



April 9, 2013

Mr. James Anaya
Special Rapporteur on the Rights of Indigenous Peoples
c/o OHCHR-UNOG
Office of the High Commissioner for Human Rights
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Dear Mr. Anaya:

Thank you for inviting the public to provide comments and information on case studies for your 2013 study on extractive and energy industries in and near indigenous territories. We understand that the final report will analyze these industries' impacts on indigenous peoples and their human rights, identify good practices to avoid or overcome those issues, discuss the applicable human rights principles, and include a series of recommendations. To assist in your process, Earthjustice and AIDA¹ are writing to highlight inadequate mine closure as a significant cause of violations of indigenous rights; to describe two important practices that can help ensure adequate funding for mine-closure and restoration of the environment ("reclamation"); to recommend an excellent resource for understanding actions that can help prevent harms to indigenous and other communities living near and downstream from mines; and to offer our continued assistance with your important effort.

Inadequate Mine Closure: The Example of the Kori Kollo Mine, Bolivia

Mining does not only cause harm during mine operations. Inadequate closure, restoration and monitoring of a mine site can cause serious long-term contamination of water, soil and biota. These problems can result in violations of human rights, including the rights to health, clean water, and a healthy environment, as well as violations of indigenous rights to culture, food and means of subsistence, lands and natural resources.

¹ Earthjustice is a non-profit public interest law organization dedicated to protecting the magnificent places, natural resources, and wildlife of this earth, and to defending the right of all people to a healthy environment. Countering the environmental and human threats of the mining and extractive industries has been part of Earthjustice's work for over 40 years. AIDA is a nonprofit environmental law organization that works to strengthen people's ability to guarantee their individual and collective right to a healthy environment. AIDA's program on freshwater resources is focused in part on the environmental and public health impacts of mining in the Americas. See <http://www.aida-americas.org/en/freshwater> and <http://www.aida-americas.org/mining>.

In the years and decades after a mine is closed, chemical and geological processes can cause acid mine drainage that contaminates areas near and downstream from the mine. Because of the time required for these processes, the extent of environmental problems may not be known until long after the mine is closed.

The **Kori Kollo mine** in Bolivia provides a striking case study of the harms caused by inadequate mine closure. In the Oruro region of Bolivia, subsistence-based Quechua, Aymara and Uru indigenous communities living near and downstream from the partially closed Kori Kollo gold mine are suffering harms because of inadequate mitigation of contamination from the mine.² A transfer of mine ownership raises questions about closure processes and responsibility for remediation. Ongoing complaints of pollution by local communities, a lack of information about closure processes and costs, and new governmental findings of severe water and soil contamination from the mine merit further investigation by the Special Rapporteur.³

The Kori Kollo mine began production in the 1980s. In 2001, Newmont Mining Corporation, one of the world's largest gold producers, acquired majority ownership of Kori Kollo's operator, Empresa Minera Inti Raymi ("Inti Raymi"). Mining at Kori Kollo stopped in 2003, though gold continues to be produced on site from ores mined elsewhere. In 2009, Newmont transferred its interest in Inti Raymi to companies owned by Bolivian nationals,⁴ but continues to receive royalties from ongoing gold production at the mine.⁵ It is unclear if the new owners will have adequate resources for clean-up, especially when compared to a large multinational corporation with diverse sources of income. The sale of the mine and departure of Newmont from Bolivia raises questions about Newmont's availability to address environmental harms caused by operations at Kori Kollo.⁶

² See, e.g., La Razon, *Culpan a Inti Raymi por contaminar y causar sequía* (January 30, 2012), http://www.la-razon.com/suplementos/especiales/Culpan-Inti-Raymi-contaminar-sequia_0_1551444917.html.

³ See e.g., CORIDUP, *Desilusión y decepción de las comunidades después de conocer los resultados de la Auditoría Ambiental al proyecto "Kori Kollo"* (Sept.2012),

http://www.cepaoruro.org/index.php?option=com_content&view=article&id=957:desilucion-y-decepcion-de-las-comunidades-despues-de-conocer-los-resultados-de-la-Auditoria-ambiental-al-proyecto-qkori-kolloq-21-09-12&catid=31:coridup&Itemid=41. For more information on this case, please contact Jessica Lawrence, Research Associate of Earthjustice's International Program, at jlawrence@earthjustice.org.

