5. DEMOCRATIC REPUBLIC OF CONGO

5.1 Constitutional Requirement for Environmental Protection in DRC

The Democratic Republic of the Congo (DRC), formerly the Belgian Congo and then Zaire, is the largest country in the SADC region. It is endowed with abundant valuable natural resources, including diamonds, cobalt, copper and petroleum. The DRC was a colony of Belgium from 1884 until 1960, when it was granted independence. Since that time, the DRC has not known true democracy, as it has been fuelled with ethnic and civil strife, leading to political and economic instability. As a result of colonialism, at the time of independence the DRC was in a state of extreme underdevelopment, which has been aggravated by the continuing armed conflict taking place within and outside of its borders.

The move towards democracy started when a transitional government was set up in July 2003, with Joseph Kabila as president with four vice-presidents representing the former government, former rebel groups, and the political opposition. The transitional government held a successful referendum in December 2005 to accept a new constitution, and elections for the presidency, National Assembly, and provincial legislatures were held in 2006. Kabila was inaugurated as president in December 2006.

The constitution, also known as the Constitution of the Third Republic was adopted by government on the 18th February 2006. Article 53 states that:

- Every person has a right to a healthy environment and which is favourable to his/her full development.
- The environment must be protected.
- The State must look after the protection of the environment and the health of the people.[76]

Article 123 of the Constitution makes provision for laws to be made concerning, inter alia, "the protection of the environment and tourism". Article 203 allows for cooperative governance by central government and the provincial administrations "to protect the environment, natural sites and landscapes, and the conservation of such sites."

5.2 Institutional and Administrative Structure for EIA in DRC

As a result of the prolonged civil war, little attention has been given to the development of environmental laws relating to environmental impact assessments (EIA). Indeed at the date of writing, there is no EIA legislation per se in the DRC. Nevertheless, several NGOs and donor agencies have been active in the DRC to develop an administrative structure to address the needs of environmental protection and natural resources management. For example, one of USAID's missions has been to identify key actors in NGOs, government, the media and the private sector and to coordinate their various efforts. Financial investment by outside constituencies in DRC's environmental, natural resources management (NRM) and conservation efforts is being encouraged. Steps have been put in place for reconnaissance missions supported by USAID to collect field data for national and international databases on

[76] Translated from the French original.

climate change, conservation and forestry, and plans are being made to engage USAID and other partners to review key environmental and NRM laws and regulations.[77]

The only activities which have a formal requirement for an EIA in the DRC are exploration, mining and quarrying. Since the mining sector is one of the most active parts of the economy and has the potential to incur serious environmental impacts, the mining laws relating to EIA will be described in this chapter.

5.2.1 Roles and Responsibilities

President

The President has jurisdiction over the classification of 'prohibited areas' which include, amongst others, sensitive environments.

Minister of Mines

The Minister of Mines has the ultimate jurisdiction over the granting and refusing of mining rights. However, he may be advised by the Commission for Validation of Mining and Quarrying Rights, which has the Minister of Environment as one of its members.

Directorate of Mines

The Directorate of Mines is responsible for inspecting and supervising mining activities and quarry works with regard to safety, health, work procedures, production, transport, sale and social matters.

Department in Charge of the Protection of the Mining Environment

Article 15 of the Mineral Code makes provision for the establishment and powers of a Department in Charge of the Protection of the Mining Environment. In coordination with the other State entities responsible for the protection of the environment, the Department in Charge of the Protection of the Mining Environment within the Ministry of Mines exercises the powers which are devolved to it by the present code and by all other regulations regarding the protection of the environment, in particular:

a) The definition and the implementation of the mining regulations concerning environmental protection with regard to:
   - The rules governing exploration;
   - The rules governing artisanal miners;
   - The guidelines for exploration and exploitation activities for mines and quarries; and
   - The conditions to supervise the obligations with regard to environmental protection.

b) The technical evaluation of the Mitigation and Rehabilitation Plan in relation to the prospecting operations for mineral substances classified as mines and quarries; and

c) The technical evaluation of the Environmental Impact Study (EIS) and the Environmental Management Plan of the Project (EMPP) presented by the applicants requesting mining or quarry exploitation rights.

