STATUTORY INSTRUMENT

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THE ENVIRONMENT PROTECTION (MINES AND MINERALS) REGULATIONS, 2013

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THE ENVIRONMENTPROTECTION AGENCYACT, 2008 (ACT NO. 11 OF 2008)

THE ENVIRONMENT PROTECTION (MINES AND MINERALS) Short title. REGULATIONS, 2013

In exercise of the powers conferred upon the Board by section 62 of the Environmental Protection Act, 2008, the Board hereby makes the following Regulations - $\,$

PART I - PRELIMINARY

1. These Regulations shall apply to-

Application.

- (a) any person who wishes to undertake or cause to be undertaken any extractive industries project, including mining, quarrying, extraction of sand, gravel, salt and peat set out in the paragraph (f) of the First Schedule of the Act, for which an application for an Environmental Impact Assessment Licence is required under section 24;
- (b) body corporates and individuals applying for or issued minerals rights under the Mines and Minerals Act 2009.
- 2. In these Regulations unless the context otherwise requires Interpretation.

:

- "Act" means the Environment Protection Agency Act, 2008;
- "adverse environmental impact" means a negative effect on, or change in, the environmental quality resulting from mining activities;
- "Agency" means the Environment Protection Agency of Sierra Leone established by section 2 of the Environment Protection Agency Act, 2008;
- "applicant" means an individual or organization that has submitted, or is in the process of submitting an application to the Board for an environmental licence or other form of approval in relation to these Regulations;
- "area of influence" means an area surrounding the project site that, through an environmental impact assessment, is determined to be affected by the project;
- "Audit Report" means a report from an environmental auditing firm summarizing the results and findings of an environmental audit to a mining operation;
- "Authorised Officer" means an employee of the Agency duly authorised by the Board or Executive Chairman for a specified purpose;
- "Board" means the Board of Directors of the Environment Protection Agency;
- "Community Development Agreement" (or CDA) means any Community Development Agreement entered into pursuant to Section 140 of the Mines and Minerals Act, 2009 designed to promote sustainable development and to enhance the general welfare and quality of life of the inhabitants;

- "community entitlement" means any legitimate claim from a member of the Primary Host Community to the holder of mining permit for the implementation of any activities relating to the community development issues;
- "Community Liaison Committee" means the committee mutually established by the applicant or holder of a mineral right and local communities to serve as the main consultation body between the applicant, the holder of a mineral right and local communities for social issues:
- "compensatory measures" means measures to be taken when mitigation is not feasible, cost effective or sufficient:
- "corporate social responsibility" means a form of corporate self-regulation and management whereby companies take responsibility for the environmental and social impact of their operations;
- "Director of Mines" means the authorised officer assigned responsibilities under the Mines and Minerals Act, 2009;
- "displaced persons" mean persons living in the project area that must move to another location and who-
 - (a) have legal rights to the land they occupy;
 - (b) have a claim to land that is recognized or recognizable by law; or
 - (c) are experiencing loss of asset, access to income whether of temporary or permanent nature due to the land acquisition process regardless of whether they are physically displaced or relocated or not;

- "environmental best practice" means the application of internationally recognised standards and practices for the protection of the environment in mining activities;
- "Environmental Impact Assessment" (or EIA) consists of an environmental impact assessment study and an environmental impact assessment report that focuses on environmental issues and describes the impacts that the proposed project is predicted to have on bio-physical conditions if implemented, together with proposals for avoiding, mitigation or compensation for adverse effects, and includes an ESIA(as the context may require);
- "Environmental Management Plan" (or EMP) means an Environmental Management Plan produced as a result of an environmental impact assessment which shall describe how the applicant will implement all recommendations, commitments and obligations designed to avoid, minimise, ameliorate or compensate for adverse environmental impacts identified in the relevant Environmental Impact Assessment;
- "environment" means land, air, water and all plants, animals and human beings living therein and the inter-relationship which exists among these or any of them;
- "environmental assessment" means, the systematic identification, prediction and evaluation of a proposal including the mitigation and management of those effects; the process extends from the initial concept of the proposal through implementation to completion and where appropriate decommissioning.

- "environmental audit" means the process of examining, documenting and verifying that a mining operation is complying with environmental laws and regulations, as well as with the EIA goals and requirements;
- "environmental impact" means the direct or indirect consequences of reconnaissance, exploration, small-scale and large scale operations on the environment including water, air, climate, land, land use and natural resources, geology, topography, soils, vegetation, wildlife that affects life in general, wellbeing, health, personal safety, cultural heritage or legitimate means of livelihood and any cumulative effects on the above:
- "environmental licence" means an Environmental Impact Assessment Licence issued under the Act;
- "Environmental and Social Impact Assessment" (or ESIA) means a simplified or limited Environmental Impact Assessment which incorporates sections on social impacts and is appropriate for projects that require more limited environmental and social analysis than an Environmental Impact Assessment as their negative effects on the environment and the community can be eliminated or minimized by simple and easy to implement measures;
- "Environmental and Social Management Plan" (or ESMP) means environmental and social management plan provided as part of an application for artisanal mining;
- "environmental offence" means an act that has directly or indirectly harmed the environment or an infringement or violation of an obligation imposed by the Act or these Regulations;

- "Executive Chairman" means the Executive Chairman of the Board of Directors of the Agency;
- "exploration" means operations carried out to search for minerals and mineral deposits and includes operations to test the mineral bearing qualities of the land, define the extent and determine the economic value of mineral deposits;
- "force majeure" means floods, landslides, riots and civil insurrection which prevent the holder of a mining right from performing its obligations under a contract as long as such event or circumstance was neither foreseen nor foreseeable at the commencement of the holder of the mining right's mining activities and are out of its control and the holder of a mining right has taken reasonable care and diligence to mitigate such event or circumstance;
- "frivolous or vexatious claims" means any claim as determined by a court of competent jurisdiction, which has been instituted maliciously or repetitively and without probable cause or has been lodged by a party or its attorney which are knowingly aware that such claim lacks merit, proper due diligence, legal argument and/or a sound factual justification;

"Government" means the Government of Sierra Leone:

"grievance mechanism" means a mechanism -

- (a) to receive and facilitate resolution of concerns and grievances about the holder of a mineral right's environmental and social performance,
- (b) for workers (and their organizations, where they exist) to raise reasonable workplace concerns, and

- (c) to receive and address specific concerns about compensation and relocation that are raised by displaced persons or members of local communities and host communities;
- "holder of a mining permit" means a person or body corporate who has been granted a permit for dredging or developing radioactive mineral activities issued under the Mines and Minerals Act. 2009:
- "holder of a mineral right" means a person or body corporate who has been granted a licence under the Mines and Minerals Act 2009;
- "inspection" means the process of entering land or buildings in order to examine, investigate, test, compare, analyse and duplicate documents, materials and data for the purpose of verifying compliance with these regulations and gather evidence;
- "large-scale mining" means the intentional mining of minerals in mechanised operations exceeding twenty metres in depth or involving the sinking of shafts, drilling of adits or other various underground opening exceeding twenty meters;
- "life cycle of the project" means all the phases of mining activity including reconnaissance, exploration, development, exploitation, beneficiation, and closure;
- "local community" means any community of the local population within the project's general area of influence who are likely to be affected by the project and shall also include local populations who are either directly or indirectly affected by the project;

- "Mine Closure Plan" means a plan comprising proposals for managing the progressive restoration (where practicable) of worked-out mine areas and the ultimate closure and restoration or rehabilitation of the mine site upon cessation of mining operations;
- "Minerals Advisory Board" means the Board established by section 11 of the Mines and Minerals Act, 2009;
- "mineral rights" means a right to explore for or to mine minerals by the hold of a valid reconnaissance licence, exploration licence, artisanal mining licence, small scale mining licence, or large scale mining licence, issued under the Mines and Minerals Act, 2009:
- "mining right holder obligation" means a commitment, condition or undertaking to act, or an agreement to omit from acting imposed upon the holder of a mining permit pursuant to these Regulations, the Act or the Mines and Minerals Act, 2009, which shall include any community entitlement" which has been agreed between the Primary Host Community and the holder of a mining permit;
- "mining activities" mean those activities undertaken by a mineral right holder and in accordance with the restrictions and obligations of the various licences including but not be limited to the following –
 - (a) mining, quarrying, extraction of sand, gravel, salt;
 - (b) the establishment and operation of industrial plant used in mineral processing, power plants, smelting plants, and refineries;

- (c) construction of mineral export ports, maritime facilities and associated mineral transportation system from mine site or in-land deposits;
 and
- (d) construction of mineral concentrate depots or other facilities outside the licence area;
- "monitoring" means the continuous or periodical procedures implemented by the holder of a mineral right, the Board, the Executive Chairman or Authorized Officer to monitor, measure, sample, record and analyse all environmental and social aspects of mining activities including dynamic mechanisms, such as inspections and audits, where relevant, to verify compliance and progress toward the desired outcomes adjusted according to performance experience and feedback;
- "primary host community" means community as defined in subsection (2) of section 139 of the Mines and Minerals Act, 2009:
- "project area" means the area covered by the mining right licence;
- "reconnaissance licence" means a reconnaissance licence granted by the Minister of Mines under section 58 of the Mines and Minerals Act 2009, that does not exceed ten thousand square kilometers;
- "Resettlement Action Plan" (or RAP) means the comprehensive plan as further defined in any law relating to the resettlement of local communities;
- "Resettlement Committee" means an intergovernmental committee established pursuant to any law relating to the resettlement of local communities designed to review, approve, monitor and evaluate resettlement activities in Sierra Leone:

- "Resettlement Management Plan" (or RMP) means the framework broadly identifying the objectives, principles, policies, procedures, organizational arrangements and the timeframe and cost for dealing with resettlement, as further described in any law relating to the resettlement of local communities;
- "Resettlement Policy Framework" means the broad principles by which the applicant sets forth its proposals for managing all stages of resettlement as further described in any law relating to the resettlement of local communities:
- "screening" means the process carried out by the Executive Chairman in consultation with the Board by which a decision is taken on whether or not an EIA is required, and what type of EIA is appropriate for a particular project;
- "scoping or scoping study" means the process of identifying the content and extent of the environmental information to be included in an Environmental and Social Impact Statement;
- "scoping report" means a report containing the findings and recommendations of a scoping study;
- "Strategic Environmental and Social Assessment" (or SESA) means a strategic environmental and social assessment for mining districts within which artisanal mining is a major activity;
- "small-scale mining" means the intentional mining of minerals in mechanised operations not exceeding twenty metres in depth or involving the sinking of shafts, drilling of adits, or other various underground openings;
- "social assessment" means in respect to a mining project, the process of undertaking a Social Impact Assessment in accordance with the Act, the Mines and Minerals Act, 2009 and these Regulations;

- "Social Impact Assessment" (or SIA) means a social impact assessment study and social impact assessment report which describes the full range of social, economic and health issues affecting local communities, predicts significant adverse social impacts and sets out proposals for avoiding, mitigating or compensating for adverse effects;
- "Social Management Plan" (or SMP) means a social management plan which describes how the applicant will implement all recommendations, commitments and obligations to avoid, minimise, ameliorate or compensate for adverse social impacts identified in the relevant social assessment instrument:
- "social impact" means the consequences of exploration, small-scale, and large-scale operations in the way people organize their economic system, the way they live, work, relate to one another, organize themselves, and the way they develop and share values, attitudes, beliefs, institutions, and perceptions of their surroundings, including other people and the biophysical environment;
- "stakeholder" means any persons or groups that are directly or indirectly affected by a project as well as those that may have interests in a project or the ability to influence its outcome either positively or negatively and the term "stakeholders" include locally affected communities and individuals and their formal and informal representatives, government, politicians, religious leaders, civic organisations, and other groups with special interests, the academic community, employees, their families and employee representatives, other businesses, financiers, shareholders and joint venture partners;

"sustainable development" means the pattern of use of natural resources that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

PART II - PRINCIPLES AND ACCOUNTABILITY

application of principles 3. (1) The principles outlined under sub-regulation (2) shall be applied by-

- (a) the Agency when dealing with matters related to environmental and social management of proposed or ongoing mining activities.
- (b) any other authority whether administrative or judicial, whenever its participation, intervention or decision on matters relating to the environmental and social impacts of mining is required under applicable laws or regulations.
- (2) The principles referred to under sub-regulation (1) are as follows -

(a) SUSTAINABILITY

Every mining operation shall be carried out in a sustainable manner that is reasonably practicable in order to minimize, mitigate or eliminate negative environmental and social adverse impacts including but not limited to pollution resulting from such operation in accordance with the Environment Protection Agency Act, 2008, subsection (1) of section 132 and subparagraphs (xii) and (xiii) of paragraph (b) of subsection (1) of section 133of the Mines and Minerals Act 2009.

(b) POLLUTER PAYS

- (i) The cost of pollution avoidance, prevention, control, remediation and compensation shall be borne by the polluter in accordance with the principles of international environmental law
- (ii) For the avoidance of doubt, this principle shall be applicable to any kind of environmental or social impact derived from the development, construction, operation and management of mining activities.

(c) PRECAUTIONARY COST-EFFECTIVE MEASURES

- (i) when a mining activity raises threats of serious or irreversible harm to public health or the environment, the lack of full scientific certainty of a detrimental outcome shall not be used as reason for postponing precautionary cost-effective measures to prevent damage to human health or environmental degradation.
- (ii) The burden of proof in relation to the precautionary principle resides with the holder of the mining rights.

(d) <u>LEGAL RESPONSIBILITY FOR ENVIRON-</u> <u>MENT</u>

- (i) The holder of a mineral right shall be responsible for the environmental and social impacts of their activities, as well as for managing these impacts.
- (ii) Every holder of a mineral right shall carry on its operations in a manner that is reasonably practicable-so as to prevent, minimize,

manage and mitigate any adverse environmental impact including but not limited to pollution resulting from such operations and any adverse social impact in accordance with the Act, and the Mines and Minerals Act, 2009.

(iii) Every holder of a mineral right is legally obliged to keep emissions and effluents resulting from its operations under the maximum level of pollutant concentration permitted by these Regulations and they shall manage and control residues, wastes, toxic substances and other contaminants in order to ensure that they will not cause adverse effects on the environment and public health.

(e) PROTECTION OF AFFECTED COMMUNITIES

Every holder of a mineral right shall protect the surface rights of those within and in close proximity to a mining area and shall-

- (i) obtain consent from lawful landowners and occupiers prior to entering lands and commencing exploration or other mining activities:
- (ii) wherever possible, allow lawful landowners and occupiers to graze livestock and cultivate land;
- (iii) pay fair compensation for land use and disturbances; and
- (iv) where necessary, provide a resettlement option which is equivalent to or better than their current living environment.

(f) OBLIGATION TO IMPLEMENT ENVIRONMENT MANAGEMENT INSTRUMENT

The holder of a mineral right shall comply with and operate in accordance with the environmental management instrument approved by the Board.

(g) ACCESS TO INFORMATION

- (i) Every local community shall have access to information held by the Board and the Minerals Advisory Board concerning the environmental and social effects of proposed or on-going mining activities.
- (ii) The Board and the Minerals Advisory Board shall inform communities of the existence and content of communities' rights to access information relating to the social, environmental and economic impact of mining activities.
- (iii) Every holder of a mineral right shall make all approved Environmental Impact Assessments, Social Impact Assessments, Environmental Management Plans and Social Management Plans available on its official website free of charge.

(h) PUBLIC PARTICIPATION

(i) Every holder of a mineral right shall provide an opportunity for local community and the Primary Host Community to participate in consultations relating to environmental and social matters in accordance with paragraph (a) of subsection (2) of sections 133 and paragraph (f) of subsection (1) of sections 140 of the Mines and Minerals Act 2009.

- (ii) Every mineral right holder, in complying with Regulation 4 shall be guided by the following rules -
- (a) all information provided shall be transparent and honest;
- (b) there shall be no discrimination on the grounds of race, sex, ethnicity, culture, socioeconomic status or political views;
- (c) cultural diversity, including values, customs, and the traditions of individuals and communities shall be respected;
- (d) information shall be communicated in the language most commonly used by the affected parties, in a clear and simple to understand structure:
- (e) local needs and circumstances are taken into consideration;
- (f) all sectors and interests of society shall be well represented, including women, the elderly and youth;
- (g) there shall be no discrimination based on any of the grounds contained in international human rights legislation; and
- joint-problem solving shall be promoted through continuous dialogue and local traditions.
- (iii) The Executive Chairman or Authorised Officer shall facilitate and encourage public awareness and participation by ensuring that environmental licence and mineral right

- holders make information on the environmental and social impact of proposed and ongoing mining activities widely available.
- (iv) The Executive Chairman or Authorised Officer shall where practicable, make all approved Environmental Impact Assessments, Social Impact Assessments, Environmental Management Plans and Social Management Plans available on the Agency's website.

(i) PUBLIC CONSULTATION

- (i) Every mining licence holder shall hold consultations with key stakeholders from the earliest stages of a mining project throughout mining operations and mine closure.
- (ii) Public consultation and participation in reconnaissance, exploration, small-scale, and large-scale mining shall be guided by the following rules -
- (a) local communities shall have the right to receive and access public information in a timely and transparent manner;
- (b) local communities shall have the right to participate responsibly in decision-making processes pertaining to mining projects that affect their interests, provided that the claims are not frivolous or vexatious:
- (c) local communities shall have the right to receive copies of the social management plan at no cost and the applicant shall raise awareness within the community about the contents of the plan;

- (d) local communities shall have the right to monitor the implementation of provisions contained in the social management plan, provided that such monitoring shall in no way impede the applicant from fulfilling its obligations under these Regulations; and
- (e) local communities shall have the right to denounce any matter concerning the violation of their civil and human rights.
- (iii) Recognising the differences between mineral rights, applicants for an environmental licence shall engage in consultation with all relevant stakeholders as early as possible and, at a minimum, prior to the submission of an application for an environmental licence to the Board.

(j) JOINT AND SEVERAL LIABILITY

Where two or more persons constitute the holder of a mineral right, those persons shall be jointly and severally liable for the payment of all costs, damages and or indemnities arising from any adverse environmental impact and social impact (which shall include any human rights violations) resulting from their mining activities on the environment, the local community and the Primary Host Community.

(k) <u>INDEPENDENT LIABILITY</u>

(i) The termination, expiration, suspension, cancellation, revocation, forfeiture, attachment, pledge, relinquishment, surrender, reduction of area, ceasing of operations, or any other matter affecting the status of the mining right licence or permit shall not prejudice any environmental or social obligations or liabilities incurred by the holder.

(ii) The rule established in paragraph (i) shall also apply in the event of any variation, suspension, amendment or any other matter adversely affecting the status of the environmental licence.

(I) <u>APPOINTMENT OF CORPORATE</u> ENVIRONMENTAL OFFICER

- (i) The holder of, or applicant for an exploration, small scale or large scale mining licence shall appoint a corporate environmental officer, and may also appoint a deputy corporate environmental officer, who shall be in charge of the environmental control of the mineral right holder's mining operations, and shall be the primary contact person for the Board, the Executive Chairman, Authorised Officer and third parties for environmental and social purposes.
- (ii) In the absence of an individual with appropriate skills, the holder of or applicant for, an artisanal mining licence shall assume the status and responsibilities of the corporate environmental officer.
- (iii) The corporate environmental officer shall have a comprehensive knowledge of the characteristics of the mineral right holder's mining operations, and shall collect compile and manage and keep, in good order for inspection purposes, up-to-date information on the mineral right holder's environmental and social performance.
- (iv) The holder of an exploration, small scale licence or large scale mining licence shall, within thirty days of the coming into force of these Regulations, inform the Executive Chairman or Authorised Officer of the

- appointment of the corporate environmental officer and if one is appointed, a deputy corporate environmental officer.
- (v) The corporate environmental officer shall inform the Executive Chairman or Authorised Officer of any major incidents that has or is likely to give rise to adverse environmental impact or social impact.

BEST ENVIRONMENTAL PRACTICES

The holder of a mineral right shall conduct his mining activities according to environmental best practice and according to the philosophy of corporate social responsibility.

PART III-ADMINISTRATION

Environmental Impact Assessment Licence required for mining projects.

- 4. (1) No person shall undertake or cause to be undertaken any mining project; including reconnaissance, exploration, artisanal mining, small scale mining, large scale mining, dredging and radioactive substances mining, specified in the First Schedule of the Act, and for which an Environmental Impact Assessment Licence is required, unless that person obtains an Environment Impact Assessment licence issued by the Agency in accordance with subsection (1) of section 24 of the Act.
- (2) Applications for Environmental Impact Assessment Licence and enquires on other administrative issues and procedures related to environmental protection in mining activities shall be submitted to the Executive Chairman or Authorised Officer in accordance with Part X

Responsibilities of mineral right holder.

- 5. Every holder of a mineral right shall -
 - (a) carry on his operations in a manner that is reasonably practicable in order to minimize, manage and mitigate any environmental impact including but not limited to pollution resulting from such operations and in accordance with the Act and the Mines and Minerals Act 2009;

- (b) ensure that his actions and operations in relation to the Local Community and the Primary Host Community comply with all laws in force in Sierra Leone including international human rights instruments to which Sierra Leone is a party;
- (c) conduct consultations and negotiations with displaced persons and affected communities in good faith and in an open and transparent manner in accordance with paragraph (f) of subsection (1) of section 140 of the Mines and Minerals Act 2009:
- (d) facilitate the formation of a Community Liaison Committee and, based on an agreed budget, fund its basic operations, including transport costs for members to attend meetings and subsistence allowances for those travelling to meetings; and
- (e) prepare and implement a Resettlement Management Plan in instances of known or potential involuntary displacement caused by mining activities in accordance with section 38 of the Mines and Minerals Act 2009.
- 6. (1) For the purpose of establishing a consultative and Community Liaison monitoring framework between the licence holder and the primary Committee. hostcommunity, as required under paragraph (f) of subsection (1) of section 140 of the Mines and Minerals Act 2009, the holder of a smallscale or large-scale mining licence shall establish a Community Liaison Committee during the period in which he is undertaking a Social Impact Assessment in order to engage with communities, stakeholders, individuals, potentially displaced persons and where relevant, local communities who hold property or access rights to lands located within the area targeted for acquisition by the mineral right holder.

- (2) A Community Liaison Committee referred to in subregulation (1) shall represent the views of its constituents on all social matters, with the mining right holder, regarding compensation and report back to its constituents on all matters, decisions and key dates addressed and identified.
- (3) Members of the Community Liaison Committee shall comprise a Chairman, not being a local or Paramount Chief, nominated by the community and approved by the mineral right holder and the following other members at least two of whom shall be female -
 - (a) one representative of a local and Paramount Chief:
 - (b) four representatives of the local community;
 - (c) one representative of Civil Society appointed from local interest groups, including teachers, workers' unions representatives, health practitioners, women's enterprises (e.g. farming, beekeeping cooperatives), proposed by the community; and
 - one representative of the District Council or Local Government.

PART IV - RESTRICTING OR PROHIBITING RECONNAISSANCE

Non-invasive

- 7. (1) Pursuant to paragraph (j) of section 57 of the Mines reconnaissance and Minerals Act 2009, an applicant for a reconnaissance licence who confirms in writing that his operations will have no adverse effects on the environment, local communities, any monument or relic in the proposed reconnaissance area, shall be exempted from applying for an environmental licence.
 - (2) A confirmation in writing under sub-regulation (1) shall be made under oath and in accordance with the Statutory Declaration Act, 1835.

- 8. (1) An applicant for a reconnaissance licence under Invasive section 57 of the Mines and Minerals Act 2009 reconnaissance
 - (a) who intends to erect camps, temporary buildings, take timber or water from a lake or watercourse, or construct weirs, dams or other impoundments, or intend to use intrusive methods to collect geological information; or
 - (b) whose operations are likely to cause disturbances to local communities through noise, vibration physical obstruction or other adverse social impacts,

shall apply to the Board for an environmental licence in accordance with Regulation 19.