⁴ Newmont Mining Corporation, *The South American Region* (accessed April 1, 2013) <http://www.newmont.com/south-america1>.

⁵ Newmont Mining Corporation, *Kori Kollo Sold*, (December 2009), <http://www.newmont.com/features/our-business-features/Kori-Kollo-Sold>. ("The buyer assumed all obligations of the operation and agreed to pay Newmont a nominal royalty from future production. With this sale, Newmont has no remaining operations in Bolivia.")

⁶ The World Bank could also have played a role in causing environmental damage from Kori Kollo because the International Finance Corporation loaned Inti Raymi US\$40 million in 1991. (At that time Inti Raymi was majority-owned by Battle Mountain Gold, which was bought by Newmont in 2001.) See Lawrence Bouton, *Results on the Ground 2*, International Finance Corporation (1998),

http://books.google.com/books?id=lkhFwxay0wEC&pg=PA3&lpg=PA3&dq=IFC+kori+kollo&source=bl&ots=rdq_cRSqFM6&sig=IeIliMVH7j2zGf-GBuTs1HbMk&hl=en&sa=X&ei=te5dUY7cB-PO0QH08oHwCQ&ved=0CC4Q6AEwAA at 3.

Over the years, nearby and downstream indigenous communities filed over 900 official complaints about negative impacts of the mine.⁷ In 2012, a government environmental audit of Kori Kollo confirmed various harms in the region, including: acid mine drainage; severe salinization of groundwater and soils; contamination of groundwater with cyanide, cadmium, zinc and copper beyond levels allowed in Bolivia; violations of several water quality laws; and environmental and economic damages valued at US\$4 million.⁸ However, the audit provided no information to affected communities on when or how the mine site will be appropriately closed and restored, whether the pollution will be mitigated, or whether the impacted communities will be compensated for their loss of freshwater, healthy soils, crops, fish stocks, and forage for livestock.⁹



Figure 1. One of two open pits of the Kori Kollo mine, 780 feet deep and 143 acres in surface area, before and after being filled with scarce river water, now severely contaminated with salts and toxic heavy metals. Credit: Jaime Caichoca (CEPA 2012).

Newmont did establish a US\$13 million trust fund for “closure and reclamation” of Kori Kollo and another large-scale open pit gold mine when it sold its share of Inti Raymi.¹⁰ However, comparing this amount to remediation costs at other sites, it seems highly unlikely that the fund will be sufficient for adequate closure of these two mines. If the mine had been in the United States, Newmont could have been required to establish a financial guarantee of between US\$292 million and US\$876 million for the Kori Kollo mine alone.¹¹ Even considering the cost

⁷ Ministerio de Medio Ambiente, P.C.A. Consultores, *Auditoría Ambiental de las Operaciones Minera de Kori Kollo, Informe Fase III* (Sept. 2012) (Auditoría Ambiental Kori Kollo Informe Fase III), at 19.

⁸ Auditoría Ambiental Kori Kollo Informe Fase III, at 4, 19, 23, 5-74, 5-89, 6-21, and 6-42.

⁹ See e.g., CORIDUP, *Desilusión y decepción de las comunidades después de conocer los resultados de la Auditoría Ambiental al proyecto “Kori Kollo”* (Sept. 2012), http://www.cepaoruro.org/index.php?option=com_content&view=article&id=957:desilucion-y-decepcion-de-las-comunidades-despues-de-conocer-los-resultados-de-la-Auditoria-ambiental-al-proyecto-qkori-kolloq-21-09-12&catid=31:coridup&Itemid=41.

¹⁰ Newmont Mining, *Annual Report 2009* (2009), http://newmont.q4web.com/files/doc_downloads/2009_Annual_Report.pdf at 60.

¹¹ Mining reclamation bonds vary greatly among US states. According to mining experts at Kuipers and Associates, hard rock mines operating in the United States with mine features similar to the Kori Kollo mine have reclamation and closure costs estimated between US\$20,000 and US\$60,000 per acre, or more, to complete reclamation and closure tasks including earthworks, water treatment and long-term care and maintenance. Mine examples with costs in this range include Questa (NM), Chino and Tyrone (NM), Golden Sunlight Mine (MT), Zortman Landusky Mine (MT), Beal Mountain Mine (MT), Pogo Mine (AK). See also Kuipers 2000, *supra*, at 47-48. We calculated a

differentials between the US and Bolivian economies, the amount set aside by Newmont for reclamation of the Inti Raymi mines is strikingly low.

