights Watch, October 8, 2011.

¹⁶¹ Ibid.

CLM has been considerable, and the mine's upgrading has positive safety and health implications. But this does not change the description by numerous workers that the respect for safety regulations and safety officers has greatly diminished. The CNMC letter finally noted that CLM had "held frank discussions with Zambian employees" following the Human Rights Watch letter, and the employees told CLM management that safety practices had not changed considerably for the worse.¹⁶² Human Rights Watch welcomes this direct engagement by CLM's management, but notes workers' concerns over being fired for speaking openly on these issues.

More generally, the CNMC letter expressed that the opinions and decisions of safety officers are given primary authority in its companies:

[S]hould [safety officers] discover any unsafe working environment, unsafe working conditions, or any worker engaging in unsafe actions, they have the authority to request that workers involved stop their work immediately and for changes to be made to address the dangerous situation or potential dangers. Only when the dangerous situation or potential dangers have been eliminated can work resume. Higher-level safety managers should support the correct decisions made by the on-site safety officers and do not have the authority to overrule these decisions.¹⁶³

While this describes how the situation should work according to Zambian and international law, the statement contrasts starkly with the descriptions of practices provided by miners and company safety officers interviewed by Human Rights Watch.

Threats against Workers Refusing to Work in Unsafe Areas

Workers at the Chinese-run mines told Human Rights Watch that their bosses repeatedly forced them to work in unsafe places, under threat of being fired if they refused. Several miners told Human Rights Watch that they had suffered consequences, including termination, for failing to work in potentially dangerous environments. Because of this apparent demand of production over safety, the already dangerous workplace underground has become rife with accidents, according to miners interviewed. While workers at other multinational companies described pressure to produce, particularly with the record-high world copper prices of late 2010 and 2011, they described a contrasting environment in which they were

162 Ibid.

¹⁶³ Ibid. This passage was directly related to NFCA, but is similar to statements regarding the other Chinese-run companies.

empowered to refuse to continue working in unsafe places—and managers could even face sanctions for reckless action (for more detail, see text box below on "Best Practices"). An underground miner at NFCA, who was involved in a 2009 accident, described his experiences with management regarding safety:

We've tried to advise [the Chinese management], to teach them issues of safety, but they don't understand. They say, "Speak about safety, stop working—you're dismissed." How do you live like this? ... They force us to work in unsafe places. As the PIC [person-in-charge], I will say "This is unsafe, we should not go ahead." But the Chinese boss will say, "No, go work," and threaten to dismiss me. If you don't go along, you don't keep your job.¹⁶⁴

A boom operator at NFCA, in charge of dynamite blasting, blamed both the Zambian and Chinese bosses and explained a recent injury he'd seen as a result of a rock fall:

If there's an unsafe place, both the Zambian and Chinese bosses will tell you to go work there anyways.... If it's a Zambian boss, he says he'll go tell the Chinese boss that you refused to work even though he said it was safe. If it's the Chinese boss, they just don't care. They'll say, "No work, job is finished, job is finished"—which means you're fired.

Rockfalls are quite common at NFCA, and a lot of it is because we work in unstable situations. I've been involved in an accident in which my arm was fractured.... Another guy in my group spent three months in the hospital in 2011 after a rock fall badly dislocated his finger.... And when these accidents happen, the mine captains are careless. We now at least have first aid boxes underground, but the materials are not okay. The mine captains don't check to see what's missing. So we go underground, someone gets hurt, and they realize that not all of the first aid materials are there. Safety just isn't a priority.... Mine captains are a mix of Chinese and Zambian, but it is really only the Chinese who are true captains.¹⁶⁵

Human Rights Watch spoke with at least a dozen miners who had suffered serious illnesses or had been injured or witnessed injuries during accidents at NFCA between 2009 and 2011; illnesses and injuries ranged from lung problems, to crushed fingers and broken

¹⁶⁴ Human Rights Watch interview with a PIC at NFCA, Chambishi, July 16, 2011.

¹⁶⁵ Human Rights Watch interview with underground boomer operator C, Chambishi, July 16, 2011.

limbs, to death. A miner who witnessed a 2009 fatality and suffered from his own health complications from what he believes were bad safety practices attested to the difficulty of complaining about substandard safety conditions:

I am developing ulcers and have had chest pain for a long time, as we are working in very bad conditions, horrible conditions. After a blast, it takes an hour for the dust, gases, and fumes to move out of the area. We're supposed to wait to go in. But with the Chinese, they say, "Go, go, rush right away!" And if you don't, they'll terminate your contract. So we go straight into an area full of fumes and dust. And they don't even give us respirators. We just receive mouth cloths, they say that respirators are too expensive.... The doctor said that these gases have caused my ulcers and chest pain....

The Chinese just don't know safety. They only concentrate on production, production, we are nothing to them. I've seen people killed this way. Back in 2009, our mine captain, a Chinese guy, told one in my group to charge the end. The man said it was dangerous, said we shouldn't go ahead because it wasn't stable. The boss said that if he didn't, he'd be dismissed. When the charge was set, rocks came down and crushed the guy's leg. They failed to control the bleed, and he died.... I saw a similar thing happen back in 2006. That time, the rocks crushed the guy's neck and he died instantly.... This stuff still happens, they still force us to work in unsafe places. And if you deny, if you refuse, they are going to dismiss you.¹⁶⁶

In describing the 2009 fatality, the Mines Safety Department's annual report states that when "charging a development end a rock dislodged from the roof causing a deep cut on the [deceased's] thigh.... The accident could have been avoided had the area been adequately barred down."¹⁶⁷ It does not specifically discuss threats by the Chinese boss, though admits, in passive voice, that better safety practices could have prevented the accident. While each individual accident could not be specifically attributed to Chinese managers' threats or inattention to safety, forcing people to work in dangerous locations under threat of being fired may have contributed to the commonality of accidents. One former miner at NFCA, who was

¹⁶⁶ Human Rights Watch interview with underground load operator A at NFCA, Chambishi, July 16, 2011. Another worker at NFCA highlighted the problem of forcing people to rush immediately after blasting, saying, "We'll have just done blasting, and there will be lots of smoke. No ventilation, dust everywhere. In most mines, you'd wait for that to clear out. But with the Chinese, they tell the loader drivers to rush immediately. They tell you to go work there right away, and they say that if you say no, they'll terminate your contact. We have to choose between the threat of termination and working in unsafe places." Human Rights Watch interview with underground boomer operator D at NFCA, Chambishi, July 16, 2011.

¹⁶⁷ Mines Safety Department, 2009 Annual Report, January 2010 (on file with Human Rights Watch).

injured in a 2009 accident, contrasted the pressure and threats there with his previous employer, Chambishi Metals, owned by the Swiss-based Enya Holdings at that time:

If you say, "This isn't safe," at NFCA, the Chinese boss refuses you and says, "You Zambians have no power, just go and work." Accidents have been frequent since the Chinese arrived.... I worked at Chambishi Metals before, and there was a big difference with NFCA. There, what the safety officer said was final. If I saw something wasn't safe, I'd tell him, and then he'd say the area should be cleared out until improved.... The Chinese nature of work is a slavish way. Friends tell you that there's a danger as they're coming out of shift, yet the Chinese will still force you to go. You'll be fired if you refuse, they threaten this all the time... The main accidents are from rock falls, but you also have electrical shocks, people hit by mining trucks underground, people falling from platforms that aren't stable.

In my accident, I was in a loading box. The mine captain, a Chinese boss, didn't put a platform. So when we were working, a rock fell down and hit my arm. It broke to the extent that the bone was coming out of the arm.... It's only a plate that holds the arm together.¹⁶⁸

In addition to forcing people to work in unsafe places, certain Chinese bosses appear to put pressure on workers who are sick or injured—demanding that they return to work, regardless of health problems. One security officer at NFCA told Human Rights Watch that he had been threatened with termination several times when he tried to get "sick off" after coming down with malaria.¹⁶⁹ A driver of the large trucks that transport the copper to Sino Metals for processing likewise told Human Rights Watch:

When you're sick, the Chinese will sometimes refuse to give you leave. Sometimes it doesn't matter what the doctor says. Once, I was very sick and told to stay home by the Sino Zam doctor. I had a sick note. The Chinese boss said he'd give me two days. And then that same night he called and said, "Report tomorrow." I had malaria, but it didn't matter to him. All that mattered is that they were short on drivers to get the amount of copper they wanted that day.¹⁷⁰

¹⁶⁸ Human Rights Watch interview with former underground miner at NFCA, Chambishi, July 15, 2011. A Human Rights Watch researcher saw a foot-long scar consistent with the miner's description.

¹⁶⁹ Human Rights Watch interview with security officer at NFCA, Chambishi, November 11, 2010.

¹⁷⁰ Human Rights Watch interview with truck driver A at Sino Metals, Kitwe, November 7, 2010.

Another underground miner at NFCA likewise recounted being pressured to return to work despite having a serious back condition:

A couple months ago, I had a serious back problem. I was in pain all the time. I went to Sino Zam, the doctors examined me, and they told me I should take 14 days off. They wrote a [medical] certificate and gave me medicine. But then soon my Chinese bosses were calling me and saying, "Too many days absent" and "You're not good, you're not good." ... It pains me, pains me that they would say this. I have worked here for so long, I've hurt myself working for them, I have the doctor saying that I need this time off. And yet they call me and tell me I'm bad because I couldn't work through the pain. It's these threats, when we don't have any job security, that drive us back to the work even before the doctor says.¹⁷¹

A nurse at Sino Zam told Human Rights Watch that they had problems with management pressuring workers to return to work immediately, regardless of what the doctors or nurses say. She said that the hospital keeps the records that show when workers have been given days off, but that miners are often afraid of being fired regardless. Many, she said, do not come for review and certification for days off in the first place, as they feel they have to go back to the job immediately.¹⁷²

In its letter, CNMC told Human Rights Watch that "[r]egardless of one's status and position within the company, any person who issues orders or carries out duties in violation of regulations, or violates labor regulations, thereby placing safety at risk, will be stopped and strong disciplinary action will be taken against him."¹⁷³ In regards to China Luanshya Mine, CNMC stated, "Any instance in which workers are forced to continue working at the risk of danger shall be dealt with through disciplinary action."¹⁷⁴ While the appropriate response, this does not accord with scores of interviews by Human Rights Watch. The CNMC letter provides no details on any case in which a Chinese manager was subject to disciplinary action for such threats.

When asked about the consistent stories of threats in the Chinese mining operations, the Ministry of Mines permanent secretary, Godwin Beene, replied, "The law says, 'If it's

¹⁷¹ Human Rights Watch interview with underground boomer helper at NFCA, Chambishi, November 11, 2010.

¹⁷² Human Rights Watch interview with nurse at Sino Zam, Kitwe, November 11, 2010.

¹⁷³ Letter from CNMC to Human Rights Watch, October 8, 2011.

¹⁷⁴ Ibid.

unsafe, don't do it.' If the miners don't listen to that, if they go ahead, it's their fault. We have made sure that this slogan is well known." Beene stressed that he was a former miner himself (during the days when the industry was controlled by the Zambian parastatal, ZCCM), and the industry was tightly regulated. In addition to the low-level miners, he blamed mine captains—not the companies—for breaches of regulations.¹⁷⁵

Making Good on Their Threats: Firings and Docked Pay

When workers do challenge Chinese managers on unsafe work areas, placing their safety over the boss's threat, they may encounter stiff penalties as a result, including lost employment, written warnings (called "charges") for insubordination, and docked pay. As noted above, the inability of workers to protect themselves from such situations violates their rights under ILO provisions that allow workers to remove themselves from potentially unsafe areas—and require the government to "take all necessary measures, including by providing appropriate penalties and corrective measures, to ensure the effective enforcement" of such provisions.¹⁷⁶

Multiple miners at NFCA said that they knew workmates who had refused to go ahead with work in areas they deemed unsafe and then had their contracts not renewed by the company when they ran out several months later. A former employee at CCS also told Human Rights Watch that he had refused the instructions of a Chinese manager in April 2010 to position himself in an area where "fire sparks were coming from the welders," saying it was too dangerous. After the specific work task was finished, however, he was called to a Chinese supervisor. The employee told Human Rights Watch what followed:

I asked, "What have I done wrong?" and [the supervisor] replied, "Don't you know you're not supposed to talk, you're a slave." [My boss] and his supervisor spoke in Chinese for several minutes, and then he said I was fired. After being fired, I went to the safety officer and took him to the workplace. Then I went to see the HR [human resources] officer, who confirmed that he had been to the site where the problem started. He was very defensive of the Chinese, he didn't even address the issue of working near the fire without fire safety equipment.... HR told me to go home, that they would finish their investigations. I have taken the case to court.¹⁷⁷

¹⁷⁵ Human Rights Watch interview with Godwin Beene, permanent secretary in the Ministry of Mines and Minerals Development, Lusaka, July 18, 2011.

¹⁷⁶ ILO Convention No. 176, arts. 13 and 16.

¹⁷⁷ Human Rights Watch interview with former miner at CCS, Kitwe, November, 15, 2010.

In addition to firing, four miners at NFCA told Human Rights Watch that they had been marked "absent"—and not paid for their day's work—after refusing to go ahead in an area they deemed unsafe. An electrician who works underground described a 2010 incident:

The Chinese even cancel hours if you stop because of safety reasons. We had a problem with the supporting drill rig, for example, and it wasn't okay to continue. I reported it to the safety officer, who reported it to the Chinese boss. I'd been working underground all day, but because we didn't go ahead, the Chinese boss said he had "canceled" our shift, and didn't pay me for that day.¹⁷⁸

A drill operator underground at NFCA explained a similar incident in late 2010:

So many accidents occur because the Chinese fail to understand the importance of safety.... If we refuse [to work in an unsafe place], even if a safety inspector agrees, we will come to the surface and find that they have marked us absent, so we won't be paid... One day we had already [drilled] past where the support stopped, and I didn't think it was safe to go farther without building more support. When I got my next paycheck I saw that I was marked absent. When I confronted the Chinese boss about it, he yelled at me and said I didn't do my job. And he told me to quit. I'm worried now that when my contract comes up, they won't renew me. So in the future, I'll just have to go ahead with the work, no matter how unsafe. Otherwise I'll lose my job.¹⁷⁹

Zambian laws on termination are fairly strict, requiring reason for dismissal and a fair process that includes giving an employee the right to respond prior to dismissal and the mandatory reporting of a summary dismissal to the district labor officer within four days along with the reasons for dismissal.¹⁸⁰ If these and other provisions are not followed, workers have a grievance—and, indeed, workers do often win cases that make their way through the Zambian courts. Like the drill operator quoted above, however, most miners who spoke to Human Rights Watch made clear that they cannot risk losing their job. As a result, they said that they rarely challenge the supervisor—regardless of the health or safety risk that it subjects them to.

¹⁷⁸ Human Rights Watch interview with electrician A at NFCA, Chambishi, November 11, 2010.

¹⁷⁹ Human Rights Watch interview with underground drill operator B at NFCA, Chambishi, November 11, 2010.

¹⁸⁰ See Republic of Zambia, Chapter 268: The Employment Act, sections 20-26; Ministry of Labour and Social Security, "Frequently Asked Labour Law Questions (With Answers)," December 2008, pp. 5-8.

Best Safety Practices in Zambia's Copper Industry

Miners who work for non-Chinese multinational corporations in Zambia's copper industry described safety practices that could be informative in improving the standards in the Chinese-run companies. One of the biggest problems in several Chinese operations is the provision and maintenance of personal protective equipment (PPE). Miners at Kansanshi, Konkola Copper Mines (KCM), and Mopani Copper Mines all told Human Rights Watch that they receive replacements for torn or otherwise damaged PPE without losing pay. A pump operator at the Canadian-owned Kansanshi processing plant told Human Rights Watch:

They are very good on safety, the credit goes to them. They do not tolerate bad work equipment. If it's torn, they replace it, they exchange it immediately. They really try to maintain safety, to keep the place accident free. We have gone one million hours fatality free.¹⁸¹

An engineer at the mainly Swiss-owned Mopani said similarly: "Mopani is fine in terms of PPE. All you have to do is go to the safety officer, who will write it up and provide you with new equipment because of a premature failure. Sometimes he'll just give you a new one on the spot, other times it has to be reviewed."¹⁸² Another worker at Mopani said that there are signs clearly marked "respirator area" in places involving fumes, dust, or chemicals, and all employees there must have and wear a respirator—including any casuals.¹⁸³ As noted above, however, another miner at Mopani's Mufulira mine complained about serious ventilation problems underground that led to respiratory disease—a finding backed by 2008 research into dust levels at the Mopani-run mines.¹⁸⁴

When accidents do occur, the provision of quick, on-site treatment is needed. An artisan fitter in Mopani's engineering department told Human Rights Watch that, at its Mufulira mining site, the company has first aid clinics in all of the departments.¹⁸⁵ A nurse at a health clinic run for employees of Chambishi Metals, a cobalt processing plant owned by a Kazakhstani natural resources company headquartered in London, said that the company had trained people on site to provide immediate first aid when necessary; if the case was serious, the person was then brought to the clinic.¹⁸⁶ At CNMC-owned Sino Metals, by contrast, employees said that they have neither an ambulance nor a first aid clinic on site, but rather must rely on those stationed at the NFCA site several kilometers away.¹⁸⁷ As

¹⁸¹ Human Rights Watch interview with pump operator at Kansanshi, Solwezi, November 12, 2010.

¹⁸² Human Rights Watch interview with engineer A at Mopani, Mufulira, November 16, 2010.

¹⁸³ Human Rights Watch interview with crane operator in the smelter at Mopani, Mufulira, November 16, 2010.

¹⁸⁴ See footnote 89.

¹⁸⁵ Human Rights Watch interview with artisan fitter at Mopani, Mufulira, November 16, 2010.

¹⁸⁶ Human Rights Watch interview with nurse at health clinic for employees of Chambishi Metals, Kalulushi, November 4, 2010.

¹⁸⁷ Human Rights Watch interview with miner B in the thickener plant, Kitwe, November 7, 2010.

quoted above, union officials and employees of NFCA stressed that it was just in 2009 that the company provided an ambulance and first aid kits to better respond to injuries, though several miners said that there are still problems in ensuring that all the necessary materials are included in underground first aid kits. Miners at CCS and CLM did not report any problems for onsite care.