- (2) Where a holder of a reconnaissance licence has not applied for an environmental licence and has been found to have adversely affected the environment or any monument or relic or caused disturbance to local communities, he shall -
 - (a) promptly report such incident to the Board: and
 - (b) pay such fine or other penalty as may be imposed by the Board, including refusal of environmental licence for applications for renewal of a reconnaissance licence and for approval of proposed amendments to the programme of reconnaissance under section 63 and section 67 of the Mines and Minerals Act, 2009 respectively.
- 9. (1) The Executive Chairman shall, after consultation with Strategic the Board, coordinate the preparation of a strategic environmental environmental and social assessment for mining districts within which artisanal assessment of mining is a major activity.

artisanal mining areas

- (2) A strategic environmental and social assessment shall consist of -
 - (a) a baseline description of the environmental, social and local economic conditions in the district:
 - (b) an analysis of the existing artisanal mining practices within the area, including the number and ownership of existing licences, the physical extent of workings, the number of miners and dependants, the contribution to the local economy from mining activities and impacts of mining activities on other land uses;
 - (c) a description of the nature and extent of adverse and beneficial environmental and social impacts, and an account of any restoration and rehabilitation work undertaken within the district:
 - (d) a statement of prospects for further mining activities if extraction licences were to be granted;
 - (e) a report on the opinions and attitudes of all stakeholders, including local communities; and
 - recommendations on the management of artisanal mining areas, including potential restrictions on activities, the number of artisanal mining licences to be granted at any one time, and requirements for the treatment of abandoned mining areas and rehabilitation of all existing workings either progressively or on cessation of mineral extraction.

- (2) All Strategic Environmental and Social Assessments shall be widely disseminated and submitted to the Minerals Advisory Board and the Director of Mines.
- (3) Strategic Environmental and Social Assessments which relate to a specific area shall be submitted to the relevant district authorities for consideration in preparing community development agreements.
- 10. (1) Applications for an artisanal mining licence made in Application accordance with paragraph (e) of sub-section (2) of section 85 of the for artisanal Mines and Minerals Act 2009, shall be accompanied by a statement mining licence. giving particulars of the likely effects of the proposed mining operations on the environment and on the local population.

- (2) The Director of Mines shall consider the relevant Strategic Environmental and Social Assessment recommendations and ESIS when determining whether to refuse or grant an artisanal mining licence under section 86 of the Mines and Minerals Act, 2009.
- 11. (1) Any applicant who wishes to undertake any extractive Project industries project, including mining, quarrying, extraction of sand, screening gravel, salt, peat, set out in paragraph (f) of the First Schedule of the Act, shall submit a project screening application to the Executive Chairman or Authorised Officer to request determination of the project category for environmental and social assessment.

- (2) Notwithstanding this Regulation and Regulation 20, all mineral activities falling under paragraphs (e) and (f) of the First Schedule of the Act shall be subject to this Regulation.
- (3) For the avoidance of doubt, mineral extraction shall include mechanical excavation, dredging, solution mining and the recovery of radio-active materials.
- (4) Project screening applications referred to in subregulation (1) shall contain information specified in subsection (1) of section 133 of the Mines and Minerals Act 2009, including -

- (a) on the area of the intended project and information on its current uses and physical, biological and social environment; and
- (b) on the nature of the project, the intended work plan and the anticipated implications on the environment and social conditions.
- (5) Project screening applications referred to in sub-regulation (1) shall be submitted in such form as specified in the Second Schedule.
- (6) Within fourteen days of the receipt of an application under sub-regulation (1), the Executive Chairman or Authorised Officer shall assign the applicant one of four categories (A, B, C or D) based on the environmental and social impact screening criteria specified in the Third Schedule.

Project categorisation

- 12. (1) The project screening application shall be reviewed by the Executive Chairman or Authorised Officer in order to-
 - (a) identify the nature and scale of the environmental and social impact that the proposed project is likely to produce;
 - (b) determine the category (A, B, C or D) to which the project is to be assigned;
 - (c) establish the environmental and social assessment instruments that correspond to the project (Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), Environmental and Social Impact Assessment (ESIA), or Code of Practice) as indicated in Chart A; and

- (d) establish the corresponding environmental and social management instruments that correspond to the project Mine Closure Plan (MCP), Environmental Management Plan (EMP), Social Management Plan (SMP), Community Development Agreement (CDA), Resettlement Management Plan (RMP) as indicated under Chart A.
- (2) In assessing the project screening application, the Executive Chairman or Authorised Officer shall apply the criteria specified in the Third Schedule .
- (3), The Executive Chairman or Authorised Officer shall complete the screening process and notify the applicant of its decision within a period, not exceeding fourteen days, from the date of submission of the application in accordance with subsection (1) of section 25 of the Act.
- (4) The Executive Chairman or Authorised Officer shall keep a record of the screening decisions and supporting information, which shall be included in the register established and maintained for that purpose.

Chart A

| PROJECT IMPACT | PROJECT CATEGORY | ENVIRONMENTAL AND SOCIAL ASSESSMENT INSTRUMENT | ENVIRONMENTAL AND SOCIAL MANAGEMENT INSTRUMENT |
|--|---------------------|---|---|
| The project will produce significant adverse environmental and social impacts that are likely to result in the need for resettlement | A | EIA + SIA | MCP EMP SMP CDA RMP |
| The project will produce significant adverse environmental impacts with moderate social effects not involving the need for resettlement | В | EIA + SIA | MCP EMP SMP CDA(where required) |
| The project will have moderated environmental and/or social impacts which negative effects can be eliminated or minimized by simple and easy to implement measures | С | ESIA | Simplified MCP Combined EMP/SMP |
| The project does not involve significant environmental and/or social impacts | D | Code of Practice Disclosure + Declaration | |

13. (1) Any applicant submitting a Project Screening Appeal Application may appeal to the Board for reconsideration of the against Project category determined by the Executive Chairman or Authorised Officer category. on payment of an additional fee to cover the administrative expenses of the appeal.

- (2) Where an appeal is upheld by the Board and a lower category is agreed the appeal fee shall be repaid to the applicant.
- (3) The period for consideration of any appeal shall be four weeks.
 - (4) The decision of the Board shall be final and binding.
- 14. (1) Applicants for category A and B projects shall submit scoping a scoping report to the Executive Chairman or Authorised Officer report specified in the Fourth Schedule.
- (2) The Executive Chairman or designated officer in consultation with the Board shall review the scoping report and advise the applicant, within a period of 21 days from the date of submission, of any modifications to the scope of the assessment or additional information that may be required.
- (3) Applicants for a Category C Project shall not be required to submit a scoping report but may submit a draft of the ESIA to the Executive Chairman or Authorised Officer with a request for guidance on any additional subject matter that may be required to be covered.
- 15. (1) The environmental and social assessment instruments Assessment indicated under Chart A of regulation 12 shall comprise the the instruments following-
 - (a) an Environmental Impact Assessment (EIA) consisting of an EIA study and environmental impact assessment report that focuses on environmental issues and describes the

impacts that the proposed project is predicted to have on bio-physical conditions if implemented, together with proposals for avoiding, mitigating or compensating for adverse effects, in accordance with section 26 of the Act and subsection (2) of section 131 of the Mines and Minerals Act 2009 and as further specified in the Fifth Schedule;

- (b) a Social Impact Assessment (SIA) consisting of a social impact assessment study and social impact assessment report which describes the full range of social, economic and health issues affecting host communities, predicts significant adverse social impacts and sets out proposals for avoiding, mitigating or compensating for adverse effects, in accordance with clause (v) of paragraph (b) of subsection (2) of section 112 and subparagraph (xii) of paragraph (b) of subsection (1) of section 133 of the Mines and Minerals Act 2009 and paragraphs (d) and (e) of the Third Schedule of the Act and as further specified in the Sixth Schedule;
- (c) an Environmental and Social Impact Assessment (ESIA) consisting of a report containing a simplified or limited EIA which incorporates sections on social impacts and health impacts and is appropriate for projects that require more limited environmental and social analysis than an EIA as their negative effects on the environment and the community can be eliminated or minimized by simple and easy to implement measures, as specified in the Seventh Schedule;

- (d) an Environmental Code of Practice, as specified in Eighth Schedule which shall apply to all projects where the Board is satisfied, on the evidence presented by the applicant, that the project will not have significant environmental impacts.
- (2) Based on the project categorisation referred to in Regulation 12, the applicant shall use the corresponding environmental and social management instrument in preparing an environmental licence application.
- 16. The environmental and social assessment management Management instruments indicated under Chart A of regulation 12 shall comprise Instruments the following -

- (a) a Mine Closure Plan consisting of proposals for managing the progressive restoration of worked-out mine areas and the ultimate closure and restoration or rehabilitation of the mine site upon cessation of working as specified in the Ninth Schedule and in accordance with clause (iii) of paragraph (c) of subsection (1) of section 140 of the Mines and Minerals Act 2009...
- (b) an Environmental Management Plan describing how the applicant will implement all recommendations, commitments and obligations designed to avoid, minimise, ameliorate or compensate for adverse environmental impacts identified in the relevant environmental assessment instrument, as specified in the Tenth Schedule and in accordance with paragraph (a) of subsection (1) of section 115 and clause (xv) of paragraph (b) of subsection (1) of section 133 of the Mines and Minerals Act, 2009;

- (c) a Social Management Plan as specified in the eleventh schedule which shall-
 - (i) describe how the applicant will implement all recommendations, commitments and obligations to avoid, minimise, ameliorate or compensate for adverse social impacts identified in the relevant social assessment instrument:
 - (ii) include a community consultation and participation plan and a grievance management plan pursuant to Sections 138, 139 and paragraph (f) of subsection (1) of section 140 of the Mines and Minerals Act 2009:
 - (iii) include a community development agreement as required under Section 140 of the Mines and Minerals Act 2009 and the applicant for an environmental licence shall include appropriate details of the planned agreement as specified in the Twelfth Schedule; and
 - (iv) include a Resettlement Management Plan for the purposes of subsection (3) of section 38 of the Mines and Minerals Act 2009,

Consent to use land for mining purposes

- 17. (1) An applicant for an environmental licence shall inform, consult with and obtain the consent of landowners or rightful occupiers to use the land for mining purposes in accordance with section 32 and paragraphs (f) and (g) of subsection (1) of section 78 of the Mines and Minerals Act 2009 and as specified in the Thirteenth Schedule.
- (2) An environmental licence shall not be granted to an applicant under the Act unless-

- (a) there is evidence that the applicant engaged landowners or rightful occupiers in open and transparent negotiations and obtained their consent to use land for mining purposes; and
- (b) appropriate procedures within the social assessment and management instruments to engage the local community and the Primary Host Community have been implemented.
- (3) An applicant for an Environmental Licence shall complete and submit the application form as specified in the Fifteenth Schedule together with a written statement confirming the status of any agreement between the applicant and landowners or rightful occupiers of the land, including details relating to compensation arrangements with landowners or rightful occupiers.
- (4) The Executive Chairman or Authorised Officer shall carry out prior consultations with the Minerals Advisory Board in order to ascertain the status and relevance of the applicants' negotiations, to social and community issues that affect the granting of an environmental licence pursuant to sections 35, 36 and 37 of the Mines and Minerals Act, 2009.
- (5) Where an agreement is not reached relating to the payment of compensation, the amount of compensation to be paid shall be determined by the Director of Mines, acting on the advice of the Minerals Advisory Board, in accordance with subsection (6) of section 35 of the Mines and Minerals Act 2009.
- 18. (1) An applicant for an environmental licence shall Sustainable engage the local community and the Primary Host Community at the interventions. earliest opportunity in order to encourage community participation and ownership of sustainable development interventions in accordance with section 138 of the Mines and Minerals Act 2009 and as specified in the Fourteenth Schedule.

- (2) All sustainable development intervention under subregulation (1) shall be designed to-
 - (a) identify all relevant social issues that could give rise to harmful or negative effects on the local community and the Primary Host Community: and
 - guide the identification of development priorities, joint planning, implementation, management, and monitoring of sustainable development projects.
- (3) An applicant for an environmental licence shall submit a completed application form as specified in the Fifteenth Schedule confirming that all necessary steps have been taken to address the issues listed in sub-regulations (1) and (2).
- (4) The Executive Chairman or Authorised Officer shall carry out prior consultations with the Minerals Advisory Board in order to ascertain the progress in negotiating a Community Development Agreement and the relevance of the applicant's programme to social and community issues that affect the granting of an environmental licence.

Environmental licence application

- 19. An applicant for an environmental licence shall complete and submit to the Executive Chairman or Authorised Officer, the application form specified in the Fifteenth Schedule and 3 copies each, of documents submitted with the application specifying –
 - (a) the project category to which the application applies; and
 - where and when the relevant documents have been deposited for public inspection.

Review of applications.

20. (1) The Executive Chairman or Authorised Officer shall examine the application and confirm in writing within 14 days whether or not the required type and number of documents have been submitted relative to the project category.

- (2) In the case of Category A and B Projects, the Board shall review the EIA and SIA and accompanying management instruments and approve or reject them within a period of twelve weeks from the date of submission, this period may be extended if the Board requires clarifications from the applicant.
- (3) In the case of Category C Projects, the Board shall review the ESIA and approve it or reject it within a period of six weeks from the date of submission.
- (4) The Board shall only grant an environmental licence in relation to projects in Category A and B where it is satisfied that appropriate screening and review of the relevant application details and environmental and social management instruments have been conducted and that any significant adverse environmental impacts and social impact can be mitigated or ameliorated sufficiently enough to allow sustainable development of mining activities.
- (5) For all applications for Category C Projects involving more minor environmental and social issues, the Board shall determine the environmental impact assessment licence by giving due weight to both environmental and social considerations as set out in the ESIA.
- 21. (1) Where a Category A Project application involves the Projects potential for resettlement, the Executive Chairman or Authorised resettlement Officer shall refer the SIA and the SMP to the appropriate authority responsible for resettlement for its consideration.

- (2) The appropriate authority responsible for resettlement shall review the SIA, the SMP and the RMP in accordance with the criteria set out in any law relating to the resettlement of local communities and make recommendations in accordance with the procedures described therein.
- (3) For Category A Projects involving potential resettlement the Board shall consider the SIA in the light of comments and recommendations provided by the appropriate authority responsible for resettlement.

Inadequate and social assessments

- 22. (1) Where an EIA, SIA or ESIA is returned to the applicant environmental by the Board on the basis of inadequacy, the Board shall state its reasons and indicate the steps required by the applicant to rectify the inadequacy within a period of 21 days as specified in paragraph (b) of subsection (2) of section 28 of the Act.
 - (2) Subject to sub-regulation (1), the application for an environmental licence shall be held in abevance until the required rectification of the inadequacy has been made and the relevant environmental or social management instruments have been resubmitted.
 - (3) In the event that the necessary rectification of the inadequacy referred to in sub-regulation (1) are not addressed or the relevant document is not resubmitted within 21 days, the application for an environmental licence shall lapse.
 - (4) The Board may agree to extend the deadline outlined in sub-regulations (1) to (3) at its discretion on the basis of a reasonable case for an extension submitted by the applicant.

Review of licence application

- 23. (1) After receipt of the application documents for an environmental licence, the Executive Chairman or Authorised Officer shall widely disseminate and distribute the documents to local communities in order to raise awareness of its contents and seeks comments thereto.
- (2) The Executive Chairman or Authorised Officer shall disseminate notice to the public and the local community of all Category A, B and C projects through a variety of information outlets including radio broadcasts, posting details of the Category A, B or C project in local community, facilitate meetings with local community groups or civil society groups.
- (3) Members of the public and the local community shall be given fourteen days from the date of the last dissemination of information to submit written comments to the Executive Chairman or Authorised Officer.

- (4) The Executive Chairman or Authorised Officer shall compile a comprehensive list of all comments received from public consultation including details of the comments and who provided the comments.
- (5) All documents submitted to the Executive Chairman or Authorised Officer as part of an application for an environmental licence shall be reviewed by officers with the relevant technical skills, discipline and experience.
- (6) The documents referred to in sub-regulation (1), together with a report of the internal evaluation and list of public comments prepared by an Executive Chairman or Authorised Officer and endorsed by the Executive Chairman shall be submitted to the Board at least five days prior to the Board meeting in which the issue is to be addressed.
 - (7) The Board may, by simple majority decision, either-
 - (a) approve the documents and application and request the Executive Chairman to grant an environmental licence.
 - (b) conclude that there are inadequacies in the assessments and return the application and documents to the applicant with the option of rectifying the inadequacies and resubmitting them within 21 days.
 - (c) conclude that the scale of adverse environmental or social impacts is so great, and is incapable of being avoided, mitigated or compensated for, such that an environmental licence shall not be granted.
- (8) The quorum of the Board for any decision to grant a Category A or B environmental licence shall be two-thirds of appointed members.

PART V – OBLIGATIONS OF AN ENVIRONMENTALLICENCE **HOLDER**

Updating Enviromental Management Plan and social Impact Management Plan

- 24 (1) The holder of an environmental licence shall prepare an Environmental Management Plan and a Social Impact Management Plan and shall -
 - (a) review the contents of such plans on each anniversary of the commencement of works
 - (b) update the plans to accommodate any changes that have occurred in the method of mining, and area of operations, or other activities that could affect environmental protection and ultimate restoration or rehabilitation of the affected areas.
- (2) The holder of an environmental licence shall submit an updated Environmental Management Plan and a Social Management Plan to the Director of Mines and the Board within one month of the anniversary of the commencement of works.

Annual Environmental Report

- 25. (1) The holder of a mineral right shall prepare an Annual Environmental Report in accordance with Section 134 of the Mines and Minerals Act 2009 and submit this report for monitoring purposes simultaneously to the Director of Mines and the Board
- (2) The authors of the Annual Environmental Report prepared and submitted by the holder of the mineral right under regulation (1) shall not subsequently be engaged in any form of independent auditing relating to the same licence area

Annual Social Report

26. (1) The holder of a mineral right shall prepare an Annual Social Report in accordance with Section 134 of the Mines and Minerals Act 2009 and shall widely disseminate the report amongst the local community and submit copies of the same to the Minerals Advisory Board and the Board.

- (2) The authors of the Annual Social Report prepared and disseminated by the holder of the mineral right under regulation (1) shall not subsequently be engaged in any form of independent auditing relating to the same licence area.
- 27. An environmental licence holder shall include a schedule Environmental of the holder of the mineral right's internal sampling and inspection and Social Performance programmes covering all areas of environmental and social monitoring Monitoring as an appendix to the Environmental Management Plan and the Social Management Plan.

28. (1) For Category A and B projects, the holder of a mineral Financial right shall establish itemised costs for the restoration plan including all progressive restoration proposals and costs associated with the Mine Closure Plan prior to commencement of work in the manner specified in the Sixteenth Schedule relating to financial assurance.

- (2) Based on the outline costs, to be agreed with the Executive Chairman in consultation with the Board, the holder of a mineral right shall, prior to commencement of work, provide financial assurances to the full value of the restoration, rehabilitation and remedial works contained within the Mine Closure Plan to the satisfaction of the Board.
- (3) Estimates of costs in sub-regulation (1) shall be revised annually in the light of practical experience on the site and the level of financial assurance shall be adjusted accordingly in accordance with subsection (3) of section 136 of the Mines and Minerals Act 2009.
- (4) For Category C projects, the holder of a mineral right shall provide the Executive Chairman or Authorised Officer with a budget of costs relating to the mine closure.
- 29. (1) Acceptable forms of financial assurance include a Forms of surety bond, a trust fund with pay-in period, an insurance policy, a cash deposit or annuities, or any combination of these in the manner specified in the Sixteenth Schedule and in accordance with subsection (4) of section 136 of the Mines and Minerals Act 2009.

(2) The financial assurance mechanism to be used for any specific project shall comply with the standards contained in the Sixteenth Schedule.

Presentation of financial assurance

30. Where the mineral right holder fails to present the financial assurance by the start-up date for the commencement of mining activities as notified by the construction contractor, the environmental licence shall be suspended in accordance with subparagraph (ii) of subsection (1) of section 34 of the Act.

Temporary Suspension of activities

- 31. (1) Where the holder of a mineral right intends to temporarily suspend its mining activities, it shall present a care and maintenance programme to the Agency for approval by the Board.
- (2) The care and maintenance programme referred to in sub-regulation (1), shall be prepared in the format specified in the Seventeenth Schedule.
- (3) The period of temporary suspension referred to in sub-regulation (1), shall not be longer than two years and where mining activities are suspended for more than two years the holder of a mineral right shall enter into final closure and implement the closure plan as approved by the Board.
- (4) The holder of the mineral right shall ensure that the financial assurance provided under Regulation 30 shall continue in full force and effect during any temporary suspension of mining activities.

PART V1 - CLOSURE OF MINING ACTIVITIES

Mine closure obligations.

- 32. (1) A mineral right holder shall bring mining activities to a close at the end of extraction and related activities, whether during the period of or on termination of its mineral right, by ensuring that the mine area is left in a condition free of any adverse physical, chemical and biological effects, with no long term adverse environmental risks.
- (2) A mineral right holder shall leave the area of operations in a condition that facilitates future sustainable land use and ensures that rehabilitation does not become a burden to the community after mining activities are over.

- (3) A mineral right holder's obligations and liabilities shall continue until a closure certificate has been delivered in accordance with Regulation 41, provided that a mineral right holder's obligations shall not be limited by the expiration of the mineral right nor with the whole or partial suspension, cancellation, revocation, forfeiture, attachment, pledges, relinquishment, surrenders, reduction of area, ceasing of operations, or any other circumstances affecting the status of the mining right licence or the environmental licence.
- 33. (1) For Category A and B projects, an applicant shall Mine Closure produce a Mine Closure Plan which shall include all technical and Plan legal measures that need to be implemented by the holder of a mineral right in order to rehabilitate the areas disturbed by its operations and to eliminate actual or potential risks to the environment and to public health and safety.

- (2) For Category C projects, the applicant shall produce a conceptual mine closure plan which shall be included in the ESIA.
- (3) The mining areas shall be restored to their preoperational ecological conditions whenever feasible, or otherwise, to an environmental condition appropriate for sustainable alternative uses acceptable to the Board.
- (4) The conceptual closure plan shall include a budget of costs in relation to the mine closure.
- (5) A detailed Mine Closure Plan shall be submitted for approval by the Board, together with the financial assurance, at least six months before the proposed commencement of the project.
- (6) Existing small-scale mining and large-scale mining licence holders who do not currently have approved closure plans shall submit a detailed Mine Closure Plan for approval of the Board within six months after these Regulations enter into force.

- (7) The Mine Closure Plan shall be prepared in accordance with the structure and guidance as specified in the Ninth Schedule of these Regulations.
- (8) Once approved by the Board, the Mine Closure Plan shall be reviewed and updated every two years and whenever changes in the project make it necessary and all updates shall be submitted to the Board for approval.

Progressive Closure

- 34. (1) Every Mine Closure Plan shall be implemented in a progressive manner during the life of the project and shall involve a continuous series of activities starting from the initiation of the project.
- (2) Rehabilitation of disturbed areas shall be carried out on an on-going basis, before, during and after the final closure of operations.
- (3) Closure referred to in sub-regulation (2) comprises the rehabilitation activities included in the Environmental Management Plan and the Mine Closure Plan.

Default in closure obligations

- 35. (1) If the holder of a mineral right defaults in the performance of its closure obligations and such default is not caused by an event of force majeure affecting the holder of the mineral right, the Board shall levy a fine on the environmental licence holder and require him to comply with such obligations within such period of time as the Board may consider appropriate.
- (2) Where the infringed closure obligations are not implemented by the end of the term referred to in sub-regulation (1), the Board shall execute in full or part, as appropriate, the financial assurance and the Board shall retain a specialized engineering or environmental firm to implement the closure obligations in default, whose costs will be reimbursed by the defaulting mineral right holder.
- (3) In the event of a second offence the environmental licence shall be suspended.

- (4) Where the amount of the financial assurance is insufficient to fully implement the closure obligations, the holder of the mineral right shall pay the amount that is required to complete the closure works, to a special financial assurance account managed by the Board.
- (5) The amount referred to in sub-regulation (4) and the reimbursable amounts indicated in sub-regulation (2), plus interest, legal costs and any enforcement costs in relation thereto, shall be recoverable by summary judgement if the holder of the mineral right fails to pay such money to the special financial assurance account within the term established by the Board.
- 36. (1) Where the holder of a mineral right intends to cease Assets on operations either during the period of or on termination of its mineral termination right, he shall, in accordance with subsection (1) of section 54 of the right. Mines and Minerals Act 2009, present a notice to the Director of Mines with -

- (a) a full register of assets showing those assets which he intends to remove and those which he intends to leave in the area covered by the mineral right or permit; and
- (b) information of any potentially hazardous substances, erections or excavations in that area.
- (2) The register of assets referred to in paragraph (a) of sub-regulation (1) and the information on potentially hazardous substances, erections or excavations referred to in paragraph (b) of sub-regulation (1), shall be consistent with the Mine Closure Plan approved by the Board.
- (3) The notice referred to in sub-regulation (1) shall be accompanied by a letter of conformity issued by the Director of Mines and for this purpose the holder of a mineral right shall submit the proposed notice for review by the Board.