Moreover, it is unclear who holds or manages the US\$13 million closure fund and how much, if any, has been or will actually be used to protect the indigenous communities impacted by Kori Kollo's environmental harms. Even if the money is spent as effectively as possible, the indigenous communities will most likely continue to suffer the long-term impacts of the mine, including acid mine drainage, salinization and heavy metal contamination of water, soil and livestock, with scant hope of adequate pollution control.¹²



Figure 2. The large terraced hill in the background is the massive cyanide heap leach pad of Kori Kollo, which has contaminated groundwater with cyanide and other toxic pollutants over many years. Credit: Scott McKittrick (WEFTA 2011).

Laws and Guarantees to Ensure Adequate Cleanup and Monitoring

In light of situations like the Kori Kollo mine, we would like to draw your attention to two important legal tools that can be used to help prevent violations of indigenous rights arising out of negligent mine-closure or post-closure practices: **laws establishing strict, joint and several liability**¹³ for harms caused by mining, including necessary cleanup and monitoring; and up-

disturbance area of 14,608 acres for Kori Kollo's mine from the 2012 environmental audit of the Bolivian Ministry of Environment and the 2003 Kori Kollo Closure and Reclamation Plan.

¹² See, e.g. CORIDUP, *Desilusión y decepción de las comunidades después de conocer los resultados de la Auditoría Ambiental al proyecto "Kori Kollo"* (Sept. 2012), http://www.cepaururo.org/index.php?option=com_content&view=article&id=957:desilucion-y-decepcion-de-las-comunidades-despues-de-conocer-los-resultados-de-la-Auditoria-ambiental-al-proyecto-qkori-kolloq-21-09-12&catid=31:coridup&Itemid=41; see also Juan Carlos Montoya Choque y Richard Silver Mendieta Cardenas, *Salinización y metales pesados. Evaluación ambiental de la mina Kori Kollo (EMIRSA) en el área de influencia, con aplicación de la Teledetección SIG*, CEPA (2006); see also Mines and Communities, *Latin American Update June 2007, Bolivia: Part II: An Emerging Mining Policy for Bolivia*, Andean Information Network, *The Voice Not Heard: Mining and the Environment*, www.minesandcommunities.org/article.php?a=449.

¹³ Strict liability holds the polluter liable regardless of negligence or fault. Joint and several liability holds all those who contributed to the harms both individually and mutually responsible—any polluter is potentially liable for all costs no matter how much of the total contamination is directly a result of their activities. An example of a law that establishes strict, joint and several liability is the U.S. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("Superfund"), 42 U.S.C. §§ 9601-9675 (1980).

front **financial guarantees** to ensure adequate funding for cleanup and monitoring in the absence of liability laws, or when the responsible parties are unavailable or do not have adequate funds.

Although some of the harms caused by inadequate mine closure may be prevented or reduced through the use of best practices for environmental management, mining companies frequently fail to implement such practices. Whether due to negligence, metal price fluctuations or mismanagement leading to bankruptcy, or rapid mine-closure,¹⁴ these failures can result in mine sites that pose severe long-term threats to environmental health.

To avoid or minimize such risks, two protections should be in place. First, laws and regulations should make mine operators fully responsible for all environmental and social harms caused by the mining activity, even after mine closure or transfer of ownership. The concerns described above are not hypothetical. The need for such laws is demonstrated by the **500,000 historic abandoned mines in the western United States**. The Environmental Protection Agency (EPA) has found that such mines have contaminated stream reaches in the headwaters of more than 40 percent of the watersheds in the West, and will cost US taxpayers up to US\$35 billion or more to remediate.¹⁵

