



BASIC PRINCIPLES

FOR ENVIRONMENTALLY
AND SOCIALLY RESPONSIBLE POLICY
OF MINING COMPANIES



Basic principles for environmentally and socially responsible policy of mining companies.
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The editor – Igor Goldfarb

At present more and more mining companies in the world are adopting environmentally and socially responsible approaches to conducting business, allowing them to reduce to a minimum the potential risks associated with mining. The “Basic Principles...” - new voluntary standards to Russian mining industry. This document has been developed on the base of the best international standards and with support of WWF USA, WRI and Pacific Environment. These principles have been approved by coalition of Russian environmental NGOs.

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At present more and more mining companies in the world are adopting environmentally and socially responsible approaches to conducting business, allowing them to reduce to a minimum the potential risks associated with mining. Companies are investing in new technologies, developing environmental and social programs, and assuming voluntary responsibilities for minimizing risk to local communities and the surrounding environment and for conserving biological diversity.

Although some degree of disturbance is inevitable even in the best-managed mines, nearly all negative social and environmental impacts are avoidable if companies are guided by the best possible standards in their operations.

This document was compiled in recognition of the need to reduce the risks associated with mining. The goal of this document is to assist mining companies in developing effective environmental and social policy.*


Realizing that environmental safety and a healthy economy are equally important for the sustainable development of society, mining companies may voluntarily adopt the “Basic Principles...” as the basis for their corporate environmental and social policy.

Among other things, adopting environmentally and socially responsible business practices allows companies to:

- Avoid additional payments and fines for environmental infringements, as the number and scale of accidents decrease, along with expenses related to clean-up;
- Obtain direct economic benefit from application of more progressive technologies and management systems, which allow companies to conserve resources and minimize losses;
- Strengthen relations with local government bodies, environmental control agencies, local communities and environmental NGOs, which positively influences perceptions of the company in the region;
- Reduce length of time necessary for project consideration during the planning phase (feasibility study), and more easily obtain a social “license to operate,” as a result of better relationships with all key stakeholders, and due to creation of a positive company image;
- Facilitate preparation for certification in accordance with international standards (ISO 9000, ISO

* **The document was compiled on the basis of the following sources:**

1. M. Miranda, D. Chambers, and C. Coumans, 2005. Framework for Responsible Mining: A Guide to Evolving Standards, <http://www.frameworkforresponsiblemining.org/docs.html>
2. Good Practice Guidance for Mining and Biodiversity // International Council on Mining & Metals (ICMM), 2006: http://www.icmm.com/library_pub_detail.php?rcd=195
3. Environmental Standards for Operations of Oil and Gas Companies Acting in Russia // WWF Russia [World Wild Fund for Nature], 2004: <http://www.wwf.ru/resources/publ/book/eng/109>
4. The materials of non-financial reports and presentations of leading domestic and foreign mining companies (Rio Tinto, Newmont, RUSAL, SUAL, Polus-Gold et al.) were also been used.

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- 14000, ISO OHCAS 18000), thanks to implementation of effective environmental strategies;
- Improve the competitiveness of goods and obtain additional means of influence on consumers as a result of manufacturing of environmentally clean products;
 - Establish an international market niche and improve the company's position among international partners;
 - Attract the interest of investors and improve access to capital, particularly when project finance is to be obtained from banks that are signatories to the "Equator Principles" and other international conventions that contain stipulations related to environmental protection.

Ultimately, practical implementation of "Basic Principles..." will allow mining companies to obtain increased access to land, human and financial resources, without which it is impossible to conduct business successfully or occupy a leading position in the industry.

The document is open for discussion with all interested parties and will serve as a foundation for further dialogue about environmentally and socially responsible practices in the mining industry.

Collaboration between mining companies and environmental organizations to develop and implement "Basic Principles..." will be mutually beneficial, leading to acknowledgement of the rights and interests of all participants in the dialogue, and will reduce the number of conflicts and expenditures during mining operations.