- (4) Pursuant to sub-regulation (3) the Executive Chairman or Authorised Officer shall issue a letter of conformity or nonconformity, as the case may be, within fourteen days which shall indicate any objections.
- (5) The holder of a mineral right shall, in not more than a period of seven days, respond to the objections of the Executive Chairman or Authorised Officer in sub-regulation (4) and re-submit the proposed notice, after which the Executive Chairman or Authorised Officer shall issue a letter of conformity within a fourteen day period and where the Board's objections are not satisfactorily addressed, no letter of conformity shall be issued.
- (6) On receipt of the notice from the holder of a mineral right, the Director of Mines may, if he deems it necessary, in accordance with paragraph (a) of subsection (2) of section 54 of the Mines and Minerals Act, require that specified items of fixed machinery are necessary for the care and maintenance of the area covered by the mineral right, and such items and machinery shall not be removed.
- (7) The items referred to in sub-regulation (6) shall be excluded from the Mine Closure Plan, and the financial assurance reduced as required, without prejudice to any corresponding environmental liabilities to which the holder of the mining right is subject, until such items are handed to the Director of Mines.
- (8) The compensation referred to in subsection (3) of section 54 of the Mines and Minerals Act shall not reduce compromise or replace any payment for fines, damages, indemnities, or other economic consequences attributable to the holder of a mineral right's environmental liabilities.

- (9) On receipt of the notice from the holder of a mineral right, the Director of Mines may, if he deems it necessary, require that specified buildings and other items of fixed machinery shall be removed or require that potentially hazardous substances, erections and excavations be removed or made safe in such manner as he may direct in accordance with paragraphs (b) and (c) of subsection (2) of section 54 of the Mines and Minerals Act.
- (10) The requirements referred to in sub-regulation (9) shall be consistent with the decommissioning and other abandonment measures contemplated in the MCP approved by the Board and the Director of Mines shall consult with the Board in case of any doubt on the matter.
- (11) Where the requirements referred to in sub-regulation (9) involves the holder of the mineral right to perform additional works, the Executive Chairman shall require the holder of a mineral right to submit a proposed amendment to the Mine Closure Plan indicating the additional works required and the associated costs, the holder of a mineral right shall present a financial assurance to the Board for the additional works which shall be included in the Mine Closure Plan.
- 37. (1) Notwithstanding subsection (5) of section 54 of the Retention of Mines and Minerals Act, the environmental licence holder shall fresh water undertake a full inspection of the integrity and safety of any fresh water dam that is to be retained and advise the Director of Mines and the Board on the long-term engineering and cost implications of retention.
- (2) After consultation with the Director of Mines, the Board may instruct the retention, removal or modification of the dam and reservoir and the environmental licence holder shall modify the Mine Closure Plan accordingly.

altaernative use of facilities

- 38. (1) In accordance with the sustainability principle established under Regulation 3 and subsection (1) of section 132 of the Mines and Minerals Act 2009, and for the purposes of the community development, provisions contained in sub-paragraph (i) of paragraph (c) subsection (1) of section 140 and paragraph (b) of subsection (2) of section 140 of the Mines and Minerals Act 2009, the local community or the local authority may file a request to the Board through its Executive Chairman or Authorised Officer in order to exclude from the Mine Closure Plan, certain facilities, such as roads, buildings, water wells, or other, that can be beneficial to the local community after the termination of the mining activities, in which case, the local community or the local authority, as appropriate, shall take the responsibility for the maintenance of such facilities as well as for their closure should it be required.
- (2) The Board, through its Executive Chairman or Authorised Officer shall communicate its decision by written notice to the community representative or the local authority, as the case may be, within thirty days.
- (3) Where the request is approved, the Board shall indicate the maintenance and closure obligations to be assumed by the local community or the local authority.
- (4) The Board through its Executive Chairman or Authorised Officer, shall also notify the related holder of the mining permit, and shall withdraw such facilities from the Mine Closure Plan, and reduce the financial assurance in the proportionate amount.

Review and modification of Mine

39. (1) Every holder of mineral right shall present an updated Mine Closure Plan every two years or at the request of the Board, for review by the Board and the closure cost of areas that have been rehabilitated as contemplated in the Environmental Management Plan and the Mine Closure Plan, shall be eliminated from the budget and the financial assurance reduced or increased accordingly.

- (2) The holder of the mineral right shall submit for consideration by the Board, modifications to the Mine Closure Plan and associated financial assurance which are required as a result of the modification of the mining activities.
- (3) The Board through its Executive Chairman or Authorised Officer shall communicate its decision by written notice to the holder of the mineral right within thirty days of submission of the Mine Closure Plan and associated financial assurance.
- 40. (1) The Mine Closure Plan shall include a proposed Monitoring monitoring and reporting programme for the Executive Chairman or and reporting Authorised Officer to control and supervise the execution of closure measures as proposed by the holder of the mineral right.
- (2) The monitoring and reporting programme referred to in sub-regulation (1), shall include a minimum of a three-year monitoring and reporting period after final closure in order to verify that the Mine Closure Plan has been successfully implemented and the area has reached physical, chemical and ecological stability.
- (3) The Board may establish a longer monitoring and reporting period if deemed necessary.
- 41. Where the Mine Closure Plan has been fully implemented Closure and the Board is satisfied that the project area has been rehabilitated certificate to a condition suitable for stable and sustainable use, the Executive Chairman shall issue a closure certificate and return the remaining financial assurance to the holder of the mining right.

PART VII - ENVIRONMENTAL STANDARDS

(1) Environmental quality standards shall establish the Environmental degree, level or concentration of elements and substances, as well quality standards as physical, chemical and biological parameters, present in ambient air, water or soil that does not pose a significant risk on the public health and the environment.

(2) Alterations of environmental quality exceeding the environmental quality standards are not legally imputable to the holder of a mineral right unless a direct cause-effect relationship between its operations and the violation of the environmental quality standards is established.

Effluent and Emission Standards.

- 43. (1) Effluent and emission quality standards -
 - (a) shall establish the degree, level or concentration of elements and substances as well as physical, chemical and biological parameters that characterize a particular effluent or emission from a mining operation, in excess of which public health, human wellbeing or the environment are or might be harmed
 - (b) shall be measured at their punctual source and include funnels and waste water pipes.
- (2) The Board shall prescribe effluents and emission quality standards and recommend air, water and soil environmental quality standards in accordance with paragraphs (h) and (t) of section 12 of the Act.
- (3) The holder of a mineral right shall comply with effluent and emission quality standards.
- (4) The Board shall enforce effluents and emission quality standards and impose penalties in case of infringement in accordance with Regulation 83 and these Regulations.

Application of standards

44. (1) Adjustment to new standards for on-going mining operations shall be prescribed by the Board and shall be gradually and progressively undertaken by the holder of the mineral right within a reasonable period of time prescribed by the Board.

- (2) The period of time referred to in sub-regulation (1) shall be determined by the Board on a case by case basis and always in consultation with the appropriate industry specialists.
- (3) Exceptionally, and for only one time, the Board may extend the period referred to in sub-regulation (2) for such extended term it deems necessary, if the social cost of standards implementation is greater than the overall benefit to the local community.
- 45. The prohibition of the discharge of any toxic and hazardous Prohibition. substance into the air or in, on or under the land and waters of Sierra Leone imposed under subsection (5) of section 58 of the Act shall apply to discharges from mining activities which infringe the effluent and emissions quality standards established by these Regulations.
- 46. Where the natural quality of water used in mining activities Ambient already exceeds the effluent standards established by these water quality. Regulations, the effluent discharges from such operations shall not have a lower quality than the water taken from its natural source.
- 47. (1) Except as provided under Regulation 48, effluent Effluent international quality standards for mining and metallurgic Standards. operations are as follows:

| PARAMETER | UNIT OF MEASURE | LIMIT AT ANY MOMENT | ANNUAL AVERAGE LIMIT |
|------------------------|--------------------|------------------------|----------------------------|
| Ph | S.U | 6- 9 | 6- 9 |
| Total Suspended Solids | mg/l | 50 | 25 |
| Oil and Grease | mg/l | 10 | 16 |
| Total Cyanide | mg/l | 1 | 8 |
| Total Arsenic | mg/l | 0.1 | 0.08 |
| Total Cadmium | mg/l | 0.05 | 0.04 |
| Hexavalent Chrome | mg/l | 0.1 | 0.08 |
| Total Copper | mg/l | 0.6 | 0.4 |
| Iron (dissolved) | mg/l | 2.0 | 1.6 |
| Total Lead | mg/l | 0.2 | 0.16 |
| Total Mercury | mg/l | 0.002 | 0.0016 |
| Total Zinc | mg/l | 1.5 | 1.2 |

(*) Unfiltered sample.

- (2) The results from effluents sample analysis shall not exceed the value established in the column: "limit at any moment".
- (3) Annual concentration for each parameter shall not exceed the values established in the column: "annual average limit"
- 48. The holder of a mineral right shall not dilute effluents with Effluent fresh or saline water or mix industrial and domestic effluents.

 dilution and mixing prohibited.
- 49. (1) Air quality standards for mining and metallurgic Air quality operations shall be as follows:

| Parameter | Unit Measure | Limit at any Moment |
|---------------------------------------|--------------|---------------------|
| Arsenic | mg/m³ | 5 |
| Carbon monoxide | mg/m³ | 29 |
| Copper | mg/m³ | 1 |
| Free silica | mg/m³ | 5.0 |
| Hydrogen cyanide | mg/m³ | 11 |
| Hydrogen sulfide | mg/m³ | 14 |
| Lead, dusts & fumes as Pb | mg/m³ | 0.15 |
| Nitrogen dioxide | mg/m³ | 6 |
| Particulate (interior nuisance dusts) | mg/m³ | 10 |

(2) Quality standards for sulphur dioxide emissions

| SULPHUR INPUTTons/day | SO ₂ EMISSION LIMIT Tons/day |
|-----------------------|---|
| <10 | 20 |
| 11-15 | 25 |
| 16-20 | 30 |
| 21-30 | 40 |
| 31-40 | 50 |
| 41-50 | 60 |
| 51-70 | 66 |
| 71-90 | 72 |
| 91-120 | 81 |
| 121-150 | 90 |
| 151-180 | 99 |
| 181-210 | 108 |
| 211-240 | 117 |
| 241-270 | 126 |
| 271-300 | 135 |
| 301-400 | 155 |
| 401-500 | 175 |
| 501-600 | 195 |
| 601-900 | 201 |
| 1201-1500 | 213 |
| >1500 | 0.142 (S)*. |

*(S) = Total sulphur input into the process

50. (1) The Board shall establish standards for other effluent Regulation of and emission parameters as it may deem necessary and shall review other parameters. such standards annually to incorporate any new effluents, emissions or measurement criteria.

- (2) The holder of a mineral right shall technically demonstrate to the Executive Chairman or Authorised Officer that effluent discharges and emissions from operations for parameters not yet regulated by these Regulations, do not cause negative effects to public health, safety and the environment.
- 51. (1) The relevant environmental assessment instrument Control and (EIA, ESIA and EMP) shall indicate-

Monitoring stations.

- (a) proposed control checkpoints for every effluent and emission generated from the operations;
- (b) effluent and emission monitoring stations to be installed in each control checkpoint;
- (c) the number and technical characteristics of monitoring equipment to be installed in each monitoring station;
- (d) the frequency with which sampling shall be carried out at each monitoring station.
- (2) For the purposes of these Regulations, effluent and emission samples shall be taken from every control checkpoint established in the EIA, ESIA and EMP.
- (3) No change in the location of any checkpoint or monitoring station shall be made unless with prior approval by the Executive Chairman or Authorised Officer.
- 52. (1) The holder of an environmental licence shall measure Monitoring of the concentration of each regulated parameter on a quarterly basis in effluents and amissions by order to determine pollutants concentration as well as the volume of environmental effluent and emission discharges.

licence holder

- (2) The holder of an environmental licence for a Category A or B project shall present a quarterly report to the Executive Chairman or Authorised Officer containing the effluents and emissions monitoring results for the last three months and an analysis and interpretation of these results.
- (3) The holder of an environmental licence for a Category C project shall monitor its effluents and emissions and keep the information readily available for review by the Board or Authorised Officer
- (4) The Board or the Authorised Officer may, at any time, request from the holder of a Category C Project environmental licence the monitoring information referred to in sub-regulation (3) for the purposes of review and control.
- (5) Every holder of an environmental licence shall keep monitoring information for a period of five years.

Sampling protocol

- 53. (1) Effluent and emission sample collection and analysis shall be carried out according to the official monitoring guidelines approved by the Board.
- (2) The Board shall by statutory instrument, prescribe the guidelines referred to in sub-regulation (1).

Penalties Imposed by Board

- 54. (1) The Board shall impose on the holder of a mineral right the penalties prescribed in these Regulations in the following cases-
 - (a) effluents and, or emissions exceeding legal limits; and/or
 - (b) dilution or mixing of effluents.

PART VIII — MONITORING AND INSPECTION

55 (1) The Executive Chairman or Authorised Officer shall Control and conduct both routine and random inspection and supervisory actions of the environmental performance of mining operations of all environmental licence holders.

- (2) The Executive Chairman or Authorised Officer shall supervise mining operations in accordance with the Code of Practice specified in the Eighth Schedule and enforce compliance with these Regulations.
- (3) Control and supervisory actions comprise project monitoring, routine and random inspection visits at site, and environmental auditing.
- (1) The Executive Chairman or Authorised Officer shall Site visits. establish a routine inspection schedule for every mining activity covered by an environmental licence.
- (2) Notwithstanding sub-regulation (1), Category A projects shall be inspected at least three times each year, category B projects shall be inspected twice a year and category C projects shall be inspected once a year.
- (3) For all routine inspections the Executive Chairman or Authorized Officer shall give the environmental licence holder five days' notice of the planned inspection in advance to the holder of the mineral right, informing him of the scheduled inspection visit, indicating -
 - (a) the name(s) and identification number of the officer(s) appointed for site visiting;
 - time schedule indicating date of visit and number of days of presence at site if applicable; and
 - (c) logistic requirements as applicable.

- (4) The notice referred to in sub-regulation (3) shall be delivered by hand or email to the holder of the mineral right, provided that any notification by email shall be deemed to be delivered upon receipt of email confirmation by the Executive Chairman or Authorised Officer.
- (5) The holder of the mineral right shall include in his application for an environmental licence, current address and email contact details and undertake to promptly notify the Executive Chairman or Authorised Officer of any change of address or email address.
- (6) Failure by the holder of the mineral right to comply with sub-regulation (5), shall not prevent the Board, Executive Chairman or Authorised Officer, from performing an inspection under this Regulation.

Random inspection.

- 57. (1) Pursuant to Section 37 of the Act, the Executive Chairman or Authorised Officer shall, from time to time conduct random inspection of any project in respect of which an environmental licence has been issued in order to assess their effect on the environment and the community and ascertain compliance with the Act and these Regulations.
- (2) For the effective exercise of these powers, the Executive Chairman or Authorized Officer may-
 - (a) enter at any time, without warrant, any premises or facility where mining activities are being undertaken and inspect the project at any time, subject only to full compliance with radiation and mine health and safety standards;
 - (b) request from the holder of a mineral right any environmental information or documentation pertaining to the mining activities, including any licence issued under the Act and these Regulations, project records, or any other document he deems relevant;

- (c) take samples of emissions, effluents, soil, wastes or any other substances or residues from the operations;
- (d) perform tests in-situ; and
- (e) perform any other tests, take samples and request information or documentation pertaining to the mining activities that he may deem necessary.
- (3) The Executive Chairman or its Authorized Officer may request the support of the police for the performance of its functions under these Regulations
- 58. (1) Category A and Category B environmental licence Voluntary holders may arrange for environmental and social audits to be Audit. conducted on their own operations from time to time, by fully qualified environmental and social auditors in order to inform the content of their environmental and social reports.
- (2) Auditors for Category A and B audits shall be of accredited international environmental and social audit standards.
- (3) A copy of every independent audit undertaken by Category A and B environmental licence holders shall be submitted to the Executive Chairman or Authorised Officer together with the annual environmental and social report.
- (4) The Executive Chairman shall recognise and accept copies of duly certified and audited independent environmental audits produced by the mineral right holder for its financiers to ensure compliance with the Equator Principles.
- 59. (1) The Executive Officer or Authorised Officer may Compulsory arrange for random auditing to be carried out on any environmental audit. licence holder's operations in order to ensure consistency and transparency in environmental and social monitoring.

- (2) The frequency of random audit shall vary with the scale and significance of the project and the level of performance identified through routine sampling, inspection and monitoring by the licence holder as follows -
 - (a) Category A and B project environmental licence holders at a frequency of 3 per year.
 - (b) Category C project environmental licence holders at any time if a routine inspection by the Executive Chairman or Authorised Officer indicates that there are serious omissions in environmental or social performance.
- (3) The Board shall be responsible for the selection of auditors and such selection shall be in accordance with the standards set out in Regulation 60 and the principles contained in the Eighteenth Schedule.

Appointment of Auditors and cost.

- 60. (1) The Board shall conduct a competitive and open tender, in accordance with the Public Procurement Act, 2004 (Act No. 14 of 2004), for a rooster of competent environmental auditors who, upon selection by the Board, shall become part of a standing pool of environmental auditors which may be called upon by the Board or the Executive Chairman at any time within a 3 year period for the purposes of conducting routine or specific environmental audits.
- (2) Bidding information to be requested by the Board shall include -
 - (a) clear requirements of an anticipated programme of work;
 - (b) the required technical competencies;
 - (c) any other specific requirements of the Board relating to the anticipated environmental audit:.

- (d) schedule of costs for the tendered framework plan,
- (e) previous experience of similar work advertised by the Board; and
- (f) a list of available technical consultants and their detailed resumes.
- (3) Where the costs of an environmental audit remains unresolved, the environmental licence holder may appeal to the Board, whose decision on any disputed costs shall be final and binding.
- (4) Whenever the Board requires the services of an environmental auditor for the purposes of these Regulations, it shall promptly notify those auditors chosen from an existing pool of environmental auditors in order to determine their availability to commence work.
- (5) The terms of reference for any specified audit shall be developed and agreed with the environmental licence holder.
- (6) Auditors shall be selected by the Board based on the responses from the standing pool of approved environmental auditors relating to price, expert qualifications and ability to mobilise:

provided that those companies or individuals who have been involved or contracted by the environmental licence holder to undertake any work related to environmental or social issues within the previous 12 months shall be excluded from undertaking any auditing work, and any selected environmental auditor shall be prohibited from providing services related to the environmental or social issues to the environmental licence holder for six months after the completion and submission of the audit.

PART IX ENFORCEMENT

Grievance mechanism

- 61. (1) The holder of a mineral right shall submit to the local communities, a formal grievance mechanism in accordance with the following principles-
 - (a) legitimacy;
 - (b) accessibility;
 - (c) predictability;
 - (d) equitability;
 - (e) transparency;
 - (f) ensuring that communities' rights under these Regulations and other laws are respected;
 - (g) dialogue and engagement; and
 - (h) encouraging an environment of continuous improvement of processes and dialogue.
- (2) The holder of a mineral right shall designate a grievance officer early in the project cycle to-
 - (a) inform the local community and the Primary Host Community and raise awareness of the grievance mechanism.
 - (b) manage grievances and ensure full documentation of grievance processes; and
 - (c) meet members of the community to resolve informal complaints.
- (3) Where grievances are unresolved by the holder of a mineral right, an arbitrator shall be jointly appointed by the Executive Chairman or Authorised Officer and the representative of the local community.

- (4) The local community shall identify an appropriate person to represent the community in all arbitration matters and the representative shall be an internationally accredited negotiator or mediator with experience in mining related grievances.
- (5) The costs of any arbitration and shall be borne by the holder of a mineral right.
- 62. The enforcement measures in these Regulations are in Enforcement addition to the enforcement measures of the Board in sections 53, measures. 54, 55 and 56 of the Act.
- 63. (1) Pursuant to subsection (3) of section 37 of the Act, Environmental where the Executive Chairman or Authorized Officer has reasonable offences. grounds to believe that an offence has been committed or is about to be committed in violation of the Act or these Regulations, he may without a warrant, enter, conduct inspections in or search any mining site, premises, facilities, vehicles or other buildings, sites or facilities associated with the mining activity, in which he has reasonable grounds to believe an offense has been, is about to be or is being committed.
- (2) The Executive Chairman or Authorized Officer may seize any document, item or substance which he has reasonable grounds to believe has been used in the commission of such offence or in respect of which an offence has been committed.
- (3) A receipt shall be given for anything seized under this regulation which states the grounds for such seizure.
- (4) The Executive Chairman or Authorized Officer may require the police to arrest any person who he suspects to have committed an offence.
- 64. Every person shall have a standing before the Board to Standing raise any matter of concern regarding violations of social and environmental obligations.

Duties of mineral right holder.

- 65. (1) The holder of a mineral right shall -
 - (a) allow the Executive Chairman or Authorized Officer to enter the project premises, and conduct all or any of the actions in exercise of the functions and powers conferred upon him by the Act and these Regulations.
 - (b) provide assistance to the Executive Chairman or Authorized Officer in exercise of the powers conferred on him under the Act and these Regulations.
- (2) The holder of a mineral right or its corporate environmental officer, shall report any environmental accident relating to its mining activities to the Executive Chairman or Authorized Officer within twenty-four hours of the accident and submit a detailed report on the accident within ten working days of the date on which the accident took place.

Financial assurance.

- 66. Where a holder of a mineral right is obligated to provide a financial assurance under section 136 of the Mines and Minerals Act 2009 and fails to do so, the Director shall-
 - (a) cause to be served, on the holder of a mineral right a notice of demand; and
 - (b) cause a note of the service of the notice to be endorsed in the mining cadastre register, in accordance with subsection (5) of section 136 of the Mines and Minerals Act, 2009.

PART X – ADMINISTRATION OF ENVIRONMENTAL LICENCE

Application for environmental licence.

67. (1) An application for environmental licence under categories EIA or ESIA shall be submitted to the Board in accordance with section 24 of the Act.

- (2) The Minerals Advisory Board shall not consider an application for exploration, small scale or large scale mining right or permit unless the applicant submits an environmental licence granted to it by the Board.
- (3) An application for an environmental licence under sub-regulation (1) shall—
 - (a) provide details of any significant adverse effects that-
 - (i) a reconnaissance operations is likely to have on the environment and on any monument or relic in the proposed reconnaissance area and an estimate of the cost of combating such adverse effects in accordance with paragraph (J) of section 57 of the Mines and Minerals Act, 2009;
 - (ii) an exploration operation is likely to have on the environment and on any monument or relic in the proposed exploration licence area and an estimate of the cost of combating such adverse effects in accordance with paragraph (J) of section 70 of the Mines and Minerals Act, 2009;
 - (b) an environmental impact assessment licence as prescribed under the Environment Protection Act as a condition for granting a small-scale mining licence or a large-scale mining licence in accordance with subsection
 (2) of section 131 of the Mines and Minerals Act, 2009;

(c) be accompanied by a statement on the consequences of dredging including the destruction of monuments and relics, sacred places and burial grounds in accordance with paragraph (a) of subsection (2) of section 228 of the Mines and Minerals Act, 2009.

Legal effect of licence.

- 68. (1) An environmental licence granted by the Board under the Act shall entitle the licensee to initiate or continue with the application process for a mining right or permit.
- (2) Where an application for an environmental licence is rejected by the Board, the mining right or permit application shall be deemed to be incomplete and not compliant with mineral right licensing requirements.

Validity and renewal.

- 69. (1) An environmental licence shall be valid for twelve months from the date of issue or for such period as the Board may determine and in accordance with paragraph (c) of section 30 of the Act.
- (2) The period specified in an environmental licence may be renewed by the Board, upon application by the licensee, for such further period as the Board shall determine and in accordance with section 31 of the Act.

