

RESPONSIBLE MINING DEFINING WHAT IS MEANT BY “RESPONSIBLE MINING” *

EIGHT PRINCIPLES OF RESPONSIBLE MINING

Introduction: Why should mining become responsible? The main reason is that mining is wreaking havoc with communities and ecosystems worldwide. When the earth was relatively empty of people and ecosystems were intact, a mine here and there seemed to be acceptable. That idyll has markedly shifted. The world is now overfull of people and their artifacts. Mines often have to be squeezed between communities or are placed where they damage already scarce life-support systems such as forests or wetlands. Therefore communities and their life-support systems need more protection from industrial mines than was hitherto needed. This priority is relatively new for the mining sector and it is taking time for companies to adapt to this new reality. The default position has become that mining should not damage any life-support systems any longer. The conditions outlined in the paper are robust. Some regions are not at all suitable for mining, that is why an increasing number of

governmental jurisdictions have mandatory moratoria on mining. El Salvador, Costa Rica, and the Philippines are examples where moratoria on mining are in place or proposed as the prudent course.¹

* “Responsible mining” is widely used by mining corporations, but rarely with a definition. For example February 12, 2012 Philippine Daily Enquirer’s full page advert (p.20) paid by the Chamber of Mines, asserts: “Responsible mining boosts the economy, attracts investment, generates employment, improves the quality of life, protects the environment.” And yet there many are calls for Mining No Go Zones, such as in Australia: www.miningaustralia.com.au/.../margaret-river-declared-no-go-zone-for-coal-mining; www.sunshinecoastdaily.com.au/story/2012/02/14; India: www.downtoearth.org.in/content/environment-ministry-firm-no-go-zones; Peru: mininginparadise.org/en/node/79; and the Philippines: rosancruz.blogspot.com/2011/10/ginalopez-wants-no-go-zones-in-mining.html.

¹ For example: The 2012 “Mindanao Declaration: Defending the Dignity of Life, Securing our Future”. taborasj.wordpress.com/2012/01/27/mindanao-declaration-defending-the-dignity-of-life-securing-our-future/.

Eight principles are outlined here in order to ensure risky mines are never proposed. These focus on encouraging the best mining corporations, while keeping the worst corporations away. Mining corporations wanting to follow best practice for responsible mining will find this section useful in future projects.² Responsible here is used to mean having a capacity for moral decisions and therefore accountable; liable to legal review or in case of fault to penalties; based on or characterized by good

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judgment or sound thinking; honest, capable, reliable, trustworthy. Note that decisions, sound thinking and good judgment require much information. Mining is here used to mean the extractive industries of oil, gas and mining both metals and non-metals. This note focuses more on large-scale and industrial mining, and not on artisanal mining. It outlines the sort of information required in order to make mining responsible.³

1. *Transparency vs. Secrecy:* No social and environmental assessment should be kept secret from the potentially impacted stakeholders. Potentially impacted people must be fully and openly participating or meaningfully involved throughout the c.2-year EIA preparation period, from stakeholder identification, through Panel of Experts, drafting, Impact/Benefit Contract to restoration and rehabilitation.

2. *Acceptance by Stakeholders:* If Stakeholders Don't Want the Proposed Project: it should not go ahead. Stakeholders in-

2 Best practice means fully espousing all relevant policies and procedures as set out in OECD's Guidelines are recommendations addressed by governments to multinational enterprises operating in or from adhering countries. They provide voluntary principles and standards for responsible business conduct in areas such as employment and industrial relations, human rights, environment, information disclosure, combating bribery, consumer interests, science and technology, competition, and taxation. www.oecd.org/daf/investment/guidelines.

3 The best single source of further information on responsible mining is: IRMA: The Initiative for Responsible Mining Assurance: a multi-sector effort to develop a voluntary system to independently verify compliance with environmental, human rights and social standards for mining operations. Participants include mining companies, jewelry retailers, NGOs, organized labor and affected communities. (responsiblemining.net/. See also: Miranda et al., 2005).

clude mining company employees, local communities and residents and the government units receiving taxes and royalties and granting permits as well as the stockholders and managers of the company. Responsible mining corporations don't force mines on people and communities who don't want them. Corporations should follow some degree of Corporate Social Responsibility (CSR). Best corporations aim to ensure that all potentially impacted stakeholders actually welcome the project because the risks are slight, compensation is great, training, employment and procurement is attractive. FPIC is the best practice here, as mandated by UNDRIP.