Other multinational copper mining companies in Zambia also appear to systematically perform inquiries into what caused accidents. An underground miner at the Indian-owned KCM told Human Rights Watch that after an increase in accidents there in 2010, the company hired more safety officers, conducted internal audits to determine the problems, and provided additional safety trainings for employees.¹⁸⁸ At Mopani, which has had accident problems at the Mufulira underground site that is one of the oldest mines in Zambia, an underground miner said that "after an accident, we have to do a risk assessment before doing the job again. We must ensure everything is in order. There are also seminars for sensitization on safety. The rule is, 'If it's not safe, don't do it,' and they make this clear."¹⁸⁹

While miners at these companies said there was pressure to meet production quotas that at times encouraged risky behavior, they also said that policies were clear and any supervisor that pushed or threatened a miner to continue in an unsafe place could be reported and sanctioned. Miners from both KCM and Mopani cited incidents they knew of when a supervisor had been charged.¹⁹⁰ In contrast with the often powerless safety officers at the Chinese-run operations, a miner at the KCM Tailings Leach Plant told Human Rights Watch: "The safety standards have been set, they are well elaborated in the procedures, and the safety inspectors follow them. If you stay strong, there aren't problems."¹⁹¹ KCM has also established a "whistleblower policy" that protects the confidentiality and anonymity of someone reporting a complaint, including on the violation of safety rules and regulations.¹⁹² An engineer at Mopani likewise said, "Mopani has taken safety as a very high priority. We have good safety officers, they are well trained and know the regulations."¹⁹³

Finally, miners at Kansanshi and KCM told Human Rights Watch that they were rewarded for safe behavior—determined by meeting set standards for injuries and damage to equipment—with a monthly bonus.¹⁹⁴

¹⁸⁸ Human Rights Watch interview with underground pump operator at KCM, Chingola, November 14, 2010.

¹⁸⁹ Human Rights Watch interview with underground mine truck operator A at Mopani, Mufulira, November 16, 2010.

¹⁹⁰ Human Rights Watch interviews with artisan technician at KCM, Chingola, November 14, 2010; and with underground mine truck operator A at Mopani, Mufulira, November 16, 2010.

¹⁹¹ Human Rights Watch interview with forklift operator at KCM, Chingola, November 14, 2010.

¹⁹² Human Rights Watch interview with union representative at KCM, Chingola, November 14, 2010. See also Konkola Copper Mines Plc., Whistleblower Policy, http://www.kcm.co.zm/index.php?option=com_whistleblower&Itemid=61 (accessed September 28, 2011).

¹⁹³ Human Rights Watch interview with engineer in the mining hoist department at Mopani, Mufulira, November 16, 2011.

¹⁹⁴ Human Rights Watch interviews with miners at KCM, Chingola, November 14, 2010; and with miners at Kansanshi, Solwezi, November 12, 2010.

Deliberate Failure to Report Accidents

In the Chinese-run copper mines, but particularly NFCA's underground mine, Human Rights Watch research found what appears to be a deliberate practice by Chinese management to underreport accidents and other dangerous occurrences. The result is that government statistics on accidents in the Chinese mines are significantly lower than the true figure, reflecting deaths and other severe injuries that are difficult to conceal but not a myriad of other accidents. Human Rights Watch asked miners from the other multinational copper mining companies in Zambia whether they faced pressure to not report accidents, but no one interviewed said that management either encouraged underreporting or punished individuals who did report. As with other bad safety practices, the problems appear most acute at the Chinese-run mines.

ILO Convention No. 176 requires employers to ensure "all accidents and dangerous occurrences, as defined by national laws or regulations, are investigated and appropriate remedial action is taken" and to provide a report "to the competent authority on accidents and dangerous occurrences."¹⁹⁵

A company safety officer employed by NFCA explained to Human Rights Watch the reporting problems at its underground mine:

There are a lot of accidents as a result of the safety practices, and many of them aren't reported to the government safety department. The [relevant Chinese managers] hide them. When there is a serious accident, like when a person is killed or incapacitated, that has to be reported. They can't hide that. But if it's a more minor issue, a minor injury, they'll try to keep it from being reported. For example, when people are gassed, it's supposed to be reported, but it almost never is. Same for when there is damage to equipment from an accident, from a rock fall for example, but we're fortunate that no one was around and hurt.... We see the difference in the records we keep and the records that go to the government. Consistently, they underreport.... They don't want the government to know the real accident figures.

Some accidents aren't even reported to us. I've had workers tell me that they're paid to not call in the NFCA safety officers. They'll take the person who has been injured from the mine to their home; the Chinese will take them, so [the person] doesn't report. So there is underreporting everywhere.

¹⁹⁵ ILO Convention No. 176, art. 10(d), (e).

But even with that, our accidents continue to rise. With the copper price high right now, they're pushing people harder and harder.¹⁹⁶

The safety officer noted that the person tasked with reporting accidents to the Mines Safety Department was Zambian, but that a Chinese national oversaw the entire office and imposed considerable pressure that stopped them from reporting, including through threats of termination.¹⁹⁷

As mentioned by the safety officer, the miners themselves often underreport accidents to company safety officers and government inspectors. Multiple miners at Chinese-run operations told Human Rights Watch that bosses had instructed them to not report an accident, including an operator in the acid plant at Chambishi Copper Smelter (CCS):

There are a lot of smaller accidents.... When they happen, the Chinese push you to just go home, they tell you not to go to the safety officer. This has happened to me and to several others in my work group. If you go to the safety officer, he's required to report it to the mines safety directorate. But they don't want this; they don't want the government to know. So they quickly get you home, they'll drive you themselves, and talk to you about not reporting.... When it's a more substantial injury, they'll pay you to stay quiet. The Chinese boss gave a friend of mine 50,000 Kwacha (US\$10.40) after he was hurt, to avoid him reporting. It was right in front of me.¹⁹⁸

Human Rights Watch confirmed the account with the injured worker, who was told by the boss that the 50,000 Kwacha was "compensation" and that the injury—an acid burn—was "minor" and so did not need to be reported. He said the boss expressly referenced a desire to avoid being "charged" by the safety department.¹⁹⁹ The paying of bribes to avoid reporting smaller injuries appears to be fairly standard practice, as it was presented repeatedly by miners at CCS and NFCA in particular. An underground miner at NFCA, injured in an accident in 2009, described to Human Rights Watch the ease of bribing workers:

I was told not to report [my accident] by my Chinese boss, who gave me 100,000 Kwacha (\$21). He was capitalizing on my poverty to get me not to report. I know others who have done the same thing. They pay people

¹⁹⁶ Human Rights Watch interview with NFCA safety inspector, Chambishi, November 11, 2010.
¹⁹⁷ Ibid.

¹⁹⁸ Human Rights Watch interview with acid plant operator A at CCS, Kitwe, November 6, 2011.
¹⁹⁹ Human Rights Watch interview with acid plant operator B at CCS, Kitwe, November 7, 2011.

50,000, 100,000 Kwacha to not report an accident. And because of the pay, because of the peanuts we receive [as salary], people do this. Sometimes it doesn't even take money. After a small accident, in which [the injury is minor], the Chinese boss will say, "I'll give you three days off, don't report to work," in exchange for not reporting the accident [to a safety officer or the MSD]. We're all so tired with our hours and our pay, it's easy. The MSD isn't going to improve our situation anyway.²⁰⁰

Human Rights Watch spoke with six workers who had received bribes to not report accidents—each of whom mentioned others in their work groups who had done similarly—and all mentioned their low salaries as influencing their decision to accept a bribe.

At times, rather than bribing workers, bosses resort to threats and intimidation. This appears to occur most often when a Zambian boss, perhaps not authorized to pay out a bribe, feels concerned about his own job safety, as demonstrated in a case described by a miner at NFCA in 2011:

I was in an accident not long ago. I was working the afternoon shift, I came out from underground around 10:40 p.m. ... I was forced by the [Zambian] shift boss at 10:55 p.m. to go back underground for the night shift [because the replacement hadn't reported]. He said that if I didn't go, I would be terminated.... I was working and [details of an accident that resulted in injury omitted].... This was never reported to the safety people, because I was told that if I reported it, I'd be fired for negligence. My boss was afraid for his own job. He'd sent me back down for the night shift without telling the Chinese. And so if the accident had looked to be his fault, he might be fired. So he threatened me instead, saying that it would be marked as negligence and I'd lose my job if I reported it.... So up until today, I haven't been able to get treatment. I have big pain. It's not okay.²⁰¹

One result is that there may be a large number of accidents unreported to the government's Mines Safety Department, which in turn does not investigate whether breaches of safety regulations led to accidents. Bright Kateka, deputy chief inspector in the Mines Safety Department, acknowledged the problem, though not specifically about the Chinese-run operations:

²⁰⁰ Human Rights Watch interview with underground artisan fitter B at NFCA, Chambishi, July 16, 2011.

²⁰¹ Human Rights Watch interview with mine truck operator B at NFCA, Chambishi, July 16, 2011. Details of this account have been omitted to protect the worker from reprisal.

There is no guarantee that every [accident] is reported. We suspect that there are some hidden by [the mine operators]. They know if something happens... or if they have broken some rules or regulations, they will be [in trouble]. So they keep quiet, because once we know, they'll be fined.²⁰²

As noted above, despite being questioned on this by Human Rights Watch in each interview, no miner from the other multinational copper mining companies in Zambia said that they experienced pressure from their management to underreport accidents. Workers at both Mopani and Kansanshi cited no issues with underreporting. At the Indian-owned KCM, one underground miner said that, at times, the miners themselves choose to underreport accidents in which there is property damage or minor injuries because the company provides a bonus for good safety practices that is tied to the number of accidents that occur in a month.²⁰³

In CNMC's letter to Human Rights Watch, NFCA did not directly respond to allegations of underreporting and said that workers could bring complaints to the Mines Safety Department.²⁰⁴ CCS said that it "has yet to uncover any pattern of underreporting."²⁰⁵ Sino Metals indicated that it "has neither the practice of deliberately underreporting accidents to the Mines Safety Department, nor the practice of preventing Zambian personnel from reporting accidents."²⁰⁶ It continued, "As long as the Zambian manager believes there is need to report an accident to the Mines Safety Department, the Chinese manager has never once stopped him from doing so."²⁰⁷

Chinese copper mining companies whose employees deliberately underreport accidents as a result of management's pressure are not acting in accordance with ILO Convention No. 176. For its part, the Zambian government is failing to meet its obligations under the convention to provide a protective environment in which workers have the right "to report accidents, dangerous occurrences and hazards to the employer and to the competent authority... without discrimination or retaliation."²⁰⁸

 ²⁰² Human Rights Watch interview with Bright Kateka, Deputy Chief Inspector, Mines Safety Department, Kitwe, July 28, 2011.
 ²⁰³ Human Rights Watch interview with mechanic at KCM, Chingola, November 14, 2010.

²⁰⁴ Letter from CNMC to Human Rights Watch, October 8, 2011.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

²⁰⁸ ILO Convention No. 176, art. 13.

Problem of Subcontractors at Konkola Copper Mines (KCM)

Miners on contract at the Indian-owned KCM described a fairly strong system of health and safety protections, including the replacement of damaged PPE, the ability to bring complaints against bosses who pressure them to work in unsafe places, qualified safety officers, an emphasis on daily safety talks before starting work, and weekly safety instructions. One miner at the tailings and leach plant told Human Rights Watch that, due to the concentration of chemicals in the work environment, the company sent employees to a dental specialist each month. A previous report that focused on KCM found that the company "offers direct employees some attractive terms, conditions and bonuses."²⁰⁹

However, there has been a longstanding problem at KCM over lower standards among the subcontractors that the company uses to perform significant portions of the mining work. Two reports published in 2007 by separate groups engaged in the Zambian mining sector discussed this issue at length, finding problems related to safety practices, anti-union activities, and wages among the subcontractors.²¹⁰

The divide between those on permanent contract at KCM and those working on shorterterm contracts for KCM subcontractors remains a troubling issue according to KCM miners interviewed by Human Rights Watch. A KCM union representative in Chingola said:

A big problem is the use of contractors. [KCM] has done major outsourcing so that they don't incur the costs of maintenance and equipment. The plant is dilapidated, 78 percent of the open-pit work is done by contractors, 50 percent of underground work is done by subcontractors. There are 1977 KCM underground employees, 1997 underground contractors.... They pay these guys less, and they don't get the same protection for safety or job security.²¹¹

Another union representative said that, because they work on shorter-term contracts without guarantees, the subcontracted miners will often "work through injuries, health problems, anything to keep their job. This impacts the overall safety. They're also more reckless in putting production over safety, because they have no guarantees."²¹² The

 ²⁰⁹ Action for Southern Africa (ActSA), *Undermining Development? Copper Mining in Zambia*, October 2007, pp. 10-15.
 ²¹⁰ Frasier and Lungu, *For Whom the Windfalls*, pp. 22-26; Action for Southern Africa (ActSA), *Undermining Development? Copper Mining in Zambia*, October 2007, p. 10.

²¹¹ Human Rights Watch interview with union representative A at KCM, Chingola, November 14, 2010.

²¹² Human Rights Watch interview with union representative B at KCM, Chingola, November 14, 2010.

quote was virtually identical to one given by a Mines Safety Department official in one of the reports from 2007 mentioned above. He said:

You will find that somebody has gone mad and developed 20 metres, because you know most of the development is now done by contractors who are paid by the metre, so they go mad developing and they leave people exposed without support in the roof sheets.... Sure enough you go there and you find someone is just scratching their heads—and they say, "sorry, I was under pressure." So, my biggest worry is the use of contractors. When I joined the mines, all the work used to be done by the mining companies themselves.... But with the coming of the new investors, they believe in out-sourcing. To me some of it has got to ridiculous lengths. It was all done for the sake of reducing the labour costs and overheads. The mines come to an arrangement with the contractors that they pay them so much for the work done.²¹³

KCM has a code of ethics for contractors which states that they must abide by applicable laws and regulations as well as the company's "high moral ethical and legal standards."²¹⁴

Government's Mines Safety Department

Miners who spoke to Human Rights Watch repeatedly deplored the ineffectiveness of the Mines Safety Department (MSD), a government body under the Ministry of Mines and Minerals Development that is based in the Copperbelt town of Kitwe. The Mines Safety Department employs inspectors who are meant to ensure that the various mining operations conform to the strict regulations under Zambian law, but it appears ill-equipped or unwilling to play the strong role needed to ensure that mining operations protect miners' health and safety.

Prof. John Lungu, an expert on the copper industry at Copperbelt University in Kitwe, told Human Rights Watch:

The mine inspector is supposed to be a watchdog. But they just sit, they just stay at their office; they don't do random checks. Part of this is a lack of personnel and funding, which comes from the government's will.... There

²¹³ Frasier and Lungu, *For Whom the Windfalls*, p. 24.

²¹⁴ Konkola Copper Mines, Code of Ethics, http://www.kcm.co.zm/index.php?option=com_content &view=article&id=56&Itemid=69 (accessed September 26, 2011).

are also corruption issues, a serious problem. [Inspectors] are paid to look the other way about accidents.²¹⁵

A miner at the Chinese-owned CLM, who has worked in Luanshya's underground copper mine for 23 years, expressed similarly:

MSD is compromised, it's a big problem. They don't come often to inspect for [violations of safety regulations], only when we are renewing our blasting license. They don't come for safety audits. In fact, I haven't seen them in a year. A year! Adequate laws exist here in Zambia, but enforcement is not there.... The government just doesn't have the will.

And while MSD is the most direct problem, it comes from higher. Not long ago, [a senior government mining official] came here and said to the workers, "Be content with what you have. Your people are languishing—for every job here, there are 15 others waiting outside [unemployed]. Or have you forgotten that the mine was closed before the Chinese came?" The conditions here don't matter to them, they don't defend us, so the MSD doesn't defend us either.²¹⁶

Miners with the Chinese companies often expressed that MSD—and the government more generally—was particularly compromised with the Chinese, because of their employers' propensity to pay bribes. Several said that their Chinese bosses openly made comments about the government being "in their pockets"²¹⁷ or about workers' complaints being futile.²¹⁸ A Zambian member of management at Sino Metals said that he had seen Chinese management there regularly give presents to visiting members of the government, including electronics, alcohol, and cell phones.²¹⁹ Previous reports on China's role in Zambia have also highlighted the problem of corruption in compromising the Mines Safety Department and, in turn, worker safety.²²⁰

²¹⁵ Human Rights Watch interview with John Lungu, professor at Copperbelt University, Kitwe, November 16, 2010.

²¹⁶ Human Rights Watch interview with blast engineer A at CLM, Luanshya, July 17, 2011.

²¹⁷ Human Rights Watch interviews with foreman at CLM, Luanshya, July 17, 2011; and with miner C in the SX/EW plant at Sino Metals, Kitwe, July 13, 2011.

²¹⁸ Human Rights Watch interviews with surface electrician A at CLM, Luanshya, November 10, 2010; with MUZ union official, Chambishi, November 5, 2010; with mechanical fitter at Sino Metals, Kitwe, July 14, 2010.

²¹⁹ Human Rights Watch interview with Zambian manager at Sino Metals, Kitwe, July 14, 2010.

²²⁰ Haglund, "In It for the Long Term?," p. 641, fn. 80 ("In 2006 production at NFCA was stopped for eight days upon the insistence of the Mines Safety Department because the rope winder for one of the shaft elevators needed its brakes replaced. Production was eventually resumed, without replacing the lift's brakes." The author then cited an NFCA miner he interviewed as saying, "I asked somebody, why is it that this winder is running, when we were told it has a problem. He said 'this man

A national-level official at MUZ who works on safety issues said that the government safety department's general ineffectiveness was particularly damaging in the context of the Chinese-run mines:

A major problem is that MSD has inadequate support. It's quite difficult for them to be monitoring the mines all the time, as they are very understaffed, they are very few.... The other issue is that the employer must have the will to ensure safety. So there's the political will from the government, and then the company's will. If [the political will] is there, things are okay. But since the government is giving inadequate support, it comes down to the companies. With the Chinese, it's a sad story. It's been difficult to get them to the standards. The safety officers, at NFCA for example, are just a rubber stamp. They are controlled by the management and can't say anything—often they don't even report accidents, as they're just protecting their jobs. Compare this to some of the other mines, to the systems at Chibuluma or KCM. You can see the programs in place when safety departments have something to add. At those places, there are internal audits to discover potential safety problems.²²¹

When asked by Human Rights Watch about the department's shortcomings, Bright Kateka, deputy chief inspector in the MSD, described a severe understaffing and underfunding of the department. He said that although the MSD has nine allotted positions for machinery inspections, only two are filled; there are likewise 17 positions for general mining inspections, nine of which are filled; and only two positions for explosive inspectors—both of which are filled, though one of the inspectors said "that's not enough for one mine," much less all the mines in Zambia.²²² Kateka said that qualified inspectors leave to work for mining companies "after a year or two" because of better pay. In addition, the government has imposed a hiring freeze on many ministries, including the Ministry of Mines, meaning the MSD cannot hire staff to replace attrition vacancies.²²³ The result is that inspectors are hopelessly overstretched and have to "multitask"—making determinations on infractions in areas outside their expertise.²²⁴

²²³ Human Rights Watch interview with Bright Kateka, Deputy Chief Inspector, Mines Safety Department, Kitwe, July 28, 2011.
 Kateka said that the freeze affected all but the Health, Education, and Agriculture Ministries.
 ²²⁴ Ibid.

who came, we took him to see the CEO, and that is how we produced a certificate saying that the winder is OK' ... When an official proves to be difficult, they take him to the higher management, so he is given something there.").