GUIDELINES FOR ENVIRONMENTAL AND SOCIAL POLICY.

- 1.1. Sustainable development, i.e. balanced development that meets the economic, environmental and social needs of the present without compromising the ability of future generations to meet their own needs.
- 1.2. Assumption of the potential environmental dangers of companies' operations.
- 1.3. Application of the precautionary principle and adoption of measures to prevent environmental degradation when there are threats of serious or irreversible damage.
- 1.4. Refusal to conduct mining on territories of high nature conservation value.
- 1.5. Construction of facilities in a way that takes into account the environmental particularities of the area (e.g., seismic and volcanic activity, permafrost, active erosion processes, etc.)
- 1.6. Use of the best available mining technologies.
- 1.7. Environmentally safe waste disposal.
- 1.8. Control over industrial safety and environmental monitoring at the project site.
- 1.9. Acceptance of responsibility for environmental pollution and compensating environmental damage fully, i.e. paying the costs of cleanup and environmental remediation.
- 1.10. Prevention of accidents and guaranteeing appropriate emergency response, including restoring ecosystems and rehabilitating animals.
- 1.11. Recognition of the interests and rights of indigenous peoples, including their right to lead a traditional way of life, rights to a healthy and productive environment, cultural integrity, control over their territories, and just compensation for damage to their lands. Respect for local traditions, natural, cultural and historical values, and local languages.
- 1.12. Recognition of the rights of indigenous peoples and local communities for free, prior, and informed consent (or disagreement) to any development activities that affect their territories and livelihoods. Participatory decision making concerning company's operations.
- 1.13. Free public access to and full disclosure of environmentally relevant information.
- 1.14. Transparency of company's activities for public environmental control.
- 1.15. Strict adherence to Russian environmental legislation and environmental safety requirements. Conduct of environmental audits and implementation of an environmental management system.

IDENTIFYING HIGH CONSERVATION VALUE AREAS POTENTIALLY CLOSED FOR MINING (“NO-GO” ZONES).

- 2.1. Mining should not occur in the following territories and marine areas:
 - a. UNESCO World Heritage Sites;
 - b. Protected areas created under the Russian federal law “On Protected Areas”¹ and corresponding regional legislation (strict reserves, national parks, nature parks, wildlife refuges, nature monuments, UNESCO biosphere reserve polygons, and other protected areas);
 - c. Land or marine areas set aside by the Russian federal government or regional governments for future creation of protected areas;
 - d. Wetlands of international importance (Ramsar sites), including both those already confirmed by the Russian federal government, and those under consideration for listing under the Ramsar Convention²;
 - e. Water bodies of the supreme and first fishery categories (places of mass spawning, fattening, wintering and migrations of extra valuable species of fish);
 - f. Critical habitat for rare and endangered species that are listed in the Red Books of Russian Federation and constituent territories³ and Convention on the Conservation of Migratory Species of Wild Animals⁴;
 - g. International Bird and Botanical Areas and key federally-recognized areas;
 - h. Sensitive marine areas and protected marine mammal habitat;
 - i. Undisturbed forest and agricultural areas of high conservation value.

- 2.2. Companies should not work in the buffer and conservation zones of the territories and marine areas listed above (2.1), as well as within the limits of sensitive ecosystems (e.g., water protection zones, exclusion and controlled access areas of rivers and other water bodies of particular importance for fisheries)⁵, if the activities of companies could negatively impact protected natural objects and complexes, degrade protected ecosystems, disrupt ecosystem processes or lead to decreases in biological diversity.

- 2.3. Companies could engage in mining in all other areas (except listed above in 2.1, 2.2) implementing in practice the basic principles outlined in subsequent sections of this document.

¹ Federal Law N-33 of 03.14.1995

² “The Convention on Wetlands of International Importance especially as Waterfowl Habitat”, was signed in Ramsar, Iran, in 1971. The list of wetlands located in the Russian Federation territory was approved by the governmental decree № 1050 of 09.13.1994.