The **Berkeley Pit** mine in Montana is a good example of how laws holding operators fully responsible can address this problem. After the Berkeley Pit mine closed, a lake formed in the pit of the mine. This lake is extremely acidic and laden with dissolved toxic heavy metals.¹⁶ In 1995, a flock of nearly 350 migrating snow geese landed in the Berkeley Pit water and died from interior burns due to the polluted water.¹⁷ The contaminated pit lake will ruin the groundwater of the city of Butte if it rises to a height where the lake intersects with the potable water aquifer. To prevent this, water from the lake must be pumped out and treated in perpetuity.¹⁸ Because of the liability provisions of the Superfund law¹⁹ in the United States, which holds all the former operators jointly liable regardless of fault, the government was able to force former operators to clean up contaminated areas, establish a reclamation guarantee of US\$87 million, a water treatment plant of US\$18 million, and pay for perpetual water treatment expenses of US\$4.5 million per year after 2017.²⁰

It is rarely the case in developing countries today that regulatory structures enable governments to hold mine operators fully liable for the harms caused by their operations. It is therefore important to ensure that contracts and laws make eminently clear that the liability for final and complete clean-up, and the costs of perpetual treatment, if necessary, rests with the company,

¹⁴ See Marta Miranda, David Chambers, and Catherine Coumans, *Framework for Responsible Mining: A Guide to Evolving Standards* (2005), <http://www.frameworkforresponsiblemining.org/index.html>, (“Framework”) at 37-46.

¹⁵ US Environmental Protection Agency, *Liquid Assets 2000: Americans Pay for Dirty Water* (accessed April 1, 2013), <http://water.epa.gov/lawsregs/lawsguidance/cwa/economics/liquidassets/dirtywater.cfm>.

¹⁶ US Environmental Protection Agency, *Silver Bow Creek/Butte Area* (accessed April 1, 2013), <http://www.epa.gov/region8/superfund/mt/sbcbutte/>.

¹⁷ Edwin Dobbs, *New Life in Death Trap*, *Discover Magazine* (December 2000), <http://discovermagazine.com/2000/dec/featnewlife>.

¹⁸ *Id.*

¹⁹ U.S. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“Superfund”), 42 U.S.C. §§ 9601-9675 (1980).

²⁰ Wikimapia, *Horseshoe Bend water treatment plant*, <http://wikimapia.org/10393258/Horseshoe-Bend-water-treatment-plant>.

even—and especially—in situations when the mine owners are headquartered outside the country of operation and might otherwise sell a mine in an attempt to avoid liability.

Liability laws may not always be enough to guarantee adequate monitoring and appropriate cleanup. In many countries, such laws do not yet exist. Even where they exist, they may be difficult to enforce, or bankruptcy or relocation may take the responsible parties beyond the reach of the law. For these reasons, mining permits or other pre-mining approvals should be conditioned on the establishment by the mining companies of independently held **financial guarantees** (also called sureties or reclamation bonds) that will fully cover the costs of reclamation, monitoring and long-term waste treatment and disposal.²¹ While such guarantees are commonplace in developed countries, there are many countries where financial guarantees are not fully or even partially implemented.²²

Without some kind of financial guarantee, if the local or national government is unable or unwilling to cover the costs of necessary closure and reclamation work, local communities may suffer the impacts of long-term toxic contamination with little recourse for assistance. Indigenous peoples are often disproportionately affected by such circumstances.²³

The need for financial guarantees is demonstrated by the **Zortman Landusky** gold mine. In this case, the mine operator, Pegasus Gold, had been required to provide US\$40 million in bonds to cover costs of potential environmental harms. Even so, when the owner of the mine declared bankruptcy in 1998, the state government was forced to do the clean-up and pay the US\$12 million difference between the financial guarantee and actual clean-up costs. Water treatment, which is required in perpetuity, currently costs US\$1.5 million dollars per year, about double the amount of the water treatment bond that is available annually.²⁴

Another example is the **Summitville** Mine in Colorado, which was abandoned by its bankrupt owner, Canadian-owned Galactic Resources, in 1992.²⁵ Later that year, when the heap leach system overflowed and killed all aquatic life along an 18-mile stretch of the Alamosa River, the state of Colorado requested that the EPA address environmental threats at the mine site on an

²¹ See *Framework, supra*, at 40 (“Because closing a mine can typically cost tens of millions of dollars, regulators need a dependable source of funds to pay for the physical reclamation of the mine site as well as the necessary oversight by government officials.... Government agencies need financial sureties that are readily available to ensure that mine reclamation occurs. Should a mining company default on its closure commitments, funds will be required immediately to operate and maintain mine facilities, such as water treatment plants.”); James Kuipers, *Hardrock Reclamation Bonding Practices in the Western United States*, National Wildlife Federation (2000) http://www.earthworksaction.org/files/publications/hardrock_bonding_report.pdf at 2 (“Reclamation bonding is meant to serve as an ‘insurance policy’ against pollution problems. It is a cache of money that mining companies are required to put down before beginning work, and which can be used for clean-up down the road, if needed.”)....