²²¹ Human Rights Watch interview with MUZ safety official, Kitwe, July 18, 2011.

²²² Human Rights Watch interviews with Bright Kateka, Deputy Chief Inspector, Mines Safety Department, Kitwe, July 28, 2011; and with an explosives inspector in the Mines Safety Department, Kitwe, July 28, 2011.

Kateka also stressed that the understaffed unit received inadequate funds to fulfill its mandate, saying that provision of the department's "full funding is... erratic."²²⁵ Annex III provides a complete breakdown of the approved and received funding for the Mines Safety Department from 2008 to 2010. The figures highlight the funding shortfalls. First, the government consistently provides far less funding than is approved for the department, with 3.952 billion Kwacha (US\$832,000) approved for 2008 and 2.875 billion provided (\$599,000); 2.534 billion approved (\$528,000) for 2009 and 1.500 billion provided (\$312,000), and 2.029 billion approved (\$422,000) for 2010 and 1.102 billion provided (\$230,000).²²⁶

Second, as seen in those figures, the overall amount of financial support for the MSD has decreased considerably from 2008 through 2010. For 2010, a budget of 450 million Kwacha—less than \$100,000—was provided for all of the department's inspections (see Annex III), not only for the copper industry, but also for the country's nickel, emerald, coal, and other mining activities. Not surprisingly, the decrease in funding has led to a sharp decrease in the inspections that the MSD undertakes each year. In 2008, MSD made 613 inspection visits to underground mines, including the country's copper mines; in 2009, MSD visited "large mines" 476 times; in 2010, just 297 times.²²⁷

Funding is so poor, according to Kateka, that the mining companies themselves often have to help fund the inspections:

When there's a [mine] fatality, the family will want compensation, but an inspector's report is required for compensation. So sometimes the mine has to pay the bill to ensure the inspector can actually come to the mine and draw up a report, for example pay for fuel in the [inspector's] car.²²⁸

When asked whether inspectors performed proactive inspections—arriving unannounced to determine whether companies met regulations—Kateka dismissed it as completely infeasible, given their staffing and budget.²²⁹ The result is that the MSD appears to respond only to reported accidents and scheduled checks, failing to observe and punish lax safety standards in a way that could minimize the number of accidents.

²²⁵ Ibid.

²²⁶ Mines Safety Department (MSD), 2008 Annual Report, February 2009, pp. 2-3 (on file with author); MSD, 2009 Annual Report, January 2010, p. 2-3 (on file with author); MSD, 2010 Annual Report, February 2011, pp. 2-3 (on file with author).
²²⁷ MSD, 2008 Annual Report, February 2009, p. 4; MSD, 2009 Annual Report, January 2010, p. 4; MSD, 2010 Annual Report, February 2011, p. 4. MSD appears to have merely changed terminology from "underground" to "large" between 2008 and 2009, as the other categories (e.g., "surface, small mines, or quarries" and "explosive factories") remained the same.
²²⁸ Human Rights Watch interviews with Bright Kateka, Deputy Chief Inspector, Mines Safety Department, Kitwe, July 28, 2011.
²²⁹ Ibid.

In each of its last two annual reports, the director of the Mines Safety Department has stressed that the cuts in inspectors and funding have "led to us failing to attend to a lot of proactive inspections... [and] reducing distant visits to a minimum," while noting also that "[i]n some Sections we hardly manage to carry out statutory examinations."²³⁰

A final problem noted by Kateka is that the fines the MSD can impose "are way too low." Low fines will have little or no deterrent effect on company practice. He said that for violating mining regulations, inspectors can charge mine operators a maximum of 135,000 Kwacha (about US\$28); for violating explosive regulations, the maximum fine is 90,000 Kwacha (\$19).²³¹ Kateka said that in his five years, he knew of only one case in which a mine operator challenged an inspector's fine in court—not surprising given the extremely low fines and current record-high copper prices bringing in more than \$7,500 per metric ton. He added that the government was in the process of increasing the allowed fines, but said that it had been a "long process" he hoped would be completed by the end of 2011.²³²

The understaffing and underfunding of the Mines Safety Department has meant that the Zambian government has not been able to meet its responsibilities under ILO Convention No. 176 to "provide appropriate inspection services to supervise the application of the measures to be taken in pursuance of the Convention and provide these services with the resources necessary for the accomplishment of their tasks."²³³ The government's continually decreasing budgetary support for the Mines Safety Department, thereby further compromising safety standards at the copper mines, may reflect a failing by Zambia to progressively achieve the full realization of the right of workers to "safe and healthy working conditions" under the ICESCR.²³⁴

²³⁰ MSD, 2010 Annual Report, February 2011, p. 18; MSD, 2009 Annual Report, January 2010, p. 18.

 ²³¹ Human Rights Watch interviews with Bright Kateka, Deputy Chief Inspector, Mines Safety Department, Kitwe, July 28, 2011.
 ²³² Ibid.

²³³ ILO Convention No. 176, art. 16(b).

²³⁴ ICESCR, arts. 2 and 7(b). According to the UN Committee on Economic, Cultural and Social Rights, progressive realization "is on the one hand a necessary flexibility device, reflecting the realities of the real world and the difficulties involved for any country in ensuring full realization of economic, social and cultural rights. On the other hand, the phrase must be read in the light of the overall objective, indeed the raison d'être, of the Covenant which is to establish clear obligations for States parties in respect of the full realization of the rights in question. It thus imposes an obligation to move as expeditiously and effectively as possible towards that goal. Moreover, any deliberately retrogressive measures in that regard would require the most careful consideration and would need to be fully justified by reference to the totality of the rights provided for in the Covenant and in the context of the full use of the maximum available resources." Committee on Economic, Cultural and Social Rights. General Comment 3, "The nature of States parties' obligations" (Fifth session, 1990), U.N. Doc. E/1991/23, annex III at 86 (1990), reprinted in Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies, U.N. Doc. HRI/GEN/1/Rev.6 at 14 (2003), para. 9.

Physical Abuse by Chinese Supervisors

Workers often mentioned difficult working relations with the Chinese managers. At times, this was simply due to a language barrier, but other times it reached the level of verbal and even physical abuse. Most workers said that physical abuse had declined considerably in recent years. And unlike low safety standards and long hours, it does not appear to be a deliberate part of the Chinese-led working environment, but rather a long-standing practice continued by a few Chinese managers.

An underground miner at NFCA told Human Rights Watch about an incident in late 2010 when he was slapped and then threatened with termination should he report the incident:

I was underground, and we didn't have industrial water to go ahead. It would have been too dangerous, because we didn't have the necessary water for the machines. The Chinese boss came and he said, "Why are you not drilling?" We told him why, and he hit me, he slapped me across the face. Later he told me that if I reported him, I would lose my job....

That was the only time [physical abuse] happened to me, but I've seen it happen to others in my work group, and we know there's no reason to report. A friend of mine was hit by the Chinese boss with a hammer because he said my friend should have done more work. My friend brought a complaint, but nothing happened to the Chinese guy and when my friend's contract came up, he was let go. Everyone knew why.²³⁵

Other workers described being slapped, hit, and kicked by their Chinese bosses, or having rocks, hard hats, or other equipment thrown at them.²³⁶ Most miners said that they did not report the incident, either because of fear for being fired or because they were paid a small bribe to not report. A nurse at the Chinese-run Sino-Zam Friendship Hospital described several cases she had seen, as well as the reluctance to report:

Yesterday [in November 2010] there were two cases that came in from severe beatings by the Chinese bosses. One of the workers was beaten by a hammer, the other by a shovel. The latter one, the one beaten by a shovel,

²³⁵ Human Rights Watch interview with underground boomer operator B at NFCA, Chambishi, November 11, 2010.
²³⁶ Human Rights Watch interviews with construction worker A at 15MCC, Chambishi, November 9, 2010; with artisan fitter A at NFCA, Kitwe, November 15, 2010; with boomer helper at NFCA, Chambishi, November 11, 2010; with acid plant operator B at CCS, Kitwe, November 7, 2010; and with construction worker B at 15MCC, Chambishi, July 15, 2011.

couldn't even sit straight when he got here. Both were beaten because they resisted work underground that they thought was unsafe. Their injuries weren't too severe; they had some inflammation, some aggravation of their muscle tissue. Both were in a fair amount of pain.

In terms of reporting to the police, that's on the patient. We can't report for them. And it doesn't happen often, because the Chinese are in a hurry to bribe, to keep the information from getting out. The driver who brought them here didn't tell us exactly what happened, because this is just too sensitive. He wasn't willing to report that they had been beaten by the Chinese bosses. It was only later, once we had been questioning [the miners] about their injuries for awhile, that it came out. People will easily lie if money is involved; their wages are small and they fear being fired, so a bribe works well. Beatings are generally not reported at all, even to us. It is only when there has been a serious injury—when there is tissue damage or an open wound. This happens perhaps every month.²³⁷

Several miners made clear, however, that their Chinese bosses treated them well. At times, the relations with the Chinese supervisors were deemed better than those with other multinational corporations. At the same time, while assaults at the Chinese mines were relatively isolated incidents, no miner interviewed by Human Rights Watch from a non-Chinese mine said that a supervisor had subjected him to physical abuse.

When asked about reports of physical abuse, the police commissioner in Kitwe said that "the Chinese are treated the same as anyone else. If we receive a complaint, we pursue it." He said he had received few complaints, however, and that most of those that he did receive involved fighting between two Chinese residents.²³⁸

²³⁷ Human Rights Watch interview with nurse at Sino Zam hospital, Kitwe, November 2010. The precise date has been omitted to protect the workers against reprisal.

²³⁸ Human Rights Watch interview with police commissioner of Kitwe, Kitwe, November 17, 2010.

III. Hours and Overtime

Across Zambia's Copperbelt, miners in the Chinese-owned companies work under difficult conditions for very long hours. At one extreme, some miners at Sino Metals described working a 78-hour week, while others described working 365 days a year without a day off. The standard Zambian work week, followed by other copper mining companies, is six days of eight hours each day.²³⁹ And those working the extended hours for the Chinese mining companies often do not receive overtime, or receive far less than they are entitled by law.

Excessive Working Hours at Sino Metals, CCS

Workers in the Chinese copper processing operations, Sino Metals and Chambishi Copper Smelter (CCS), often work far longer hours than the 48-hour week considered "normal" under Zambian law. This work generally takes place in demanding conditions with harmful chemicals, fumes, and dust. Most miners at Sino Metals and CCS work 12-hour shifts—in contrast to the eight-hour shifts that are standard in every other copper mining and processing operation in Zambia. Miners in certain departments at Sino Metals must work 365 days a year, or be docked pay for any absence. These conditions, particularly in the mining context, are likely to put workers at greater risk of injury.

A high-level official for the National Union of Miners and Allied Workers (NUMAW) contrasted the hours at the Chinese copper mining operations to other international companies in Zambia:

Some workers in Chinese mines are forced to work 12 hours or more a day for six days a week. Compare this to KCM [Konkola Copper Mines], where in the open pit they have four shifts and elsewhere they have three. So people work four days, with three days off; or five days, with two days off. And only eight hour shifts. It's the same at Mopani.... The Chinese want people to work seven days a week, and longer hours. It's one of the most common complaints we receive, but the Chinese refuse to change.²⁴⁰

At Sino Metals, miners in the crusher department and truck drivers—who travel from the Chambishi plant to an area outside of Chingola where they load the low-grade copper that

²³⁹ Republic of Zambia, Chapter 276: The Minimum Wages and Conditions of Employment Act, No. 25 of 1982, as amended by Act No. 13 of 1994, art. 3 ("The normal weekly hours of work for any employee shall not exceed forty-eight hours.").
²⁴⁰ Human Rights Watch interview with NUMAW national union official, Kitwe, November 7, 2010.

the company processes—work 365 days a year. One driver told Human Rights Watch about the difficulty of the long hours and the penalties that the company imposes for missing a single day of work:

My biggest problem is that I've been working for 365 days without [a day] off.... I start every day at 6:30 a.m. and go until 18 hours Monday through Friday, with a one-hour break. On Saturday, I knock off at 3:30 p.m.; on Sunday, at noon.... It gets very tiring, I never see my family. We don't understand why we can't have normal hours like the other companies on the Copperbelt.

If you're absent for even one day, because you're tired, because you have other responsibilities to your family, they deduct from your basic pay. Far more than what one day's pay should be. If you're absent for two days, your pay goes way down. Even your housing allowance will go down.²⁴¹

Human Rights Watch interviewed four other miners employed by Sino Metals who work 365 days a year, and each of them said that, in combination with the low pay, the long hours were the most pressing problem that they faced.

Even those at Sino Metals who do not work 365 days voiced complaints about their working hours. Miners that work in production departments at Sino Metals, including fork-life operators, those in leaching, and those in the Solvent Extraction and Electrowinning (SX/EW) plants, routinely work five 12-hour shifts each week and a sixth 18-hour shift when they change from day or night shift. Many of these individuals work with harmful chemicals, in extreme heat, or with heavy machinery. A miner in the leach pad, where people work with acid, explained:

It's difficult to handles these hours. We work 12 hours a day, five days, and 18 hours on the day of the change shift. It's very tiring. During the week, we work from 6 to 6, either day shift or night shift. And then yesterday we worked from 6 p.m. until 12 [noon] today, an 18 hour shift; the group after us will work from 12 today until 6 [a.m.] tomorrow.... And we never get a break; they say it's a continuous operation, so no break. They say the pipes would break because of the copper solution if we took a break. It's very tough. If we eat, we have to while we work, or have a friend cover for a few minutes. There are times where you're just so tired. And after transport to and from work, it's 14 hours at least. My life is only my work here.

²⁴¹ Human Rights Watch interview with driver B at Sino Metals, Chambishi, July 17, 2011.

Overtime is supposed to be four hours every day. But it doesn't make sense in terms of the pay.... Last month I received less than 200,000 [Kwacha, or \$42] for overtime. Yet I put in 30 hours of overtime every week! They don't tell us how they calculate this, they refuse.... Our hours are too long for the pay we receive.²⁴²

Many workers complained about the lack of breaks over the long hours. An operator in the SX/EW plant said:

Sometimes we'll share some bread that someone has brought in, eating a little while we work. But you can't step away for lunch—they say we're a continuous process. By the end of the day, we're so tired. We look at our brothers in other mines [who work eight-hour shifts] and wonder what's different with these Chinese.²⁴³

Several miners at Sino Metals said that the only positive aspect of the long shift was that they received a little overtime pay to supplement their salaries, which helped them to better make ends meet. However, they all, like the leach pad worker quoted above, expressed dismay at the overtime pay—which was generally around 200,000 Kwacha (\$42) for the month.²⁴⁴ As discussed below, this overtime appears to fall short of the requirements under Zambian labor law.

In response to a Human Rights Watch letter addressing concerns, CNMC said Sino Metals "considers it untrue" that "some departments force workers to work" 365 days without an off day, although provided no further detail. Multiple miners from specific departments, as noted above, told Human Rights Watch that they had no days off. CNMC's letter also said that the company had engaged the union about ending the 12-hour workday during the collective bargaining negotiations at the end of 2010. The letter stated that Sino Metals "completely in agreement that shift lengths shall be implemented in line with its workers' wishes," and pointed to a clause in the most recent collective agreement that says, "The Union in consultation with its members will prescribe to management measures that will govern the shift change procedures."²⁴⁵ The letter faulted the union for not yet replying.²⁴⁶

²⁴⁵ Letter from CNMC to Human Rights Watch, October 8, 2011.

²⁴² Human Rights Watch interview with leach pad operator A at Sino Metals, Kitwe, November 8, 2010.

²⁴³ Human Rights Watch interview with miner A at SX/EW plant at Sino Metals, Kitwe, July 13, 2011.

²⁴⁴ Human Rights Watch interviews with miner A in the tailings department at Sino Metals, Kitwe, November 8, 2010; with miner C at SX/EW plant at Sino Metals, Kitwe, July 13, 2011; and with leach pad operator A at Sino Metals, Kitwe, November 8, 2010.

²⁴⁶ Ibid.

While notable that Sino Metals is interested in engaging the union on shift issues, "shift change" commonly signifies the changeover from day shift to night shift (and vice versa), rather than the hour length of an individual shift. This provision, while relevant to concerns about the once weekly 18-hour shift as workers change shifts, does not address concerns about the daily 12-hour shift. CNMC did specify in its letter to Human Rights Watch that it was open to negotiations "as soon as possible" regarding the "shift lengths that the workers wish to have."²⁴⁷ Miners, in interviews with Human Rights Watch, indicated their strong preference for an eight-hour shift—whether blame for stalled negotiations rests with the union or with Sino Metals management.

Most miners at the Chambishi Copper Smelter (CCS) also work 12-hour shifts, though, in contrast to Sino Metals, generally only for 20 days a month. The normal routine for someone in a CCS production department is two days on the day shift, two days on the night shift, and two days off for every six days. The dozen CCS workers interviewed by Human Rights Watch all identified the 12-hour shift as a hardship.