³ The legal foundation for the Red Books of Russian Federation and the constituent territories are the Federal Law on Environmental Conservation (2001) and the Federal Law on Fauna (1995).

⁴ Convention on the Conservation of Migratory Species of Wild Animals was signed in Bonn, June 1979.

⁵ Defined by the articles of the Forest Code (Federal Law N 200 of 12.04.2006) and the Water Code (Federal Law N 74 of 06.03.2006) of Russian Federation.

ENSURING AN ENVIRONMENTALLY RESPONSIBLE MINING STRATEGY.

3.1. Conducting an Environmental Impact Assessment

- 3.1.1. Companies should always conduct an Environmental Impact Assessment (EIA) when developing new mines, as well as when expanding existing mines or when significantly changing operating conditions and technologies used at existing mines.
- 3.1.2. Companies should use the following guidelines to conduct project impact assessments:
 - a. Inclusion of multivariable project scenarios, including an assessment of the “zero option” (full rejection of the project);
 - b. Complexity: analysis of the impact of the planned activities on all components of the natural environment and on the ecosystem as a whole;
 - c. Consideration of natural conditions in the project area (permafrost, seismicity, active erosion processes, difficult ice conditions, etc.);
 - d. Consideration of the technological specificities to be used at all stages of prospecting and exploitation;
 - e. Collection of baseline data about the existing state of the environment and the baseline level of biodiversity;
 - f. Assessment of the main threats to biodiversity, in consultation with scientific and nature conservation organizations;
 - g. Full and detailed analysis of environmental impact, including all possible risks and potential emergencies, including an analysis of possible worst-case scenarios (complete destruction of mines, breaches in tailings dams, process plant spills, etc.) and their impacts;
 - h. Analysis of transboundary effects: an assessment of the environmental impact beyond the boundaries of the mine;
 - i. Calculation of costs of providing regulatory oversight, conducting long-term environmental monitoring, and reclaiming lands after mine closure, and taking into account the estimates during assessment of a mining project’s profitability, and analysis of the project’s alternatives.
- 3.1.3. Results of an environmental impact assessment are submitted for public examination. Stakeholders should be given adequate notification, and access to supporting information in order to participate effectively in the EIA process.

3.2. Natural Resource Use

- 3.2.1. Minimizing water, energy and land consumption should be part of companies’ officially accepted resource-use strategy.
- 3.2.2. Companies should strive to decrease the area of land allocations and limit land clearance by using mining technologies and practices that minimize disturbances of the natural environment.
- 3.2.3. In order to ensure rational use of water resources, companies should introduce a closed-loop system to re-circulate water supply at industrial facilities, and should decrease the use of fresh

water for production by reusing treated rainwater, water from melted snow, drainage water and other incidental sources. Companies should manage utilities plumbing and eliminate leaks in water and heating pipes.

- 3.2.4. In order to reduce energy use and increase projects' energy efficiency, companies should establish a system for calculating energy use and enforcing limits; optimize equipment use by taking into account load cycles; install energy-efficient equipment; modernize heating systems; reduce non-productive losses, and utilize low-grade heat.
- 3.2.5. Companies should strive for maximum extraction of primary and secondary minerals, and should make it a priority to use waste products as secondary raw materials, rather than dispose of them.