3. *Food Production Trumps Questionable Mining:* The threats to life through depletion of water and food mining must not increase resources in areas of scarce land or water. Many national laws mandate that priority for water use is given to domestic use first, second to municipal water supply, third to irrigation, fourth to power generation, fifth to fisheries, livestock raising, and industrial use, and lastly to mining.

4. *Standards of Mining Corporations:* Better mining corporations will uphold all international social and environmental agreements.⁴ Better corporations possess in-house environmental and social units staffed by seasoned social and environmental professionals, which are adequately resourced to ensure the corporation follows best practice. The company has a clear policy on Corporate Social Responsibility (CSR) and complies with all applicable social and environmental policies of the host country and of the proponent's home country. Double standards are to be avoided. A sample of standards and codes of conduct followed by better mining corporations is provided in Figure 1 below.

5. *Pre-Qualification or certification of potential mining permit seekers:* National

4 For example: AWEA Migratory species; Unesco Biosphere Reserves; CBD on Biological Diversity; Cartagena Protocol on Biosafety, CITES on trade in species; CMS on migratory species, Plant Treaty, Ramsar Convention; World Heritage Convention; Basel, Rotterdam and Stockholm Conventions, UNCCD on desertification, UNFCCC on climate; Kyoto Protocol, Montreal Convention on ozone; Vienna Convention on ozone.

FIGURE 1: CODES OF CONDUCT AND STANDARDS FOLLOWED BY BETTER MINING CORPORATION

EITI: The Extractive Industries Transparency Initiative Plus Plus.

UNDRIP: The United Nations Declaration on the Rights of Indigenous Peoples.

UNHCR The United Nations High Commission for Human Rights.

The Voluntary Principles on Security and Human Rights

IRMA: The Initiative for Responsible Mining Assurance.

UN Convention Against Corruption

UN Precautionary Principle

The Voluntary Principles on Security and Human Rights.

The Equator Principles.

The UN Aarhus Convention

The Extractive Industry Review.

Corporate Social Responsibility.

The UN Global Compact.

The Environmental Liability Directive.

IPIECA Guidance Document on Sustainable Social Investment.

The ECOWAS Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector.

UN ILO Convention 169: Core Labor Standards.

The International Convention on Economic, Social and Civil Rights.

The International Convention on Elimination of all Forms of Racial Discrimination.

Convention on the prevention and punishment of the crime of genocide.

Voluntary Principles on Security and Human Rights.

UN Guiding Principles on Business and Human Rights

The OECD Guidelines for Multinational Enterprises.

The Akwé: Kon Guidelines

No-Go Zones for Mining

governments nowadays often mandate pre-qualification or certification of potential bidders on governmental work. This pre-qualification mechanism encourages the better corporations that already have Environmental and Social (E & S) units in-house, E & S codes and standards, and a reputable track record of E & S quality in previous projects. For example, MCEP (See: Soloman et al. 2006) project evaluated whether independent, third-party certification of environmental and social performance could be applied to mine sites. Three main questions were investigated during the project encompassing: governance; standards and assessment; and, assurance. However mining corporations with reprehensible track records,

often with no in-house E & S units, and no corporate social responsibility or E & S Policies will not meet pre-qualification criteria. This pre-qualification will promote the better companies, and discourage the weaker companies.

6. *Insurance and Performance Bonds:* Insurance and performance bonds are mechanisms to foster compliance with contractual obligations and to improve the quality of results. They are in widespread use in the construction industries and elsewhere. They should become standard in mining. The main challenge is setting the insurance and bonds high enough to cover accidents and non-compliance adequately and for long enough into the future. Often, after mine closure a miner may declare bankruptcy or be taken over by another company. Then if, some decades later, a toxic waste lagoon ruptures, liability is not as clear as desirable. The most notorious case at present is in Ecuador where Texaco polluted vast areas of Amazon forest for 30 years before they were bought out by Chevron. The 18 years of court trials in Ecuador and the USA recently led to fining Chevron US\$18 Bn., as Texaco's successor. The transferability of insurance bonds with the sale of the company needs to be clarified in advance.