Amendment of EIA or ESIA

- 70. (1) The holder of an environmental licence who wishes to amend an EIA or ESIA shall submit an application to the Board for that purpose.
- (2) Subject to sub-regulation (1), an EIA or ESIA shall be amended or modified in the following cases-
 - (a) for the implementation of mine development at completion of the exploration phase, and before the commencement of mining activities:

- (b) for increments of mineral production greater than 50% of the production estimated in the original EIA, in small-scale mining operations;
- (c) for increments of mineral production greater than 30% of the production estimated in the original EIA, in large-scale mining operations;
- (d) for increments of mineral production in smallscale or large-scale mining operations having new environmental impacts or involving disturbance of new areas:
- (e) for the construction and operation of new beneficiation facilities not included in the beneficiation plant original layout;
- (f) for the modification of existing beneficiation facilities due to introduction of new mineral processes or increment of production capacity greater than 50%;
- (g) for the construction of tailing ponds, rock deposits, furnaces, chimneys, leaching pads or other facilities not included in the beneficiation plant original layout;
- (h) for the introduction of new equipment or variations of technology in mining or beneficiation facilities having new environmental impacts or affecting new areas.
- (3) Subject to sub-regulation (2), the Board may determine that amendments to an ESIA may result in re-categorization of the project into a Category A or B project that shall require an EIA.

Cancellation, suspension, and ex officio modification.

- 71. (1) Pursuant to Section 34 of the Act, where the terms and conditions of a licence are not being complied with or have been contravened, or there is a substantial change in or an adverse effecton the environment as a result of the operations of the holder of a mining licence, the Board may-
 - (a) cancel the licence;
 - (b) suspend the licence for such time as the Board considers appropriate; or
 - (c) impose additional or modified conditions for the licence:

Provided that the Board shall, prior to any decision to cancel, suspend or modify the licence conditions, consult with the holder of the mineral right and give him an opportunity to take corrective measures to remedy or abate the offending events for a period not exceeding 3 months.

- (2) The Executive Chairman or Authorised Officer shall notify the Director of Mines and the holder of an environmental licence in writing of the cancellation, suspension or imposition of additional conditions of a licence and of such additional conditions that may have been imposed.
- (3) The Board may, in addition to cancellation, suspension or imposition of additional conditions, require the holder of a mining permit to take measures to remedy or abate such adverse effects on or remedy any damage to the environment where necessary.
- (4) The Board may engage an appropriately skilled independent consultant to produce a technical assessment report of the offending events that may assist the Board to determine whether to cancel, suspend or impose additional conditions on the holder of the mining right or permit and the costs of such report shall be borne by the holder of the mineral right or permit.

- (5) The suspension or cancellation of the mining right or permit to which the environmental licence applies shall be determined in accordance with section 53 of the Mines and Minerals Act, 2009.
- 72. (1) An applicant who is dissatisfied with the decision of Appeal the Board not to grant or to reject an application for an environmental licence or to cancel or suspend an existing environmental licence may appeal to the High Court within thirty days of the Board's notification of its decision to the applicant.
- (2) A member of the local community aggrieved by the Board's decision to grant an application for an environmental licence may appeal to the High Court within thirty days of the Board's notification of its decision to the applicant to grant the application for an environmental licence.
- (3) The filing of the appeal shall under sub-regulation (2) and (3) shall not suspend the effects of the Board's decision and shall remain in force until the High Court suspends or revokes the decision of the Board.
- 73. (1) The Executive Chairman or Authorised Officer shall Licence establish and maintain a Register of Environmental Licences in which register. shall be recorded all applications and licences granted including all ancillary documents and materials.
- (2) The Register of Environmental Licences referred to in sub-regulation (1), shall be a public document and shall be available for public inspection on payment of the prescribed fee.
- (3) A copy of the Register of Environmental Licences shall be deposited with the mining cadastre on a semi-annual basis.
- 74. The environmental licence approval process shall require Stakeholders stakeholders' participation and reaction and accordingly in order to participation. give the applicant an opportunity to plan in advance on how to mitigate negative environmental impact and social impact before they arise.

PART XI-MISCELLANEOUS

Existing licences and rights.

- 75. (1) All environmental licences issued prior to the coming into force of these Regulations shall be valid for the period of the licence.
- (2) The Board may review all environmental licences issued prior to the coming into force of these Regulations in order to assess whether the environmental and social impact assessments and associated management plans have been completed to the standards established in these Regulations.
- (3) Subject to sub-paragraph (2), the Board may amend any plan or document associated with any environmental licence issued prior to the coming into force of these Regulations.
- (4) All mineral right holders shall, not later than six months after to the coming into force of these Regulations, ensure that their operations are in compliance with the Environmental Standards established in Part VII of these Regulations.
- (5) Existing mineral right holders who do not have an environmental licence shall apply for an environmental licence not later than six months after the coming into force of these Regulations.

Information disclosure.

- 76. (1) Where the Board requires additional information to that already provided by an applicant or licence holder, the Executive Chairman or Authorised Officer shall submit a written request to the applicant or licence holder specifying the information required and stating the reason for requesting the information.
- (2) If the applicant refuses to provide information requested under sub-regulation (1) the Board may refuse a new application, suspend or revoke an existing licence.

Environmental management-instrument.

77. Reconnaissance and exploration operations undertaken for the purpose of locating mineral deposits shall be developed under an environmental management instrument, issued by the Board in accordance with these Regulations.

- 78. (1) Where there is a transfer of a mineral right, the Transfer transferee shall implement the EIA or ESIA, as applicable and MCP obligations. approved by the Board in relation to the mineral right in accordance with subsection (7) of section 83 and subsection (7) of section 119 of the Mines and Minerals Act, 2009.
- (2) Sub-regulation (1) shall apply to all and any kind of mineral right or permit acquisition.
- 79. (1) All small-scale and large-scale mining licence holders Financial shall provide, within such time as specified by these Regulations, assurance. financial assurances for their own performance against all obligations to which they are subject under an EMP or the terms of an environmental licence and in accordance with subsection (2) of section 137 of the Mines and Minerals Act 2009.
- (2) The form of financial assurance to be provided under sub-regulation (1) shall be in such form as specified in subsection (4) of section 136 of the Mines and Minerals Act, 2009.
- (3) The holder of a mineral right shall provide only one financial assurance against all environmental and social liabilities resulting from his mining activities in a specific project and shall not be required to provide two assurances in relation to its environmental and social liabilities deriving from a specific project.
- 80. (1) The Act and these regulations shall not apply to any Cadastral land marked on the cadastral survey map in accordance with paragraph survey map. (c) of subsection (1) of section 46 of the Mines and Minerals Act, 2009 and known to be closed to mining.
- (2) In application of sub-regulation (1), the cadastral survey map shall depict all national parks, natural reserves, archaeological sites, and other protected areas established throughout Sierra Leone in accordance with paragraph (d) of subsection (2) of section 176 of the Mines and Minerals Act, 2009.
- 81. (1) The Director of Mines in consultation with the Suspension. Executive Chairman shall suspend or cancel a mineral right if the holder grossly violates health and safety regulations or causes environmental harm in accordance with paragraph (c) of subsection (1) of section 53 of the Mines and Minerals Act, 2009.

or cancellation of mineral rights. (2) The Board shall order the holder of the mineral right to immediately implement environmental rehabilitation as prescribed under Section 136 of the Mines and Minerals Act 2009.

Category of penalties.

- 82. (1) Notwithstanding any penalties prescribed in the Act or the Mines and Minerals Act, any violation or infringement of the provisions of these Regulations by the holder of a Category A or B Environmental Licence shall be assessed and categorised as follows-
 - (a) administrative infringements with no immediate environmental consequences involving the submission of reports or maintenance of records required under the Act or these regulations shall be termed category EP1A;
 - (b) operational infringements resulting in the potential for harm to the environment or local communities shall be termed category EP2A;
 - (c) operational infringements resulting in actual harm to the environment or local communities shall be termed category EP3A; and
 - (d) operational infringements resulting in substantial harm to the environment or local communities, loss of life or Serious Injury or illness shall be termed category EP4A.
- (2) Notwithstanding any penalties prescribed in the Act or the Mines and Minerals Act, any violation or infringement of the provisions of these Regulations by the holder of a Category C or D Environmental Licence shall be assessed and categorised as follows-

- (a) administrative infringements with no immediate environmental consequences involving the submission of reports required under the Act or these regulations or maintenance of records shall be termed category EP1B;
- (b) operational infringements resulting in the potential for harm to the environment or local communities shall be termed category EP2B;
- (c) operational infringements resulting in substantial harm to the environment or local communities shall be termed category EP3B; and
- (d) operational infringements resulting in substantial harm on the environment or local communities, loss of life or Serious Injury or illness shall be termed category EP4B.
- 83. (1) The Executive Chairman or Authorised Officer shall, Infringement. acting reasonably, determine whether an infringement is categorized as EP1A, EP1B, EP2A or EP2B and shall promptly notify the Board of the relevant categorization decision and reasons therefore.
- (2) The Executive Chairman or Authorised Officer in consultation with the Board shall determine whether an infringement is categorized as EP3A, EP3B, EP4A or EP4B.
- 84. (1) A holder of an environmental licence who infringes Penalty any of the provisions of these Regulations commits an infringement and shall be liable, subject to Regulation 85, to a penalty specified in the Schedule of penalties.
- (2) In relation to categories EP3A, EP4A, EP3B and EP4B and potential benefits of non-compliance, the Environmental License Holder shall be liable to an additional penalty from the first provable day of infringement as follows:

- (a) up to 1% of the additional daily penalty for each day of the first 100 days of infringement;
- (b) the additional daily penalty increases by up to 1% after every 100-day period for the first 500 days of continuous infringement, so that after 100 days the additional penalty increases to 2%, after 200 days to 3%, after 300 days to 4%, after 400 days to 5%.
- (3) An infringement shall be deemed to be continuous until the company demonstrates compliance, unless the company provides evidence to the satisfaction of the Executive Chairman and Board that the violation was not continuous.

Warnings.

- 85. (1) In relation to a category EP1A, EP1B, EP2A and EP2B infringement only, the Executive Chairman or Authorised Officer shall, prior to imposing a penalty in accordance with this Part, issue a written warning to the environmental licence holder informing him of the relevant infringement and providing giving him a period not exceeding 14 days within which to remedy the relevant infringement.
- (2) Where the environmental licence holder fails to remedy the infringement in accordance with sub-regulation (1), the prescribed penalty for the relevant infringement category shall be imposed.

Notification and payment of fines.

- 86. (1) The Executive Chairman or Authorised Officer shall notify the environmental licence holder in writing of the infringement and the related penalty.
- (2) The environmental licence holder shall pay the penalty within 30 days of the notification referred to in sub-regulation (1) and where the environmental licence holder fails to pay the penalty within 30 days the Executive Chairman or Authorised Officer may apply to the High court for an order to enforce the penalty.
- (3) An environmental licence holder who disputes any penalty imposed by the Executive Chairman or Authorised Officer shall be resolved, in the first instance, by arbitration.

- (4) An internationally accredited negotiator or mediator with experience in mining related grievances shall be jointly appointed by the environmental licence holder and the Executive Chairman or Authorised Officer as an arbitrator.
- (5) The costs of the arbitration shall be paid by the environmental licence holder.
- (6) Either party may appeal to the High Court against the decision of the arbitrator appointed under sub-regulation (4) within 10 days of receipt of the arbitral decision.
- (7) The losing party shall pay all costs and fees associated with the appeal.
- (8) The decision of the High Court shall be final and binding.
- 87. (1) An environmental licence holder shall be liable for any $_{
 m No~exclusion}$ civil or criminal action to which he may be subject at any time and the of liability. penalty provisions contained herein shall not be interpreted as excluding liability or providing compensation in relation to any such criminal or civil liability.
- (2) The penalty provisions contained in these Regulations are in addition to and in no way limit or exclude the obligation of an environmental licence holder's responsibility to spend funds and take any other remedial or restorative actions required to clean up and rehabilitate all damages resulting from an infringement and where practicable, restore damaged land or goods to their condition prior to the occurrence of the offence.
- (3) Any compensation or fines indicated in the Act shall not reduce, preclude, compromise or replace any payment of penalties, damages, indemnities or other economic consequences attributable to an environmental licence holder under these Regulations.
- (4) An environmental infringement shall not be liable to a penalty under these Regulations and the Mines and Minerals Act, 2009 only one penalty shall apply.

SCHEDULE OF PENALTIES (REGULATION 84)

| EP1A | Category A or B environmental licence holder | \$10,000 |
|------|--|-----------|
| EP2A | Category A or B environmental licence holder | \$50,000 |
| EP3A | Category A or B environmental licence holder | \$250,000 |
| EP4A | Category A or B environmental licence holder | \$750,000 |
| EP1B | Category C or D environmental licence holder | \$5,000 |
| EP2B | Category C or D environmental licence holder | \$25,000 |
| EP3B | Category C or D environmental licence holder | \$125,000 |
| EP4B | Category C or D environmental licence holder | \$375,000 |

FIRST SCHEDULE - PUBLIC PARTICIPATION AND CONSULTATION

1. Requirement for public participation and consultation

Regulation 3 (h) places a mandatory obligation on all applicants for an environmental licence to carry out consultation with stakeholders from the earliest stages of a mining project throughout the mining operations until closure is completed. This consultation shall be undertaken in accordance with the principles for public participation and consultation set out in Regulation 3 (h) and this Schedule.

2. Procedural requirements for each category of mining project

Applicants for mining projects under the following environmental licence categories shall, as a minimum requirement, undertake the following level of public participation and consultation.

Category D: There is no formal requirement for public participation and consultation in relation to a Category D project, however the holder of a mineral right shall recognize the legitimate interests of local communities

to be informed about any activities which involve the transport of equipment and personnel and the use of accommodation in association with mineral reconnaissance and prospecting and shall provide relevant information to such stakeholders.

Category C: Applicants for an environmental licence in relation to a Category C project shall arrange a public meeting within the area likely to be affected by exploration or small scale mining activities before any equipment is moved into the area or physical activity takes place on site.

The purpose of the meeting will be to discuss with the community the nature of the work and its likely impacts and to engage in dialogue with the community which must include answering questions and addressing concerns.

Where activities are ongoing, the holder of an environmental licence shall hold public meetings with local communities at regular intervals, which shall occur at least every three months.

Category B: The requirements for public participation and consultation set out for Category C projects above shall also apply to Category B projects.

In addition, where the area covered by a Category B project includes more than one settlement and these settlements are more than 5 kilometers apart, the holder of or applicant for an environmental licence shall organise public meetings in each settlement.

In the case of Category B projects, the holder of or applicant for an environmental licence shall develop and implement a communications plans to manage public participation and consultation throughout the term of the mining licence or environmental licence, as applicable.

The communications plan shall be included in the Environmental Management Plan and Social Management Plan.

Category A: The requirements for public participation and consultation set out for Category B projects shall also apply to Category A projects.

In addition, all arrangements for public participation and consultation contained within the communications plan shall be discussed and agreed with the Community Liaison Committee established under Regulation 7.

SECOND SCHEDULE-PROJECT SCREENING APPLICATION

(REGULATION 11(5))

TO DETERMINE THE CATEGORY OF PROJECT FOR AN

ENVIRONMENTAL LICENCE

1. Procedures

Applicants for an environmental licence required in connection with the following categories of mineral rights licences shall submit a project screening application as set out in Tables 1 through 3 below. This information will be used by the Agency to determine which category of environmental impact assessment shall be undertaken by the applicant to support its application for an environmental licence relating to:

- (a) A Reconnaissance Licence involving invasive activities under Section 64 of the Mines and Minerals Act 2009;
- (b) An Exploration Licence under Part IX of the Mines and Minerals Act 2009;
- (c) A small scale mining licence; and
- (d) A large scale mining licence.

Table 1 Information on the Applicant and the nature of the planned operation

| 1. | | The following information is in summary form (full details shall be submitted as set out in the Act). |
|----|-----|--|
| | (a) | Registered Name and place of incorporation of the company |
| | | |
| | (b) | Company profile and history of reconnaissance and exploration operations in Sierra Leone and elsewhere |
| | | |
| | (c) | Name and qualifications of supervising officer |
| | (d) | Plan of the reconnaissance licence area |
| | (e) | Description of contiguous blocks |
| | (f) | Statement on technical and financial resources |
| | (g) | Proposed programme of reconnaissance operations |
| | (h) | Period for which the application applies |
| | (i) | Details of any existing mineral rights |
| l | | |

Table 2 Description of Location and Nature of Operations

| | 2. Information required und | er the First So | chedule |
|-------|--|--|-------------------------------|
| | Description | Units | Estimated cost of remediation |
| (i) | Area of land covered by the application | Km ² or Ha | |
| (ii) | Number of boreholes to be drilled | Number | |
| (iii) | Quantity of specimens and samples to be taken | < 1 tonne <1-10 tonnes > 10 tonnes | |
| (iv) | Name and surface area of woodland or forest within which timber will be cut | | |
| (v) | Name and location of river, lake or other water body from which water will be extracted | | |
| (vi) | Location of any temporary buildings | | |
| (vii) | Name and location of any ancient monument, relic, sacred grove or other artifacts of historic and cultural significance that lies within or closer than 100 metres to the boundary of any physical works | | |

Table 3 Applicant's assessment of the likely effects of the mining activities on the natural environment within the area of mining operations

Completion of this table shall satisfy the requirements of an applicant for a reconnaissance licence under Section 57 (j) of the Mines and Minerals Act 2009.

| 3. Physical Environment depth or volume, w | | | tions with an X | and give precise | e details of area, |
|--|----------------------------------|------------------------------------|--|---|---|
| 3.1 Land Surface | | | | | |
| Description | Less than 1 hectare | 2 1 to 10 hectares | 3 10 hectares to 1 km ² | 4 1 to 100 km ² | More than 100 km ² |
| Surface area of land affected by surface disturbance with machinery or excavations | | | | | |
| Area of vegetation to be cleared | | | | | |
| Area of farmland affected | | | | | |
| 3.2 Land Excavation | • | • | | | |
| If the operations involve excavation what quantity of material will be moved? | Less than 10 m ³ | 2 10m³ to ⁻ 100m³ | 3 100m³ to 1 million m³ | 4 1 million to 100 million m³ | More than 100 million m ³ |
| What is likely to be the maximum depth of excavation from the existing surface level | Less than 3 feet (1 metre) | 3 to 15 feet (1-5 metres) | 15-30 feet (5-10 metres) | 30 to 150 feet (10-50 metres) | More than 150 feet (>50 metres) |
| Ratio of overburden to mineral ore recovery | 0:1 | 1:1 | Between 1:1 and 5:1 | Between 5:1 and 20:1 | More than 20:1 |
| 3.3 Water | | | | | - |
| Description | Less than 100 m ³ | 2 100 to 1000m ³ | 3 1000 to 50,000m ³ | 4 50,000 to 100,000m ³ | 5 Over 100,000 m ³ |
| Volume of water to be abstracted by gravity or pumping from a natural or artificially constructed water course or water body (maximum over one month) Volume of water to be stored in tanks/ settling ponds or other artificial storage areas | | | | | |

| Volume of waste water (including drilling mud) to be produced (over a maximum period of one month) | | | | | |
|--|---------------|---------------------------|---|--|-----------------------------|
| Does the operation involve creating a dam or impoundment on any watercourse or dredging operations? | No | | | | Yes |
| Does the operation involve diverting an existing water course? | No | | | | Yes |
| 3.4 Wildlife and Nature Conservation | | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| Does the application area include any officially protected area? | No | | | | Yes |
| Has an ecological survey been undertaken by a qualified biologist? | Yes | | | | No |
| Are any rare or endangered species of plants or animals found within the application area as listed in national or international registers? | No | | | | Yes |
| In the applicant's opinion, will the operations affect wild life and nature conservation in the application area? | Not at all | Very slight effects | Some minor adverse impacts which can be mitigated | Moderate adverse impacts which can be mitigated | Major adverse impacts |

| 3.5 Natural Resources | | | | | | |
|---|----|---|-----|---|---|--|
| | 1 | 2 | 3 | 4 | 5 | |
| Will the operation require the use of local timber, stone, clay or other building materials | No | | Yes | | | |

| 6 Infrastructure | | | | | | | |
|---|-------------|---------------------|------------------------------------|----------------------------------|--------------------------------|--|--|
| | 1 | 2 | 3 | 4 | 5 | | |
| Do existing tracks and roads lie within the application area? | Footpaths | Minor tracks | Dirt/ gravelled feeder roads | Un-surfaced District Roads | Regional and Paved Roads | | |
| Will any tracks and roads be used by mineral traffic? | Footpaths | Minor tracks | Dirt/ gravelled feeder roads | Un-surfaced District Roads | Regional and Paved Roads | | |
| How many of truck movements of over 3 tonnes capacity will use public roads in an average month? | Less than 3 | 3 to 10 | 10 to 20 | 20 to 50 | More than 50 | | |
| Does the project involve the diversion or construction of new roads? | No | Under 500 metres | 500 metres to 1 Km | 1 km to 10 kms | More than 10 kms | | |
| Does the project involve the diversion or construction of new railways? | No | Under 500 metres | 500 metres to 1 Km | 1 km to 10 kms | More than 10 kms | | |
| Does the project involve the use of existing ports or the construction of new ports? | No | | Yes (existing ports) | | Yes (new ports) | | |
| Does the project involve the use of air transport from existing or new airports? | No | | Yes (existing airport) | | Yes (new airports) | | |

3.7 Energy

| Will the applicant provide all energy requirements from the company's own resources? | No | | Yes | | |
|--|-------------------------|--------------------------------|---------------------------------|-----------------------------------|----------------------------------|
| What is the estimated annual electricity requirement of the operations? | Less than 5000kw | 5000 - 50,000 kw | 50,000 to 100,000 kw | 100,000 kw to 1 mw | More than 1 mw |
| What is the estimated annual requirement of the operations in terms of diesel oil or other petroleum products? | Less than 50,000 litres | 50,000 to 100,000 litres | 100,000 to 500,000 litres | 500,000 to 1 million litres | More than 1 million litres |

| | | 1 | | 2 | 3 | 4 | 5 |
|-------------------------------|--|---|------|---|--|--|-------------------------------------|
| the er | the operations include ection of buildings and ures/plant? | Tempora building and structure erected f <5 year | gs b | Permanent buildings/ structures covering less than 100m ² | Permanent buildings/ structures covering 100m ² to 500m ² | Permanent buildings structures covering 500m ² to 1000m ² | buildings structures covering |
| 3.9 Emis | sions | | | | | | - |
| | | 1 | | 2 | 3 | 4 | 5 |
| solid | the operations generate waste requiring disposal gh land fill? | No | | | Yes | | |
| proces | the operations involve sses giving rise to us emissions | No | | | Yes | | |
| potent which | he operations have the tial to generate dust would impact on local itants? | No | | | Yes | | |
| potent which | he operations have the tial to generate noise could adversely affect inhabitants? | No | | | Yes | | |
| use of | he operations require the chemicals and reagents site processes? | No | | | Yes | | |
| form of potent creation | he operations pose any of risk to humans from tial accidents and the on of hazards deep bodies of water/rock falls | No (?) | | | Yes | | |
| visual | the operations create unsightle impacts affecting the setting lages or towns? | y No | | | Yes | | |

Table 4Applicant's assessment of the scale and likely effects of the operations on the local economy and social conditions within the area of mining operations.

| •• | Resettlement Impact | | | | | | |
|-----|---|------------|---------------------------|--|---|-----------------------------|--|
| | Will the operations require the resettlement of people? | No | Yes | | | | |
| | Description/Impact | | | | | | |
| | Will the operations affect existing settlements either directly or indirectly? | Not at all | Very slight effects | Some minor adverse impacts which can be mitigated | Moderate adverse impacts which can be mitigated | Major adverse impacts | |
| | with more than 500 houses? | | | | | | |
| | with 100-500 houses? | | | | | | |
| | with 50 -100 houses? | | | | | | |
| | with 25-50 houses? | | | | | | |
| | With fewer than 25 houses? | | | | | | |
| | Where the answer to the above question number of properties and individuals | | ents and pro | operties is "Yes" | provide details | on the estimate | |
| | - Fragrand | mvorveu | | | | | |
| 1.2 | Effect on current land use activity | , involved | | | | | |
| 4.2 | | Not at all | Very slight effects | Some minor adverse impacts which can be mitigated | Moderate adverse impacts which can be mitigated | Major adverse impacts | |
| 4.2 | Effect on current land use activity Will the operations displace or reduce the viability of existing | . | slight | minor adverse impacts which can | adverse impacts which can | Major adverse | |
| 4.2 | Effect on current land use activity Will the operations displace or reduce the viability of existing land uses for: | . | slight | minor adverse impacts which can | adverse impacts which can | Major adverse | |
| 4.2 | Effect on current land use activity Will the operations displace or reduce the viability of existing land uses for: Agriculture? | . | slight | minor adverse impacts which can | adverse impacts which can | Major adverse | |
| 4.2 | Effect on current land use activity Will the operations displace or reduce the viability of existing land uses for: Agriculture? Forestry? Rural livelihoods (collecting roots/ | . | slight | minor adverse impacts which can | adverse impacts which can | Major adverse | |
| 4.2 | Effect on current land use activity Will the operations displace or reduce the viability of existing land uses for: Agriculture? Forestry? Rural livelihoods (collecting roots/ fruits/honey etc.)? | . | slight | minor adverse impacts which can | adverse impacts which can | Major adverse | |
| 4.2 | Effect on current land use activity Will the operations displace or reduce the viability of existing land uses for: Agriculture? Forestry? Rural livelihoods (collecting roots/fruits/honey etc.)? Tourism? Will the operations affect: | . | slight | minor adverse impacts which can | adverse impacts which can | Major adverse | |
| | Effect on current land use activity Will the operations displace or reduce the viability of existing land uses for: Agriculture? Forestry? Rural livelihoods (collecting roots/fruits/honey etc.)? Tourism? Will the operations affect: Monuments/archaeological sites: | . | slight | minor adverse impacts which can | adverse impacts which can | Majo advers | |

THIRD SCHEDULE - PROJECT SCREENING CRITERIA (Regulations 11 (6) and 12 (2))

1. Procedures

- (1) The Agency shall base its decision on the information submitted as part of the project screening application, supported by information on environmentally sensitive areas in Sierra Leone and criteria relating to social and local economic conditions as set out in Table 1.
- (2) Any application which falls within the criteria listed in Table 1 will automatically require a Category A or B environmental Assessment and the equivalent social assessment.
- (3) Applications falling outside the environmentally sensitive localities listed in Table 1 will also require environmental and social assessment where the class of assessment will be determined by the nature and scale of the planned operations.
- (4) In all cases, the class of environmental and social assessment will be determined by the Agency in accordance with criteria set out in Table 2.