3.3. Prevention and Minimization of Negative Environmental Impacts

- 3.3.1. In order to prevent additional degradation of animal habitat, companies should strictly observe land allocation boundaries during mine construction and throughout the exploitation period.
- 3.3.2. During construction of engineering installations (first and foremost linear objects - roads, power lines, dumping piles, ditches, etc.), companies should apply measures to decrease landscape fragmentation and conserve animal migration routes.
- 3.3.3. Companies should cooperate with each other in order to share already-existing regional electrical supply and transport networks and other infrastructure necessary for the project, if doing so will decrease the project's environmental impact.
- 3.3.4. In order to prevent erosion companies should remove vegetation only in those areas where it is absolutely necessary, fortify river banks and slopes within the project site, and conduct intermediate land reclamation to stabilize land in areas that will not be used in future stages of the project.
- 3.3.5. Before mining activities are begun companies should remove topsoil from areas to be disturbed and store it separately for use during future re-vegetation and land reclamation. Topsoil storage facilities should prevent soil from being washed or blown away, eroded or lost in any other way.
- 3.3.6. In order to prevent water pollution and submergence of equipment and installations companies should divert surface flows away from industrial objects. With this end in view the project site should be equipped with a system to intercept storm water and purify it of suspended matter and petrochemicals in special settling ponds and treatment facilities.
- 3.3.7. Company uses highly efficient purification systems for discharged waters, and environmentally safe coagulants (e.g. sodium oxychloride). In case of accidents companies should construct wastewater purification stations where a large volume of discharge can be taken in and pollutants can be reduced to allowable levels.

3.3.8. If mining technology involves use of cyanide, companies should follow the principles and standards of the International Cyanide Management Code, and should adopt all measures necessary to protect workers, the local population and the environment from the impacts of cyanide.

These measures include:

- Selecting environmentally safe locations for tailings ponds, storage tanks and cyanide facilities, and applying effective means to protect groundwater during their construction (liners/shields, concrete underpans, an alarm system for discharges, waterproofing control, a drainage system, etc.);
- Using a closed-loop system with no discharges at dangerous facilities and tailings ponds;
- Constructing dams and tailing ponds in case of accidents;
- Diverting surface and ground water from cyanide facilities, storing tailings and wastes and conducting regular monitoring of their quality;
- Creating a system to pump out, isolate and purify discharges in case of emergency;
- Using environmentally safe technologies to decontaminate cyanide discharges (transition from chlorination to biological treatment methods and so on);
- Designating appropriate personnel responsible for safety during transport, storage and use of cyanide; giving them the equipment and resources necessary to respond to emergencies;
- Preparing detailed response plans for potential cyanide releases, training personnel in emergency response;
- Conducting an independent audit confirming the company's implementation of an appropriate cyanide management strategy.

3.3.9. Company should not locate the infrastructure of dangerous objects (refineries, storages of chemical agents, tailing dumps et al.) above the tectonic fractures and in the places of dangerous geological processes, in the watercourses and in the valleys of small mountain rivers, within the water protection zones and forest strips that are protecting spawning areas of valuable commercial fishes.

3.3.10. Work in the basins of spawning rivers may be conducted under obligatory agreement of fishing control authorities.

3.3.11. Companies should implement measures to prevent petroleum products from reaching the soil and water. Such measures include outfitting stationary facilities for storing petroleum and fueling hard deposition, banking, systems of withdrawal and localizing spills, and also collecting and disposing of processed petroleum products.

3.3.12. Companies should monitor hazardous airborne emissions (particularly mercury, lead, and greenhouse gases) and reduce the level of such emissions using specialized filters and gas purifiers.

3.3.13. In order to prevent atmospheric and water pollution from dust, during warm and dry weather companies should organize dust-suppression measures at the project site, at waste rock dumps and on access roads.