7. *Social and Environmental Assessment:* Social and environmental assessment is mandated by the laws of many national governments. However, the quality and professionalism of some ESIA's are questionable; the aim is to achieve a reliable and effective ESIA. The mining proponent often selects the ESIA team, which then has a clear conflict-of-interest in not finding too many serious impacts. This conflict-of-interest has been realized for decades, so mechanisms to foster objectivity by ESIA teams paid by the mining proponent have become standard procedure. The first effective mechanism is for a small team or panel of social and environmental experts (PoE, see Goodland et al. 2011) to

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help the proponent select the most appropriate team to prepare the ESIA.⁵

8. *Royalties, Taxes and Fees*: see Andrew Bauer's paper. Caveat: Responsible mining also can be achieved by ensuring that the benefits accruing to the potentially impacted people clearly exceed the costs and impacts. This issue comes down to payments and other compensation from the mining proponent to the impacted people. World experience shows that, most unfortunately, compensation to impacted peoples and to their government almost always is marginal at best. How to set royalties, taxes, fees etc and other compensation sufficiently high is a financial & economic issue not dealt with here, but well outlined by Andrew Bauer (2012).

Five types of socially or environmentally sensitive areas, which are valuable when intact, and whose value would be jeopardized by extractive industries are given special consideration in mining regulations.⁶ If the potentially affected communities reject the project on these categories of lands, the area would be off-

limits to mining. Meaningfully informed, prior consent is a precondition for licensing mining operations. An important proviso is that offsets can be more valuable for local communities and even for conservation, so the possibility of trade-offs is available in certain cases. The five main types of areas off limits to mining are:

- 5 The PoE is composed of about three highly seasoned professionals who care more for their lifetime professional reputations and scientific objectivity, rather than for their next consultancy. They meet on site a couple of times a year to ensure the ESIA is off to a reliable start and that it is of good quality when the final draft appears in c.24 months time. The PoE usually let their names be known. If the ESIA team members are not identified by name, suspicion may arise about their capabilities. The PoE supports and strengthens the in-house E&S unit of the proponent and may liaise with the governments E&S staff. The second mechanism to foster quality is to ensure critical reviews of the final draft ESIA report to ensure it is reliable before it is released.
- 6 Based on: Dudley & Stolton 2002, IUCN, The Forest Stewardship Council, and the World Bank Group definitions of sensitive areas and high conservation value areas. See also: "World Heritage and Mining" IUCN/ICME.

1. *Indigenous Peoples Reserves*: Areas in which Indigenous Peoples live, or on which they depend. Ancestral Domains, Indigenous Peoples, tribal people, forest dwellers, vulnerable ethnic minorities; their territories, reserves or usucapion lands are off limits to mining.
2. *Conflict Zones*: Areas of overt or simmering/latent social conflict, especially armed conflict. Worldwide experience shows that mining in such conflict zones almost invariably exacerbates conflict. Land grabbing, deforestation and illegal expansion of mining, cattle ranching, and oil palm plantations still are fuelled by violence.
3. *Fragile Watersheds*: such as those protecting a dependent project downstream. Riparian ecosystems important for conserving riparian services. Watershed conserving water for irrigation or intensive agriculture below. Any mining activity is illegal within 1000 meters of any source of water. Some nations ban mining in all mountainous zones. Areas with active seismicity or geological faults should be avoided for mining because of the risk that toxic lagoons and heaps of mine wastes will rupture or leak. Steep slopes should be protected. Areas prone to landslides, lahars or mudslides should be off limits. No mining should be permitted in a wide swath either side of possible hurricane or cyclone paths. All water catchments above or feeding into irrigation need conservation.
4. *Biodiversity, Habitats and Wildlands*: Areas of high biodiversity and endemism, rare or endangered species, rare habitats, and intactness (e.g., coral reefs, mangroves, tropical rain forest, remaining old growth, biological hotspots, wetlands, and wilderness, as defined by IUCN and by Phillips (2001). This includes all conservation units, IUCN's Categories I thru IV and to a certain extent Categories V and VI, such as National Parks, state or provincial parks, UN Biosphere Reserves, World Heritage Sites, areas scheduled for inclusion in the national system of conservation units, protected forests, UN Ramsar Convention wetland sites, as well as their buffer zones. Most mangroves and old-growth tropical forests should be included.
5. *Cultural Property*: For example, an indigenous peoples religious site; sacred groves, battlefields, archeological sites, petroglyphs, geoglyphs or rich fossil sites. Note:

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there may conceivably be exceptions, for example, when a compensatory offset reserve is purchased with funding in perpetuity by the mining proponent, which is unambiguously bigger in size and richer in contents than the area sought for the mine.