Table 1 Criteria Determining a Mandatory Need for Environmental Assessment

Criteria relating to Environmental Sensitive localities

- (a) Areas and ecosystems meriting special protection under national and international law including coral reefs, mangroves, native forest, small islands, areas at risk from erosion including sand dunes and beaches, areas exposed to desertification, marshland, wetlands and areas with flora, fauna or ecosystems on the verge of extinction.
- (b) Fish spawning areas and areas containing important natural resources such as medicinal plants
- (c) Important water sources including springs, headwater catchments of rivers, and watercourses or water bodies providing public water supplies.

Criteria relating to Socially or Economically significant localities

- (d) Populated areas where more than 50 properties or 500 people might be directly or indirectly affected in terms of livelihoods.
- (e) Populated areas where it might be necessary to resettle any individual inhabitants involuntarily.
- (f) Populated areas where more than 50 properties or 500 people live in close proximity to the area of potential operations and could be affected adversely by noise, dust or other pollutants.
- (g) Areas within which there are already conflicts in terms of ownership, use and distribution of natural resources.
- (h) Areas containing sensitive receptors including proximity to hospitals and health centres
- (i) Applications in areas adjacent to ports and airports where development activities could adversely affect operation of these facilities.
- (j) Areas within or adjacent to important tourism resorts or tourism assets

Table 2 EPA Determination of the Class of EIA required based on the nature and scale of planned operations

The class of assessment is guided by the aggregate score generated by the Agency's review of the applicant's screening application. A total score for an application is established by summing individual scores from tables 3 and 4 in the Second Schedule.

Agency staff will be guided by the applicant's own assessment of the severity of any potential Impact but may alter the weight / score at their discretion where they have reason to believe that the effects of the project may be more or less significant.

Any alteration in the score allocated to individual topics shall be highlighted on a copy of the screening application and forwarded to the applicant with the EPAs screening decision.

The Agency shall exercise its discretion in terms of the categorisation of applications and is not bound by the absolute scores set out in the table below which provide guidance only.

| Category | Physical Environment Score | Social and Economic Score | Type of Assessment Likely to be required |
|----------|-------------------------------|------------------------------|---|
| A | Over 150 | Over 20 | EIA and SIA |
| В | 130-150 | 5-20 | EIA (including SIA) |
| С | 50-130 | Under 5 | ESHIA |
| D | Under 50 | 0 | Code of Practice |

Table 3 $\label{eq:second-sec$

| 3. Physical Environment (Mark the relevant sections with an X) | | | | | | | | |
|---|---------------------|---------------------|-------------------------------------|-----------------------------|----------------------------------|--|--|--|
| 3.1 Land Surface | | | | | | | | |
| Description | 1 | 2 | 3 | 4 | 5 | | | |
| | Less than 1 hectare | 1 to 10 hectares | 10 hectares to 1 km ² | 1 to 100 km ² | More than 100 km ² | | | |
| Surface area of land affected by surface disturbance with machinery or excavations | | | | | | | | |
| Area of vegetation to be cleared | | | | | | | | |
| Area of farmland affected | | | | | | | | |

| 3.2 Land Excavation | | | | | |
|--|----------------------------------|------------------------------|------------------------------|--|---------------------------------------|
| | | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| If the operations involve excavation what quantity of material will be moved? | Less than 10 m ³ | 10 mto- 100m³ | 100m³ to 1 million m³ | 1 million to 100 million m ³ | More than 100 million m³ |
| What is likely to be the maximum depth of excavation from existing surface level | Less than 3 feet (1 metre) | 3 to 15 feet (1-5 metres) | 15-30 feet (5-10 metres) | 30 to 150 feet (10-50 metres) | More than 150 feet (>50 metres) |
| Ratio of overburden to mineral ore recovery | 0:1 | 1:1 | Between 1:1 and 5:1 | Between 5:1 and 20:1 | More than 20:1 |
| 3.3 Water | | | | • | |
| Description | 1 | 2 | 3 | 4 | 5 |
| | Less than 100 m ³ | 100 to 1000m ³ | 1000 to 50,000m ³ | 50,000 to 100,000m ³ | Over 100,000 m ³ |
| Volume of water to be abstracted by gravity or pumping from a natural or artificially constructed water course or water body (maximum over one month) | | | | | |
| Volume of water to be stored in tanks/settling ponds or other artificial storage areas | | | | | |
| Volume of waste water (including drilling mud) to be produced (maximum over one month) | | | | | |
| Does the operation involve creating a dam or impoundment on any watercourse, or dredging operations? | No | | | | Yes |
| Does the operation involve diverting an existing water course? | No | | | | Yes |

| 3.4 Wildlife and Natur | e Conser | vation | | | |
|---|-------------|------------------------|---|---|--------------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Does the application area include any official protected area? | No | | | | Yes |
| Has an ecological survey been undertaken by a qualified biologist? | Yes | | | | No |
| Are any rare or endangered species of plants or animals found within the application area as listed in national or international registers? | No | | | | Yes |
| In the applicants' opinion will the operations affect wild life and nature conservation in the application area? | Not at all | Very slight effects | Some minor adverse impacts which can be mitigated | Moderate adverse impacts which can be mitigated | Major adverse impacts |
| 3.5 Natural Resource | 1 | 2 | 3 | 4 | 5 |
| Will the operation require the use of local timber, stone, clay or other building material | No s | | Yes | | |
| 3.6 Infrastructure | • | | | | |
| Do existing tracks and roads lie within the application area? | footpaths | Minor tracks | Dirt/ graveled feeder roads | Un-surfaced District Roads | Regional and Paved Roads |
| Will any tracks and roads be used by mineral traffic? | footpaths | Minor tracks | Dirt/ gravelled feeder roads | Un-surfaced District Roads | Regional and Pave Roads |
| How many truck movements of over 3 tonnes capacity will use public roads in an average month? | Less than 3 | 3 to 10 | 10 to 20 | 20 to 50 | More than 5 |

| Does the project involve the diversion or construction of new roads? | No | Under 500 metres | 500 metres to 1 Km | 1 km to 10 kms | More than 10 kms |
|---|---|---|--|---|--|
| Does the project involve the diversion or construction of new railways? | No | Under 500 metres | 500 metres to 1 Km | 1 km to 10 kms | More than 10 kms |
| Does the project involve the use of existing ports or the construction of new ports? | No | | Yes (existing ports) | | Yes (new ports) |
| Does the project involve the use of air transport from existing or new airports? | | | | Yes (new airport) | |
| 3.7 Energy | | | | | |
| Will the proponent provide all energy requirements from the company's own resources | Yes | | No | | |
| What is the estimated annual electricity requirement of the operations? | Less than 5000 kw | 5000 - 50,000 kw | 50,000 to 100,000 kw | 100,000 kw to 1 mw | More than 1 mw |
| What is the estimated annual requirement of the operations with respect to diesel oil and other petroleum products? | Less than 50,000 litres | 50,000 to 100,000 litre | 100,000 to 500,000 litres | 500,000 to 1 million litres | More than 1 million litres |
| 3.8 Buildings, Struct | ures and P | rocessing | Plant | | |
| | 1 | 2 | 3 | 4 | 5 |
| Will the operations include erection of buildings and structures/plant? | Temporary buildings and structures erected for <5 years | Permanent buildings/ structures covering less than 100m ² | Permanent buildings/ structures covering 100m ² to 500m ² | Permanent buildings/ structures covering 500m² to 1000m² | Permanent buildings/ structures covering more than 1000m ² |

| 3.9 Emissions & Waste | | | | | |
|---|----|---|-----|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Will the operations generate solid waste requiring disposal through land fill? | No | | Yes | | |
| Will the operations involve processes giving rise to gaseous emissions | No | | Yes | | |
| Will the operations have the potential to generate dust which would impact on local inhabitants? | No | | Yes | | |
| Will the operations have the potential to generate noise which could adversely affect local inhabitants? | No | | Yes | | |
| Will the operations require the use of chemicals and reagents in on-site processes | No | | Yes | | |
| Will the operations pose any form of risk to humans from potential accidents and the creation of hazards (e.g. deep bodies of water/rock falls) | No | | Yes | | |
| Will the operations create unsightly visual impacts affecting the setting of villages or towns? | No | | Yes | | |

If the answers to any of the above questions on emissions are "Yes", provide summary details on the scale and nature of the potential effects.

Table 4Review of the Applicant's Assessment of the scale and likely effects of the mining activities on the local economy and social conditions within the area of mining operations

| | 1 | 2 | 3 | 4 | 5 |
|--|--------------|------------------------|---|---|-----------------------------|
| 4.1 Resettlement | - | <u> </u> | | | |
| Will the operations require resettlement of people? | No | | | | Yes |
| If the answer to the quest below:- | ion above is | YES then so | core the assessi | ment of effects a | s shown |
| Description /Impact Will the operations affect directly or indirectly existing settlement(s): | Not at all | Very slight effects | Some minor adverse impacts which can be mitigated | Moderate adverse impacts which can be mitigated | Major adverse impacts |
| Complete only one of the following | | | | | |
| with more than 500 houses? | 0 | 25 | 30 | 35 | 40 |
| with 100-500 houses? | | 20 | 25 | 30 | 35 |
| with 50 -100 houses? | | 15 | 20 | 25 | 30 |
| with 25 50 houses? | | 10 | 15 | 20 | 25 |
| With fewer than 25 houses? | | 5 | 10 | 15 | 20 |

Where the answer to the above questions on settlements and properties is "Yes" provide details on the estimated number of properties and individuals involved

| 4.2 Effects on current le | and use ac | ctivities | | | |
|---|------------|------------------------|---|---|-----------------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Will the operations displace or reduce the viability of existing land uses for: | Not at all | Very slight effects | Some minor adverse impacts which can be mitigated | Moderate adverse impacts which can be mitigated | Major adverse impacts |
| Agriculture | | | | | |
| Forestry | | | | | |
| Rural livelihoods (collecting roots/ fruits/ honey etc.) | | | | | |
| Tourism | | | | | |
| Will the operations affect: Monuments/archaeological sites | | | | | |
| Sacred groves | | | | | |
| Burial areas | | | | | |

FOURTH SCHEDULE - PREPARATION OF A SCOPING REPORT $(REGULATION\,14\,(1))$

1. Content of the Scoping Report

In accordance with Regulation 15, the applicant for an environmental licence shall prepare and submit a Scoping Report to the Agency before commencing detailed investigations as part of an environmental impact assessment for a Category A or B Project.

The Scoping Report will typically consist of a document, 20 to 60 pages in length and will cover the following information:

CONTEXT

1.1 Name of the project

1.2 Particulars of the applicant for an Environmental Licence

Name:

Identity document/registration:

Legal representative:

Address:

Telephone number:

E-mail address:

1.3 <u>Information on the environmental firm engaged to work on the EIA</u>

Including where relevant, information on individual experts who are engaged to work on specific aspects of the assessment

Name:

Identity document/registration:

Registration with the Agency:

Legal representative:

Address:

Telephone number:

E-mail address:

1.4 A Description of the Project Proposals

- (a) Site Area
- (b) Nature of the project (exploration, pre-feasibility study, feasibility study, small-scale mining, large scale mining)
- (c) Timescale of operations

1.5 Environmental Baseline Conditions

This shall include the following:

- (1) Topography and relief
- (2) Climatic conditions.

- (3) Air quality
- (4) Water and drainage
- (5) Geology and soils
- (6) Flora and fauna
- (7) Landscape character and quality
- (8) Human settlement
- (9) Land use

1.6 Potential Areas of Environmental Impact

A one paragraph description of the potential areas of environmental impact that could arise during each phase of the planned activity in relation to each of the environmental topics described in the baseline.

1.7 <u>Scope for Avoiding, Mitigating or Compensating for Potential Adverse</u> Environmental Impacts

A one paragraph statement on the scope for minimizing significant environmental impacts in relation to each of the environmental topics described in the environmental baseline.

1.8 Programme of Work

This shall contain a summary of investigations to be undertaken in relation to each area of potential environmental impact.

FIFTH SCHEDULE-EIAT STANDARDS FOR CATEGORYA AND B PROJECTS (REGULATION 15 (1) (e))

These standards provide generic Terms of Reference (ToRs) for the preparation of EIAs for Category A and B mining activities.

Applicants for Environmental Licences shall adapt the ToRs to meet the specific characteristics of their development project and the environmental and social conditions in the project area.

1. General Provisions for an Environmental Impact Assessment Report

The Environmental Impact Assessment report records the findings of exhaustive studies undertaken as part of the assessment process. The principal findings shall be included in the main report, supported by a stand-alone Non-Technical Summary. Background information, detailed maps and statistical data may be added as appendices or set out in separate volumes.

- (1) Applicants shall ensure that all aspects of the bio-physical environment are addressed when applying for an exploratory, small scale or large scale mining project.
- (2) The EIA shall contain a section on methodology and give a clear statement about the processes of public consultation that has been employed.
- (3) The EIA shall contain a chapter outlining the characteristics of the planned activity and the physical development of infrastructure and these features shall be clearly shown on a map of appropriate scale.
- (4) A description of the current baseline conditions and likely trends in the absence of the planned development shall be provided.
- (5) Potential environmental impacts shall be identified in relation to topography, geology, soils, land use, flora and fauna, water, drainage, climate, air, human beings (unless covered in a separate Social Impact Assessment), and the interactions between these topics.

- (6) Impacts shall be described in terms of potential scale, magnitude, significance, for example, major, minor and likely duration, for example, short term, medium term, long term and reversibility or irreversibility.
- (7) Any economic or physical alternatives to the proposed form of development.
- (8) A Non-Technical Summary written in plain English such that a layman would be able to understand.

2. Content of the EIA Report

The Environmental Impact Assessment report shall include the following:

I CONTEXT

1.1 Name of the project

1.2 Particulars of the applicant for an Environmental Licence

Name:

Identity document/registration:

Legal representative:

Address:

Telephone number:

E-mail address:

1.3 <u>Information on the environmental firm that produced the EIA</u>

Name:

Identity document/registration details:

Registration with the Agency:

Legal representative:

Address:

Telephone number:

E-mail address:

II TABLE OF CONTENTS

This section shall contain an index of the EIA.

II EXECUTIVE SUMMARY

The executive summary shall be written in plain English and in a form that is accessible to all potentially affected parties. It shall include summarized information on the following:

- (1) Project description
- (2) Environmental impacts of the project
- (3) Environmental management plan, monitoring plan and closure plan
- (4) Public participation plan

IV INTRODUCTION

- (1) Brief history of the project
- (2) Other mining projects under the applicant's control that are planned or in progress in the same area
- (3) Other associated projects
- (4) Previous environmental management instruments
- (5) Benefits of the project (locally and regionally)
- 6) Legal framework
- (7) Methodology adopted for the environmental assessments (to be expanded, as necessary, in technical appendices for individual specialist topics; e.g. measuring air pollution).

V DESCRIPTION OF THE PROJECT

The description of the project shall contain the following information as applicable:

5.1 General information on the project

- (1) Type of mining activity (exploration, artisanal mining, small scale mining, large scale mining, dredging mining, radioactive substances mining and sand miningetc.)
- (2) Project location (district, chiefdom, village, section)
- (3) Blocks that comprise the project area, indicating UTM coordinates

- (4) The extent of the project area in hectares
- (5) Minerals to be explored or produced
- (6) Proven and probable mineral reserves
- (7) Estimated production
- (8) Estimated productive life of the mine
- (9) Phases of the project and chronogram
- (10) Duration of the project
- (11) Estimated date for the beginning of operations
- (12) Workforce (permanent and temporary workers)
- (13) Total investment and financial sources

5.2 Works and logistics

- (1) Earthwork (volume of soil to be moved)
- (2) Volume of water required and water sources (for mining purposes and domestic and human consumption)
- (3) Water and wastewater treatment plants
- (4) Natural resources demand (timber, flora and fauna, etc.)
- (5) Waste rock deposits
- (6) Electricity requirements and sources
- (7) Power plants
- (8) Fuel supply and storage
- (9) Mineral transportation system
- (10) Buildings, camps, other facilities
- (11) Equipment and machinery
- (12) Roads to be constructed in kilometres
- (13) Port facilities

5.2.1 Specific information for exploration projects

- (1) Exploration plan and method
- (2) Exploratory boreholes and drilling techniques

5.2.2 Specific information for mining projects

- (1) Mining plan and method
- (2) Excavation, open pit, underground mining, placer
- (3) Mine development
- (4) Type of explosives to be used

5.2.3 Specific information for beneficiation projects

- (1) Mineral processing and metallurgy methods
- (2) Beneficiation plants and associated facilities (crusher, grinder, mill, concentrator, leaching pads, smelter, refinery, conveyors, cable cars, pipelines, tailings dam, reservoirs, etc.)
- (3) Ore and concentrates storing facilities

5.3 Permits

- (1) Permits required (i.e. water use, effluent treatment)
- (2) Permits obtained
- (3) Private agreements (i.e. easements, land leasing)

5.4 <u>Maps</u>

- (1) Location map (1/25,000) depicting the following:
- (a) Project area and area of influence
- (b) Topography and relief
- (c) Access roads
- (d) Urban areas and areas of urban expansion

- (e) Populated rural areas
- (f) Agriculture areas, cultivated areas, and areas with agricultural potential
- (g) Protected areas
- (h) Water bodies, wetlands, forests
- (2) Land use map (1/500 or 1/1000) depicting the following:
- (a) Water supply and sewerage network
- (b) Electric power supply network
- (c) Site facilities layout (comprises any construction or works that modifies the preoperational landscape such as tunnels, open pits, plants, buildings, camps, roads, waste rock dumps, tailing channels, tailing dams, slag deposits, mineral transportation, etc.)
 - (d) Land owned by the applicant
 - (e) Land owned by third parties
 - (3) Geology mapand geology report

VI <u>BASELINE</u>

This Section describes the characteristics of the environment in the project area and area of influence before the implementation of the proposed project.

6.1 Physical environment

- (1) Climate and meteorology (atmospheric conditions, temperature, humidity, rainfall, winds, storms, barometric pressure, etc.)
- (2) Topography, geology, geomorphology, stratigraphy, geochemistry
- (3) Hydrography, hydrology, hydrogeology, hydraulic balance
- (4) Land use capacity
- (5) Air, soil, water and ground quality

6.2 <u>Biological environment</u>

(1) Biological diversity

- (2) Flora and fauna (terrestrial and aquatic) distribution, conservation status, endemic species, and endangered species
- (3) Fragile ecosystems (deserts, mountains, wetlands, forests, other.)
- (4) Protected areas and buffering zones
- (5) Scenic beauties

6.3 Social environment

- (1) Demographic indicators
- (2) Population distribution
- Social organization
- (4) Ethnic groups
- (5) Public health
- (6) Economy and labour
- (7) Goods and services
- (8) Residential location
- (9) Land ownership and use
- (10) Use of natural resources
- (11) Recreation
- (12) Utilities and services
- (13) Transportation services
- (14) Quality of life indicators
- (15) Cultural heritage
- (16) Areas of historical, cultural or scientific interest
- (17) Vulnerability

6.4 Areas already disturbed

- (1) Areas already disturbed by previous mining activities
- (2) Areas already disturbed by other previous activities
- (3) Current third party's activities disturbing the area
- (4) Other elements that represent a menace to the conservation of natural habitats and ecosystems

VII ENVIRONMENTAL IMPACT

In this Section the applicant shall describe possible significant environmental impacts of the project if implemented. The description shall refer to each phase of the project (exploration, construction, operation, closure and post-closure) and shall indicate the affected environmental element and the action that caused the impact.

Significant impacts shall be determined based on the analysis of the impact's characteristics: nature, extent, timing, probability, reversibility, duration and magnitude.

7.1 Exploration

Describe environmental impacts of the project on the items listed in Section 6.1, 6.2 and 6.3 above.

7.2 Construction phase

Describe environmental impacts of the project on the items listed in Section 6.1, 6.2 and 6.3 above.

7.3 Operational phase

Describe environmental impacts of the project on the items listed in Section 6.1, 6.2 and 6.3 above.

7.4 Closure phase

Describe remaining impacts after implementing the environmental management plan.

7.5 <u>Post-closure phase</u>

Describe potential impacts from a closed operation. These impacts may comprise amongst others, acid drainage, long-term stability of ground or closed tailing dams.

VIII ENVIRONMENTAL MANAGEMENT PLAN

This Section summarises the measures and actions to be taken by the applicant during each phase of the project to avoid, mitigate or compensate each significant environmental impact identified in Section VI of this document. This information is included in the stand-alone Environmental Management Plan (EMP) and includes a budget for all works. Further guidance on the preparation of the Environmental Management Plan is given in the Tenth Schedule.

The set of measures which are proposed for control of environmental impacts during each phase of the project (preventive measures, mitigation and compensation) shall be summarized in a table as illustrated below.

| Phase | Environmental impact | Preventive | Mitigation | Compensation |
|--------------|--|---|--|--|
| Construction | Oil spill into a river | | Immediate clean up measures: application of oil dispersant and oil capture | |
| Operation | Ground water pollution from tailings pond. | Installation of geomembrane underneath soil liner | | |
| Closure | Environmental alteration due to open pit not suitable for restoration to original topography | | | Construction of artificial lagoon by filling the pit with water, in benefit of migratory birds and recreational activities for the community |

IX ENVIRONMENTAL CONTINGENCY PLAN

This Section shall contain an Environmental Risk Assessment (ERA) and an Environmental Contingency Plan (ECP).

The ERA analyses the probability of an extreme accidental or natural event causing significant adverse effects on the environment and human health within the project area and/or in the project's area of influence. The ERA shall determine the likelihood of the event and the magnitude of the consequences.

The ECP shall establish control measures to be applied in case of the occurrence of emergency situations detailed in an ERA.

X MONITORING PLAN

This Section describes the proposed plan for assessing the effectiveness of environmental control measures (preventive measures, mitigation and compensation) set forth in the EMP. It shall refer to environmental standards approved by law or, if such laws are not provided, to internationally acceptable standards.