- 3.3.14. In order to minimize disturbance to animals near project boundaries, companies should adopt guidelines setting maximum noise levels for blasting, drilling, and other equipment use.
- 3.3.15. Companies should develop and approve employee code of conduct that include stipulations related to the environment. Such code should prohibit illegal hunting and fishing in the regions where companies operate, as well as other forms of animal and plant use that are harmful to biodiversity. Companies should inform contractors and subcontractors about environmental obligations and ensure they are enforced. In order to prevent poaching companies should cooperate with regional-level nature protection agencies to control the use of mining access roads.
- 3.3.16. Companies should conduct systemic observations of the state of industrial facilities and the surrounding natural environment within with framework of an ongoing combined monitoring program. A combined monitoring program for mining presumes the following:
- management of all industrial processes that could potentially impact the environment (stripping and preparatory work, actual mining, disposing waste rock and tailings, ore processing, operating hydraulic equipment, land reclamation, etc.);
 - Monitoring all components of the natural environment (air, surface and ground water, soil, biota).
- The results of combined monitoring should be used by companies for day-to-day management of production and processing, and for management of the environmental aspects of mining operations.
- 3.3.17. Companies should train all employees in environmental job safety and designate a staff member responsible for such trainings.
- 3.3.18. Companies should define possible worst-case scenarios and emergency situations in cooperation with potentially affected local communities, and should also cooperatively develop prevention plans and appropriate response strategies. Together with regional emergency services agencies, companies should train local communities in emergency response in order to minimize potential damage to health and property, as well as to the surrounding natural environment.
- 3.3.19. Companies should inform local communities, local government agencies and the public at large about emergency situations. At the same time, reports on discharge of contaminants to surface and ground waters (including raw data of chemical analyses), as well as toxic emissions, should be made publicly available.
- 3.3.20. Companies should have sufficient reserves of intact equipment and materials to ensure appropriate cleanup in case of an accident or emergency.
- 3.3.21. Companies should obtain full insurance coverage against environmental risks from independent insurance companies, and/or should reserve enough of their own funds to insure against environmental risks, and they should demand the same from contractors and subcontractors.

3.4. Industrial Waste Management

- 3.4.1. Companies should decontaminate waste to a condition that is not harmful to the environmental.
- 3.4.2. Companies should develop a detailed plan for waste collection and removal.
- 3.4.3. Treatment, disposal and storage of waste should be handled only by those companies that can prove they have the technology and equipment, certified specialists, licenses and permissions necessary for waste management.
- 3.4.4. Companies should build landfills for industrial and domestic solid waste, and/or should set aside special zones, outfitted with a protective layer and impermeable walls, for waste collection and sorting. Industrial and domestic wastes should be collected in moisture-proof containers for future disposal and storage at landfills. Domestic waste water should go through full biological treatment before being discharged.
- 3.4.5. Tailings impoundments and waste rock dumps should be constructed in a manner that minimizes the risk of contaminants release and the threat to workers and local communities, and that takes into account the cost of long-term use of such facilities.
- 3.4.6. When building tailings ponds and waste rock dumps, companies should put in place an appropriate system for collecting leaking water, which will prevent pollutants from reaching groundwater and make it possible to localize any leakage in close proximity to its source.
- 3.4.7. Acid-producing materials, especially waste rock, should be segregated and isolated in special facilities that prevent release of acidic drainage. Companies should monitor waste dumps in order to prevent acid generation and leaching of heavy metals and other dangerous substances.
- 3.4.8. Rivers should not be used for disposal of mine waste, and companies should not engage in shallow-water (100 m or less) submarine waste disposal. Deep-water submarine waste disposal could be used if an independent assessment demonstrates minimal environmental and social risks.
- 3.4.9. Companies should conduct appropriate monitoring of wastewater treatment facilities and collectors in order to detect any seepage of pollutants. Monitoring of acid-generating materials should be conducted throughout the entire period of the mine's existence and for at least 3 years after its closure in order to ensure timely application of measures to reduce negative impact.

3.5. Land Reclamation

- 3.5.1. Companies should conduct land reclamation in order to restore disturbed areas as closely as possible to their original condition. Companies should restore all areas to a condition suitable for their future use according to the plans of regional development.