THE EXCEPTIONS OF ENVIRONMENTAL OR COMPENSATORY OFFSETS⁷

As mentioned in the introduction, the default position for industrial mining is not to permit any harm to communities or their to life-support systems; the precautionary principle should prevail. But there may be some rare exceptions called compensatory offsets.

Compensatory environmental offsets are mainly environmental conservation measures designed to compensate for unavoidable environmental impacts caused by a development project. The advantage for the mining proponent is that offsets enhance a company's social license to operate, strengthen trust between proponent, impacted people and government, bolsters regulatory goodwill, and boosts the company's reputation —normally at low cost. Offsets often provide proactive companies (one that moves quickly) a "first mover advantage", as other, more reactive, companies find themselves dealing with high entry costs, unforeseen regulatory hurdles and fully developed and complex regulatory regimes

A clear case is if a mining company wants its project to be carbon-neutral. To become carbon-neutral the company would calculate the amounts of GHG it expects to emit over the course of the mine's life, then plant sufficient trees to sequester that amount of GHG. Another example would be biodiversity offsets where a mine cannot avoid converting say 10 km² of forest. The offset would be to conserve in perpetuity a similar tract of forest nearby of a small multiple⁸ of the 10 km² lost. So-

metimes a "Paper Park" is expanded by the multiple of the tract lost or is converted into a viable conservation unity by financing. Any compensation for biodiversity loss should leave the environment "better off" than before the project. This implies "informed agreement of stakeholders that the proposed offset is more extensive in area, greater in environmental value (less disturbed, less damaged, more biodiversity, greater environmental service value), and under a more secure level of protection, such as by financing in perpetuity" (Goodland, 2003).

Thus the term "compensatory environmental offset" extends the conservation hierarchy of first, do no harm or prevent, second, minimize, and third, mitigate any residual impacts. Offsets supplement the mitigatory measures.

Social impacts sometimes can be compensated for in a manner acceptable by the impacted people in monetary terms. Financial transfers can sometimes win FPIC to the impacted community. The miner pays the impacted community a sum of money negotiated in the Impact-Compensation Contract, often into an account, which can be drawn down only for community-approved expenditures.

www.environment.nsw.gov.au/biocertification/offsets.htm. GHG sequestration capacity is severely impaired worldwide by deforestation. Therefore offsets have to expand GHG sequestration capacity. No net loss is far too modest as a goal; we have already lost too much biodiversity, and GHG sequestration capacity.

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7 The term "mitigate" meaning to minimize harm or to make it less severe, is often used in the USA for precautions to compensate for unavoidable environmental damage. In the US, therefore, it is generally interchangeable with the term "offset". "Offset" is often used interchangeably with "compensate". "Compensation" itself has several meanings, however. It can mean financial payment for impacts as in "Impact-Compensation Contracts", or it can mean measures designed to counteract harm or impacts (Sources: ten Kate et al. (2004), Soloman et al. (2006, 2011), Goodland (2003).

8 The "small multiple", of course, has to be more than a one-for-one ratio as that would be the old-fash-

ioned "no net loss" or stagnation. The needs of the world have now become much greater than no net loss. The world has moved from no net loss to net gain or net benefit. "Net benefit" is now increasingly accepted; the decision devolves more around how big the ratio should be. The US 1972 Clean Water Act is interpreted as a rule of thumb to be a c.3:1 ratio for wetland banking. Nowadays a 10:1 ratio would be best practice.



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LAS LICENCIAS AMBIENTALES Y SU PROCESO DE REGLAMENTACIÓN EN COLOMBIA

RESUMEN

Este documento tiene como fin presentar el desarrollo que han tenido en la legislación colombiana las licencias ambientales, su implementación y su proceso de reglamentación, con el fin de establecer las consecuencias positivas y negativas en la protección del medio ambiente. Mediante el proceso de licenciamiento ambiental se evalúan los posibles impactos que los proyectos, obras o actividades puedan generar, constituyéndose en uno de los principales instrumentos de planificación ambiental en Colombia, que responde al papel de interventor del Estado en los procesos de desarrollo, con el fin de garantizar el mejoramiento de la calidad de vida y el adecuado manejo del ambiente. Este es un mecanismo de comando y control que corresponde al ejercicio de la autoridad ambiental y que, según los precedentes internacionales, requiere de proyectos que previamente cuenten con evaluación de impacto ambiental.