A miner in CCS's hot metal department, a part of the smelting operation where workers are often in contact with extreme heat, raised basic health concerns regarding the long shifts. He told Human Rights Watch: "The 12-hour shift is a very bad system. We need eight-hour shifts so that we can have enough rest. For 12 hours, all we get are three [bread] buns and a small thing of milk. We need energy to work, we're working in the hot metal department, yet this is it. No break, no food."²⁴⁸

Venus Seti, the assistant labor commissioner in the Ministry of Labour and Social Security, told Human Rights Watch that, as unionized workers, those in the copper industry were free to negotiate terms that would otherwise violate Zambian labor law. He said that the rigid labor protections were primarily for non-unionized workers, though the Ministry of Labour could choose to not approve a collective bargaining agreement if the "conditions of service disadvantage the worker."²⁴⁹ He said he could not comment specifically on the question of hours at CCS and Sino Metals, though the ministry has approved agreements with these provisions every year.

When asked about complaints over the 12-hour shift, Godwin Beene, the permanent secretary in the Ministry of Mines and Minerals Development, told Human Rights Watch:

247 Ibid.

²⁴⁸ Human Rights Watch interview with miner C in the electrical furnace at CCS, Kitwe, July 16, 2011.
²⁴⁹ Human Rights Watch interview with Venus Seti, assistant labor commissioner in the Ministry of Labour and Social Security, Lusaka, July 18, 2011.

"Let me tell you, for people who complain. I once worked underground nine straight nights from 6 p.m. to 6 a.m.—and I enjoyed it."²⁵⁰

Evan Mutali, the assistant human resources manager at CCS, defended his company's 12hour shifts as necessary for the mining operations:

The issue of hours was brought up during the last collective bargaining agreement. The 12-hour shift will continue, as it's required for our smelter's operations [that] need to be maintained for 12 hours. If you did three shifts, the smelter would fail because of the shift change. So the shifts must be 12 hours, because of the method and technology involved. Once the copper is put in the converters, it must go through a long process. If people knock off during the cycle, the whole thing will collapse.... This is different from other smelters, where they use fire and coal. We use oxygen, so it's difficult. The labor law says 48 hours, but production is continuous.²⁵¹

In its letter to Human Rights Watch, CNMC did not claim that a 12-hour shift was necessary at the CCS plant, but that it was better both for productivity and from the workers' perspective:

This model for shift work is relatively better than that of eight-hour shifts in that: work and non-work hours are concentrated into longer blocks, thereby reducing the number of shifts and increasing stability in production; at the same time, workers can reduce the number of times they travel to and from work each month, thus reducing the amount of time spent on travelling for work, which then effectively increases the amount of time workers have for themselves.²⁵²

Whether or not the 12-hour shift is necessary or better for its operations, its standard use along with the weekly 18-hour shift at Sino Metals, is both unique in Zambia's copper industry²⁵³ and raises safety concerns. Many of the workers who spoke to Human Rights

²⁵² Letter from CNMC to Human Rights Watch, October 8, 2011.

²⁵⁰ Human Rights Watch interview with Godwin Beene, Ministry of Mines, Lusaka, July 18, 2011.

²⁵¹ Human Rights Watch interview with Evan Mutali, assistant HR manager at CCS, Chambishi, July 12, 2011. Human Rights Watch presented the claim to union officials, Zambian economists who specialize in the copper mining industry, and other Zambian copper mining experts, and they all disagreed with the contention that a 12-hour shift was necessary. They all said that there should not be a problem in utilizing a three-shift system, as is standard in copper smelters run by other multinationals. Human Rights Watch interviews, Kitwe and Lusaka, July 2011.

²⁵³ Smelting and processing operations at Konkola Copper Mines, Mopani Copper Mines, and Kansanshi operate on an 8-hour workday, with three work shifts, as discussed below.

Watch said they believed the long hours contributed to avoidable accidents. According to a miner at CCS, "Accidents happen because people are stressed from the long hours—they are tired, so they are not looking after their safety."²⁵⁴

In its response, CNMC denied the safety concerns, saying that "research and investigation by relevant foreign agencies (mainly Australia copper companies and other relevant research departments) have shown that the impact [of a 12-hour shift on workers' mental and physical health] is not significant."²⁵⁵

ILO Recommendation 183 states that:

[C]onsultations provided for by Article 3 of the Convention [ILO No. 176] should include consultations with the most representative organizations of employers and workers on the effect of the length of working hours, night work and shift work on workers' safety and health. After such consultations, the Member should take the necessary measures in relation to working time and, in particular, to maximum daily working hours and minimum daily rest periods.²⁵⁶

ICESCR provides that states "recognize the right of everyone to the enjoyment of just and favourable conditions of work which ensure, in particular [r]est, leisure and reasonable limitation of working hours and periodic holidays with pay."²⁵⁷

As noted, Zambian labor law recognizes a 48-hour work week as standard. Any weekly work beyond 48 hours is to be paid at one and a half times the employee's hourly pay.²⁵⁸ In addition, work on public holidays or Sundays, "where a Sunday does not form a part of the normal working week," should be paid double.²⁵⁹ Despite these provisions, a union representative and miners from NFCA, Sino Metals, and CCS all identified consistent disputes over overtime pay.²⁶⁰ At NFCA, miners told Human Rights Watch that overtime was

²⁵⁴ Human Rights Watch interview with miner A in the water treatment plant at CCS, Kitwe, November 6, 2010.
²⁵⁵ Letter from CNMC to Human Rights Watch, October 8, 2011.

²⁵⁶ ILO Recommendation No. 183: Safety and Health in Mines Recommendation, June 22, 1995, provision 3(2).
²⁵⁷ ICESCR, art. 7.

²⁵⁸ Republic of Zambia, Chapter 276: The Minimum Wages and Conditions of Employment Act, art. 4(1). Hourly pay is determined by dividing the employee's monthly basic wages by 208 hours. Ibid., art. 4(3).

²⁵⁹ Republic of Zambia, Chapter 276: The Minimum Wages and Conditions of Employment Act, art. 4(2).

²⁶⁰ A miner from China Luanshya Mine, by contrast, told Human Rights Watch: "If you work overtime, you are properly paid. We had some problems with this when the Chinese first came on, but it wasn't actually the Chinese who were the problem. The problem was the [Zambian] managers. They would demand that we work over, but then not let us get it approved formally. And then we would be told that since it wasn't formally approved, we couldn't be paid for it. That's CLM's rule, that overtime

almost never paid, even when they were required to work beyond the standard 48-hour week there (see textbox on NFCA, below). At Sino Metals, as seen in accounts above, miners complained that they received extremely small overtime pay despite working as many as 30 overtime hours each week, public holidays, and Sundays. In its response, CNMC said that all of its companies paid overtime. Regarding Sino Metals and NFCA, it did not specify the precise overtime pay percentage. At CCS, it said it was 1.5 times the normal pay; at China Luanshya Mine, two times normal pay.²⁶¹

In contrast to the hours of work at the Chinese-run copper mining operations, miners at KCM, Mopani, and Kansanshi all said that their standard work week is between 40 and 48 hours. The Canadian-owned Kansanshi previously had a 12-hour shift at its processing plant but agreed with the unions to reduce to an eight -hour shift during their 2011 collective bargaining agreement. Eight-hour shifts are likewise standard at the other copper mining companies, including KCM and Mopani, where three shifts are employed in departments that the companies deem necessary to operate continuously.

On overtime, a few miners from other multinationals reported issues, though, in contrast to the Chinese-run operations, few reported problems and even those who complained often deemed it a relatively minor problem. While several miners at KCM said they always received overtime pay for work beyond 48 hours, two miners said that their bosses often told them just to take a day off, rather than receive overtime pay—which they found to be unfair, as they preferred to work and receive the overtime pay.²⁶² At Kansanshi, miners both at the mining site and the processing plant reported no problems with overtime payment, though one miner expressed frustration that Sunday was paid as a normal day.²⁶³ At Mopani, miners who spoke to Human Rights Watch all said that they received overtime pay so long as the work was authorized. However, one miner explained that at times the Zambian managers appear to skirt the rules and not report employees' overtime:

Sometimes, the foreman asks us to work over, to work 12 hours. And there is a problem of authorized versus unauthorized overtime. When it's reported to the pay office that we're to work overtime, we have no issues, it's paid. But sometimes the boss doesn't put our overtime in at the pay

²⁶¹ Letter from CNMC to Human Rights Watch, October 8, 2011.

must be approved for it to be paid. We complained about the lack of payment, and the process has been sorted out." Human Rights Watch interview with surface electrician B at CLM, Luanshya, November 10, 2010.

²⁶² Human Rights Watch interviews with pump operator underground at KCM, Chingola, November 14, 2010; and with artisan technician in the engineering department at KCM, Chingola, November 14, 2010.

²⁶³ Human Rights Watch interviews with miners at Kansanshi mining, Solwezi, November 11-12, 2010.

office. The blame isn't on the pay office, it's on the direct manager. So it's not checked—authorized—and then it's not paid.²⁶⁴

A union representative told Human Rights Watch that this issue had been taken up with higher-level management, and that the main issue now was sensitizing workers to ensure that authorization is given before overtime work is agreed to and undertaken.²⁶⁵

Improvements at NFCA, except for Double Shift Underground

Underground miners at NFCA, the Chinese-owned copper mine in Chambishi, told Human Rights Watch that during the first years after the mine became operational in 2003, they routinely worked 12-hour shifts underground.²⁶⁶ After pressure from miners and the unions given the danger involved in working underground—NFCA established an 8-hour standard workday, with many of the underground operations splitting into morning, afternoon, and night shifts. Although slow in coming, this reform shows that Chinese management in the copper mines can be responsive to labor concerns.

However, this change did not end the practice of forcing miners to work a double shift—up to 16 hours—underground, often without overtime pay or sufficient rest to make up for the double time.

An electrician at NFCA described being forced to work a second shift without overtime whenever there were breakdowns or other problems at the plant:

Normally, our hours are considered to be eight hours a day, six days a week. But I often work 10 hours a day, six days a week, without overtime. The Chinese are very reluctant to pay overtime.... And some days, there may be a breakdown at 3:30 p.m, right as I'm knocking off. If the next person on shift isn't there, I'm told to go repair it, even though it's time to knock off. The Chinese boss will say, "You'll lose your job if you don't go." So what choice do I have? I'm still not paid overtime even when this happens.... Sometimes I'll be knocking off late, at 5 p.m., and when I get to the surface, I'll find out that there's a problem underground. I'm sent right back down.²⁶⁷

²⁶⁴ Human Rights Watch interview with mechanic in the engineering department at Mopani, Mufulira, November 16, 2010.
²⁶⁵ Human Rights Watch interview with union representative at Mopani, Mufulira, November 16, 2010.

²⁶⁶ For example, Human Rights Watch interview with underground repair technician at NFCA, employed since 2004, Chambishi, July 16, 2011.

²⁶⁷ Human Rights Watch interview with electrician A at NFCA, Chambishi, November 11, 2010.

Even when it is not an emergency situation, but simply normal production, Chinese bosses have ordered underground miners to work double shifts when their counterpart in the next shift does not report for work. A load operator at NFCA described an experience to Human Rights Watch that he said was repeated frequently:

They treat us very badly. I'm in the day shift [7:30 a.m. to 3:30 p.m.], and if a person from the afternoon shift [3:30 p.m. to 11:30 p.m.] doesn't come, they say that I have to do a double shift. We don't get a break, just a couple buns [of bread] and back underground for another eight hours.... Sixteen hours underground is not easy. And then I don't even get time off for performing double duty. If I don't make it to my day shift the next day, they'll mark me absent, and I'll lose pay. If I refuse to do the double shift, they'll fire me. The Chinese boss says so.... And I don't get overtime even for this double shift, they view it as just a standard day of work. They don't give overtime.²⁶⁸

Several NFCA miners said they had suffered injuries from workplace accidents during the second shift, blaming the accidents in part on their exhaustion.²⁶⁹

Although certain circumstances, including breakdowns and other emergencies in which a suitable shift replacement is not available, might necessitate an occasional double shift, NFCA appears to have made it the standard response to any absence; rather than an emergency, it is a manner to ensure that production does not slip at all. The government's failure is even more pronounced when NFCA bosses deny miners the ability to rest the day after a double shift—requiring them, in practice, to work 24 hours underground in a 32-hour period, even in the absence of an emergency.

In response, CNMC said:

Due to safety needs, workers charged with key responsibilities related to underground water discharge, power supplies, and hoisting systems are required to hand over their task to workers in the next shift.... This is a common practice in the mining industry to protect lives and safety in production. Should workers from the next shift be unable to take over in

²⁶⁸ Human Rights Watch interview with underground load operator A at NFCA, Chambishi, July 16, 2011. Another worker stated similarly, "Sometimes I am forced to work a double shift, if the evening person doesn't show or is sick. And yet they only count one shift, I'm not given overtime. If I even have one absent, my salary goes from 1.2 million down to 900,000. How is this fair?" Human Rights Watch interview with underground boomer operator B at NFCA, Chambishi, November 11, 2010.

²⁶⁹ Human Rights Watch interviews with mine truck operator B at NFCA, Chambishi, July 16, 2011; and with underground drill operator C at NFCA, Chambishi, July 16, 2011.

time, the worker who takes that shift and works overtime will be given overtime wages.²⁷⁰

Human Rights Watch recognizes that there may be specific circumstances that necessitate a double shift to ensure safety. However, as described by the miners, the practice appears to have been abused at times to include even when alternative arrangements could be made. Moreover, all those interviewed who had worked a double shift denied receiving overtime for the extra hours.

While Zambia is not a state party, ILO Convention No. 1, the Hours of Work (Industry) Convention, is informative. Article 3 states: "The limit of [48] hours of work ... may be exceeded in case of accident, actual or threatened, or in case of urgent work to be done to machinery or plant, or in case of 'force majeure', but only so far as may be necessary to avoid serious interference with the ordinary working of the undertaking.²⁷¹

²⁷⁰ Letter from CNMC to Human Rights Watch, October 8, 2011.

²⁷¹ ILO Convention No. 1: Convention Limiting the Hours of Work in Industrial Undertakings to Eight in the Day and Forty-eight in the Week, November 28, 1919, entered into force June 13, 1921, art. 3.

IV. Anti-Union Activities

*If you don't ever talk, if you don't ever complain, then the Chinese [managers] will like you.*²⁷²

-Union Representative at Sino Metals, November 2010

While at least one union exists at each Chinese-run copper mine, the Chinese copper mining operations in Zambia have inhibited workers from joining Zambia's oldest mining union, the Mineworkers Union of Zambia (MUZ). MUZ was established in 1948, prior to independence, as the Northern Rhodesian African Mineworkers' Union. The second main union, the National Union of Miners and Allied Workers (NUMAW), was formed in 2003. Both represent thousands of miners across the Copperbelt, but management in several Chinese-owned operations appear to have chosen to accept only NUMAW, despite some workers expressing a clear preference to be represented by MUZ. Domestically in China, there is only one legal trade union—the government-affiliated All-China Federation of Trade Unions—and many problems described in this section are similar to those experienced within China.²⁷³ At every non-Chinese copper mine, workers have been free to establish and join branches of both unions.

In addition to impeding the establishment of MUZ, union leaders at the Chinese operations said that they faced discrimination because of their union activities. These problems were not limited to the Chinese mines—union representatives at several non-Chinese mines also expressed concerns for this. This raises broader issues regarding the right to association and union activity in Zambia.

The right of workers to join unions of their choice is protected under international human rights and labor law. The International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights both provide for the right to freedom of association with others, including "the right to form and join trade unions" for the protection of their interests.²⁷⁴ Likewise, ILO Convention No. 87 concerning Freedom of Association and Protection of the Right to Organise states, "Workers and employers, without distinction whatsoever, shall have the right to establish and, subject only to the

²⁷² Human Rights Watch with union representative A at Sino Metals, Kitwe, November 7, 2010.

²⁷³ "Trade Unions in China: Membership Required," *The Economist*, July 31, 2008.

²⁷⁴ International Covenant on Civil and Political Rights (ICCPR), G.A. res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 52, U.N. Doc. A/6316 (1966), 999 U.N.T.S. 171, *entered into force* Mar. 23, 1976, art. 22; ICESCR, art. 8.

rules of the organisation concerned, to join organisations of their own choosing without previous authorisation."²⁷⁵

In 2009, the International Trade Union Confederation (ITUC) noted that while "Zambia has ratified the ILO Conventions on trade union rights... the legislation on freedom of association and collective bargaining is not in full conformity with ILO Conventions ... [and] trade union rights are widely flouted in the mining sector in particular."²⁷⁶ In particular, the ITUC found that, in contravention with the ILO conventions, Zambian law permitted the stopping of strikes that were not in the public interest and subjected them to procedural requirements that made it "almost impossible ... to hold a legal strike."²⁷⁷ The ITUC noted a "worsening social climate in the mining industry" for trade unions, with specific reference to "Chinese investors who are often accused of intimidating and brutal attitudes."²⁷⁸

Efforts to Bar MUZ at CCS, Sino Metals

Management at two Chinese-owned copper mining operations have actively impeded workers from joining MUZ. Although opinions vary greatly throughout the Copperbelt, MUZ is often reputed to have greater resources and energy to fight for members' rights than has the much newer NUMAW.

At China Luanshya Mine (CLM), where the previous structure was kept in place following CNMC's purchase, both NUMAW and MUZ operate freely. And at NFCA, MUZ has operated a branch office since 2006, with NUMAW establishing its own branch office since soon after that union's creation in 2003. But in the Chambishi processing and smelting operations— Sino Metals and CCS—management has continued to refuse to sign a recognition agreement with MUZ, according to Charles Muchimba, the director of research at MUZ's national office. He told Human Rights Watch:

We took [Sino Metals] to court over this, over their refusal to allow a "recognition agreement" that allows you to form an elected branch of the union on site—that allows you to set up a branch office, essentially. The court ruled in our favor in 2007, or 2008, but there is still no branch there.

²⁷⁵ International Labour Organization Convention No. 87: Convention concerning Freedom of Association and Protection of the Right to Organise, adopted July 7, 1948, art. 2. Zambia ratified the convention in September 1996. Both the ICCPR and the ICESCR reference the ILO convention on the right to organize.

²⁷⁶ International Trade Union Confederation (ITUC), Internationally Recognised Core Labour Standards in Zambia: Report for the WTO General Council Review of the Trade Policies of Zambia, July 2009, p. 1.

²⁷⁷ Ibid., p. 3.

²⁷⁸ Ibid.