The Monitoring Plan shall indicate the following;

- (1) Environmental aspects to be monitored
- (2) Monitoring and inspection methodology
- (3) Inspection frequency
- (4) Location of monitoring stations
- (5) Reporting schedules
- (6) Equipment and supplies
- (7) Administration
- (8) Technical team

XI CLOSURE PLAN

This Section describes the closure plan for mining operations at a conceptual level. The Conceptual Closure Plan will form the basis for developing a comprehensive Closure Plan as required in Section 47 of these Regulations and the standards in the Ninth Schedule.

The Closure Plan shall comprise decommissioning and rehabilitation of all components of the mining operations (exploration roads, boreholes, mine pits, waste dumps, plant sites, etc.), during each phase of the project, including progressive or concurrent reclamation, closure and post-closure measures.

The Closure Plan shall describe the intended plans for the post-mining sustainable use of the project area.

XII COMMUNICATION AND PUBLIC PARTICIPATION PLAN

A communications plan shall be developed to manage public participation and the participation of stakeholders in the process of project planning, identification of environmental and social impacts, follow-up and monitoring. It shall indicate how public consultation is to be conducted (public hearings, workshops, media, etc.), how the community's principal concerns about the project will be identified and how these will be managed by the applicant.

XIII ANALYSIS OF ALTERNATIVES TO THE PROPOSED PROJECT

This Section describes other alternatives to the project (such as different location, alternative mining methodologies, substitutes to target minerals, etc.) and explains why the project design is the best in terms of environmental protection and social development.

SIXTH SCHEDULE - SIA STANDARDS (REGULATION 15 (1) (b))

1. SIA General Principles

The Social Impact Assessment shall be carried out in accordance with the following principles -

- (1) the mineral right holder shall ensure compliance with all human rights treaties to which Sierra Leone is a party at any time;
- (2) the diversity of interests and cultures of the many different social actors involved in, and affected by, mining and mining related activities shall be duly acknowledged and respected;
- (3) every effort shall be made to protect local cultures and traditions;

- (4) assessment of the social dimension of mining and mining shall be designed to help identify the best project options and alternatives, to minimise negative social impacts and to identify sustainable development opportunities;
- (5) strong emphasis shall be placed on engaging local knowledge and experience; these resources combined with expert judgment, are fundamental inputs for enhancing project planning and decision-making processes;
- (6) the mining project shall recognize that development of social and human capital is of primary importance when engaging communities in sustainable development projects and knowledge transfer from skilled to un-skilled workers shall play a major role in company employment policies;
- (7) every effort shall be made by the applicant to recruit workers and retain the services of local enterprises from the local community and/or the Primary Host Community,
- (8) materials, food and other resources shall be sourced from the local communities,
- (9) the holder of a mineral right shall engage social and economic experts periodically throughout the mine life cycle to monitor compliance with its social and environmental obligations; and
- (10) if, under the best scientific advice and feasible mitigation measures it is concluded that a planned intervention poses considerable threats to the health or survival of a community that intervention shall not proceed.

2. General Provisions on Social Impact Assessment

Applicants shall apply the same principles on Social Impact Assessment to all levels of assessment from exploratory and small scale mining to large scale mining.

(1) The SIA shall contain a section on methodology and give a clear statement about the processes of public consultation and public participation that have been employed.

- (2) The SIA shall contain a socio-economic and cultural overview of the locality
- (3) The SIA shall include a baseline description and identify and assess potential social impacts on land, property, labour requirements, the work force and other social aspects of the proposals.
- (4) The SIA shall contain a map identifying all human settlements, including villages and towns within their respective chiefdom jurisdictions.
- (5) The SIA shall include a chapter setting out a Social Impact Management Plan (SIMP) with measures designed to prevent, mitigate or compensate for social impacts. Furthermore, monitoring activities, timeframes and estimated costs shall be included in the SIMP.

3. Scoping Study and Report

- (1) Following confirmation from the Agency that a Social Impact Assessment is required for a Category A or B Mining Project, the applicant will undertake a scoping study and prepare a scoping report.
- (2) The scoping study will examine:
 - (a) The basic social characteristics of the proposed licence area and its surroundings;
 - (b) Any specific local language requirements to ensure that all public participation and public consultation processes reach affected communities;
 - (c) The main economic activities, in addition to mining, that is taking place or are being promoted within the region.
 - (d) The main requirements of the project for skilled and unskilled labour, materials and services that could be provided from the local communities.
 - (e) A preliminary assessment of the likely range of adverse and beneficial social impacts.

- (f) Requirements for negotiations over land and other natural resources.
- (3) The findings of the scoping study will be written up in a report not exceeding 60 A4 sides of paper.
- (4) The Scoping Report will be submitted to the Agency and any recommendations from the Agency will be carefully considered and incorporated as appropriate in a final document.
- (5) The Final Scoping Report shall be published on the Company's website (where this exists) and copies shall be provided to the District Authorities and Chiefdoms' administrative offices for public display and access.

4. Non-Technical Project Brief

The applicant for an environmental licence shall prepare a Non-Technical Project Brief which summarises the essential characteristics of the planned project in terms of the likely area of land required, the nature of the mine site in terms of area and depth, the type of extraction process envisaged, options for disposing of rock, sand and tailings waste, the type of buildings and structures to be erected, and the quantities of materials and means of transportation for transferring mine products for further processing or to ultimate markets.

The non-technical project brief shall be published and copies provided to the District Authorities and Chiefdoms' administrative offices for public display and access.

5. Formation of Community Liaison Committee

A community liaison committee shall be formed in accordance with Section 5 of these Regulations as soon as it becomes apparent to the applicant that the project is likely to involve negotiations with the local community and Primary Host Community over any aspect of social cultural and local economic activities. This need is certain to arise with large scale mining and will also apply to most small scale mining projects.

6. Public Participation and Consultation

The applicant shall arrange for full public disclosure of the Scoping Report and

Non-Technical Project Brief. In addition a communications plan shall be prepared and followed in accordance with the First Schedule.

7. Stakeholder participation

When undertaking the analysis of social and local economic issues the applicant shall actively engage local stakeholders including village communities, individuals and local enterprises such as agricultural cooperatives, education, gender and youth empowerment groups, market traders and educational, health and social workers. A full list of stakeholders' names, positions and contact details shall be kept by the applicant and published in the draft SIA report.

8. Undertaking the Social Impact Assessment

The process of undertaking the Social Impact Assessment shall include:

- identifying, analyzing, managing, and monitoring the negative and positive, intended and unintended consequences of reconnaissance, exploration, small-scale, and large-scale mining operations, and any kind of social and cultural change that these interventions may generate;
- (2) a public consultation process through which to identify, analyse, manage, and monitor potential social impacts;
- (3) a participatory processes with the aim of strengthening the role of women, youth, and marginalized segments of society in development planning, bringing about higher levels of social inclusion and a more equitable distribution of benefits.
- (4) a strategy identifying how the applicant plans to obtain the community's support for the project and strengthen ties with it throughout the entire life of the project, including preparing the community for closure and post-closure phases.

9. Draft SIA report

The results of the social and local economic analysis shall be written up in a draft

Social Impact Assessment and submitted for comment to the Agency. The draft findings shall also be presented to the stakeholders identified in (7) above.

10. Review by the Environment Protection Agency

Following review by the Agency and, where appropriate, by the Resettlement Committee, the applicant shall revise the draft SIA report to take account of these views.

11. Publication of the Social Impact Assessment Report

The Company shall make the findings of the SIA public by making them available for the public to review through a variety of medium which may include periodic radio broadcasts, publication at local town halls, community halls and/or public notice boards, adjourning meetings with local communities and dissemination amongst local civil society groups, as appropriate.

12. Components of SIA Report

A Social Impact Assessment Report shall include the following:

- (1) Social baseline description
- (2) Potential impacts and analysing alternatives
- (3) Maximising development opportunities and mitigation of negative impacts
- (4) Benefit and Impact plan
- (5) Monitoring Plan
- (6) Evaluation Plan

13. Content of the SIA Report

The Social Impact Assessment Report shall include the following:

I CONTEXT

1.1 Name of the project

1.2 Particulars of the applicant for an Environmental Licence

Name:

Identity document/registration:

Legal representative:

Address:

Telephone number:

E-mail address:

Name:

Identity document/registration:

Registration with the Agency:

Legal representative:

Address:

Telephone number:

E-mail address:

I PREAMBLE AND TABLE OF CONTENTS

The preamble shall provide:

- Acknowledgements: identifying the principal contributors and stakeholders who have rendered assistance to the assessment team.
- (2) Key sources of information
- (3) Definitions and abbreviations. Defines all words, expressions and abbreviations that a layperson cannot be expected to know.

The contents list shall contain an index of the SIA.

III EXECUTIVE SUMMARY

Discusses significant findings and recommended actions in a non-technical language (layperson's language). It shall include summarized information on the following:

- (1) Project description
- (2) Social and local economic impacts of the project
- (3) Social impact management plan, social monitoring plan and social components of the mine closure plan
- (4) Public participation plan

IV INTRODUCTION

- (1) Brief history of the project
- (2) Other mining projects under the applicant's control that are planned or in progress in the same area
- (3) Other associated projects
- (4) Previous environmental management instruments
- (5) Benefits of the project (locally and regionally)
- (6) Legal framework
- (7) Methodology adopted for the social impact assessments (to be expanded, as necessary in technical appendices for individual specialist topics).

V POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

This chapter discusses the policy, legal and administrative framework within which the SIA is carried out, including relevant international agreements to which Sierra Leone is a party.

VI DESCRIPTION OF THE PROJECT

This chapter summarises the proposed project and its geographical, social and temporal context, including any off-site developments that may be required (e.g. access roads, power plants, water supply, housing, storage facilities). Relevant maps are to be included showing the project site and area of influence. The description of the project shall contain the following information as applicable:

6.1 General information on the project

- (1) Type of mining activity (exploration, artisanal mining, small scale mining, large scale mining, dredging mining, radioactive substances mining)
- (2) Project location (district, chiefdom, village, section)
- (3) Blocks that comprise the project area, indicating UTM coordinates
- (4) The extent of the project area (hectares)
- (5) Minerals to be explored or produced
- (6) Proven and probable mineral reserves
- (7) Estimated production
- (8) Estimated productive life of the mine
- (9) Phases of the project and chronogram
- (10) Duration of the project
- (11) Estimated date for the beginning of operations
- (12) Workforce (permanent and temporary workers)
- (13) Total investment and financial sources

6.2 Permits

- (1) Permits required (i.e. water use, effluent treatment)
- (2) Permits obtained
- (3) Private agreements (i.e. easements, land leasing)

6.3 <u>Maps</u>

- (1) Location map (1/25,000) depicting the following:
 - (a) Area and area of influence
 - (b) Topography and relief
 - (c) Access roads
 - (d) Urban areas and areas of urban expansion
 - (e) Populated rural areas
 - (f) Agriculture areas, cultivated areas, and areas with agricultural potential
 - (g) Protected areas
 - (h) Water bodies, wetlands, forests

(1) Land use map (1/25000) depicting the following:

- (a) Water supply and sewerage network
- (b) Electric power supply network
- (c) Site facilities layout
- (d) Land owned by the applicant
- (e) Land owned by third parties

VII SOCIAL BASELINE

This Section describes relevant social and economic conditions in local communities, the region and Sierra Leone at large, including any changes anticipated before the project commences. Quantitative parameters are provided where possible.

7.1 <u>Demographic Indicators</u>

- (1) Population number, density and distribution
- (2) Population age profile
- (3) Male/Female ratios
- (4) Children under 18
- (5) Average life expectancy
- (6) Population growth
- (7) Migration
- (8) Fertility rates

7.2 <u>Community and Social Organisation</u>

- (1) Role of Chiefdoms
- (2) Local authority structure, powers, capabilities
- (3) Informal administration structures
- (4) Cultural diversity, ethnic groupings and religion
- (5) Local customs and taboos
- (6) Vulnerable and disadvantaged groups

7.3 Housing

- (1) Housing stock
- (2) Housing condition
- (3) Housing demand

7.4 Education

- (1) Child Education
- (2) Youth education and training
- (3) Adult education and training

7.5 Public Health

- (1) Mortality rates
- (2) Morbidity rates
- (3) Maternal welfare (pre/post natal)
- (4) Infectious diseases
- (5) Nutrition levels
- (6) HIV/AIDs

7.6 Economy and Livelihoods

- (1) Economic structure
- (2) Livelihoods
- (3) Business Enterprises
- (4) Employment
- (5) Unemployment
- (6) Goods and services
- (7) Market trading

7.7 Land ownership and use

7.8 Use of natural resources

7.9 Utilities and services

7.10 <u>Intangible Assets</u>

- (1) Quality of life indicators
- (2) Cultural heritage
- (3) Areas of historical, cultural or scientific interest

VIII SOCIAL AND LOCAL ECONOMIC IMPACT

In this Section the applicant shall describe possible significant socio-economic impacts of the project if implemented. The description shall refer to each phase of the project (exploration, construction, operation, closure and post-closure), indicating the affected socio-economic element and the action that caused the impact. The assessment of socio-economic impacts shall take into account relevant local, regional or national development plans.

Significant impacts shall be determined based on the analysis of the impact's characteristics: nature, extent, timing, probability, reversibility, duration and magnitude.

8.1 Exploration

Describe environmental impacts of the project on the items listed in Section 6.1, 6.2 and 6.3 above.

8.2 <u>Construction phase</u>

Describe environmental impacts of the project on the items listed in Section 6.1, 6.2 and 6.3 above.

8.3 Operational phase

Describe environmental impacts of the project on the items listed in Section 6.1, 6.2 and 6.3 above.

8.4 Closure phase

Describe remaining impacts after implementing the environmental management plan.

8.5 Post-closure phase

Describe potential impacts from a closed operation. These impacts may comprise acid drainage, long-term stability of ground or closed tailing dams, among others.

IX SOCIAL IMPACT MANAGEMENT PLAN

This Section describes the set of measures and actions to be taken by the proponent during each phase of the project to avoid, mitigate or compensate each significant socio-economic impact identified in Part VII of this Schedule. The Social Impact Management Plan (SMP) shall include a budget. Further guidance on the preparation of a social impact management plan is given in the Eleventh Schedule.

The set of proposed measures to control environmental impacts for each phase of the project (preventive measures, mitigation and compensation) shall be summarized in the table below (see example in Italics

| Phase | Socio-Economic impact | Preventive | Mitigation | Compensation |
|--------------|--------------------------|------------|------------|--------------|
| Construction | | | | |
| Operation | | | | |
| Closure | | | | |

X COMMUNITY DEVELOPMENT PLAN

The Social Impact Assessment shall include a chapter which summarises the state of negotiations between the applicant for an environmental licence and the Primary Host Community being undertaken in accordance with Section 140 of the Mines and Minerals Act 2009. An outline of the content and main proposals of the Community Development Plan shall be included together with the programme for finalizing this document and, where appropriate, arrangements for entering into a Community Development Agreement.

XI SOCIO-ECONOMIC CONTINGENCY PLAN

This Section shall contain a Social and Economic Risk Assessment (SERA) and a Socio-Economic Contingency Plan (SECP).

The SERA analyses the possibility of an extreme accidental or natural event causing significant adverse effects on the social fabric and human health within the project area and/or in the project's area of influence. The SERA shall determine the event likelihood and the magnitude of the consequences.

The SECP shall establish control measures to be applied in case of emergency situations described in the SERA.

XII SOCIO-ECONOMIC AND HEALTH MONITORING PLAN

This Section describes the proposed plan for assessing the effectiveness of socio-economic and health control measures (preventive measures, mitigation and compensation) set forth in the SIMP. It shall refer to socio-economic and health standards and standards approved by law or, in the absence of such laws, to internationally acceptable standards.

The Monitoring Plan shall indicate the following;

- (1) Socio-economic and health aspects to be monitored
- 2) Monitoring and inspection methodology
- (3) Inspection frequency
- (4) Location of monitoring stations
- (5) Reporting schedules
- (6) Equipment and supplies
- (7) Administration
- (8) Technical team

The Evaluation of monitoring results will form a key output from the socio-economic and health monitoring plan. The results shall be carefully considered by the environmental licence holder and acted upon in implementing the social impact management plan.

XIII SOCIAL AND ECONOMIC COMPONENTS OF THE CLOSURE PLAN

This Section describes the mine closure plan for mining operations at a conceptual level. The Conceptual Closure Plan will form the basis for developing a comprehensive Mine Closure Plan as required in Section 47 of these Regulations and described in more detail in the Ninth Schedule.

The Mine Closure Plan shall comprise decommissioning and rehabilitation of all components of the mining operations (exploration roads, boreholes, mine pits, waste dumps, plant sites, etc.), during each phase of the project, including progressive or concurrent reclamation, closure and post-closure measures. The Mine Closure Plan shall describe the intended post-mining sustainable use of the project area.

XIV COMMUNICATIONS AND PUBLIC PARTICIPATION PLAN

The Communications and Public Participation Plan shall describe the participation of stakeholders in the process of project planning, identification of environmental and social impacts, follow-up and monitoring. It shall indicate what are the means for public consultation to be used (public hearings, workshops, media, etc.), what the community's principal concerns about the project are and how these plan to be managed by the proponent.

XV ANALYSIS OF ALTERNATIVES TO THE PROPOSED PROJECT

This Section describes other alternatives to the project (such as different location, alternative mining methodologies, substitutes to target minerals, etc.) and indicates how the community and surrounding district would possibly develop if the project is not realized, for example, in terms of potential social impacts; and reasons why these alternatives have not been chosen.

SEVENTH SCHEDULE-ESIA STANDARDS (REGULATION 15 (1) (C))

1. Environmental and Social Impact Assessment (ESIA) Procedures

These standards set out the procedures for conducting a simplified form of environmental, social and health impact assessment for those Category C projects identified in Regulation 13 that do not require a comprehensive Environmental Impact Assessment or Social Impact Assessment.

The Regulations and these standards recognise that there are some forms of exploration and small-scale mining activity that are unlikely to have major environmental, social or health impacts. These operations may typically involve:

- (1) extraction of small quantities of ore for bulk sampling during mineral exploration
- (2) small quarries used for the extraction of building stone
- (3) small scale sand and gravel pits

Very occasionally, other small scale mining operations may qualify for the simplified form of assessment if the type of mineral extraction allows for rapid restoration of worked out areas and there are no important or sensitive environmental habitats or social issues on the mine site or the surrounding area.

For the avoidance of doubt no large scale mining operations will qualify for simplified assessment using ESIA.

2. Conduct of an Environmental and Social Impact Assessment

Applicants for a Category C Project Environmental Licence shall undertake a combined assessment on environmental, social and health issues relating to the project and prepare a report of not more than 100 pages including appendices. The work shall be undertaken by assessors who are qualified and competent to undertake the three core areas of assessment.

3. Content of the EIA Report

The Environmental Impact Assessment Report shall include the following:

I CONTEXT

1.1 Name of the project

1.2 Particulars of the applicant for an Environmental Licence

Name:

Identity document/registration:

Legal representative:

Address:

Telephone number:

E-mail address:

1.3 Information on the Environmental firm that produced the EIA

Name:

Identity document/registration:

Registration with the Agency:

Legal representative:

Address:

Telephone number:

E-mail address:

II TABLE OF CONTENTS

This section shall contain an index of the EIA.

III EXECUTIVE SUMMARY

The executive summary shall be written in plain English and in a form that is accessible to all potentially affected parties. It shall include summarized information on the following:

- (1) Project description
- (2) Environmental, social and health impacts of the project
- (3) Combined environmental, social and health management plan, monitoring plan and closure plan
- (4) Statement on public participation procedures

IV INTRODUCTION

The introduction shall contain the following:

- (1) Description of the project
- (2) Relationship to other developments under the applicant's control or ownership
- (3) Benefits of the project
- (4) Methodology adopted for the environmental assessments

V DESCRIPTION OF THE PROJECT

The description of the project shall contain the following information as applicable:

5.1 General information on the project

- (1) Type of mining activity (exploration, artisanal mining, small scale mining, large scale mining, dredging mining, radioactive substances mining)
- (2) Project location (district, chiefdom, village, section)
- (3) Blocks that comprise the project area, indicating UTM coordinates
- 4) The extent of the project area (hectares)
- (5) Minerals to be explored or produced
- (6) Proven and probable mineral reserves
- (7) Estimated production
- (8) Estimated productive life of the mine
- (9) Phases of the project and chronogram
- (10) Duration of the project
- (11) Estimated date for the beginning of operations
- (12) Workforce (permanent and temporary workers)
- (13) Total investment and financial sources

5.2 Works and logistics

- (1) Earthwork (volume of soil to be moved)
- (2) Volume of water required and water sources (for process, domestic and human consumption)
- (3) Water and wastewater treatment plants
- (4) Natural resources demand (timber, flora and fauna, etc.)
- (5) Waste rock deposits
- (6) Electricity requirements and sources
- (7) Power plants
- (8) Fuel supply and storage
- (9) Mineral transportation system
- (10) Buildings, camps, other facilities
- (11) Equipment and machinery
- (12) Roads to be constructed in kilometres
- (13) Port facilities

5.3 Specific information for exploration projects

- (1) Exploration plan and method
- (2) Exploratory boreholes, drilling techniques

5.4 <u>Specific information for exploration projects</u>

- (1) Mining plan and method
- (2) Excavation, open pit, underground mining, placer
- (3) Mine development
- (4) Type of explosives to be used

5.5 Specific information for beneficiation projects

- (1) Mineral processing and metallurgy methods
- (2) Beneficiation plants and associated facilities (crusher, grinder, mill, concentrator, leaching pads, smelter, refinery, conveyors, cable cars, pipelines, tailings dam, reservoirs, etc.)
- (3) Ore and concentrates storing facilities

5.6 Permits

- (1) Permits required (i.e. water use, effluent treatment)
- (2) Permits obtained
- (3) Private agreements (i.e. easements, land leasing)

5.7 Maps

Location map (1/25,000) depicting the following:

- (1) Project area and area of influence
- (2) Topography and relief
- (3) Access roads
- (4) Urban areas and areas of urban expansion
- (5) Populated rural areas
- (6) Agriculture areas, cultivated areas, and areas with agricultural potential
- (7) Protected areas
- (8) Water bodies, wetlands, forests

5.8 <u>Land use map</u> (1/500 or 1/1000) depicting the following:

- (1) Water supply and sewerage network
- (2) Electric power supply network

- (3) Site facilities layout (comprises any construction or works that modifies the preoperational landscape such as tunnels, open pits, plants, buildings, camps, roads, waste rock dumps, tailing channels, tailing dams, slag deposits, mineral transportation, etc.)
- (4) Land owned by the applicant
- (5) Land owned by third parties
- 5.9 Geology map and geology report

VI ENVIRONMENTAL, SOCIAL AND HEALTH BASELINE

This Section describes the characteristics of the environment in the project area and area of influence under existing conditions (i.e. prior to the project development)

- 6.1 Physical environment
- 6.2 Biological environment
- 6.3 Social, local economic, health and environment
- 6.4 Areas already disturbed

The content of these sections shall draw on the fuller description of topics to be covered under an EIA or SIA baseline, where these are relevant to the assessment.

VII POTENTIAL IMPACTS

In this Section the applicant shall describe possible significant environmental, social and where relevant health impacts of the project if implemented. The description shall be referred to each phase of the project (exploration, construction, operation, and closure), indicating the affected environmental element and the action that caused the impact.

Significant impacts shall be determined based on the analysis of the impact's characteristics: nature, extent, timing, probability, reversibility, duration and magnitude.

VIII INTEGRATED ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

This Section describes the set of measures and actions to be taken by the applicant during each phase of the project to avoid, mitigate or compensate the environmental and/or social impacts identified in Section VII. The integrated environmental and social management plan shall include an indicative budget for all works.

IX ENVIRONMENTAL AND SOCIAL RISKS

A chapter shall be included indicating any potential environmental or social risks and the measures that will be taken to control such risks.

X INSPECTION AND MONITORING PLAN

A chapter shall be included setting out the measures that are proposed for monitoring potential sources of environmental pollution and control measures to avoid, mitigate or compensate for any adverse environmental or social impacts

XI CLOSURE PLAN

A chapter shall be included outlining the steps that will be taken to decommission the mine and rehabilitate the site on completion of works.

The Mine Closure Plan shall describe the intended post-mining sustainable use of the project area.