[77] www.usaid.gov

5.3 Policy and Legal Framework for EIA

Environmental problems, such as erosion and solid waste pollution plague the cities of the DRC. Aside from mining and logging, the development of natural resource-based industries has been severely hampered by decades of mismanagement and conflict. Policies concerning access to and control over natural resources are antiquated and ambiguous. Encroachment into national parks and protected areas, and destruction of their infrastructure, has become a serious local and national issue. The civil conflict has encouraged large-scale deforestation of DRC's vast equatorial forests and natural resources.[78]

Several NGOs are working in the DRC with the objective of strengthening environmental institutional and policy frameworks. One of these is USAID which aims to tap into and strengthen existing institutions responsible for conservation, sustainable management of natural resources and bio-diversity. Strengthening these institutions has improved the environmental sanitation of Kinshasa in the short-term, while overhauling the policies and laws governing natural resources management (NRM) and bio-diversity will improve medium-term prospects for sustainable management of Congo's natural resources.

As mentioned in the previous section, there are no general EIA laws in the DRC. However, there are stringent environmental requirements in the Mining Code, which is described below.

5.3.1 Mining Code: Law No 007/2002

As mentioned above, the only law at present which requires an EIA is the Code Minier or Mining Code. The Mining Code specifies the need for an environmental impact study (EIS), a mitigation and rehabilitation plan (MRP) and an environmental management plan for the project (EMPP). These are defined in the Mining Code as follows:

Environmental Impact Study (EIS): *A priori* scientific analysis of the foreseeable potential effects a given activity will have on the environment, as well as the analysis of the acceptable levels thereof and the mitigating measures to be taken to ensure the conservation of the environment, subject to the best technology available, at a viable economic cost;

Mitigation and Rehabilitation Plan (MRP): Plan required for the operations relating to a mineral or quarry exploration right or a Temporary Quarry Exploitation Licence pursuant to which a holder undertakes to carry out certain mitigation measures of the impact of his activities on the environment, as well as rehabilitation measures where said activities take place, including the holder's undertaking to provide a financial guarantee to cover or guarantee the mitigation and rehabilitation costs of the environment;

Environmental Management Plan of the Project (EMPP): Environmental specifications of the project consisting of a programme for the implementation and monitoring of measures contained in the EIS in order to eliminate, reduce and possibly offset the damaging consequences

[78] www.usaid.gov

The Mining Code applies to all commercial activities associated with prospecting, exploitation, processing, transportation and sale of mineral substances, as well as artisanal mining activities. However, the exploration and extraction of liquid or gaseous hydrocarbons are excluded from the Mining Code because they are governed by separate laws.[79]

5.3.2 Regulations

Regulations pertaining to mining are contained in Decree No 038/2003 of 26th March, 2003. These regulations set out, inter alia, the contents of EIA and EMP reports (see section 5.4 below). The regulations contain a number of Annexures, but the ones which relate specifically to the environment are:

Annex II: Financial surety for rehabilitation
Annex III: Environmental Code of Conduct for Prospectors
Annex VII: Mitigation and Rehabilitation Plan (MRP)
Annex VIII: Guidelines for preparing an MRP
Annex IX: Guidelines for preparing an EIS and EMPP
Annex X: Closure measures
Annex XII: Classification of mining wastes and their characteristics (standards for effluents)
Annex XII: Sensitive environments
Annex XIII: Method for the measurement of noise.

5.3.3 Permits and Licences

A Prospecting Certificate is required for all prospecting for minerals in the DRC. The holder of a Prospecting Certificate is required to comply with all applicable regulations pertaining to the protection of the environment.[80]

Any person is allowed to explore or exploit minerals in the DRC so long as they are in possession of a valid Mining or Quarry Exploitation Licence, granted by the relevant government entity.[81] The Mining or Quarry Exploitation Licence will not be granted unless the applicant has submitted and had approved the documents making up the 'Plan Environnemental', which includes an EIS and EMPP/MRP. However, mining is not allowed in areas designated by the President as Prohibited Areas on account of their environmental sensitivity.[82]

5.3.4 Environmental Standards

The environmental quality standards applicable to mining operations are provided in Annex IX together with details on monitoring frequency, monitoring locations, calculations and measurement techniques. The following tables showing standards for water quality, air pollution and noise are included in Annex IX and are repeated below in Tables 5.1 – 5.4.