Sino Metals still does not allow us.... At CCS, it's similar. Workers submitted papers to join MUZ, but the company instead only allowed NUMAW. No [MUZ] branch office is allowed there either. They refuse to enter into a recognition agreement with MUZ, but have allowed NUMAW on the scene.... There was a point where the workers were so angry that they withheld their subscription dues from NUMAW to try to be able to join MUZ, but it has calmed down since.... We took CCS to court as well, and the court decided in our favor. Yet we still can't get access. The company won't sign a recognition agreement.... It has been a long time since we last approached [the company], because we moved the issue to the courts. It ruled in our favor several years ago, but [the judgment was ignored], nothing has changed.²⁷⁹

A MUZ official in Chambishi who has worked to establish a CCS branch, explained further:

At CCS, there are only about 300 unionized workers [out of 900 total] those belonging to NUMAW. The rest are not unionized, because the company won't allow MUZ, and the workers want MUZ. Previously papers were filed by workers who wanted to join MUZ, I helped organize this, but the company then told us that "they were misplaced." The HR officer has told us that they are not refusing MUZ, but that the paperwork must be in order. This has gone on for years though, even after courts ruled in our favor.

Next time, which we are starting right now, we will collect the forms in the township, and we will hold on to them ourselves. We will not give them to the company again so that they can "misplace" them. We have a strategy, we will be more careful this time.²⁸⁰

Miners at both CCS and Sino Metals expressed a strong desire to have MUZ's representation, and had even taken steps to secure their representation before being threatened by management. An acid plant operator at CCS, who identified MUZ as stronger on workers' rights and tending to support the political opposition, explained:

²⁷⁹ Human Rights Watch interview with Charles Muchimba, director of research at MUZ, Lusaka, November 2010 and July 2011. See also Mwila Chansa-Ntambi, "Enforce decent work agenda, MUZ urges govt," *The Post* (Zambia), July 26, 2011 (describing an interview with MUZ General Secretary Oswell Munyenyembe in which he "stated that MUZ had faced significant 'roadblocks' in its quest to have the affected mineworkers unionised adding that firms such as Chinese-run Chambishi Copper Smelter and Sino Metals had even defied court judgments passed in MUZ's favour to have the said workers unionised.").

²⁸⁰ Human Rights Watch interview with local MUZ official, Chambishi, July 14, 2011.

We have two main unions here in Zambia, MUZ and NUMAW.... The Chinese know that MUZ is considered pro-[Sata], and also that it has more power. It's older and stronger. MUZ tried to establish a branch here at CCS, with NUMAW already here. The chief executive of CCS kept them out though. The management wants to make sure and keep us from being able to join them, even though many of us want to.... The majority of workers in fact think that NUMAW is weak, but we cannot join MUZ.

MUZ brought forms awhile back, it was probably a year ago at least, early when I was working here [since early 2009]. Management made clear to us that we would be dismissed if we signed. A lot of us had already signed them—I had—but we ripped them up and threw them away when we were told that. I can't lose my job, even if I'd prefer MUZ.²⁸¹

A miner at the Sino Metals processing plant expressed similarly:

Right now, we only have NUMAW; the management won't allow MUZ to come in, because they know it's stronger. They say if we bring MUZ, MUZ will cause too much problems advocating for [our rights]. We've tried, but with no success. We have tried to sign stop orders, it's been over two years since many of us did this. We gave them to HR, who is still keeping the forms and does nothing. If MUZ was allowed in, it would help.²⁸²

Another worker at Sino Metals said that to keep the workers from joining MUZ, "Zambian bosses have told us that the Chinese will fire anyone who tries to establish MUZ here."²⁸³

A 2007 report on the Zambian copper industry noted shortcomings in Zambia's labor legislation in terms of protecting the right to establish a union branch office:

Zambia's weak labour legislation makes organising workers, particularly setting up union branches in new workplaces, difficult. Unions cannot simply go into a company and announce that they want to recruit. Rather, before recognition can be considered, the union must identify a "shadow committee" of employees. However, the experience of MUZ organizers is

²⁸¹ Human Rights Watch interview with acid plant operator C at CCS, Kitwe, July 16, 2011.

²⁸² Human Rights Watch interview with forklift operator A at Sino Metals, Kitwe, July 13, 2011.

²⁸³ Human Rights Watch interview with copper sampler A at Sino Metals, Kitwe, November 8, 2010.

that once such a committee is established, firms have simply sacked those staff that constitute the committee, sending a clear message to the workforce that unionism will not be tolerated. MUZ representatives report that they are having to adopt underhand tactics, "The moment they are publicly known we have ended up finding that the whole shoot are dismissed. So, when you go there, once you have identified a shadow committee they have to clandestinely organise."²⁸⁴

In response to Human Rights Watch's letter describing our main findings, the Chinese parastatal that owns the four copper mining operations in Zambia denied that either CCS or Sino Metals had ever interfered with workers' rights to join the union of their choice. Specifically on CCS, the response indicated that discussions with MUZ had been undertaken in 2009, but MUZ did not present the signatures necessary to establish a recognition agreement.²⁸⁵ As noted above, MUZ officials and CCS employees told Human Rights Watch that this was due to active undermining by CCS management. The letter from CNMC further states that "[w]e have discussed this with NUMAW leaders who are of the opinion that that for a company like Chambishi Copper Smelter, where there are less than 1,000 workers, one union suffices."²⁸⁶ It is unclear why CCS would consult with NUMAW, MUZ's competitor union, to determine whether the presence of a second union was warranted—rather than allow the miners themselves to make the decision.

In regards to Sino Metals, the CNMC letter stated:

Although there is only one union in the company at the moment, this cannot be used to illustrate that the company is engaging in "anti-union activities." The type of union in a company, and the number of unions that choose to enter the company, depend on the choices that the workers make based on their free will, and are matters to do with the workers themselves. The company will not, and does not have the right to, interfere with any union that enters the company lawfully.²⁸⁷

As with CCS, MUZ officials and Sino Metals employees expressed in interviews with Human Rights Watch that they did not have the freedom to establish a MUZ branch office.

²⁸⁴ Frasier and Lungu, *For Whom the Windfalls*, p. 24.

²⁸⁵ Letter from CNMC to Human Rights Watch, October 8, 2011.

²⁸⁶ Ibid.

²⁸⁷ Ibid.

When asked in November 2010 about several Chinese operations blocking MUZ from representing workers, the deputy labor minister, Simon Kachimba, told Human Rights Watch:

Any employee is free to join a union. A company can't refuse a union, there is no way that this would happen. If MUZ is being denied somewhere, they should involve us. If MUZ involves us and says that they want to recruit at a mine where workers want them, we will summon management. They took the wrong channel by going to court. We are the custodian.²⁸⁸

In July 2011, Venus Seti, the assistant labor commissioner from the Ministry of Labour and Social Security, said that MUZ should be allowed in and the companies' blocking of MUZ "is a big problem if true."²⁸⁹ As with the deputy labor minister, he said that labor disputes are to be referred to the Ministry of Labour for "amicable resolution" before going to the court of law.²⁹⁰ However, Zambia's Employment Act does not appear to require that the Ministry of Labour be seized before a complainant files a case with a court, saying that whenever a dispute arises, "the party aggrieved *may* report the matter to a labour officer, who shall thereupon take such steps as may seem to him to be expedient to effect a settlement between the parties."²⁹¹ The word "may" implies that it is one of several options, and additional provisions of both the Employment Act and the Industrial and Labour Relations Act indeed reference filing complaints without mention to labor officers.²⁹²

Regardless of the correct manner to settle the dispute, management's efforts to bar MUZ at CCS and Sino Metals, including the intimidation of workers seeking representation, would appear to violate Zambia's Industrial and Labour Relations Act, which gives employees the right to form and be a member of the trade union of their choice.²⁹³

²⁹³ Republic of Zambia, Chapter 269: Industrial and Labour Relations Act, art. 5(a),(b).

²⁸⁸ Human Rights Watch interview with deputy labor minister Simon Kachimba, Lusaka, November 18, 2010.

 ²⁸⁹ Human Rights Watch interview with Venus Seti, assistant labor commissioner, Lusaka, July 18, 2011.
 ²⁹⁰ Ibid.

²⁹¹ Republic of Zambia, Chapter 268: The Employment Act, sect. 64(1), emphasis added. Section 65 then states, "Wherever, upon a report made to him under the provisions of section sixty-four, a labour officer considers that a breach of the provisions of this Act has been disclosed, he may refer the matter to a court."

²⁹² Republic of Zambia, Chapter 268: The Employment Act, sects. 66-70; Republic of Zambia, Chapter 269: Industrial and Labour Relations Act, No. 27 of 1993, as amended by the Industrial and Labour Relations (Amendment) Act, 1997 (No. 30 of 1997), art. 5(2). The Industrial and Labour Relations Act says that an employee who has "reasonable cause to believe" that she has suffered negative consequences as a result of protected union activity "may lay a complaint before the Court" either "(a) within thirty days after exhausting administrative channels available to that employee in the employing undertaking; or (b) where administrative channels are not available, within thirty days of that termination of services or employment, or of knowing that the employee has suffered any penalty, disadvantage or victimization."

Intimidating Union Representatives

Union officials at the three Chambishi-based copper mining operations alleged that Chinese management acted improperly against both the local union branch and individual representatives. ILO Convention No. 135 states that "[w]orkers' representatives in the undertaking shall enjoy effective protection against any act prejudicial to them, including dismissal, based on their status or activities as a workers' representative or on union membership or participation in union activities, in so far as they act in conformity with existing laws or collective agreements or other jointly agreed arrangements."²⁹⁴ A union representative at Sino Metals described to Human Rights Watch the contrast between these requirements and the conditions at the mine where he worked:

The Chinese don't understand the concept of a union. They intimidate those that lead or are part of a union. If they know you're a representative, you'll encounter problems, they'll try to frustrate you until you leave the job. For me, before I was working in the [omitted to protect anonymity] department. But they transferred me to the crusher department because I'm a representative. We all know why these transfers happen, as it always touches the same people, [union representatives].... It's a much tougher environment in the crusher, it's very dusty. I don't have experience there, it's not my background, they just wanted to make me leave.... Basically, if you're in the union, they're going to try to frustrate you. If you don't ever talk, if you don't ever complain, then the Chinese will like you.²⁹⁵

Several other union representatives at Chinese-run mines described being transferred to different departments where they had no experience, without being consulted, in what they perceived as an attempt to either make them quit or pressure them into shunning their union responsibilities. A union representative at NFCA described what he believed was retribution for attending union meetings:

Several times I've been harassed and intimidated because of my union ties. [Earlier this year], I was forcibly transferred; they moved me to machines, because they wanted me to stop attending union meetings—the machines department is much farther from where meetings are organized and held.... [Several months later], they charged me for attending a meeting, which is

²⁹⁴ ILO Convention No. 135: Convention concerning Protection and Facilities to be Afforded to Workers' Representatives in the Undertaking, art. 1, adopted June 23, 1971, ratified by Zambia May 24, 1973.

²⁹⁵ Human Rights Watch with union representative A at Sino Metals, Kitwe, November 7, 2010.

directly against the law. The manager claimed that I did not have permission from the immediate supervisor, even though I had received it. I had asked my [Zambian] supervisor, he approved, and I went. Then the Chinese manager said that I didn't; the supervisor wasn't going to cross him, then he would just lose his job. My supervisor said the instructions came from above, so he couldn't do anything; he said that the Chinese manager "insisted that I charge you." So the Chinese manager gave me a "charge," which indicated a "final warning." I could be fired for the next one, so it is a way to keep me from my union duties. The Chinese don't give any respect to the union, they see us as enemies.²⁹⁶

In addition to the guarantees outlined in ILO Convention No. 135, described above, ILO Convention No. 98, the Right to Organise and Collective Bargaining Convention, guarantees workers adequate protection "against acts of anti-union discrimination" including, specifically, "acts calculated to … cause the dismissal of or otherwise prejudice a worker by reason of union membership or because of participation in union activities outside working hours or, *with the consent of the employer, within working hours.*"²⁹⁷ Although Human Rights Watch was not able to verify with the supervisor in this specific circumstance whether permission was provided in accordance with company policy for meetings conducted within working hours, union representatives across the Chinese-run mines repeatedly voiced similar complaints alleging prejudice for attending union meetings with authorization. A union representative at CCS told Human Rights Watch:

They don't understand unions at all. To go to a union meeting, you need to get a note from HR, who take it to the Chinese. We do this, but the Chinese still cause us problems. I get bad performance assessments that say, "Always going to meetings." So they allow us to go, they don't expressly bar us from going, but they view us as bad workers for taking care of our union responsibilities. And the problem is that when it comes time for renewing contracts—because we're all just on one- or two-year contracts—they won't renew you because of your bad performance reviews. So we're facing a lot of problems as union officials. Sometimes I turn down going to important meetings just so I don't have to deal with my boss the next day.²⁹⁸

²⁹⁶ Human Rights Watch interview with union representative A at NFCA, Chambishi, November 11, 2010.
²⁹⁷ ILO Convention No. 98: Convention concerning the Application of the Principles of the Right to Organise and to Bargain Collectively, art. 1, adopted July 1, 1949, ratified by Zambia September 2, 1996, emphasis added.
²⁹⁸ Human Rights Watch interview with union representative A at CCS, Kitwe, July 16, 2011.

A union representative at Sino Metals likewise said:

We receive a lot of intimidation from the managers. I need to perform my duties as the union representative, to move around the plant and discuss problem with people, to see the conditions and have things reported to me, but the Chinese tell me that if I move around and discuss, they'll fire me. They also threaten to give me less for a production bonus, because they say, "You spend too much time in meetings." I've received less several times.... And they've said that they can't [increase] my salary because I'm the union rep. I do the duties of a supervisor—I have for the last 18 months—but I'm paid the same as an attendant.... And our contracts make it more difficult. It's one year, two years, even for those of us that have been here since inception. Management says that it's not ready to give us permanent employment. As a result, we are all worried that our contracts will not be renewed, so we can't strike, we can't complain, we can't do anything to show our displeasure with the conditions.²⁹⁹

The one- and two-year contracts that are standard in the Chambishi-based Chinese mining operations were repeatedly described as obstructions to meaningful union activity. Union representatives and members at each of these operations identified outspoken colleagues who had been union officials in the local branch and then had their contracts not renewed by management. Human Rights Watch interviewed several of these officials, who said they received a written notice that their contract would not be renewed, without further details or explanation.³⁰⁰ While Human Rights Watch could not verify whether union activity was related to termination in each specific case, there does appear to be a pattern of not renewing "troublesome" union representatives. And the perception that union activity was likely to negatively impact a person's employment, regardless of performance, was expressed in nearly all interviews with Human Rights Watch. Non-unionized workers at Chinese mines often explained their decision to not join a union, such as this miner at CCS: "The unions are compromised. If they do anything to help us, they'll be fired. So they're just there. If the Chinese respected unions like the other mines, I'd join, but now, there's no reason."³⁰¹ [See text box below for discussion of anti-union activities in other mines.]

²⁹⁹ Human Rights Watch interview with union representative B at Sino Metals, Kitwe, November 8, 2010.

 ³⁰⁰ Human Rights Watch interviews with former union representative at NFCA whose contract was terminated in 2010, Kitwe, November 10, 2010; with former union representative at Sino Metals whose contract was terminated in 2009, Chambishi, November 9, 2010; and with former union representative at NFCA whose contract was terminated in 2009, Kitwe, July 13, 2011.
 ³⁰¹ Human Rights Watch interview with acid plant operator D at CCS, Kitwe, July 16, 2011. A miner at NFCA expressed similarly, "People who have been in unions in the past have been fired for 'inciting problems.' More have been had their contracts

In response to Human Rights Watch's concerns, CNMC said that its companies had "harmonious" relations with the unions.³⁰² CNMC did not directly address the issue of prejudice against union representatives in several of its companies, however. For NFCA, the letter said the existence of yearly collective bargaining negotiations and the company's decision to avoid downsizing during the 2008 economic crisis demonstrated "the sincere collaboration" between management and the unions. For CCS, the issue of prejudice was not addressed in the letter.³⁰³ Concerns were more directly addressed with regards to Sino Metals. The letter stated that "Sino-Metals clearly supports the union in its lawful work and in fulfilling its legitimate union responsibilities; it welcomes and encourages the union to monitor the company in various aspects of its work."³⁰⁴ It is unclear if the company has a different conception of "legitimate union responsibilities," as the response does not accord with Human Rights Watch's interviews with union representatives. The CNMC letter further identified initiatives that Sino Metals has undertaken to improve managementunion relations, including financial support for the union's activities as well as the provision of office space and a canteen; regular meetings between the company's general manager and a union representative; support in recreational and sporting events; and regular communication. The CNMC letter also states that any worker is able to lodge a complaint on any matter at any time.³⁰⁵ Despite these stated initiatives, nearly all the miners and union representatives from Sino Metals who spoke to Human Rights Watch described an environment of intimidation, as described above.

Management at another CNMC company, China Luanshya Mine, appears to have instituted a positive initiative that has been more felt by the miners. The letter notes that there is consistent dialogue between management and union representatives and routine meetings in which the unions and workers can voice problems to the human resources department.³⁰⁶ Miners and union representatives from China Luanshya Mine indeed expressed very few problems related to union activity, and, while this specific initiative was not mentioned, the union representatives did on several cases extol concerted efforts of engagement by the Chinese management at that company.

Zambia's Industrial and Labour Relations Act accords employees the right to participate in union activities as well as the "the right not to be dismissed, victimized or prejudiced for

304 Ibid.

305 Ibid.

306 Ibid.

terminated once the term ends. People fear losing their job, so they don't join a union." Human Rights Watch interview with artisan fitter B at NFCA, Chambishi, November 15, 2010.

³⁰² Letter from CNMC to Human Rights Watch, October 8, 2011.

³⁰³ Ibid.

exercising or for the anticipated exercise of any right" outlined in the Act.³⁰⁷ The Act appears to go beyond the ILO Conventions in giving those involved in union activities "the right to obtain leave of absence from work in the exercise of" those activities, and states that "the leave applied for shall not be unreasonably withheld by the employer."³⁰⁸

Zambia's failure to ensure the right to association of workers, in particular to protect union representatives from prejudicial acts, including loss of employment, doubtlessly has an impact on other substandard conditions of employment addressed in this report, including poor health and safety practices and long hours without adequate overtime. Workers, particularly union representatives, expressed the view that they are unable to bargain effectively, as the anti-union pressure means they have to choose between needed job security and advocating more rigorously for improved conditions. Given the scarcity of jobs, they overwhelming choose to protect their employment.