²² See *Framework, supra*, at 40.

²³ See *Framework, supra*, at 37-46.

²⁴ Montana Department of Environmental Quality, *Zortman-Landusky Reclamation, Phillips County, Montana* (2011) <http://deq.mt.gov/recovery/remediation/ZortmanLandusky/default.mcpx>; US Bureau of Land Management, *Zortman and Landusky Mines, Phillips County, Montana*, http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/lewistown/zortman.Par.32256.File.dat/ZLbackground.pdf; Erin P. Billings, *State faces cleanup bill for mines*, *Missoulian*, (March 8, 2000), http://missoulian.com/state-faces-cleanup-bill-for-mines/article_76c25155-01aa-567b-9cb4-8417e762153d.html.

²⁵ *Id.*

emergency basis. Though the company forfeited US\$4.5 million in cash and equipment, and state and federal governments later won US\$28 million in a bankruptcy settlement,²⁶ the EPA continues to spend US\$30,000 per day to treat contaminated mine drainage from the site, and full reclamation costs are estimated to be US\$170 million.²⁷

These situations show the importance of understanding the financial status of any company proposing a mining project before approving its permit, and of estimating financial guarantees accurately – and even conservatively – to avoid shortfalls if the company goes under before fully reclaiming the area.

The Berkeley Pit, Summitville and Zortman Landusky experiences demonstrate that strong liability laws to redress environmental harms, and mandatory, transparent, and independently-held financial guarantees for mine closure can help protect governments from having to pay the exorbitant costs of mine reclamation and long-term monitoring or treatment. Especially in developing nations where funding is scarce and governments may not have the resources to cover these costs, in the absence of such laws and guarantees, nearby and downstream rural and indigenous communities stand to lose greatly from the long-term impacts of poorly regulated extractive industry activities.

Bolivia and the Kori Kollo mine could prove to be a case in point in Latin America. Based on the scant information publicly available on this subject, it appears that Bolivian law may not require long-term liability of foreign mining companies operating joint ventures in Bolivia, nor does Bolivia seem to have required independently held financial guarantees of appropriate magnitude to cover long term costs.

The Framework for Responsible Mining

A comprehensive understanding of recommended practices to reduce the impacts of mining is important for all communities affected by mines, not only indigenous peoples. Such recommendations are particularly important for affected indigenous communities, as they have been disproportionately impacted by the negative social and environmental effects of mining. Additionally, indigenous communities have not historically had easy access to such information.

We therefore wish to recommend an excellent resource for understanding actions that can be taken to help alleviate harms to indigenous and other communities living near and downstream from mines. The *Framework for Responsible Mining: A Guide to Evolving Standards*,²⁸ developed by a geographer, a geophysicist, and an anthropologist, all of whom have extensive experience with the social and environmental impacts of mining, describes, in a manner accessible to non-experts, both common and best practices for all aspects of mine planning, exploration, implementation, reclamation, closure, and long-term monitoring, as well as impacts

²⁶ James Kuipers, *Putting a Price on Pollution: Financial Assurance for Mine Reclamation and Closure*, Mineral Policy Center and Center for Science in Public Participation (March 2003),

<http://www.earthworksaction.org/files/publications/PuttingAPriceOnPollution.pdf> at 9.

²⁷ US Environmental Protection Agency, *Liquid Assets 2000: Americans Pay for Dirty Water* (accessed April 1, 2013), <http://water.epa.gov/lawsregs/lawsguidance/cwa/economics/liquidassets/dirtywater.cfm>.