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- 3.5.2. Before operations begin, companies should develop a reclamation plan that includes detailed cost estimates. Funds sufficient to carry out reclamation tasks should be included in the budget from the project's initial investment stages.
 - 3.5.3. In accordance with land reclamation plans, companies should bear responsibility for decommissioning industrial objects and dismantling facilities after mining is discontinued.
 - 3.5.4. Companies should backfill underground workings, pits, shafts and mined-out areas (if there are no different recommendations on the basis of special research) in order to minimize the size of waste rock dumps and tailings facilities, decrease subsidence, and reduce negative impacts of acid leaching into surface and ground waters.
 - 3.5.5. Land reclamation activities should include restoring topsoil, for which companies should use soil that was removed and stored for this purpose at the start of the project.
 - 3.5.6. During the biological recultivation stage companies should strive to restore the territory's natural vegetation. Quantitative standards for vegetation restoration should be established and included in the overall land reclamation plan.
 - 3.5.7. Companies should provide intermediate land reclamation immediately after finishing mining activity in the separate areas of mine, even if the companies may use these areas in future for reuse of waste.
 - 3.5.8. Companies should provide for environmental monitoring at the project site after mining is discontinued.
 - 3.5.9. Land reclamation plans should be periodically revised to update reclamation practices and costs.
 - 3.5.10. Companies should create a special fund for managing financial resources allocated for land reclamation. The fund's capital should be formed through periodic contributions, the size of which should be determined in accordance with the cost of planned reclamation activities, the area of disturbed land and the amount of raw materials mined. Money in the reclamation fund should be used exclusively for restoration of disturbed land and vegetation.

ORIENTATION FOR LOCAL COMMUNITY INTERESTS AND THE RIGHTS OF INDIGENOUS PEOPLES. PUBLIC PARTICIPATION IN THE DECISION-MAKING PROCESS.


- 4.1. Companies should reach agreement with indigenous peoples regarding mining on lands traditionally belonging to and used by indigenous peoples, and in areas where important cultural or religious landmarks are located. Comprehensive impact assessments should be conducted and their results taken into account, and mining should be conducted in a manner that guarantees the preservation of the natural environment, traditional natural resource use, and the ethnic indigenous community itself.
- 4.2. Companies should obtain free, prior and informed consent from affected local communities and indigenous peoples as a condition for resource extraction on their lands. This consent should be obtained:
 - a) freely: without manipulation or coercion,
 - b) in advance: prior to commencement of activities affecting indigenous peoples' lands, territories, and resources;
 - c) during consultations and discussions of key aspects of the project with all interested stakeholders.
- 4.3. Participation of local communities, indigenous peoples and other civil society groups in the decision-making process presumes a number of measures, including information-sharing, consultations, joint development and signing of legal agreements containing detailed regulations and commitments for each phase of a given mining project.
- 4.4. In consultation with local environmental organizations, local communities and indigenous peoples, companies should establish an independent dispute resolution mechanism, so that local communities can count on fair resolution of concerns they may have with mining companies.

COMPENSATING ENVIRONMENTAL DEGRADATION AND LOSS; SOCIAL BENEFITS.

- 5.1. Companies should pay full compensation for damage to the surrounding environment and to human health in the areas negatively impacted by mining operations, as stipulated by law.
- 5.2. To offset negative environmental impacts companies should provide insurance against environmental risks and provide adequate financial guarantees to pay for prompt cleanup, reclamation, and long-term monitoring and maintenance.
- 5.3. The conditions under which local communities and indigenous peoples obtain benefits from mining and compensation for losses should be stipulated in a legally-binding compensation agreement, which should address:
 - The means by which communities will receive a share of the wealth generated by the use of their land;
 - The size of compensation for property and resources that community members may lose as a result of mining (such as houses, land, and livelihoods, as well as loss of ability to conduct traditional natural resource use, loss of cultural landmarks, environmental degradation, and other discomforts), and the means by which such compensation will be paid;
- 5.4. Compensation payment reports should be included in companies' annual reports and be made available to the public.
- 5.5. Companies should employ local residents, including indigenous peoples, to the greatest extent possible, and should provide professional training in the region so that they can employ a maximum percentage of their labor force locally.
- 5.6. Companies should encourage development of small and mid-size business in the region by purchasing local goods and services as much as possible, and by notifying local suppliers of materials and equipment needed.