Intimidation against Union Representatives in Other Copper Mines

The two Chinese-run operations in which MUZ is absent are the only copper mining companies in Zambia in which workers have been blocked from joining their preferred mining union. But, while anti-union activities do not reach the same level, union representatives from companies owned by other nationals at times voiced similar complaints regarding prejudice against them. A union representative at the Kansanshi processing plant, part of an open-pit mining operation in Solwezi owned by the Canadian First Quantum Minerals (FQM), told Human Rights Watch that several active union leaders were dismissed once their fixed-term contracts ended. The perception, according to the representative, was, "If you speak out too much, they fire you."³⁰⁹ A union representative at FQM's mining operation similarly said his biggest problem was "intimidation" in citing a number of prejudicial acts the company had taken as a result of his position:

Management has asked me to resign my position, and in return they would promote me. I refused. They even tried to bribe me. If you talk too much, they try to bribe you. Last week they told me that they were going to change me from [a mining position I've been trained for] to a storeroom manager. I am qualified for my job, not to be a storeroom manager. I refused the change, and I was reported to management. They are just trying to

³⁰⁷ Republic of Zambia, Chapter 269: Industrial and Labour Relations Act, art. 5(c), (g).

³⁰⁸ Republic of Zambia, Chapter 269: Industrial and Labour Relations Act, art. 5(d).

³⁰⁹ Human Rights Watch interview with union representative at Kansanshi, Solwezi, November 12, 2010.

intimidate me. I was supposed to go to South Africa for a job training course even, but they have said that I must step down from the union, or I can't go. They gave merit increases to everyone in my section except me, telling me to step aside from the union. It goes on and on.³¹⁰

At Konkola Copper Mines, owned by an Indian mining conglomerate now headquartered in London, a union official explained their efforts to target union representatives:

They're reducing the employees at the open-pit by 20 percent, deploying them to other departments. In doing this, they've targeted the shop stewards to paralyze union leadership there. Every time we've voted a new one, they've deployed him elsewhere.³¹¹

Another union representative at KCM said that if a union leader is promoted, "it's because he's listened to management and shut up. Those of us that speak out, we're stuck."³¹²

Finally, two union members from Mopani Copper Mines said that, during the 2009 global economic crisis—when many Zambian copper mining operations laid off workers in response to low world copper prices—union representatives were often the first to be "pruned" from the company's Nkana mine.³¹³ In a letter response to Human Rights Watch, Mopani's chief executive officer said that reports of prejudicial acts were "simply untrue. In fact, we enjoy good relations with the unions at Mopani." The response highlighted that Mopani was perhaps the only copper mining company in Zambia "not to have had a general strike over negotiations for many years."³¹⁴ Mopani is primarily owned by the Switzerland-based Glencore International, though First Quantum Minerals owns just under 17 percent as well.

³¹⁰ Human Rights Watch interview with union representative A at FQM mining, Solwezi, November 13, 2010. Another union representative said simply, "We don't have freedom of speech. They, the managers, tell you to be quiet or you'll be fired. As union officials, we're intimidated." Human Rights Watch interview with union representative B at FQM mining, Solwezi, November 13, 2010.

³¹¹ Human Rights Watch interview with union representative A at KCM mining, Chingola, November 14, 2010.

³¹² Human Rights Watch interview with union representative B at KCM mining, Chingola, November 14, 2010.

³¹³ Human Rights Watch interviews with union representative at Mopani, Mufulira, November 16, 2010; and with union member at MCM mining, Kitwe, November 17, 2010.

³¹⁴ Letter from Danny Callow, chief executive officer of Mopani Copper Mines Plc, to Human Rights Watch, October 12, 2011.

V. Conclusion

This report seeks to move beyond the general, often unwieldy, characterizations of "China in Africa" by examining what the engagement has meant, from a human rights perspective, for miners in Zambia's copper industry. The parastatal China Non-Ferrous Metals Mining Corporation (CNMC) entered the Zambian copper mining sector in 1998 and began operations in 2003. Almost a decade later, it is possible to distinguish between its notable investment and its often poor labor record. Miners universally recognize that CNMC saved jobs and is creating thousands of new ones. Copper mines that were dilapidated under previous investors, with almost no capital upgrading or even maintenance, are being modernized and expanded by the Chinese-run companies. Yet the goodwill from these efforts is offset by workers' complaints about labor abuses. Of particular concern are the relentless pressures to continue working in areas that miners consider unsafe, the failure to replace defective personal protective equipment, and the brutally long hours in certain mining operations. Preventable accidents result, and health consequences will continue to be felt in the future.

There is no question that since first beginning operations, the Chinese-run companies have improved health and safety conditions as well as union relationships. Yet there is likewise no question that they remain in routine violation of Zambian and international law on these same issues, and perform considerably worse from a labor standpoint than their competitors from other multinationals in Zambia's copper industry. Still, the improvements make clear that there is neither an inherent link between Chinese investment and poor labor practices nor a complete inflexibility on their part. Indeed, they appear responsive to pressure from host governments and care greatly about their image.

The role of the host state is therefore fundamental, as it is in the protection and fulfillment of all human rights. In Zambia, the Chinese-run copper mining companies have taken advantage of the ineffectual Mines Safety Department and a Labor Ministry that endorses collective bargaining agreements containing provisions that conflict with Zambian and international labor law. Human Rights Watch's large body of work on business and human rights shows that this is of course neither unique to Zambia nor to Chinese companies operating overseas. Many Western companies likewise take advantage of weak labor standards and enforcement around the world, exploiting local workforces. But in Zambia, while other multinationals are responsible for certain labor abuses, the Chinese-run companies are generally the worst on issues involving health and safety, hours of work, and the right to organize.³¹⁵

³¹⁵ The UK-based organization RAID published similar findings in a study on the Democratic Republic of Congo's copper mining industry. RAID, *Chinese Mining Operations in Katanga, Democratic Republic of Congo*, September 2009, p. v, 8.

The situation in Zambia could change rapidly as a result of longtime opposition leader Michael Sata's election as president. President Sata promised to improve the lives of average Zambians within his first 90 days in office, and his first weeks have been met with a flurry of activity related to mining and the economy more generally. Miners—and workers in other Zambian industries—have appeared to feed off of Sata's often vitriolic language and gone on wildcat strikes around the country. While some reports indicate promises by Chinese management to drastically increase miners' pay, other Chinese mining companies appear to be taking a hard line in response to the strikes—even dismissing employees. It is unclear, at time of writing, how the strikes will be resolved and what these operations will look like in the coming months.

Rather than simply pointing a finger at the Chinese-run companies, the new government needs to support its rhetorical commitments and clean up the regulatory bodies responsible for overseeing the mining industry. Miners will remain in a precarious position so long as the Mines Safety Department is incapable or unwilling to effectively enforce the country's mining regulations. Companies will have little fear of breaking labor and safety regulations if the prescribed fines remain so small that they have almost no deterrent effect. And union leaders at each company will be unable to rigorously represent their colleagues if prejudicial acts against them continue to go unpunished. The Chinese-run companies have shown themselves capable of conducting operations according to enforced labor laws. The question is thus enforcement. Under the previous administration, Zambia's regulations were only strong on paper.

In its October 8 letter to Human Rights Watch, CNMC promised to "conduct more detailed, comprehensive and in-depth investigations, focusing on the issues that you have raised, or have yet to raise.... [W]e strive to work hard as a team in raising our standards, as well as push for our enterprises to be enterprises with a positive image." Like the Sata government, if its future action meets its rhetorical commitment, Zambia may soon provide a model for how Chinese business ventures in Africa can benefit all parties involved: from China, to the host government, to the so-far forgotten workers in these companies.

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Annex I: Letter to CNMC and Response

September 16, 2011

Luo Tao

General Manager, Vice Secretary of the Party Committee China Non Ferrous Metals Mining Corporation (CNMC)

CNMC Building (North Tower), No. 10 Anding Road, Chaoyang District Beijing, China Fax: 010-84426699

Via e-mail: cnmc@cnmc.com.cn Re: Copper Mining Operations in Zambia

Dear Mr. Luo:

Human Rights Watch is an independent international organization that monitors human rights in more than 80 countries around the world. We are currently preparing a report on labor rights issues in the Zambian copper mining industry, focusing primarily on health and safety conditions, shift lengths, and the right to take part in union activities.

Since 2010, we interviewed 143 miners in Zambia's copper industry, including 95 miners from the four CNMC-owned copper operations (NFCA, China Luanshya Mine, Chambishi Copper Smelter, and Sino Metals); and 48 miners from other multinational copper operations. We also spoke with management representatives from the CNMC operations; officials from the Mineworkers Union of Zambia (MUZ) and the National Union of Miners and Allied Workers (NUMAW); Zambian government officials, including from the Mines Safety Department; and medical professionals at Sino-Zam Friendship Hospital.

Among the management representatives from the Chinese-owned mines, we spoke principally with Zambian nationals. Zambian members of management were asked if meetings could be arranged with a Chinese member of high-level management, but Human Rights Watch was told it would not be possible. Human Rights Watch made further attempts to interview Chinese managers, in Chinese, but Human Rights Watch, in all but a few cases, was denied access to the workers' sites or refused interviews. We therefore write to inform you of our main findings and in hope that you can respond to questions raised below.

Human Rights Watch takes no position on who should or should not invest in Zambia's copper industry, but rather whether investors comply with domestic

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and international labor standards. We recognize the enormous investment that CNMC has made in Zambia: NFCA reopened a long dormant mine; CNMC's purchase of Luanshya Mine kept it from closing; and Chambishi Copper Smelter is a state-of-the-art smelting operation. We also acknowledge the current expansion these companies are undertaking that will add even more jobs. Many of our interviewees expressed gratitude for this. However, many also complained about poor labor conditions. Below are some of our main findings.

Health and Safety Practices

Our findings show that the CNMC-run mines appear to have poor safety practices compared to other copper mining operations in Zambia, leading to unnecessary injuries and health problems. Miners at China Luanshya Mine, for example, described how when CNMC took over from the previous investor, the safety practices changed considerably for the worse. Members of the CNMC companies' safety departments describe safety officers as having no authority over Chinese managers to prevent workers from working in areas that miners and safety officers consider to be unsafe. Miners told Human Rights Watch that if they refuse to work because of credible danger, the Chinese managers threaten to fire them. Such threats appear to have been acted on in several cases and, in others, workers have been marked "absent" on days they worked full shifts but considered a specific job too dangerous to continue.

We documented instances where such practices have led directly to accidents, including rock falls, that have resulted in serious injuries, long-term health consequences, and even death. While the CNMC-run mines are not unique in suffering accidents, the safety practices appear worse than those in copper mining operations run by other multinationals, according to our interviews with miners at all of these mines.

A related problem is the apparent deliberate practice at NFCA, CCS, and Sino Metals to underreport accidents to the Zambian government's Mines Safety Department. Miners and safety officers who spoke to Human Rights Watch described being bribed and threatened by Chinese managers so as to not report accidents. While those interviewed said that deaths and other serious injuries were deemed impossible to hide, they provided strong information that CNMC-run companies have sought to cover up other injuries by paying off workers or threatening to fire people for reporting them.

Miners who spoke to Human Rights Watch also said that NFCA and Sino Metals refuse to replace personal protective equipment (PPE) before the completion of their department's timeframe elapses, even when the PPE is damaged sufficiently during work to pose risks of injury or health consequences. Miners at mines run by other multinationals described almost no difficulty in having their company replace PPE damaged during work, as did miners at NFCA's sister company, China Luanshya Mine. A comparison to the other multinationals' copper mines likewise shows that some PPE pieces, like respirators, are not provided to miners when they should be at NFCA and Sino Metals.

Shift Lengths

Our report will also highlight hours that miners must work at CNMC-run companies. At Sino Metals, some departments force workers to work 365 days a year, without a day off. Other departments of Sino Metals work 12-hour shifts, six days a week. At CCS, workers also work 12-

hour shifts, though generally only for 20 days a month. The CNMC-run smelting and processing operations require 12-hour shifts, the only operations in the Copperbelt that reportedly do so, raising possible safety concerns. Operations by other multinationals all use 8-hour shifts.

Anti-Union Activities

Finally, our report documents alleged anti-union activities by CNMC-run companies. Two CNMC-run operations, Sino Metals and Chambishi Copper Smelter, have only allowed one union, NUMAW, to operate – despite some miners expressing a clear desire to join the other Zambian union that represents mineworkers, MUZ. Miners told Human Rights Watch that they had tried to sign papers to establish a MUZ office, but said that they were threatened with termination should they continue.

In addition, union representatives at the CNMC-run operations described repeated prejudicial acts against them by Chinese managers for fulfilling their union responsibilities. Several union representatives told Human Rights Watch about being intimidated for attending union meetings and, in a few cases, even being "charged" by the company – with threats of having their contracts terminated should they continue to undertake their lawful union functions. As the report makes clear, such problems are not unique to the Chinese-run operations in Zambia's copper mines, but they are nonetheless a serious problem.

We would welcome any information CNMC could provide regarding these issues, as well as any steps it has taken or plans to take to address them. We would also appreciate your responses to the questions raised below, as well as any additional information you wish to provide us.

Human Rights Watch strives to reflect all perspectives in our research and look forward to your response. In light of our publishing schedule, we would be grateful to receive your response by September 30, sent to Matt Wells, researcher in the Africa Division, by email to wellsm@hrw.org, or by fax to +1 212-736-1300.

Thank you for your attention to this matter, and we look forward to hearing from you.

Sincerely,

Dans Bekell

Daniel Bekele Africa Director Human Rights Watch

- Do CNMC-run companies in Zambia replace personal protective equipment (PPE) damaged during work? Under what circumstances are they not immediately replaced? Do some work departments require that workers wait until the elapse of the timeframe for acquiring new PPE? Does the type of equipment affect this determination?
- 2. Does CNMC have any internal policies in place in Zambia to discipline or take more severe action against managers who require workers to work in unsafe areas or under unsafe conditions? How can workers report such problems to management without threat of repercussions? Would CNMC support establishing an ombudsman in the Chinese embassy in Zambia that could field anonymous complaints about labor abuses?
- 3. Are managers in CNMC-run operations in Zambia permitted to overrule decisions by safety officers about whether miners should continue in potentially dangerous areas? If so, why are they permitted to do this, which is contrary to standard practice in other multinationals' copper mining operations?
- 4. Do CNMC-run companies in Zambia permit 12-hour shifts? If so, why is this permitted, since other copper mining companies in Zambia only permit 8-hour shifts, as outlined by Zambian law?
- 5. What policies does CNMC have in place to ensure that its subsidiaries fulfill mining regulations and labor laws in Zambia, including International Labour Organization treaties that Zambia has ratified? Are there any monitoring or reporting mechanisms in place in regards to the State-owned Assets Supervision and Administration Commission's "instructing opinions" for state-owned enterprises, like CNMC?

收件人:人权观察非洲部主任丹尼尔·贝克勒

日期:2011年10月8日

主题:中国有色集团在赞比亚各矿业企业安全经营介绍

Attention: Daniel Bekele, Human Rights Watch Africa Director Date: 8 October 2011 Subject: An overview of safety management in CNMC's mining enterprises in Zambia

Dear Mr. Daniel Bekele,

We have received your letter dated 22 September 2011. The matters laid out in the letter are being taken seriously by CNMC management, and we have launched a general investigation into these issues across CNMC-owned operations, with the aim to rectify existing malpractices, to eliminate possible potential risks, and to work together in managing our enterprises well. The relevant information is set forth below:

1. Health and safety issues

According to our investigation, the management approach that CNMC-owned operations have adopted places high importance on issues related to health and safety conditions during production.

A. NFCA

NFCA has, in accordance with the requirements of Zambia's mining laws, developed a "Safe Production Management System" in which the Safety and Environmental Protection Department is entirely focused on safe production standards. Any worker with recommendations, feedback or grievances regarding safety issues can lodge a complaint with the Safety and Environmental Protection Department to seek resolution. At the same time, workers can also lodge complaints directly with the local government agency responsible for safety issues, Zambia's Mines Safety Department (located in Kitwe, where NFCA is). NFCA has also appointed safety officers or persons responsible for safety. During their safety inspections of the workplace, should they discover any unsafe working environment, unsafe working conditions, or any worker engaging in unsafe actions, they have the authority to request that workers involved stop their work immediately and for changes to be made to address the dangerous situation or potential dangers. Only when the dangerous situation or potential dangers have been eliminated can work resume. Higher-level safety managers should support the correct decisions made by the on-site safety officers and do not have the authority to overrule these decisions. Regardless of one's status and position within the company, any person who issues orders or carries out duties in violation of regulations, or violates labor regulations, thereby placing safety at risk, will be stopped and strong disciplinary action will be taken against him. Those responsible for causing accidents shall be held accountable and severely penalized, based on laws and the company's disciplinary regulations.

NFCA has established the "Management of Distribution of Personal Protective Equipment for Workers" system where workers are provided with protective equipment on a regular basis, according to the nature of the job undertaken by each worker, to satisfy their safety and health needs. There is a fixed schedule for the distribution of protective equipment. Equipment damaged ahead of the scheduled date of replacement should be replaced, but depending on the specific circumstances, the costs incurred shall be borne either by NFCA or the worker himself. Should a worker not abide by relevant laws and relevant company policies governing the proper wearing of required protective equipment, the worker will be strictly prohibited from entering and working in the workplace.

In 2010, the company further supplemented and improved measures to manage protective equipment for workers. It laid down detailed regulations regarding personal protective equipment for all forms of work within the company, as well as the replacement timeframe for the protective equipment. According to Zambia's safety and environmental protection laws, respirators are not required on all jobs, however NFCA has provided respirators, dust masks, and other protective equipment that meet safety standards. These regulations were officially implemented on 1 January 2011.

Herein is an issue that requires special mention. NFCA's underground mining operations have been subcontracted to a Chinese company, JCHX Mining Management Co., Ltd (JCHX), using a management model where on-site projects operated by JCHX come under the central management of NFCA through NFCA's Mining Department.

For the past few years, through the concerted efforts of both parties, a positive record has been achieved through stable progress in production management. However, JCHX had yet to be registered as an independent legal entity in Zambia, which brought about many problems for NFCA in its management operations and resulted in NFCA being subject to repeated criticisms from Zambia government departments including the tax department, audit department, mining department and safety department.