²⁸ Framework report, *supra*.

on the environment, human rights, and indigenous rights. It provides a well-researched and thoughtful analysis of key issues that should be addressed when defining "responsible mining," and does not represent the views or positions of any specific company, NGO, or civil society group. The full report is available in English and Spanish at: <http://www.frameworkforresponsiblemining.org/index.html>. We append below selected recommendations from the report that we believe would be most relevant for your 2013 extractive industries report.

We are hopeful that your report and related processes will improve understanding of these sometimes technical recommendations for best practices. We also hope they will provide some guidelines for the government agencies that are obligated to protect the rights of indigenous peoples, and the corporations that must respect them.

* * *

We hope these recommendations are helpful, and we offer our continued assistance to you as you move forward in this process. In particular, Anna Cederstav, Co-Executive Director of AIDA, has expertise that you may find valuable. Since earning her Ph.D. in chemistry from the University of California at Berkeley in 1996, Dr. Cederstav has worked on the environmental impacts of natural resource extraction in Latin America. She served on the assurance committee for the Mining, Minerals and Sustainable Development Project, an industry-led initiative that in 2001-2003 sought to identify and address environmental and social concerns with the global mining sector. She is also on the board of Center for Science in Public Participation (www.csp2.org), an organization that provides technical expertise to communities affected by mining.

Please do not hesitate to contact us should you desire our further assistance in your important work to protect indigenous communities from harm posed by extractive industries.

Sincerely,



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Selected Recommendations from *Framework for Responsible Mining* (2005)

Chapter 2. Ensuring Environmentally Responsible Mining

A. Exploration

(1) Details of the exploration project and potential impacts should be made available to affected communities and area residents in an appropriate language and format, and should be made accessible to the public.

(2) To cover the lasting environmental impacts of the exploration phase, companies should provide adequate financial guarantees to pay for prompt cleanup, reclamation, and long-term monitoring and maintenance.

B. Environmental Impact Analysis

(1) Stakeholders should be given adequate notification, time, financial support to pay for technical resources, and access to supporting information, so that participation in the EIA process is effective.

(2) Companies should collect adequate baseline data during the EIA process.

(3) Environmental costs, including those associated with regulatory oversight, reclamation, closure, and post-closure monitoring and maintenance should be included in the environmental impact assessment.

(4) Environmental assessment should include worst-case scenarios and analyses of off-site impacts. Companies should work with potentially affected communities to identify potential worst-case emergency scenarios and to develop appropriate response strategies.

C. Water Contamination and Use

(1) Companies should make discharge reports of contaminants to surface and ground waters publicly available.

(2) A qualified professional should certify that water treatment, or groundwater pumping, will not be required in perpetuity to meet surface or groundwater quality standards beyond the boundary of the mine.

(3) Minimizing water usage should be a stated mine management goal.

(4) Mine dewatering should be minimized to prevent all undesirable impacts on ground and surface waters, including seeps and springs.

D. Acid Mine (Rock) Drainage

(1) Companies should conduct adequate pre-mining and operational mine sampling and analysis for acid-producing minerals, based on accepted practices and appropriately documented, site-specific professional judgment. Sampling and analysis should be conducted in accordance with the best available practices and techniques.

E. Air

(1) Companies should monitor and publicly report airborne hazardous emissions (particularly mercury, lead, and greenhouse gases).

F. Energy Consumption

(1) Reducing energy use and greenhouse gas emissions should be a stated mine management goal.

G. Noise

(1) Maximum noise level requirements should be implemented at the project boundary.

H. Waste Management

(1) Tailings impoundments and waste rock dumps should be constructed to minimize threats to public and worker safety, and to decrease the costs of long-term maintenance.

(2) Tailings impoundments and waste rock dumps should be constructed in a manner that minimizes the release of contaminants by installing liners if seepage would result in groundwater contamination. In addition, waste facilities should have adequate monitoring and seepage collection systems to detect and collect any contaminants released in the immediate vicinity.

(3) Net acid-generating material should be segregated and/or isolated in waste facilities.

(4) Hazardous material minimization, disposal, and emergency response plans should be made publicly available.

(5) Rivers should not be used for the disposal of mine waste.

(6) Companies should not engage in shallow-water submarine waste disposal. Deep-water submarine waste disposal should not be used unless an independent assessment can demonstrate minimal environmental and social risks.