XII STATEMENT ON PUBLIC PARTICIPATION

A section shall be included in the report indicating the steps that have been taken to consult the local community and the Primary Host Community and the measures that will be followed to keep stakeholders informed throughout the mine life cycle.

XIII ANALYSIS OF ALTERNATIVES TO THE PROPOSED PROJECT

This Section shall describe other alternatives to the project (such as different location, alternative mining methodologies, substitutes to target minerals, etc.) and explain why the project design is the best in terms of environmental protection and social development.

EIGHTH SCHEDULE - ENVIRONMENTAL CODE OF PRACTICE (REGULATIONS 15 (1) (D) AND 55 (2))

1. Application of the code of practice

This code of practice will be applied by all holders of mineral rights to their operations in circumstances where:

- (1) a declaration has been signed under oath that there will be no adverse environmental, social or local economic impacts arising from the operations; and
- (2) the Agency has issued a decision that an environmental licence is not required and the code of practice shall apply.

2. Content of The Code of Practice

I. Land Surface

- (1) The site(s) of operations shall be protected at all times by fencing or by constant inspection to ensure that they pose no risk to the local community and Primary Host Community and in particular children or other vulnerable groups.
- (2) All areas of land affected by the operations shall be reinstated to their original condition following completion of the operations and such reinstatement shall include the replacement of soil and reseeding or replanting of vegetation, or in the case of productive land, re-cultivation of the land to leave it in a state suitable for the growing of crops.

II. Land Excavation

Any excavation created as part of the operations shall be backfilled with inert material or regarded to leave smooth free-draining contours with no depressions or pits that could fill with water.

III. Water

- (1) The holder of a mineral right shall ensure that no water supplies are adversely affected or access to water is impaired by the operations for any other users in the locality.
- (2) In the event that the operations accidently cause a temporary break in service or supply to any other users in the locality, the mineral right holder shall provide alternative supplies and meet the full costs of compensation for disruption of supply.
- (3) In the absence of any agreement under (4) below, all pipes, tanks and other receptacles used for water storage shall be removed on completion of the operations.
- (4) Pipes, tanks and other water storage receptacles may be retained on site for use by the landowner or local community if this action is authorised by the Agency following a written request from the holder of a mineral right.

IV. Wildlife and Nature Conservation

The holder of a mineral right shall ensure that minimum disturbance is caused to local habitats by the operations.

V. Natural Resources

- (1) With the exception of the clearance of vegetation to permit activities to proceed in accordance with the signed declaration, the operator undertakes not to fell trees or cut timber or remove any other natural resources from the site.
- (2) The rights of local communities to collect roots, fruits, honey, medicinal plants, fire wood and any other natural resources in the area shall be respected.

VI. Infrastructure & Access

- (1) Where any form of mineral traffic, including movement of plant takes place on public access roads or tracks and the roadways are subject to wear and tear from this traffic, the operator undertakes to maintain such roads in a state which is as good as, if not better than it was prior to the commencement of operations.
- (2) Following closure of the operations the operator shall leave all access roads used by mineral traffic in a condition which is as good as, if not better than those at the start of operations.

VII. Energy & Fuel

- (1) All equipment used for the transport or storage of diesel, oil and other fuels will be maintained in safe and fully serviceable condition throughout the life of the operations and shall be removed on completion of the works.
- (2) Areas used for the storage or transfer of diesel, oil and other fuels shall be protected against accidental spillage with an impermeable membrane (plastic or equivalent) laid beneath an absorbent surface.

VIII. Buildings, Structures and Processing Plant

- (1) All buildings, structures and processing plant shall be maintained in a safe and secure condition during the operations and will be removed on completion of the operations, except under condition (2).
- (2) Following completion of the operations, buildings may be retained on site for use by the landowner or local community if this action is authorised by the Agency following a written request from the holder of a mineral right.

IX. Emissions & Waste

- (1) The holder of a mineral right shall ensure that at all times throughout the operations, any emissions to air, water or land are kept to an absolute minimum and at levels that pose no risk whatsoever to the health of workers, local inhabitants or wildlife.
- (2) Drilling mud and all other reagents used in lubricating drill rods and drilling equipment shall be contained in sealed circulatory systems and recycled without discharge to the environment.

X. Social Conditions

- (1) The holder of a mineral right shall ensure that all aspects of the operations are controlled to the highest standards and do not give rise to any disturbance or annoyance to persons living or working in the vicinity of the operations.
- (2) The holder of a mineral right shall be liable for any accidents caused to members of the local community and/or the Primary Host Community and in particular children or other vulnerable groups arising within the area of the operations and shall be obliged to pay full compensation in the event of injury or death or any individual.

XI. Land use

The holder of a mineral right shall ensure that the operations are conducted in harmony with all surrounding land uses and shall undertake restitution with full compensation in the event that any aspect of the operations leads to accidental damage to neighbouring land uses.

NINTH SCHEDULE-MINE CLOSURE PLAN STANDARDS (REGULATIONS 16(A), 33 (7))

1. Objectives

The aim of these standards is to ensure that for every mining operation in Sierra Leone a planning process is in place that ensures the mine can be closed, decommissioned and rehabilitated in an ecologically and socially sustainable manner consistent with the terms of the environmental licence.

The responsibility for opening, operating and closing a mine rests on the environmental licence holder and mineral right holder and must be exercised without unacceptable liability to the state.

Planning for mine closure should be an integral part of mine development and operations planning. Consequently the level of information required should correspond to the stage in the mine lifespan.

2. Principles and Approaches towards Mine Closure Planning

At all stages from project approval and licencing onwards, the Mine Closure Plan should demonstrate that ecologically sustainable approaches can be followed. Mine closure plans shall be site-specific. "Off the shelf" or generic proposals will not be permitted.

Closure planning should take account of detailed materials characterization, data on local environmental conditions and climatic conditions.

Consultation should take place between the mine manager and local communities.

3. Public availability of documents

The applicant shall ensure that all Mine Closure Plans are made public in the Local Community and the Primary Host Community and shall use a variety of medium which may include periodic radio broadcasts, publication at local town halls, community halls and/or public notice boards, adjourning meetings with local communities and/or dissemination amongst local civil society groups, as appropriate.

4. Level of Detail required in a Mine Closure Plan

The level of detail provided with each category of project will vary according to the complexity of the mineral deposit and the expected longevity of the mining operations. The level of detail required in a Mine Closure Plan for small scale mining operations will be significantly less than is required for large scale mines.

Table 1 below provides an indication of the information required.

| Anticipated Life of Mine | Post-mining land use | Identification and Management of Key | Level of information | Status of Mine Closure Plan |
|-------------------------------------|---|---|--------------------------------|--|
| | | Environmental Issues | | |
| Long term in excess of 25 years | Provisional targets established | All high risk components identified | Indicative | Provisional |
| Medium term (10-25 years) | Clear proposals set out | Full risk assessment provided | Well informed | Full Plan presented |
| Short term up to 10 years | Full definition of future uses required | Full risk assessment provided | Full and accurate details | Plan and detailed proposals presented |
| Small scale mining operations | Full definition of future uses required | Full risk assessment provided | Full and accurate details | Plan and detailed proposals presented |
| Existing operations | Assessed on case-by-case basis | Assessed on case-by-case basis | Assessed on case-by-case basis | Assessed on case-by-case basis |

5. Details required in a Mine Closure Plan

A Mine Closure Plan must be accompanied by professionally surveyed site plans, aerial photographs and three dimensional drawings and diagrams.

The suggested content of a MCP is detailed below:

CONTENT

Cover Page:

- (1) Title of project
- (2) Document title
- (3) Document ID number and version number
- (4) Date of submission
- (5) Environmental Licence number (or application number)
- (6) Mineral Rights Licence number (or application number)
- (7) Company name
- (8) Full contact details

Table of Contents

| Section 1 | Scope and Purpose of the Mine Closure Plan |
|-----------|---|
| Section 2 | Project Summary |
| | Covering: land ownership, location of the operations, overview of the mining operations, comprehensive site plan |
| Section 3 | Identification of closure obligations and commitments |
| Section 4 | Collection and analysis of closure data Covering environmental data, other closure data and an analysis of data |
| Section 5 | Results of Stakeholder consultation |

- Section 6 Post-mining land use and closure objectives

 Section 7 Presentation of final land forms in map and graphic (3-D) formats

 Section 8 Identification and Management of closure issues

 For example:
 - Hazardous materials
 - Hazardous and unsafe facilities
 - Contaminated sites
 - Acid and metallic-ferrous drainage
 - Radioactivity
 - Fibrous materials (asbestos)
 - Non-target metals and residues in mine wastes
 - Management of mine pit lakes
 - Adverse impacts on surface and ground water quality
 - Dispersive materials
 - Design and maintenance of permanent drainage systems
 - Dust emissions
 - Rehabilitation of flora and fauna
 - Visual amenity
 - Heritage issues
- Section 9 Completion Criteria, Performance indicators and targets
- Section 10 Financial provisions

To cover:

- Earthmoving and landscape forming operations
- Management of hazardous or unstable materials

- Management of surface water drainage post closure
- Research and trials
- Decommissioning and removal of infrastructure
- Remediation of contaminated areas
- Progressive and final restoration
- Post-closure maintenance and monitoring
- Continuing stakeholder consultations
- Closure project management (administration, specialist consultancy, legal fees)
- Provision for unexpected closures
- Provision for potential delays and extreme events.
- Section 11 Closure Implementation
 - Management structure and staffing
 - Work plan and programme
 - Sources of materials for remedial works
 - Pilot processes
- Section 12 Closure Monitoring and maintenance
- Section 13 Management of date and permanent mine records depository

6. Risk Assessment

In the interests of reducing the risks of failure in achieving full rehabilitation of worked out mines, the applicant shall carry out a risk assessment and include the findings in the Mine Closure Plan. The purpose of the risk assessment is to:

- Ensure early identification of potential risks;
- Develop acceptable and realistic criteria to measure performance;

- Ensure orderly, timely and cost-effective closure outcomes;
- Reduce uncertainty in terms of the scale of closure costs; and
- Ensure application of continual improvements in remedial technology, the enhancement of the final design and management of drainage, erosion and seepage controls.

7. Minimum requirements for a Mine Closure Plan

A Mine Closure Plan will be judged incomplete if the answer to any of the following questions is NO;-

- (1) Has the closure plan been prepared specifically for this site?
- (2) Is stakeholder consultation fully documented in the plan?
- (3) Does the plan clearly indicate how stakeholders' concerns have been taken into account?
- (4) Has a full environmental and social assessment been undertaken of the issues involved in closing and rehabilitating the mine?
- 5) Are workable management measures identified and formally proposed as part of the mine closure plan for dealing with the issues highlighted in (4) above,
- (6) Is there evidence that experience from other similar sites in Sierra Leone, or other countries has been taken into account with the lessons learnt being applied to the mine closure plan?
- (7) Does the mine closure plan contain firm proposals for further research and field trials to support closure proposals?
- (8) Is the scope for progressive restoration or rehabilitation fully examined in the mine closure plan?
- (9) If scope exists for progressive restoration or rehabilitation are the necessary technical and financial provisions made in the plan?
- (10) Does the mine closure plan contain a section setting out measures for dealing with closure and the possibility of temporary closure on a care and maintenance basis?

8. Changes to approved Mining Proposals

Any substantial change to an approved mining operations and a mine plan is likely to result in increases in environmental and social impact. This in turn will necessitate review of the mine closure plan.

9. Unexpected and Temporary Closure

Mining operations can run into unexpected issues, like the influx of water into the mine area, or change in economic circumstances that necessitate temporary closure of the mining operations. If temporary closure becomes necessary this will trigger requirements for adoption of a Care and Maintenance Plan as set out in the Seventeenth Schedule of these Regulations. In the case of a temporary closure the mineral right holder is required carry out all environmental obligations without interruptions.

10. Existing Mine Operations

Under the Regulations and this Schedule the mine closure plans for all existing mining operations will need to be reviewed every 2 years

TENTH SCHEDULE - ENVIRONMENTAL MANAGEMENT PLAN STANDARDS (REGULATION 16(1)(B))

1. Preparation of an Environmental Management Plan

A mineral right holder which is obliged to prepare an EIA shall prepare an Environmental Management Plan in accordance with Section 110(2)(d) of the Mines and Minerals Act. 2009.

The Environmental Management Plan must incorporate all of the recommendations and commitments to environmental protection in terms of avoidance, minimisation and compensation that are contained in the Environmental Impact Assessment, together with any additional conditions that are attached to the Environment Licence. The Environmental Management Plan must include a programme of environmental works, including timescale, targets and indicative costs.

2. Objectives of the Environmental Management Plan

An environmental management plan sets out the measures and steps that will be taken by the holder of an environmental licence to avoid, minimise, mitigate or compensate for adverse environmental effects arising from the mining operation that are identified in the environmental impact assessment studies and report. The level of detail will vary according to the stage of mining operation that is being covered in the environmental license (i.e. exploration, detailed feasibility study or full scale mining) and the scale of operations (small scale or large scale mining operations).

An EMP will describe critical environmental values and/or sensitive sites that are to be protected during the life, closure and post-closure stages of the operations, in addition to those environmental features that are likely to be directly influenced or affected.

Specific commitments must be entered into in the plan based on the site assessments and international best practice in environmental care and proven research. Provisions for monitoring must be included that are technical and financially achievable and these shall cover environmental protection objectives, standards, measurable indicators and control strategies.

Applicants for an environmental licence are strongly advised to consult the Agency while preparing environmental protection commitments and responses to the findings of the EIA.

3. Recommended contents of an Environmental Management Plan

Environmental Management Plan for an Environmental Licence for Exploration

CONTENTS

| Section 1 | Mining project status |
|-----------|---|
| Section 2 | Description of mining activities |
| Section 3 | Description of environmental values and potential impacts |
| Section 4 | Management measures for each of the following environmental values, as applicable |

- Air: micro-climate, dust, odours, point source contaminants
- Water: natural watercourses, stream sediments, water quality, groundwater, dams and containments, sewage effluent quality and control,
- Noise and vibration
- Wastes: liquids and solids
- Land, landforms, rehabilitation criteria, landform design, gradients relating to end-uses
- Dams containing hazardous waste
- Infrastructure: roads, power lines, generators
- Vegetation: flora
- Biodiversity: fauna
- Heritage and cultural conservation features

ELEVENTH SCHEDULE - SOCIAL MANAGEMENT PLAN STANDARDS (REGULATION 16 (C))

1. Status of a social management plan

A social management plan is prepared from the material contained in a social impact assessment (SIA) environmental and social impact assessment (ESIA) and contains the measures to prevent, mitigate or compensate for negative social impacts resulting from mining activities as well as measures to enhance and maximise development opportunities.

The social management plan sets out the steps and measures that will be taken by the mineral right holder to deliver all of the social and local economic obligations that stem from these Regulations in relation to the construction, implementation, operation and closure of mining activities and operations. Social obligations covered in the social management plan are separate and distinct from any wider commitments arising pursuant to negotiations with the host community in relation to a Community Development Agreement or community development plan or resulting from a Company's corporate and social responsibility policies.

2. Preparing a Social Management Plan

All Category A project applicants are required to prepare a social management plan. Where it is deemed appropriate, an authorised officer of the Agency or the Director of Mines may also direct that a Social Management Plan be prepared for a Category B project.

In accordance with these Regulations, a social management plan must be revised annually throughout the construction, implementation, operations and closure stages of a mineral operation. The annually updated SMP shall be submitted to the Agency within one month of the date of its adoption.

3. Objectives of a social management plan

A social management plan sets out the measures and steps that will be taken by the holder of an environmental licence to avoid, minimises, mitigate or compensate for adverse social effects arising from the mining operation that are identified in the social impact assessment studies and report (or the environmental and social impact assessment study and report in the case of a Category C Project).

The level of detail will vary according to the stage of mining operation that is being covered in the environmental license (i.e. exploration, detailed feasibility study or full scale mining) and the scale of operations (small scale or large scale).

A SMP will describe critical social values and/or sensitive sites that are to be protected during the life, closure and post-closure stages of the mining operations in addition to those social and local economic features that are likely to be directly influenced or affected.

Specific and tailored commitments must be entered into in the plan based on site assessments, international best practice in social care and proven research. All monitoring provisions must be technically and financially achievable and must cover social protection objectives, standards, measurable indicators and control strategies.

Applicants for an environmental licence are strongly advised to consult the Agency while preparing their social protection commitments and responses to the findings of the SIA or ESIA.

4. Contents of a social management plan

The social management plan will contain, as a minimum, the following criteria:

CONTENTS

Section 1 Mining project status

Section 2 Description of mining activities

Section 3 Description of social and local economic values and any sensitive sites and potential impacts

Section 4 Management measures for each social and local economic value.

In addition, the social management plan shall include sections detailing the following:-

- (a) references and links to a public consultation and participation plan;
- (b) a grievance or conflict management plan;
- (c) timescales and estimated costs for the work; and
- (d) provisions for monitoring and evaluating the results, and where necessary, taking extra measures.

TWELFTH SCHEDULE-COMMUNITY DEVELOPMENT AGREEMENT AND PLAN STANDARDS (REGULATION 16 (c) (iii))

1. Community development agreement

The holder of a small scale or large scale mining license is required to have and implement a community development agreement with the host community in accordance with Section 139(1) of the Mines and Minerals Act 2009.

2. Community development plan

The Community development agreement shall be based on the contents of a community development plan which in turn sets out how the holder of an environment licence will implement the findings and recommendations of a social impact assessment (SIA) or environmental and social impact assessment (ESIA).

The Community Development Plan (CDP) will include;

- (1) a participatory framework;
- (2) a statement on the company's policy, procedures and institutional arrangements necessary to implement sustainable development opportunities in the Host Community in the social impact assessment or environmental and social impact assessment and in the social management plan.
- (3) a local employment and procurement strategy that commits the applicant;-
 - (a) to a policy of utilizing local employment wherever practical during all stages of mine development; and
 - (b) to purchasing local materials and products wherever practical.
- (4) a gender strategy outlining actions for improving the condition of women and children within the Host Community who are likely to be affected by the planned operations.
- (5) a community development programme which shall include at least the following:
 - (a) objectives,
 - (b) milestones;
 - (c) implementation timetable;
 - (d) schedule of anticipated expenditures;
 - (e) metrics by which to measure progress;

- (f) periodic reporting including actual expenditures;
- (g) how the plan works in coordination with government plans, services, infrastructure and activities provided to or affecting the community;
- (h) how the provision of any service provided by the mining right holder to the community will be terminated or transferred to the community, government or other entity;
- (i) how and when the plan will be periodically updated;
- (j) how the plan and amendments to the plan will be ratified by the community; and
- (k) such other content as may be mutually agreed by the community and the mining right holder;

Pursuant of Section 140(1) (c) (iii) of the Mines and Minerals Act 2009, the Community Development Plan shall also serve to prepare the community for mine closure with the Mine Closure Plan (MCP) also containing relevant consultation and participation methodologies to meet that end.

3. Form of the Community Development Agreement

The community development agreement shall be structured around the following contents list.

CONTENTS LIST

- 1. Objectives
- 2. Mining right holder's obligation to assist in development of communities
- 3. Capacity to negotiate
- 4. Recommended content of community development agreement
- 5. Community development agreements should complement other agreements and development plans
- 6. Recommended minimum expenditure
- 7. Transparency through reporting

- 8. CDAs and annual reports available to the public
- 9. Transfer
- 10. Pre-existing mining rights

4. Objectives of the Standards

The objectives of these standards are:

- (1) to enhance the sustainable social, cultural and economic well-being of communities impacted by mining operations;
- (2) to define when community development agreements may be useful and to provide a suggested framework for such agreements;
- (3) to promote accountability and transparency in mining related community development.

5. Obligations of the Mining Rights Holder

In accordance with Section 138 of the Mines and Minerals Act a mining right holder is required to assist in the development of communities affected by its operations to promote sustainable development, enhance the general welfare and the quality of life of the inhabitants, and recognize and respect the rights, customs, traditions and religion of local communities.

6. Conduct of negotiations

Where a qualified community lacks the capacity to effectively negotiate a community development agreement, the mining right holder is obliged to assist to build that capacity including the provision of such funds to the community for capacity-building and preparation as are reasonable in the circumstances.

7. Content of the Community Development Agreement

A mining right holder is required to negotiate a ratified community development agreement with each host community affected by the planned mining development, and each such agreement shall include as a minimum the following provisions:

- (1) the person, persons, board, committee, foundation, trust, forum, body or other entity which shall manage the agreement;
- (2) the person or body that represents the partner community for the purposes of the agreement;
- (3) the means by which a registry of persons comprising the community will be developed, maintained and updated;
- (4) the means by which members of a partner community will participate in the community's agreement related decision-making processes;
- (5) the means by which the interests of women, youth and sub-communities of the partner community will be represented in the community's agreement related decision-making processes and implementation;
- (6) the goals and objectives of the community development agreement;
- (7) a community development programme (see Section 2v. above)
- (8) the roles and obligations of the holder of the mining right to the partner community, which may or may not be part of the development programme plan, including but not necessarily limited to:
 - undertakings with respect to the social and economic contributions that the project will make to the sustainability of the community;
 - (b) assistance in creating self-sustaining, income-generating activities, such as but not limited to, production of goods and services needed by the mine and the community;
 - (c) consultation with the community in the planning of mine closure and post-closure measures that seeks to prepare the community for the eventual closure of the mining operations;
- (9) the roles and obligations of the partner community to the holder of the mining right;
- (10) the roles and obligations of the District Council, if it is a party to the community development agreement or otherwise so chooses to be obligated;

- (11) the means by which the community development agreement shall be reviewed by the holder of the mining right and partner community every five (5) calendar years, and the commitment to be bound by the current agreement in the event that any modifications to the agreement sought by one party cannot be mutually agreed with the other party;
- (12) the consultative and monitoring frameworks between the holder of the mining right and the partner community, and the means by which the community may participate in the planning, implementation, management, measurement (including indicators) and monitoring of activities carried out under the agreement;
- (13) the language(s) to be used in the preparation of reports, plans, and other written matters required under the agreement;
- (14) the means by which any funds made available under the agreement are to be disbursed, for what purposes they may be disbursed, what accounts must be kept and by whom, and reporting and auditing requirements;
- (15) the mechanisms whereby the partner community, and sub-communities and members of the partner community may lodge a grievance with the mining right holder;
- (16) the mechanisms whereby the mining right holder may lodge a grievance with the partner community;
- (17) the process by which the agreement may be modified;
- (18) a statement to the effect that both the holder of the mining right and partner community agree that any dispute regarding the agreement shall in the first instance be resolved by consultation between the holder and the partner community representative(s);
- (19) the dispute resolution mechanism to be used when consultation between the holder and the partner community representative(s) fails;
- (20) severability of articles;
- (21) the applicable law, which shall be the law of Sierra Leone;
- (22) reasons and procedure for declaring force majeure;
- (23) duration of the agreement;

- (24) suspension / termination of the agreement;
- (25) assignment of the agreement or any right or obligation there under;
- transfer of all community development agreement rights and obligations to any party to whom the mining right holder transfers its mining right;
- (27) how notifications to respective parties shall be done;
- (28) in order to prevent any overlap of resources and wastage of funds, a provision requiring the mining right holder to co-ordinate with the relevant local or central planning authorities which are responsible for providing schools, medical centres, hospitals and other social infrastructure to local communities;
- (29) location where the agreement may be accessed by members of the community; and
- (30) the agreement signatories, which may for the partner community be the representatives of the community, representatives of sub-communities comprising the community, community members or any combination thereof, non-governmental organizations, and others as the need requires.

8. Other Issues to be considered

In addition to the subject matter listed in (7) above, it is recommended that a community development agreement take into account the unique circumstances of the mining right holder and partner community, and the issues to be addressed in the agreement and development program plan might address all or some or none of the following issues:-

- (1) role of local and other levels of government;
- (2) educational scholarship, apprenticeship, technical training and employment opportunities for the people of the community;
- (3) employment quota or percentage allocation for sub-communities;
- (4) financial or other forms of contributory support for infrastructural development and maintenance such as education, health or other community services, roads, water and power (in consultation with relevant government authorities);

- (5) assistance with the creation, development and support to small-scale and micro enterprises;
- (6) special programs which benefit women;
- (7) special programs which benefit youth;
- (8) special programs which benefit sub-communities within the partner community;
- (9) agricultural product marketing;
- (10) protection of natural resources;
- (11) support for cultural heritage and sports;
- (12) treatment of cultural and sacred sites;
- (13) treatment of ecological systems, including restoration and enhancement, for traditional activities such as hunting and gathering;
- (14) language training to further employment prospects;
- (15) how cultural values will be respected;
- (16) cross-cultural training requirements;
- (17) malaria, AIDs and drug dependency prevention and intervention;
- (18) land access;
- (19) the assumption of specified obligations of the mining right holder by the partner community, sub-communities and/or government authorities on an evolving basis and/or upon termination of the agreement;
- (20) methods and procedures of environment and socio-economic management, and local governance enhancement;
- (21) coordination with local and national government development plans affecting the community;
- (22) requirements with regard to third parties such as the mining right holder's contractors and suppliers;
- (23) the involvement of non-governmental organizations; and

(24) other matters as may be agreed.