To this end, we have repeatedly requested for JCHX to register as an independent legal entity in Zambia.

In 2010, during the process of finalizing the 2011-2013 mining contract, JCHX obliged with our request to register as an independent legal entity in Zambia. After it registered as an independent legal entity in Zambia, both parties signed the mining contract. This was highly commended by Zambia's mining department, which believes that it is essential for the regulation of companies' production and management.

In addition, NFCA believes that language and cultural differences during communication and interaction with workers, as well as during work planning, could have possibly resulted in misunderstandings about the actual state of affairs. The company's actual intent behind various work issues may have not been thoroughly and clearly expressed to the workers, which would have assisted them in understanding, accepting, and supporting such matters. Nevertheless, opinions and recommendations provided by the workers have been beneficial and will further improve NFCA's management standards, but NFCA is also of the view that the opinions of some are not representative of the opinions held by all Zambian workers.

B. China Luanshya Mine

The claims of the report run contrary to the practices at China Luanshya Mine. Since the takeover of Luanshya Mine in 2009, appropriate safety management measures have been implemented at Luanshya Mine, the safety situation has been stable, and this has been

acknowledged by various parties. In 2011, China Luanshya Mine not only organized a mines rescue competition within the mine, but the team it sent to represent the company in the Zambia Mines Rescue Association competition even clinched the top prize. After taking over the mine, China Luanshya Mine has invested over US\$7 million in 58 rehabilitation and rebuilding projects at Baluba Mine, including investment in the water drainage system, the ventilation system, and a hoisting system, among others. It has restored a tailings discharge system at Luanshya River; its eight-foot pipe system had been in disuse for ten years.

For the first time, six sets of dust removal equipment were installed at the mineral processing ore crushing plant, and surface waste material was transported from Muliashi to Musi tailings dam, where it was used for reinforcement of the dam body and to begin land reclamation works. The company invested US\$7 million in the use of HDPE [High-Density Polyethylene] lining technology for Muliashi Mine Tailings Dam, to prevent accidents such as solution leakage to the greatest possible extent. This use of HDPE lining technology is of the largest scale in Zambia, and is the first time that the technology is being used. These measures have won positive reviews from the local government, the public, and the workers. The protection of mine safety has been further enhanced with these measures, which are also more environmentally friendly and have brought about further improvements in the work conditions for workers.

Meanwhile, China Luanshya Mine has never had a pattern of mine managers forcing workers to work in hazardous conditions as claimed. We will take disciplinary action against mine managers who permit or do not stop workers from working in hazardous conditions, regardless of their seniority. Before China Luanshya Mine workers can commence work, the workplace has to be inspected by the person in charge of safety (or PIC - Person In Charge) there or a more senior manager. Only after he confirms and announces that the site is safe can workers enter the workplace. Should safety officers or anyone at the workplace discover that conditions at the site are unfit for work to be carried out safely, they have the right to call for a stop of all work activities until hazardous elements are removed. Such decisions are not subject to any restriction. Any instance in which workers are forced to continue working at the risk of danger shall be dealt with through disciplinary action.

China Luanshya Mine drafted the "Measure Regarding the Distribution of Protective Equipment for Workers", in which the distribution standards were introduced after full communication with, and consent from, the trade union.

The protective equipment for workers is based on the actual needs of each job (job type), and the distribution schedule was also based on full consideration of various factors. We have always unconditionally replaced personal protective equipment that has, for various reasons, been damaged ahead of the scheduled date of replacement. Once workers' personal protective equipment (PPE) is found to be defective, we take the initiative in requesting that the workers report this to the company's safety management department; upon approval from the safety management department, the workers shall collect the PPE, as per their request.

In fact, with the exception of having to recently employ one Chinese worker to enhance safety management of the Muliashi project, the rest of China Luanshya Mine's safety department is entirely made up of local Zambian workers. The safety management

measures are essentially a continuation of previous systems and policies, therefore it is impossible to say that "when CNMC took over from the previous investor, the safety practices changed considerably for the worse." With regards to this view, we have held frank discussions with Zambian employees who believe that the idea that "safety practices changed considerably for the worse" lacks factual basis. We will send you the opinions of these Zambian workers on this matter, as well as their names and contact details, for verification purposes.

C. Chambishi Copper Smelter

Chambishi Copper Smelter has informed the investigation team that they have not received any request for interviews with relevant personnel.

With reference to health and safety measures, Chambishi Copper Smelter now has an independent safety and environmental protection department where its (Chinese) manager is the assistant to Chambishi Copper Smelter's general manager, the deputy manager is a Zambian worker, and the rest of the department is made up of Zambian workers. The department has three responsibilities: safety, environment, and health.

Safety within the company is managed on three levels: the company's safety department, safety officers within the work departments (and who are selected by the miners), and group leaders (who have undergone safety training). Safety officers within the company are full-time safety management officers; safety patrols are conducted 24 hours a day. There are safety officers of all levels conducting the necessary patrols all day in the mines. In the event of a significant potential safety risk, safety officers are able to act according to Zambia's mines safety regulations as well as company regulations in order to prevent activities that violate safety regulations. They can report immediately to Chambishi Copper Smelter's production manager and control center. They also have the right to, according to "Safety Regulations" and "Emergency Response Plans," take the correct approach in halting production, so as to prevent major accidents during production.

Should a more severe accident (MSN Reportable Incident) occur, the safety officers shall follow regulations accordingly and report to the Mines Safety Department (MSD) immediately. To date, Chambishi Copper Smelter has yet to uncover any pattern of underreporting. The company believes, given that the smelting plant operates at high temperatures and high pressure, the presence of safety risks in any form is not permissible.

Chambishi Copper Smelter has developed emergency response plans for the operating conditions particular to a copper smelting plant. Chambishi Copper Smelter is an advanced smelting enterprise that is systematic, highly mechanized, and automated. Safety officers have the authority to prevent any actions that violate regulations on safe production, provided that the entire production line is not halted.

For instance, in situations where production systems under a programmable logic controller are affected, or where a halt in production will result in or cause some accidents, safety officers should immediately report to the production control center and adopt corresponding measures.

Chambishi Copper Smelter has requirements on the distribution and wearing of PPE, and these requirements differ according to the various operating jobs. The requirements on

the wearing of PPE (including those for workers undertaking different jobs, as well as visitors) are set out in the company's "Safety Regulations." To date, the company has not received any objection from Zambia's Mines Safety Department with regards to our system of PPE distribution.

Chambishi Copper Smelter has in place a system of conducting meetings and interviews with workers. Meetings are routinely held once a month between all mine representatives and the management; here, workers express their views on relevant company systems and management practices. The general manager himself currently attends these meetings.

Previously, any issue related to the distribution of PPE has been taken seriously and would be investigated. For example, Chambishi Copper Smelter would immediately make adjustments and improvements if there is a problem of an inappropriate PPE distribution system.

All workers must wear the appropriate PPE when in the mines, and this is subject to random inspections by safety officers. Those not wearing PPE will be penalized by the company (this extends to all workers). Chambishi Copper Smelter has explicit processes for workers to file requests for the replacement of, and for their collection of, PPE that has been damaged or lost in production areas. These are implemented across all work units, which also ensures that there is no conflict between these processes and the most minimum requirements on wearing PPE in the workplace.

Chambishi Copper Smelter regularly sends workers for silicosis check-ups, as required by MSD.

Chambishi Copper Smelter has hot metal allowances in areas of high temperature.

There is a clinic within the company to care for emergency patients, and there is also ambulance transfer available for patients in the event of major emergencies.

There are plans to provide first aid training for all mine workers. The professional trainers from the company's training center will develop training programs and arrange for training to take place. Upon completion of training, workers can sit for tests by the Zambia Mines Rescue Association to obtain a certificate of competency. Every year, the company also organizes and selects workers to participate in the mines rescue competition held by the Zambia Mines Rescue Association . The departments also provide first-aid kids according to requirements.

D. Sino-Metals

On the issue of reporting of accidents: Sino-Metals has neither the practice of deliberately underreporting accidents to the Mines Safety Department, nor the practice of preventing Zambian personnel from reporting accidents.

Sino-Metals has a department dedicated to safety management, whereby full-time safety management officers are employed for safety, environmental protection, fire fighting, quality control, measurement, and training in the company. Martin, the most senior-ranking Zambian employee in the company, is in charge of safety and environmental protection, and is also the assistant to the general manager. For all company accidents,

whether large or small, safety officers are required to conduct an investigation, prepare a report, analyse the causes, and recommend precautionary measures to take and how to resolve the issue. As long as the Zambian manager believes there is the need to report an accident to the Mines Safety Department, the Chinese manager has never once stopped him from doing so.

On the situation around the distribution of PPE: By October 2006 (when regular production had just begun), Sino-Metals has already developed a detailed set of "Standards for the Distribution of PPE," and since its implementation has made amendments and improvements on three occasions: April 2007, June 2008 and February 2009. The aim was to have workers receiving reasonable and effective labour protection.

In the "Standards for the Distribution of PPE" that is currently in use, the job types have been refined to a total of 41, while there are 18 types of PPE equipment, including the smaller pieces. The equipment list includes goggles, dust masks, anti-acid respirators, soundproof ear plugs, cloths, soap, and washing powder. "Standards for the Distribution of PPE" sets forth clear regulations surrounding the "respirators" mentioned in your letter; these are distributed by Sino-Metals on a regular basis and workers have been collecting all of them. However, some workers dislike using them, preferring cloth masks instead; cloths perform the same function as respirators.

Some of the equipment is distributed at short intervals, for instance, two sets of anti-acid uniforms are distributed to mine workers on an annual basis. Some workers receive a pair of anti-acid boots every four months, which means they receive three pairs a year. Sino-Metals has discovered that work clothes that it purchased from China are on sale in Chambishi's markets. Investigations have shown that some workers sell the work clothes which they had just collected from the company and show up for work in old and tattered ones; during inspections, they report that the company has not replaced their work clothes in a timely manner. In addition, some workers are extremely careless about the PPE from Sino-Metals. There are many occasions on which we have found that work clothes issued barely a week before are missing a sleeve, or where the worker continues wearing a torn pair of trousers. This is not a problem to do with quality, since most workers are able to use their uniforms for a long time, with no damage to the two sets of work clothes given to them every year.

Despite facing such problems, Sino-Metals has continued to mandate that PPE damaged before distribution is due shall be replaced, and that it will only charge half the costs incurred.

2. Issue of shift lengths

A. NFCA

Work is carried out in three eight-hour shifts. NFCA believes that as the main ore body in Chambishi copper mine has a daily discharge of nearly 50,000 cubic meters of water and a large volume of groundwater, it is extremely difficult for mining operations to take place in this deep mine. Hence, the mine's lifeline depends on the effective functioning of all underground water drainage systems, power supply systems, and hoisting systems. Due to safety needs, workers charged with key responsibilities related to underground water discharge, power supplies, and hoisting systems are required to hand over their task to workers in the next shift, but their working hours will not be extended. This is a common practice in the mining industry to protect lives and safety in production. Should workers from the next shift be unable to take over in time, the worker who takes that shift and works overtime will be given overtime wages. This practice, suggested during the wage negotiations with the trade union, is recognized by both parties.

B. China Luanshya Mine

It has a system of three eight-hour shifts undertaken by four teams.Workers can rest on weekends or any day designated as a public holiday by Zambian law. Workers working overtime will be paid twice their usual wages. In addition, workers enjoy 24 days of paid annual leave every year.

C. Chambishi Copper Smelter

It has a 12-hour shift system where every worker works 20 shifts in a month (calculated according to a calendar month of 30 days).

Chambishi Copper Smelter uses copper smelting technology from Australia's Mount Isa copper smelting operation; Chambishi Copper Smelter's shareholders are CNMC and Yunnan Copper. Yunnan Copper is the first company in China to use copper smelting technology from Australia's Mount Isa copper smelting operation, with years of practical experience behind it. Chambishi Copper Smelter has made broad reference to the successful management experience of Yunnan Copper, and in our preliminary design, we decided to adopt its 12-hour shift system. This was implemented after discussion with the trade union, where an agreement was signed as well. This model for shift work is relatively better than that of eight-hour shifts in that: work and non-work hours are concentrated into longer blocks, thereby reducing the number of shifts and increasing stability in production skills; at the same time, workers can reduce the number of times they travel to and from work each month, thus reducing the amount of time spent on travelling for work, which then effectively increases the amount of time workers have for themselves. With respect to the potential impact of a 12-hour shift on workers' mental and physical health, research and investigation by relevant foreign agencies (mainly Australia copper companies and other relevant research departments) have shown that the impact is not significant.

In our shift system, for workers who work longer than the 48-hour work week defined in Zambian law, the company shall, in accordance with law, pay overtime wages that are 1.5 times of usual wages.

D. Sino-Metals

Sino-Metals considers it untrue to say, "At Sino-Metals, some departments force workers to work 365 days a year, without a day off."

The current shift lengths implemented at Sino-Metals are as follows: some departments implement 12-hour shifts, the wages for some of which are calculated as overtime wages (as they extend beyond eight hours), and the work week lasts six days. Other departments work on a five-day work week with daily working hours of eight hours (8am-12pm; 1.30pm-4.45pm - actual work day is less than eight hours long); they rest on Saturdays and Sundays.

Some of the departments do have 12-hour shifts, and though no safety issues have been uncovered, the company has already expressed concern about this a while ago. In 2010, Sino-Metals made clear to the union its view on changing the shift lengths, and during the

wage negotiations of end-2010, stated clearly the views of management. Sino-Metals is completely in agreement that shift lengths shall be implemented in line with its workers' wishes, and has invited the company's trade union and its members for negotiations. The trade union has explicitly expressed that is has to be consulted on changes in shift lengths and such changes can only be made with its approval. On 31 December 2010, Sino-Metals signed a collective agreement, in which clause 2.6 (on working hours) states, "The Union in consultation with its members will prescribe to management measures that will govern the shift change procedures." To date, the union has yet to advise on this.

Sino-Metals believes that implementation of shift lengths must first be done in accordance with Zambia's laws and must respect the wishes of the company's workers, thus its negotiations with the union have been based on this premise. Sino-Metals management is unable to unilaterally change the system. The company shall continue to urge the trade union to, as soon as possible, recommend shift lengths that the workers wish to have, so that negotiations can take place.

3. Issue of union activities

A. NFCA

NFCA has always valued collaboration with the trade unions. There are currently branches of two trade unions within NFCA. There was only one union in CNMC prior to 2006.

To increase competitiveness and to maximize the bridging role that unions play, as the middleman between enterprises and workers, NFCA took the initiative in requesting for the Mineworkers Union of Zambia (MUZ) to establish a branch office in the company.

Local workers are basically guaranteed a ten-percent annual wage increment, with this increase being determined during the annual consultations and agreements between NFCA and the unions. After the economic crisis erupted in 2008 and the price of copper plummeted, we faced pressures in production management, but we behaved responsibly and declared that there will be "no retrenchment, no downsizing, and no pay cut." Meanwhile, the trade union initiated having a lower wage increment. Such is a true reflection of the sincere collaboration between both parties.

B. China Luanshya Mine

At present, China Luanshya Mine has registered Zambia's two major trade unions, MUZ and the National Union of Miners and Allied Workers (NUMAW), with each one establishing two branch offices according to their locations in the mining districts. Every month, the management collects workers' opinions and grievances at routine meetings held jointly by the human resources department and the unions; depending on their needs, the management then conducts direct dialogue sessions with the union. The union and management enjoy open communication channels with each other, as well as a stable relationship. Since 2009, three collective negotiations have taken place without major disputes.

C. Chambishi Copper Smelter

The company has never interfered with the right of any employee to join a union. In 2008, the Chambishi Copper Smelter signed a recognition agreement with NUMAW, agreeing to abide by relevant laws in establishing a branch office in the company. The union's branch office has about 400 members. In 2009, we held talks with another trade union MUZ to discuss it

registering with the company. However, MUZ failed to produce the statutorily-required number of signatures of people due to join the union in order to sign a recognition agreement. We have discussed this with NUMAW leaders, who are of the opinion that for a company like Chambishi Copper Smelter, where there are less than 1,000 workers, one union suffices. It is unlike other larger companies (e.g., Mopani and KCM) where employees total 2,000, or even more than 3,000. They have promised to discuss this matter with MUZ.

D. Sino-Metals

The company believes that the description of Sino-Metals's "anti-union activities" is not true. Sino-Metals strictly abides by Zambia's laws and has never once interfered with the right of its workers to join unions, neither has it ever interfered with nor opposed any union that is lawfully set up in the company. Although there is only one union in the company at the moment, this cannot be used to illustrate that the company is engaging in "anti-union activities." The type of union in a company, and the number of unions that enter the company, depend on the choices that the workers make based on their free will, and are matters to do with the workers themselves. The company will not, and does not have the right to, interfere with any union that enters the company lawfully. Sino-Metals believes that its management and the union has a closely interdependent relationship; they rely on each other for survival and for development. Neither party is able to survive independently. Sino-Metals clearly supports the union in its lawful work and in fulfilling its legitimate union responsibilities; it welcomes and encourages the union to monitor the company in various aspects of its work. Towards this end, the company has provided good conditions for the union to carry out its work, and has established healthy dialogue mechanisms between the management and union. For example:

- 1) Sino-Metals has provided the union with an office, a union canteen, and transport means;
- 2) Sino-Metals has supported the union in launching a number of recreational and sporting competitions, and has provided financial assistance;
- 3) Sino-Metals has held many recreational and sporting events in conjunction with the union, annually and on a regular basis;
- 4) Sino-Metals has provided financial support for the union's work and activities;
- 5) The general manager of Sino-Metals meets the union representatives regularly to listen to the union' views and ideas on various aspects of the company's work;
- 6) Sino-Metals has already established routine meetings with the union. The supervising deputy general manager and a human resources officer hold routine meetings and dialogue with the union representatives;
- 7) In daily work, be it the union representative or the worker himself, as long as he considers that there are unreasonable areas in the company, or feels that he has been treated unfairly, and it is an issue that the department cannot or refuses to solve, he is able to meet the company's supervising deputy general manager at any time. He is able to discuss or lodge a complaint on any matter. He is also able to submit written complaints. All letters shall receive a reply.

It is precisely because Sino-Metals respects unions, supports unions, and has established healthy dialogue mechanisms, that the harmonious situation at Sino-Metals has been made possible.