I. Cyanide

(1) Mine operators should adopt the Cyanide Management Code, and third-party certification should be utilized to ensure that companies implement safe cyanide management.

J. Reclamation and Rehabilitation

(1) Companies should develop a reclamation plan before operations begin that includes detailed cost estimates. The plan should be periodically revised to update reclamation practices and costs.

(2) Companies should restore all disturbed areas so that they are consistent with future uses.

(3) Companies should re-contour and stabilize disturbed areas. This should include the salvage, storage, and replacement of topsoil or other acceptable growth medium. Quantitative standards should be established for re-vegetation in the reclamation plan—and clear mitigation measures should be defined, to be implemented if these standards are not met.

(4) Where acid-generating materials are exposed in the rock wall of the mine, companies should backfill the mine pit if this would minimize the likelihood and environmental impact of acid generation. Backfilling options must include reclamation practices and design to ensure that contaminated or acid-generating materials are not disposed of in a manner that will degrade surface or groundwater.

(5) Where subsidence is considered likely, companies should backfill underground mine workings to prevent negative environmental impacts.

(6) Underground workings and pits should be backfilled to minimize the size of waste and tailings disposal facilities.

K. Financial Guarantees

(1) Financial sureties should be reviewed and upgraded on a regular basis by the permitting agency, and the results of the review should be publicly disclosed.

(2) The public should have the right to comment on the adequacy of the reclamation and closure plan, the adequacy of the financial surety, and completion of reclamation activities prior to release of the financial surety.

(3) Financial surety instruments should be independently guaranteed, reliable, and readily liquid. Sureties should be regularly evaluated by independent analysts using accepted accounting methods. Self-bonding or corporate guarantees should not be permitted.

(4) Financial sureties should not be released until reclamation and closure are complete, all impacts have been mitigated, and cleanup has been shown to be effective for a sufficient period of time after mine closure.

L. Post-Closure

(1) Reclamation plans should include plans for post-closure monitoring and maintenance of all mine facilities, including surface and underground mine workings, tailings, and waste disposal facilities. The plan should include a funding mechanism for these elements.

M. Monitoring and Oversight

(1) If permit violations occur, companies should commit to rapidly implementing corrections in order to maintain clean surface and groundwater.

(2) The environmental performance of mines and the effectiveness of the regulatory agencies responsible for regulating mines should be addressed in an independent environmental audit. These audits should be conducted on a regular basis and the results should be made publicly available.

(3) Communities should have the right to independent monitoring and oversight of the environmental performance of a mine.

Chapter 3. Ensuring That Mine Development Results in Benefits to Workers and Affected Communities

...

Indigenous Peoples and Free, Prior, and Informed Consent

(1) Companies should obtain the free, prior, and informed consent of indigenous peoples before exploration begins and prior to each subsequent phase of mining and post-mining operations.

Participation in Decision Making/Consultation

(1) Companies should negotiate with affected indigenous peoples and community men and women before exploration. Such negotiations should continue throughout the life of the mine, with the understanding that indigenous peoples or local communities may withhold consent at each stage of mine development.

(2) Companies should conduct consultations that are culturally appropriate, using mechanisms and institutions that are recognized by the affected indigenous peoples and community women and men in the area in which they wish to operate.

(3) Indigenous peoples and community women and men should be provided with sufficient resources to evaluate a project in order to decide whether, and how, they would like it to proceed.

(4) Companies should not try to extract a community decision in support of mining (or encourage governments to do so for them) as this may divide communities and create dissent.

Access to Information/Disclosure

- (1) The company should provide full disclosure of pertinent information regarding a mining project to both women and men, as well as to marginal groups within potentially affected communities, in culturally appropriate forms and in locally accepted languages, as well as in English.
- (2) The company should provide accurate information regarding employment opportunities for local people at the mine project, especially for women, indigenous peoples, and marginal groups in the community, as well as information regarding positive and negative economic impacts on non-employed members of the community, and “just transition” arrangements for employees and the community post-closure.
- (3) If requested by the community, companies should facilitate site visits to other mines they operate. Communities should be allowed to choose the sites they wish to visit, and such visits should be designed to allow communities to fully explore the company’s operations, including the opportunity to speak freely with other community members, as well as with critics, if any, of the mining company.