9. Goals and Objectives of the Community Development Plan

It is recommended that goals, objectives, obligations and activities specified in a community development agreement aim to achieve sustained community development which-

- (1) lasts from generation to generation;
- (2) is based on the actual needs of the community;
- (3) is maintainable within available income:
- (4) is well planned, monitored and evaluated;
- (5) has long term benefits;
- (6) prepares the community for closure of the mine;
- (7) compliments but does not replace government-led development and services:
- (8) is in accord and compliments local and regional government development plans; and
- (9) recognizes and incorporates traditional knowledge.

10. The Role of the Local Authority

A mineral right holder and partner community shall consider what role the District Council should have in regard to a community development agreement, whether that role should be described in such agreement, and whether it would be appropriate for the District Council to be a party to such agreement.

11. Provisions to be excluded from Community Development Agreements

A community development agreement shall not address any of the following matters:-

- the provision of any passenger car, small truck, or four by-four vehicle to any individual or single family unit of the partner community or to the partner community, other than a specialized purpose vehicle such as an ambulance, fire engine, water truck, or bus; or
- 2) the provision of any monetary amount, service, good, or facility for the sole benefit of an individual or single family unit.

12. Other Matters

- (1) It is recommended that a community development agreement be in English but where a substantial proportion of the community members are not fluent in English the mining right holder party to such agreement should consider making available to representatives of the partner community translated copies in the local language or dialect.
- 2) It is recommended that a mining right holder that enters into a community development agreement with a partner community take into consideration;-
 - (a) any community development agreements it has with other partner communities so that such agreements complement one another to achieve synergistic development across the communities.
 - (b) any existing community development agreements entered into by that partner community with other holders of mining rights so that its community development agreement compliments such existing agreements, and whether the mining right holder might become a party to any such existing agreements.
 - (c) any governmental community, local or regional development plans or schemes so that the agreement is in harmony with and compliments such plans or schemes.
- (3) It is recommended that the holder of a mining right who has entered into one or more community development agreements expend no less than one tenth of one percent (0.1%) of the gross revenue amount earned pursuant to that right from mineral sales in the previous calendar year to implement all its agreement(s) or otherwise promote community development.

- (4) Where a mining right holder makes expenditures pursuant to a community development agreement, it is recommended that such expenditures be done in a transparent, predictable and sustained manner over the life of the mine.
- (5) The value of community development related work might include (whether incurred directly by the mining right holder or indirectly through payments by the mining right holder to a contractor, community trust, community foundation or other legal entity):
 - (a) work or funds irrevocably committed to fulfil any obligation of the mining right holder specified in a community development agreement;
 - (b) salaries and benefits of any person responsible for managing the implementation of one or more community development agreements where such responsibilities comprise over fifty percent(50%) of that person's time;
 - (c) social baseline studies (the gathering and compilation of baseline data that describes the state of the ecological, social and economic environment and characteristics of the populations living in the area);
 - (d) social impact and opportunities assessment work (assessment of the potential ecological, social and economic impacts of the project upon communities and measures to offset potential negative impacts and maximize positive impacts);
 - (e) competencies assessment (measuring and recording the skills in a community);
 - (f) participatory planning (the preparation of development program plans where community members participate in the planning effort);
 - (g) community and mining operation mapping (maps depicting what the community perceives as its community space, where mining operations will take place and when, where access is open, restricted, or closed);
 - institutional analysis processes (processes for identifying and discussing what institutions are present in and around a community);

- problem census taking (processes by which community members articulate the problems they consider need addressing in their community);
- (j) implementation of District Council regional and community development plans;
- (k) training programs for members of a partner community;
- consultation processes between the mining right holder and a
 partner community or members of a partner community and or
 local government which are related to the creation or
 implementation of a community development agreement;
- (m) community development agreement monitoring;
- conflict management activities (the implementation of a grievance process, other than Court actions, as stipulated in a community development agreement); and
- (o) such other expenditures as may be appropriate in the circumstances.
- (6) It is recommended that the holder of a mining right provide annually to the Mining Cadastre Office, Minerals Advisory Board for every community development agreement to which it is a party-
 - (a) a Community Development Agreement Annual Report no later than January 31st, describing objectives, activities, milestones and results for January through December during the prior calendar year, and
 - (b) a Community Development Annual Expenditure Report not later than February 15th detailing its community development expenditures and total expenditure for January through December during the prior calendar year.
- (7) All community development agreements, community development agreement reports and community development annual expenditure reports (including all required attachments) submitted by past and present holders of a mining right in furtherance of these standards shall be open to free inspection by members of the public at the Mining Cadastre Office during normal Government office hours.

- (8) It is recommended that a community development agreement, community development agreement reports and community development annual expenditure reports (including all required attachments) submitted by the holder of a mining right in furtherance of these standards also be open to free inspection by any member of the partner community at the office of the mining right holder located closest to that community during normal office hours.
- (9) It is recommended that when a mining right is transferred to another party, the transferee should assume all rights and obligations of the transferor under any community development agreement relating to the mining right.
- (10) The holder of a mining right which came into force prior to the publication date of these guidelines should strive to have community development agreements with all partner communities within two years from the publication date of these Regulations.

THIRTEENTH SCHEDULE - CONSENT FOR THE USE OF LAND FOR MINING PURPOSES (REGULATION 17(1))

1. The nature of consent

Before the initiation of any mining activity regulated under the Mines and Minerals Act 2009 and these Regulations, the applicant for a mining right must obtain consent to use the surface land on licence area for exploration or mining purposes. Consent must be obtained from the Chiefdom Mining Allocation Committee or its rightful occupiers or owners, and must be supported by documentary evidence.

2. Conditions for granting an Environmental Licence

Before granting an environmental licence for exploration, small scale mining, large scale mining or any other mineral activities authorized under these Regulations, the Agency will require proof that a legally binding agreement is in place to cover use of land for mining purpose and that any other permits or permissions under other legislation have been secured by the applicant.

Exceptionally, the Board of the Agency may grant an environmental licence for complex projects involving a multiplicity of surface right ownerships if evidence is presented to show that negotiations are at an advanced stage and there are no substantive areas of disagreement between all the parties. The issue of a licence under conditions where agreements remain to be concluded will be entirely at the discretion of the Board of the Agency with no grounds for appeal in the event that a licence is withheld.

3. Standard form on the status of consent for the use of land for mining purposes

| Registration Details |
|---|
| Name of Applicant |
| Document Identity/registration no. |
| Registration with the Agency |
| Legal representative. |
| Address |
| Telephone number. |
| E-mail address. |
| Details of the Land owner(s) |
| Provide the name, address and contact details for each independent land owner |

| Details of the Chiefdom Mining Allocation Committee |
|---|
| Mining District |
| Name of Chiefdom. |
| Name of Representative |
| Address |
| Telephone number |
| Email |

| Details of the Land owner(s) |
|---|
| Provide the name, address and contact details for each independent land owner |
| Name |
| Address |
| Telephone number |
| Email |

| Answer each question by ticking the relevant box A full legal agreement has been signed between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for mining exploration purposes. | Yes | No |
|---|-----|----|
| A draft legal agreement has been exchanged between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for mining exploration purposes. The draft agreement covers all heads of agreement and there is no dispute between any of the parties which would prevent full agreement being reached. | | |
| A full legal agreement has been entered into between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, covering the terms of compensation for any disturbance to the land owners' rights during the mining operations. | | |

| Attempts to reach a voluntary agreement between the | |
|--|--|
| applicant for the environmental licence and mineral rights | |
| and the land owner(s) identified above, for the use of | |
| land covered by this application for mining exploration | |
| purposes have been unsuccessful and an application | |
| has been made to the Minister under the Mines and | |
| Minerals Act, 2009 | |

| Status of negotiations for consent to use land for small scale mining | | | |
|---|-----|----|--|
| Answer each question by ticking the relevant box | Yes | No | |
| A full legal agreement has been signed between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for small scale mining operations. | | | |
| A draft legal agreement has been exchanged between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for small scale mining operations. The draft agreement covers all heads of agreement and there is no dispute between any of the parties which would prevent full agreement being reached. | | | |
| A full legal agreement has been entered into between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, covering the terms of compensation for any disturbance to the land owners' rights during the mining operations. | | | |
| Attempts to reach a voluntary agreement between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for mining exploration purposes have been unsuccessful and an application has been made to the Minister under the Mines and Minerals Act, 2009 | | | |

| Status of negotiations for consent to use land for large scale mining | | | |
|--|-----|----|--|
| Answer each question by ticking the relevant box A full legal agreement has been signed between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for large scale mining operations. | Yes | No | |
| A draft legal agreement has been exchanged between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for large scale mining operations. The draft agreement covers all heads of agreement and there is no dispute between any of the parties which would prevent full agreement being reached. | | | |
| A full legal agreement has been entered into between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, covering the terms of compensation for any disturbance to the land owners' rights during the mining operations. | | | |
| Attempts to reach a voluntary agreement between the applicant for the environmental licence and mineral rights and the land owner(s) identified above, for the use of land covered by this application for large scale mining have been unsuccessful and an application has been made to the Minister under the Mines and Minerals Act, 2009 for the land covered by this application to be compulsorily purchased, subject to the provisions for compensation contained in the above act. | | | |

FOURTEENTH SCHEDULE - CONFIRMATION OF LOCAL COMMUNITY PARTICIPATION IN SUSTAINABLE DEVELOPMENT (REGULATION 18(c))

1. Basic requirements

The applicant for an Environmental Licence is obliged under the principles and obligations set out in Regulation 3 to;-

- (1) engage the local community at the earliest opportunity;
- (2) ensure that the programme of participation:
 - (i) identifies all relevant issues that could have harmful effects on the local community; and
 - (ii) guides the identification of development priorities, joint planning, implementation, management and monitoring of sustainable development projects.

2. Form confirming participation of the local community

| Applicants' Details |
|---------------------------------|
| Name of Applicant |
| Identity document/registration. |
| Registration with the Agency |
| Legal representative. |
| Address |
| Telephone number |
| E-mail address. |

| Local Community Details (A separate entry should be made for each local |
|--|
| community involved) |
| Name of Community: |
| Location (Name of District): |
| Official representative of the Community: |
| Chiefdom(s) within the local community area: |
| |
| Details of any Community Liaison Committee(s) (CLC) Established |
| Name of CLC: |
| Name of CLC Representative: |
| Contact Details for CLC Representative: |
| Date of formation and incorporation of the CLC: |
| Number of meetings of the CLC: |
| Dates when meetings of the CLC were held |
| |
| Record of Public Consultation |
| (Provide a list of all public consultation meetings and describe the location, venue, purpose, type of meeting, number of participants, outcomes and recommendations with copies of minutes) |
| 1. |
| 2 |

Note: Add rows as necessary

| Record of Publications, Advertisements and Media Events (Video, Film, TV and Radio Broadcasts) |
|--|
| 1. |
| 2. |
| 3. |

Note: Add rows as necessary

FIFTEENTH SCHEDULE-APPLICATION FORM FOR ENVIRONMENTAL LICENCE (REGULATIONS 17 (3), 18 (3) and 19)

This application datedhas been:

- (1) Hand-delivered to the Registration Office of the Environment Protection Agency at 3rd Floor West Wing Youyi Building, Freetown.
- (2) Submitted to the Registration Office of the Environment Protection Agency at 3rd Floor West Wing Youyi Building, Freetown by Courier service.
- (3) Hand-delivered to a regional office of the Environment Protection Agency.
 (strike out whichever of the above categories do not apply).
 Signed and dated by individual authorised to submit the application

Counter signature and date by receiving officer.....

 $Official\ Date\ Stamp\ of\ the\ Environment\ Protection\ Agency:$

The period specified for determination of the environmental licence by the Environment Protection Agency will run from the day following receipt of the completed application if delivered at the headquarters in Freetown, or 5 working days after registration at a regional office to allow for the transfer of relevant documents.

Registration Details

Project Category:

An application shall not be complete until it comprises the requisite number of all of the documents specified in Regulation 20.

Confirmation by the Environment Protection Agency's reception staff of the type and number of documents handed over does not in itself constitute a formal acceptance of a completed application. This will be provided by letter signed by a duly authorised officer once the applications details have been checked and verified.

| Name of Applicant |
|---|
| Identity document/registration |
| Registration with the Agency. |
| Legal representative |
| Address |
| Telephone number. |
| E-mail address. |
| I confirm, as the authorised officer or agent for the applicant, that the following details are correct and that the requisite number of documents (identified by a tick in the appropriate boxes) has been submitted with this application form: |
| Signature of applicant's agent or Authorised Officer: |
| Date: |
| History of Application |
| Project Screening Application submitted: Date: |
| Environment Protection Agency Decision on Project Category issued: Date |
| Environment Protection Agency Application Reference Number: |

| Application documents submitted with this form | To be completed by applicant | | EPA confirmation | |
|---|------------------------------|------------------|------------------|------------------|
| | | No. of Copies | | No. of Copies |
| CATEGORY D PROJECT | | | | |
| Environmental Code of Practice | | | | |
| CATEGORY C PROJECT | | | | |
| Environmental and Social Impact Assessment | | | | |
| Mine Closure Plan | | | | |
| CATEGORY B PROJECT | | | | |
| Mine Closure Plan | | | | |
| Environmental Management Plan | | | | |
| Social Management Plan | | | | |
| Draft Community Development Agreement (where required) | | | | |
| CATEGORY A PROJECT | | | | |
| Mine Closure Plan | | | | |
| Environmental Management Plan | | | | |
| Social Management Plan | | | | |
| Draft Community Development Agreement (supported by a community development plan) | | | | |
| Resettlement Management Plan | | | | |

SIXTEENTH SCHEDULE - FINANCIAL ASSURANCE MECHANISM STANDARDS (REGULATIONS 28 (1) AND 29 (1) AND (2))

The financial assurance mechanism utilised for a specific project shall be comply with the standards defined in this Schedule.

1. Early scoping of financial feasibility

The mining right holder must ensure that the costs associated with mine closure and post closure activities, including post closure care, are included in business feasibility analyses during the planning and design stages. Minimum considerations should include the availability of all necessary funds by appropriate financial instruments to cover the cost of closure at any stage in the mine life, including provision for early or temporary closure. Funds must be set aside early on in the project development to finance the social and economic aspects of mine closure.

2. Level of financial assurance

The required level of financial surety will be established by the Agency taking due regard of the following end goals and rehabilitation standards and in all cases, to enable full reclamation and cover all costs relating to the physical closure of the site. Reclamation shall comprise but is not limited to (i) removal of all plant, equipment, and, where it is no longer needed, infrastructure; (ii) removal of all hazardous materials; (iii) sealing of adits; (iv) stabilization of all surfaces; (v) revegetation of all surfaces; (vi) restoration of surface and groundwater flows; (vii) prevention of long-term pollution and (viii) the adverse effects of closure of social assets in the local community, the closure of which can have severe economic consequences.

In addition, reclamation includes amounts to cover activities provided for in future care, maintenance, reconstruction and emergency response action plans.

The social elements that should be taken in to consideration include redundancy payments, retraining schemes, support for dependent (spin-off) businesses, utilities (electricity, water, communications etc.), social facilities (health, education, justice etc.), infrastructure (roads, airstrips, ports, wharves etc.), food security and the financial system.

In most cases, the amount that is required for the financial surety is based on the specific itemized costs of all components included in the closure or rehabilitation plan. The amount of financial surety shall be established by the applicant and reviewed by the Agency.

3. Timing

The financial surety must be in place before work is allowed to start on site. It does not have to be lodged until after the mining title is granted.

4. Types of funding

Acceptable funding instruments include a cash accrual system, bank guarantee or letter of credit, offshore trust fund, insurance policy or surety bond. The two acceptable cash accrual systems are fully funded escrow accounts (including government managed arrangements) or sinking funds.

5. Accessibility of financial assurance

Financial assurances should be readily accessible, dedicated, and only released with the specific consent of the Agency. Forms of financial assurance should be payable to the Agency under its control or in a trust for their benefit and earmarked for reclamation and closure.

6. Funding provider

An acceptable form of financial guarantee must be provided by a reputable financial institution.

Where a guarantee is provided, in order to assure that guarantors have the financial capacity to assume an operator's risk of not performing its reclamation obligations, the Agency must carefully screen a guarantors' financial health before accepting any form of assurance. Any risk-sharing pools should also be operated on an actuarially sound basis. The Agency should require periodic certification of these criteria by independent third parties.

7. Review of financial assurance

The level of financial surety may be reviewed and revised at any time by the Environment Protection Agency.

8. Release of financial assurance

Following the successful total rehabilitation of the site and consultation with the relevant local community, all of the financial surety is returned to the proponent. The financial surety funds are not available to the mining permit holder for ongoing rehabilitation.

The funds may be partially released where progressive rehabilitation has been successful and at the time of periodic review. Staged reductions in the level of financial surety can help to promote progressive rehabilitation and good practices. Before any money is returned to the mining permit holder, the Agency should establish that the program has been successful and no further work is required on the site. A commonly used method of evaluating the release of the financial surety is the success of the re-vegetation program. It is also possible to use other testing criteria, such as the surface stability, water quality, or a combination of all three. Depending on the post closure monitoring requirements, as specified in the mine closure plan, the mining title may not be relinquished for a significant period of time during which period, the proponent is responsible for any additional rehabilitation work for residual environmental impacts and social impacts and long term care and maintenance issues. Financial surety is required to support these obligations, either through the original security or by provision of a specific fund. It is released when the Agency has issued a closure certificate, but a portion may be retained to cover latent or residual environmental impacts and social impacts.

9. Public Involvement

Since the public runs the risk of bearing the environmental and social costs not covered by an inadequate or prematurely released security, they must be accorded an essential role in advising authorities on the setting and releasing of such security. Therefore, the Environment Protection Agency must give the public notice and an opportunity to comment both before the setting of the financial level of the security and before any decision on whether to release the same.

10. No Substitute

Any type of financial assurance should not be regarded as a surrogate for a mining permit holder's legal liability for cleanup or for the Agency applying the strictest scrutiny and standards to proposed mining plans and operations. Rather, a financial assurance is only intended to provide the public with a buffer against having to shoulder costs for which the mining permit holder is liable.

11. Primary Agency

The Agency shall act as primary government agency in all mine closure matters. This assures the business community that one agency will take the lead on its problems and that it will not have to answer to many differing opinions on how the success of operation, reclamation, and closure will be measured.

SEVENTEENTH SCHEDULE-CARE AND MAINTENANCE PROGRAMME STANDARDS (REGULATION 31 (2))

1. Context

A mine may need to be closed either permanently due to unexpected circumstances, including but not limited to, a marked change in the geological conditions, or temporarily due to changes in mineral demand and/or market prices which make it uneconomic to continue production in the prevailing economic climate.

Whenever a mine needs to be closed it is a fundamental requirement of the Regulations that one of the following two actions is taken:

- the mining operations are brought to an end in accordance with the Mine Closure Plan; or
- (2) the mining operations are put into temporary suspension and a care and maintenance plan is enacted to ensure that there are no adverse environmental or social impacts arising during the period in which the mine is dormant.

2. Preparation of the care and maintenance plan

A care and maintenance plan must be prepared as part of the environmental management plan and social management plan so that the necessary actions can be taken as soon as the need for temporary closure arises. It is acknowledged that some elements of the care and maintenance plan will cover protection of plant and equipment and that these elements are covered in the Operational Regulations for the Minerals Sector, 2011. This guidance relates only to environmental and social aspects of the care and maintenance plan.

3. Activating a care and maintenance plan

Any decision taken by the environmental licence holder to place a mine under care and maintenance must be immediately notified to the Agency. Concurrently with this notification the environmental licence holder must undertake an environmental and social audit of the site and its surrounding area.

4. Audit requirements

The environmental audit will establish the precise condition of all open excavations, waste tips, minerals dumps, watercourses, chemical storage tanks, treatment plants, tailings dams and lagoons and assess their vulnerability to erosion, subsidence, corrosion, rupture or any other form of failure in the absence of on-going mining activities.

The social audit will establish the likely impact of closure for employees and their dependents and for the local and host community as well as the consequences this will have for obligations and commitments entered into by the environmental licence holder in relation to any Community Development Agreement.

5. Care and maintenance inspections

Under the terms of the care and maintenance plan the environmental licence holder will be obliged to continue carrying out inspection and monitoring activities in accordance with a schedule agreed with the Agency. Where the Agency concludes that additional surveys and inspections or remote monitoring is required this shall be provided by the environmental licence holder at its own expense.

6. Emergency response action plan

It shall be a condition of acceptance of the care and maintenance plan by the Agency that the environmental licence holder formulates an emergency response action plan along with all relevant implementation tools.

7. Financial assurance and compensation

The costs of the care and maintenance plan and the emergency response action plan shall be covered by the financial assurance scheme.

Under the terms of the care and maintenance plan, the environmental licence holder shall make compensatory payments to the local community and host community to cover the loss of any payments over the period of temporary closure which would fall due in accordance with any Community Development Agreement.

SCHEDULE EIGHTEENTH-ROSTER OF INDEPENDENT AUDITORS (REGULATION 59 (3))

1. Creation of a roster of independent environmental auditors

The Agency will establish and maintain a roster of environmental and social consultants with the necessary credentials, skills and experience to undertake the full range of environmental and social audits in the mining and minerals sector. The roster will comprise between four and six international consultancy companies that can be called upon to provide the full range of auditing services over a three year period of service on the roster.

Competitive tendering for the auditor positions will be undertaken at three yearly intervals.

2. Selection of auditors for the roster

Advertisements will be placed in international mining journals, the newsletter for the International Association of Impact Assessors (IAIA) and other international press outlets inviting environmental and social consultants with capabilities in impact assessment, management, and auditing in the field of mining and mineral development to apply for a three year post on the auditing roster.

Terms of Reference will be provided which set out the requirements for the submission of parallel technical and financial bids. All proposals will be evaluated in terms of the technical competence of the auditing consultancies and their staff. Applications from those consultancy companies scoring a minimum of 70 points under the technical assessment will go forward to a second stage review based on its financial proposal.

The selection of environmental auditors for the roster will be based on an evaluation of the best performing applicants on technical merit combined with lowest financial cost using the following ratio:

Technical assessment score x 70% + financial assessment score x 30%

Technical assessment will be based on submissions outlining:

| Organisation, skills and capacity | | Score |
|-----------------------------------|---|-------|
| 1. | Company structure and organisation | 10 |
| 2. | Number and specialisms of senior managers and project managers | 10 |
| 3. | A list of in-house staff (names, disciplines, qualifications, seniority, years of work experience), | 10 |
| 4. | A list of recruited external consultants (names, disciplines, qualifications, seniority, years of work experience). | 10 |
| 5. | Access to laboratories and description of in-house monitoring and auditing equipment | 10 |
| 6. | A method statement for handling different types of audit with examples of related work | 20 |
| 7. | A detailed description of similar auditing work and experience in the mining and related development sectors, including client references, timescale and costs. | 30 |
| | Total Score | 100 |

Financial Proposals will provide the following information:

| Information Required | | Score |
|----------------------|--|-------|
| 1. | Scale of charges in bands relating to skills and experience | 60 |
| | Project Director | |
| | Principal Auditors | |
| | Senior Auditors | |
| | Middle Rank Auditors | |
| | Support Staff | |
| 2. | Fully costed financial proposals for undertaking 3 levels of audit according to the detailed brief provided in the | |
| | Terms of Reference for appointment. | 40 |
| | Total Score | 100 |

MADE this 15th day of May, 2013.

HADDIJATOU JALLOW (MRS.), EXECUTIVE CHAIRPERSON Environment Protection Agency