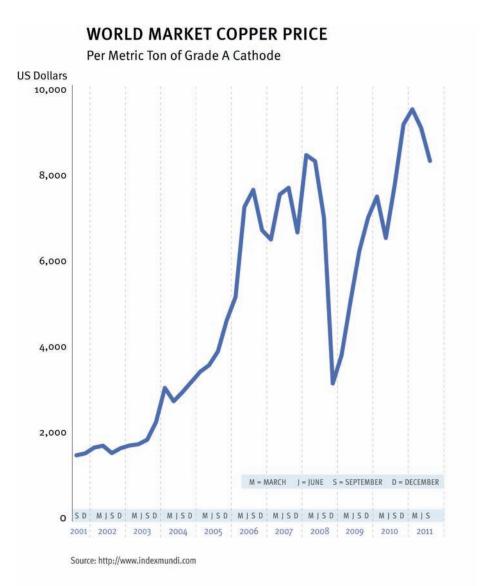
Dear Mr Daniel Bekele,

CNMC is a state-owned enterprise under the direct supervision and management of the State Council, thus it is essential to our long-term vision to fulfill our social responsibilities and to bring benefit to the locals. We will remain open-minded and serious, and pay attention to all the valuable opinions from people from all walks of life. The above are the result from our preliminary investigation into the issues raised in your letter; we shall also take immediate action to rectify any mistakes. If you are able to witness some of the improvements made in our enterprises in the near future, that shall be of greatest comfort to us. The next step for us is to conduct more detailed, comprehensive, and in-depth investigations, focusing on the issues that you have raised, or have yet to raise. Being of concern to people from a vast spectrum of society, we strive to work hard as a team in raising our standards, as well as push for our enterprises to be enterprises with a positive image, where management is being regulated, where a win-win situation is created for all, and where everyone is working towards better development. This will allow us to make our necessary contribution towards creating a harmonious, wonderful world that all of us can be proud of.

Once again, your concern about our enterprises is highly appreciated.

8 October 2011

Annex II: Copper Price, 2001-2011



Annex III: Funding for Mines Safety Department

2010 Financial Summary for the MSD

PROGRAMME ³¹⁶	ACTIVITIES	APPROVED BUDGET(amounts in Kwacha, 4800 per US\$)	FUNDING RELEASED
General	1. Office Administration	270,000,000	117,500,000
Administration	2. Record Management	15,000,000	15,000,000
	3. Appraisal and Induction of Members of Staff	15,000,000	15,000,000
	4. Procurement and Supply	170,000,000	150,000,000
	5. Revolving Fund	200,000,000	200,000,000
	6. Utilities of Mines Safety Department	122,000,000	200,000,000
	7. Review of Mining Regulations	50,000,000	50,000,000
	8. Review of Explosives Act and Regulations	50,000,000	50,000,000
Inspections	9. Inspections - Large Mines	270,000,000	102,083,335
	10. Inspections - Small Mines	315,000,000	123,802,084
	11. Inspections of Machinery at Mines	155,000,000	67,453,705
	12. Inspections - Explosives	215,000,000	93,564,815
	13. Inspections – Environment	152,102,056	66,192,559
	14. Enforcement of the Environmental Protection Regulation	Nil	Nil
	15. Sensitisation of Small Scale Miners on SHE	30,000,000	Nil
	16. Environmental Protection Funds(EPF)	Nil	Nil
	17. Mainstreaming Disabilities Issues	Nil	Nil
	18. Dismantling Arrears	Nil	Nil
	TOTAL	2,029,102,056	1,101,929,831

³¹⁶ Mines Safety Department, 2010 Annual Report, February 2011, pp. 2-3 (on file with author).

2009 Financial Summary for the MSD

PROGRAMME	ACTIVITIES	APPROVED BUDGET (amounts in Kwacha, 4800 per US\$)	FUNDING RELEASED
General	1. Office Administration	890,379,305	586,691,150
Administration	2. Record Management	13,068,054	13,068,054
	3. Appraisal and Induction of Members of Staff	20,125,002	11,925,928
	4. Procurement and Supply	80,000,000	41,666,667
	5. Revolving Fund	210,000,000	210,000,000
	6. Upgrading and Procurement of the Departmental Laboratory Equipment	250,000,000	0
	7. Construction of Mechanical Testing Workshop	0	0
	8. Procurement of testing Equipment	100,000,000	100,000,000
	9. Utilities of Mines Safety Department	100,000,000	48,500,004
	10. Formulate a Mine, Health and Safety Policy	0	0
	11. Review of Mining Regulations	38,000,000	3,333,333
	12. Review of Explosives Act and Regulations	38,000,000	3,333,333
Inspections	13. Inspections – Large Mines	230,620,000	120,650,441
	14. Inspections – Small Mines	79,680,000	37,420,781
	15. Inspections of Machinery at Mines	109,282,000	55,873,856
	16. Inspections- Explosives	59,660,000	31,223,034
	17. Inspections -Environment	136,036,000	76,344,957
	18. Enforcement of the Environmental Protection Regulation	42,000,000	20,105,818
	19. Sensitisation of Small Scale Miners on SHE	30,000,000	32,175,926
	20. Mainstreaming Disabilities Issues	7,454,682	7,454,682
	21. Dismantling Arrears	100,000,000	100,000,000
	TOTAL	2,534,305,043	1,499,767,964

2008 Financial Summary for the MSD

PROGRAMME	ACTIVITIES	APPROVED BUDGET (amounts in Kwacha, 4800 per US\$)	FUNDING RELEASED
General	1. Office Administration	1,350,000,000	1,343,952,015
Administration	2. Record Management	40,000,000	26,145,832
	3. Appraisal and Induction of Members of Staff	20,125,002	13,416,672
	4. Procurement and Supply	80,000,000	86,875,000
	5. Revolving Fund	300,000,000	350,000,000
	6. Upgrading and Procurement of the Departmental Laboratory Equipment	437,107,505	237,107,505
	7. Construction of Mechanical Testing Workshop	200,000,000	199,355,397
	8. Procurement of testing Equipment	150,000,000	0
	9. Utilities of Mines Safety Department	100,000,000	135,000,000
	10. Formulate a Mine, Health and Safety Policy	50,000,000	0
	11. Review of Mining Regulations	100,000,000	0
	12. Review of Explosives Act and Regulations	100,000,000	0
Inspections	13. Inspections – Large Mines	350,000,000	142,042,313
	14. Inspections – Small Mines	200,000,000	84,483,333
	15. Inspections of Machinery at Mines	120,000,000	53,281,250
	16. Inspections – Explosives	100,000,000	47,606,000
	17. Inspections – Environment	155,000,000	65,526,357
	18. Enforcement of the Environmental Protection Regulation	50,000,000	0
	19. Sensitisation of Small Scale Miners on SHE	50,000,000	0
	TOTAL	3,952,232,507	2,874,791,674

Annex IV: Wages in Chinese and Other Foreign-Owned Mines in Zambia as of September 2011

In the copper industry, salaries are generally divided between a "basic pay" and a variety of allowances that are standard across the industry. For example, miners receive a "housing allowance" as a percentage of their basic pay: at both the Chinese-owned NFCA and the Indian-owned KCM, miners receive 30 percent of their monthly basic pay. However, since KCM pays its underground miners roughly three to four times the basic pay NFCA does, the housing allowance is likewise more substantial. Other additional monthly payments given to miners include fixed amounts for transport when a miner lives outside the company's bus system; "shift differentials" for working the night shift; production bonuses; lunch allowances; and, occasionally, education allowances to cover costs for a miner's child. Not all mining companies provide each of these allowances, but, particularly because of housing allowance disparities, the allowances generally increase the basic pay difference when totaling a miner's gross pay in a non-Chinese versus Chinese-run mine.

Table 1 below shows the low-, middle-, and high-range basic pay salaries at copper smelting and processing operations in Zambia. As shown, the Chinese companies, CCS and Sino Metals, generally pay one-third to one-sixth the salaries of their competitors from other countries—even for identical work. Thus, an acid-plant operator in CCS's smelter told Human Rights Watch that his basic pay was 715,008 Kwacha (US\$149), whereas an acid-plant operator in KCM's smelter told Human Rights Watch that he made 3.2 million Kwacha (US\$667). Annex V provides a full breakdown of the salaries at Sino Metals and CCS, showing also that the majority of employees fall within the lower end of the pay scale.

Table 1: Pay in Zambian Copper Smelting and Processing Operations as of Sentember 2014 (Chinese Companies in Italian)

Company	Pay Increase in 2011	Lowest Group Monthly Salary Range	Middle Group Salary Range	Highest Group Salary Range
Smelting, Proces	sing, and Eng	gineering		
Chambishi Copper Smelter (CCS)	12%	US\$117 (G9)	\$141 to \$154 (G7, half the employees)	\$261-\$340 (G2/G1)
KCM (surface)		\$544-\$634 (KCM 1)	\$631-\$756 (KCM 3)	\$665-\$808 (KCM 4)
(hot metal) ³¹⁷	11.5%	\$596-\$694	\$691-\$828	\$728-\$885
Mopani (surface)		\$466-\$503 (M8)	\$508-\$545 (M7)	\$562-\$717 (M6)
(hot metal)	11.5%	\$497-\$536	\$541-\$580	\$596-\$764
Processing and Engineering Only				
Sino Metals	12%	\$101-\$118 (L10: cleaners, attendants)	\$116-\$161 (most workers, L9-L7)	\$213-\$287 (L4 to L2)
Chambishi Metals	9%	\$360	\$475	\$655
Kansanshi ³¹⁸	9.9%	\$348	\$481-625	\$1030

September 2011 (Chinese Companies in Italics)

As seen in the second column of Table 1, companies provided pay increases between 9 and 12 percent for the 2011 collective bargaining agreements. The Chinese companies both provided 12 percent increases, although workers demanded much higher and, at CCS, originally went on strike over the 12 percent proposal.³¹⁹

Table 2 shows salaries at the underground copper mining operations in Zambia, as well as at Lumwana, a surface-only copper mining operation. Although the differences are not as pronounced as in the processing and smelting operations, the Chinese companies are again consistently the lowest payers, with NFCA generally paying about one-half to one-third what underground competitors pay for the same work.

³¹⁷ At KCM and Mopani, those who work in the hot metal department—a part of the smelting operations where miners are often exposed to extreme heat—are paid higher rates. Human Rights Watch includes both the surface pay and the hot metal here, as they encompass jobs comparable to those at Chambishi Copper Smelter.

³¹⁸ Human Rights Watch saw the collective bargaining agreements for the other companies listed, whereas this information comes from an interview with a union representative at Kansanshi. Human Rights Watch phone interview with union representative at Kansanshi, Solwezi, September 27, 2011.

³¹⁹ Reuters, "Zambia's Chinese-owned copper plant workers strike," March 25, 2011; Nicholas Bariyo, "Zambia Miners Union Says It Has Resolved Labor Dispute At Chambishi," Dow Jones Newswires, April 4, 2011.

Prior to 2008, the differences in salaries between the main copper mining companies often did not reflect that some companies contracted out substantial portions of their operations to subcontractors that then paid a fraction of the wages for the same work done by permanent employees of the parent company. One report found that in September 2006 almost 40 percent of the copper miners were employed by subcontractors, with wages for some subcontractors only 40 to 50 percent those paid by the main company for the same work.³²⁰ The two largest mining companies, the Indian-owned Konkola Copper Mines and the Swiss/Canadian-owned Mopani Copper Mines, both had sizeable parts of their workforces employed by subcontractors.³²¹ However, government officials and business representatives told Human Rights Watch that the Ministry of Labor outlined in 2008 that subcontractors had to pay salaries that were at least 80 percent of that paid by the main company to permanent employees, reducing the previous disparity.³²² As a result, while both the Chinese companies and other multinationals still use subcontractors, the wages below reflect salaries achieved through collective bargaining with unions for the employees of the parent mining companies.

Company	Pay Increase 2011	Lowest Group Monthly Salary Range	Middle Group Salary Range	Highest Group Salary Range
NFCA (underground)	10%	\$229-\$245 (L8)	\$262-\$296 (L5)	\$385-\$485 (L1)
China Luanshya Mine (CLM) (underground)	12%	\$358-\$370 (UG7)	\$375-564 (UG4)	\$450-\$712 (UG1)
Mopani (underground)	11.5%	\$521-\$563 (M8)	\$566-\$608 (M7)	\$625-\$808 (M6)
KCM (underground)	11.5%	\$623-\$726 (KCM 1)	\$722-\$866 (KCM 3)	\$761-\$925 (KCM 4)
Chibuluma (underground) ³²³	13.5%	\$416-\$489 (G8)	\$461-\$534 (G5)	\$618-\$691 (G1)
Lumwana (open-pit only)	12%	\$440-\$506 (J6)	\$609-\$699 (J4)	\$930-\$1070 (J1)
Sandvik ³²⁴ (2010 salary level) (underground)	n/a	\$460-\$560 (helper, lower- level atrisans)		\$955-\$1156 (higher- skilled technicians and artisans)

Table 2: Basic Pay in Zambian Copper Mining Operations as of September 2011(Chinese Companies in Italics)

³²⁰ Frasier and Lungu, *For Whom the Windfalls*, pp. 22-26. See also Dan Haglund, "Chinese 'push factors' and the EITI in Zambia," https://minewatchzambia.blogspot.com, July 4, 2008.

³²¹ Frasier and Lungu, For Whom the Windfalls, pp. 22-26.

³²² Human Rights Watch interviews with high-level official in the Ministry of Labour, Lusaka, July 19, 2011; and with high-level official in Zambia's Chamber of Mines, Lusaka, July 18, 2011. See also "MUZ Expresses Sadness," *Times of Zambia*, April 15, 2008.
³²³ Each worker also receives a 680,000 Kwacha (US\$142) subsistence allowance that appears to be unique to Chibuluma. Human Rights Watch has not included it here, despite it being standard and unique, to be consistent in reporting only the "basic pay" of each company.

³²⁴ Sandvik does not own a mine itself, but is rather a contractor that works in other mining projects. These figures come from the 2010 collective bargaining agreement, as opposed to the 2011, which Human Rights Watch was not able to obtain.

China Luanshya Mine (CLM) is slightly more competitive in its pay than NFCA—particularly for the most skilled workers—but this appears to be a result of the context in which the Chinese investor took over the mine. While, as detailed in the Background, the Chambishi underground mine lay dormant for over a decade before NFCA reopened the mine and started production, Luanshya's mine was dormant for less than a year. More than a dozen miners at CLM, as well as national union officials, told Human Rights Watch that the Chinese management was forced to essentially carry over the previous conditions of service—including pay—when it started production.³²⁵ Even a high-level Zambian member of management at CLM, who otherwise defended the actions of the Chinese owners there, echoed this explanation as to why CLM paid better than the Chambishi-based operations.³²⁶

³²⁵ Human Rights Watch interviews with miners at CLM, Luanshya, November 2010 and July 2011; with national official in MUZ, Lusaka, July 2011; and with national official in NUMAW, Lusaka, July 2011.

³²⁶ Human Rights Watch interview with high-level member of management at CLM, Luanshya, November 10, 2010.

Annex V: Salary Breakdown at Sino Metals and CCS as of September 2011

SINO METALS			
Grade	Number of employees	Low monthly salary range (in Kwacha, 4800 per US\$)	High range
L11	1	435,456	516,096
L10	16	487,065	567,705
L9	127	555,878	636,518
L8	11	624,691	705,331
L7	29	693,504	774,144
L6	56	779,520	860,160
L5	15	882,737	963,379
L4	7	1.020 million	1.101 million
L3	8	1.175 million	1.256 million
L2	2	1.296 million	1.376 million
L1	0	1.468 million	1.548 million

CHAMBISHI COPPER SMELTER			
Grade	Low monthly salary range (in Kwacha, 4800 per US\$)	High range	
G9	n/a	560,000	
L8	627,200	677,376	
L7 (over half the employees fall in this salary range)	689,920	740,096	
L6	752,640	852,992	
L5	878,080	978,432	
L4	1,033,520	1,103,872	
L3	1,128,960	1,229,312	
L2	1,254,400	1,354,752	
L1	1,379,840	1,630,720	

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Human Rights Watch particularly expresses its gratitude to the copper miners who agreed to share their stories. Many were coming off 12-hour shifts in demanding conditions, yet graciously consented to take further time and describe the difficulties they faced in the mines. They often spoke with pride at the great Zambian mining tradition and expressed little more than a desire to provide for their families in an environment that respected their basic rights. We hope that this report plays a role in the achievement of those goals.

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"You'll Be Fired if You Refuse"

Labor Abuses in Zambia's Chinese State-owned Copper Mines

The past decade has seen burgeoning investment across Africa by private and state-run Chinese enterprises. This report, based on three field missions to Zambia in November 2010 and July 2011 and interviews with 143 miners, examines the labor practices of a Chinese state-owned enterprise in four copper mining operations in Zambia. While Zambia's copper miners welcome Chinese-run companies' substantial investment and job creation, they also encounter abusive employment conditions that violate national and international standards and fall short of practices among the other multinationals operating in Zambia's copper mining industry.

Miners at Chinese-run companies described consistently poor health and safety standards, including inadequate ventilation that can lead to serious lung diseases, hours of work in excess of Zambian law, the failure to replace workers' damaged protective equipment, and routine threats of being fired should they refuse to work in unsafe places. These practices, combined with the already dangerous nature of the work, cause injuries and other health complications. Many of the labor practices in Zambia seem to be exported from China's domestic mining industry, with safety and health measures treated as irritating barriers to greater profits, rather than as good business practices, both in the Chinese domestic mining industry and in Chinese-run mines in Zambia.

Primary responsibility for ensuring that Zambia's copper mines operate in accordance with national and international standards rests with the Zambian government, which has largely failed to enforce the country's labor laws and mining regulations. A September 20, 2011, presidential election brought to power longtime opposition politician Michael Sata, who has long been critical of labor practices in Chinese-run companies.

Sata should now demonstrate that his rhetoric will be matched by action to protect workers' rights. "You'll Be Fired if You Refuse" calls on the Sata government to swiftly address the inadequacies in Zambia's Mines Safety Department and greater penalize mining operations that violate safety regulations and other labor laws.

A Zambian does construction work at China Luanshya Mine as a Chinese manager looks on. China Luanshya Mine is one of four copper mining companies in Zambia operated by the Chinese parastatal China Non-Ferrous Metal Mining Company.

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