INTRODUCCIÓN

La evaluación ambiental se realiza en nuestro país desde los años setenta, cuando apareció el Código de Recursos Naturales Renovables y de Protección al Medio Ambiente, pero su implementación se da a partir de la expedición de la Ley 99 de 1993. A través de los años se han expedido diferentes disposiciones mediante las cuales se han reglamentado las licencias ambientales. Estos cambios han presentado dificultades como tratamos de demostrar en este documento, resaltando que su evaluación ha tenido una manifiesta tendencia a flexibilizar los procesos de licenciamiento, disminuyendo las actividades y requisitos necesarios para evaluar mejor los proyectos.

El proceso de licenciamiento ambiental ha sido considerado, especialmente por el sec-

tor productivo, como un obstáculo para el desarrollo pero, si bien es cierto se requiere del desarrollo económico, también debe tenerse presente que "el derecho al desarrollo debe ejercerse en forma tal, que responda equitativamente a las necesidades de desarrollo ambiental de las generaciones presentes y futuras". El aprovechamiento de los recursos naturales, a la luz del principio de desarrollo sostenible, implica naturalmente una concepción restrictiva de la libertad de la actividad económica, cuyo alcance, de conformidad con lo previsto en el artículo 333 de la Constitución Política, se podrá delimitar cuando así lo exija el interés social y el medio ambiente.

1 Martín Nieto, Ramón. *El hombre, una especie en peligro*. Campanario Libros, 1993. p. 98.

análisis 1

¿EXISTE UNA POLÍTICA AMBIENTAL EN BOGOTÁ? PRINCIPALES PROBLEMAS AMBIENTALES

RESUMEN

Los últimos años no han sido los mejores para el mantenimiento de la vida y de la naturaleza en la ciudad de Bogotá. Las variaciones del clima y la intensificación de los eventos de lluvias o de falta de ellas han mostrado la vulnerabilidad de la Sabana de Bogotá y del territorio de la ciudad a las sequías y a las inundaciones, y han hecho evidente la ausencia de una política ambiental coherente y de largo alcance y de planes serios de contingencia, para responder a las condiciones cada vez más severas que tendremos que afrontar en los próximos años, así como han mostrado la incapacidad de los gobernantes para encontrar mecanismos regionales de coordinación y toma de decisiones. A esto se suma el crecimiento de la ciudad y de las áreas anexas, con la consecuente presión sobre el agua, los suelos, los depósitos de arcillas y rocas, las coberturas vegetales y las comunidades ecológicas que subsisten aún en la debilitada estructura ecológica principal regional y local.

EL MODELO DE CIUDAD

Una rápida mirada de los aspectos ambientales más importantes de Bogotá obliga a preguntarse, en primer lugar, por el modelo de ciudad que se debe adoptar y por los datos sobre los que se sustentan las propuestas y las decisiones. Aunque en forma abierta nadie recomienda la expansión de la ciudad, la conurbación con los municipios vecinos, la destrucción de los bosques, el mantenimiento de la segregación social y espacial, el secamiento y contaminación de las aguas superficiales y la profundización de los niveles freáticos, la invasión de los cerros y la intensificación de las prácticas extractivas, estas son consecuencias inmediatas de otras

recomendaciones, propuestas de campaña o acciones de gobierno. A su vez, la construcción de una ciudad compacta en contra de la expansión es aceptada a pesar de que no se haga evidente que determina un tipo particular de relaciones con la región, que implica una política sobre los bordes para impedir la conurbación y que obliga a tomar decisiones sobre el fortalecimiento y la conservación de la naturaleza en esas áreas limítrofes para que actúe como barrera natural y como límite definido al crecimiento incontrolado.

1 Una decisión seria en este sentido significa un fracaso de muchas inversiones en tierra, que tienen la expectativa de empujamiento con la transformación de áreas rurales en urbanas. Estas propo-

análisis 2

This document has been elaborated by Robert Goodland.

The Foro Nacional Ambiental is an alliance between Ecofondo, Alejandro Angel Escobar Foundation, Friedrich Ebert Stiftung in Colombia-Fescol, Natura Foundation, Tropenbos International Colombia, Wwf Colombia, Administration Faculty from Andes University and Rosario University. It started activities on 1997 as an instance of permanent character. The Foro is a space opened for reflection and looking forward to the integration of the environmental dimension into the Development policy of Colombia.

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The expressed ideas in this document do not commit the institutions involved on this project.

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