Consent-Benefit and Compensation Agreements

- (1) Companies should enter into binding contracts with communities that specify the terms under which a particular phase of a mining project may proceed. Such agreements should be mutually agreed upon and enforceable through the national court system in the country of operation or through mutually acceptable arbitration procedures.
- (2) Indigenous peoples and community women and men have the right to deny consent to a project if the project changes substantially or if the company does not honor its binding agreement with the community.
- (3) If a community has withheld consent for a mining project, no further requests for consultation by that company or any other should be made within a five-year period unless the community indicates otherwise.

....

H. Resettlement/Relocation and Compensation

- (1) Resettlement should be avoided if at all possible and should not occur without the free, prior, and informed consent of affected individuals set out in a binding Consent Agreement.
- (2) Voluntary resettlement must be preceded by a detailed displacement impact assessment that assesses all possible costs to communities and individuals who will be affected by the displacement, either directly or indirectly.
- (3) Companies should allow enough time for assessment, consultation, participation of affected people, alternative land acquisition, and resettlement.
- (4) Absence of legal title should not constitute a barrier to compensation through the resettlement process.
- (5) Resettled individuals should be better off in their new situation than they were before resettlement.
- (6) No displacement should take place until all likely risks and outcomes have been independently assessed for men and for women, a binding agreement is in place, compensation has been provided, alternate land has been allocated, people have had a chance to start rebuilding

in the new location and policies and facilities are in place that allow resettled people to preserve or increase their standard of living. In addition, resettled individuals should be able to access an independent complaint and dispute resolution mechanism.

(7) Companies should encourage the establishment of dispute resolution mechanisms so that affected women and men can freely participate in the successful implementation of the resettlement program. Any complaints should be acknowledged, recorded, and addressed expeditiously in an agreed-upon fashion.

(8) Performance bonds or resettlement insurance should be provided in case these efforts do not provide better livelihoods in the timeframe originally agreed upon.

(9) All payments and expenses related to resettlement and compensation should be publicly disclosed to ensure accountability and transparency and to counter charges of corruption or misuse of funds.

I. Security Issues and Human Rights

(1) Companies should conduct an independent peace and conflict impact assessment to assess the risk of provoking or exacerbating violent conflict through their operations. Companies should avoid investing in areas where the risk of violent conflict is high (e.g., in areas of civil war or armed conflict).

(2) Companies operating in conflict zones or using armed security guards should abide by all major international human rights agreements, international humanitarian law, and refugee law. Security forces should never be used to address conflicts between the company and community women and men or the company's workers.

(3) Companies should not operate in areas that require them to use military forces or excessive security in order to maintain their operations, as such conditions are likely to result in human rights abuses. Companies should also not pay for or provide logistical or other support for police or armed forces of the host country in return for security services at the mine.

(4) Companies should not adopt policies that create or intensify divisions in communities, including hiring traditional enemies of the local community or one faction of an internal division in the community as security guards.

(5) Companies should cooperate with conflict prevention and conflict resolution NGOs to alleviate existing conflicts.

(6) Companies should state in their contracts with security personnel the conditions under which force may be used and make these contracts public.

(7) Companies should make sure that mining infrastructure and properties, such as vehicles or explosives, are not used to further conflict and that economic rents from mining are not used to provoke or prolong civil conflict or to support regimes that abuse human rights.

Chapter 4. Ensuring Good Governance

A. Reporting

(1) Companies should report their progress toward achieving concrete environmental and social goals through specific and measurable indicators that can be independently verified. Such information should be disaggregated at a project or site-specific level.

(2) Financial institutions should report the environmental and social risks associated with their lending in the mining sector.

(3) Companies should report money paid to political parties.

B. Accountability

(1) An independent dispute resolution mechanism should be established so that communities can count on fair resolution of concerns they may have with mining companies.

Transparency

(1) Companies should report payments made to central governments, state or regional governments, and local government and authorities, and these payments should be compared to revenues governments receive, as well as to government budgets.

Corporate Governance

(1) Corporate governance policies should be made public, implemented, and independently evaluated.

(2) Companies should encourage adoption of sustainability concepts by employees in the workplace.

(3) Companies should review contractor practices to ensure compliance with sustainability principles.