DISCLOSURE OF ENVIRONMENTALLY RELEVANT INFORMATION AND PUBLIC MONITORING.

- 6.1. Companies should develop and practice open environmental policy aimed at ensuring environmental safety.
- 6.2. Companies should provide full disclosure of project information to representatives of potentially affected indigenous peoples, civil society groups and local communities. This information should include:
 - a. Mine development plans, including how much land will be affected, for how long and by what type of mining, planned processing facilities, technology to be used and waste disposal;
 - b. Baseline data on existing environmental conditions and local health conditions;
 - c. An environmental and social impact assessment;
 - d. Hazardous material minimization plans, accident and emergency prevention and response plans, and information about industrial safety;
 - e. Information on financial insurance against environmental and social risks;
 - f. Plans related to appropriate mine closure and land reclamation;
 - g. Results of combined monitoring of environment and mining operations;
 - h. A record of health and safety incidents and environmental infractions at the mine.
- 6.3. All information should be made available to affected local communities in an appropriate language and should be presented in an accessible manner, including on the company's website.
- 6.4. Companies should organize public discussions of their projects and consult with leading environmental organizations from the first stages of project operations until their conclusion. Companies should give the public sufficient advance notice about submitting projects for official examination.
- 6.5. Companies should regularly conduct environmental audits, the results of which should be made available to the public, and, in accordance with existing legislation, companies should provide civil society groups with the documentation necessary to conduct public environmental impact assessments.
- 6.6. Companies should help to government agencies and civil society groups to organize independent monitoring and independent environmental audits designed to assess their environmental performance. If requested by representatives of civil society groups, companies should facilitate site visits to the mines they operate and allow independent sample collection and analysis.
- 6.7. Companies should include information in their annual reports about fulfillment of environmental and social responsibilities. Progress towards achieving concrete environmental and social goals should be evaluated using specific and measurable indicators that can be independently verified:
 - Significant environmental incidents, accidents, air emissions, discharges, spills, including uncontrolled fugitive emissions (e.g., dust), as well as emissions from mobile and stationary sources;

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- Production of site-specific or technology-specific waste (categorized as hazardous and non-hazardous waste), percent of wastes that is reused or recycled;
 - Resource management policy, including water and energy consumption, amount of land owned, leased, and managed for extractive use, including amount of land disturbed and rehabilitated;
 - Percent of mine workforce employed from the local community, including women and representatives of indigenous peoples;
 - Size of compensation payments to local people;
 - Company investment in local infrastructure development and contributions to local budget;
 - Services for local communities, access to professional education/training;
 - Implementation of biodiversity conservation plans and environmental monitoring;
 - Preparation for emergency situations, number of man-hours spent training staff per year, etc.

Effectiveness measures are developed in accordance with the recommendations of the Global Reporting Initiative's Sustainability Reporting Guidelines (www.globalreporting.org), are based upon other international standards and practices, and are guided by the recommendations of local communities, local government bodies and non-governmental organizations.

NATURE CONSERVATION INITIATIVES.

- 7.1. Companies should partner with environmental organizations.
- 7.2. Companies should contribute (subsidize) to existing conservation initiatives in the region, or should propose their own conservation initiatives. Financial support of these initiatives should not take place of a company's commitment to adopt environmentally and socially responsible practices as outlined in previous sections.
- 7.3. Companies should promote the development of protected areas networks and support programs to improve energy efficiency and utilize renewable sources of energy.
- 7.4. Companies should adopt concrete measures for conserving biodiversity in the specific regions where mining projects take place, and should include such measures in overall corporate environmental policy.
- 7.5. Corporate environmental policy should be set out distinctly in an independent document. A company executive should be made responsible for implementation of environmental policy.
- 7.6. Companies should review corporate environmental policy annually in order to improve existing environmental protection strategies.