[79] Art. 2 of the Mining Code.
[80] Art. 20 of the Mining Code.
[81] Art. 5 of the Mining Code.
[82] Art. 6 of the Mining Code.

Table 5.1: Maximum concentration of contaminants in water (mining)

Determinant	Maximum Concentration mg/l (except where indicated)
Temperature at the edge of the mixing zone	5°C above the maximum ambient temperature of the receiving waters and a maximum of 3°C if the ambient water temperature is 28°C or more
Oil and Grease	20
Biological oxygen demand	50
Acute toxicity	More than the acute level specified for freshwater fish and crustaceans
pH	6-9 units
Suspended solids	100
Arsenic	0.4
Copper	1.5
Cyanide, total	2.0
Iron	6.0
Lead	0.5
Mercury	0.002
Nickel	1.0
Zinc	10.0
Hydrocarbons	10.0

Table 5.2: Threshold limits for air pollution within the mining rights area

Nature of Contaminant	Threshold limit mg/m^3
Arsenic	0.5
Carbon monoxide	29
Copper	1
Free silica	5
Cyanure d'hydrogène	11
Hydrogen sulphide	14
Lead – emissions and fumes	0.15
Nitrogen dioxide	6
Solid particles	10
Sulphur dioxide	5

Table 5.3: Threshold limits for air pollution outside the mining rights area

Nature of Contaminant	Threshold limit mg/m³
Particulate matter (<10µm):	
Annual average	100
Average maximum in 24 hrs	500
Nitrogen oxide as NO_2:	
Annual average	100
Average maximum in 24 hrs	200
Sulphur dioxide	
Annual average	100
Average maximum in 24 hrs	500

Table 5.4: Maximum sound levels

Terrain	Nighttime dB(A)	Daytime dB(A)
Built up residential areas with schools, hospitals or other sensitive teaching or health establishments	40	45
Areas with permanent commercial activities, hunting, fishing or other recreational activities.	50	55
Areas with mostly industrial or agricultural activities	70	70

5.4 EIA Procedural Framework for Mining in DRC

With the exception of the temporary exploitation of quarries, all mining operations require an environmental impact study (EIS) and an environmental management plan for the project (EMPP) to be approved before operations can commence, in accordance with the provisions of Chapter V of the Mining Regulations.

The EIS and the EMPP must be deposited at the same time as the request for mining rights and must be approved by the competent authority as a condition of granting the mining rights.[83]

Prospecting for minerals and an application for a temporary quarry exploitation licence require only an MRP to be compiled.

5.4.1 Environmental Impact Study

Annex IX of the Mining Regulations provides detailed guidelines and requirements for the preparation of an environmental impact study. The applicant for a mining or quarrying exploitation licence must compile the EIS and EMPP according to the form and content defined in the Mining Regulations and its Annexes.

The EIS must include the following information (please note that the regulations and the annexes provide exhaustive details of what should be addressed in the EIS and the list below is merely a summary of the requirements):

[83] Art. 406 of the Mining Regulations.

Identification of the project and proponent:

- Name, contact and business details of the mining (or quarrying) company, and any mining sub-contractors if used;
- Name and contact details of the company that compiled the EIS;
- State the nature of the mining right required;
- Provide a map at a scale of 1:20,000 showing the coordinates of the mining area; and
- Identify all land owners within and around the mining right area and show on a 1:20,000 scale map.

Detailed description of the project:

- Nature and extent of the mineral deposit;
- Mining methods, volumes expected, quantities of overburden to be removed, location of ore stockpile sites, explosives to be used, blasting details, mining equipment schedules etc;
- Site clearance works including removal of vegetation, cut and fill, blasting, schedule of equipment etc;
- Methods of mineral treatment and processing, including the basic processing method, location of the plants(s), types of equipment and plant to be used, chemical agents, hydrocarbons and lubricants, all emissions and effluents, solid and liquid waste disposal etc;
- Proposed mine dewatering programme, including nature and number of pumps, volumes to be pumped, quality of the water to be pumped from underground, possible utilisation of pumped water and the discharge of such water;
- Effluent treatment programme including volumes, sources, and description of the effluent discharge sites, whether they be into natural water courses (aquatic environment) or constructed effluent dams or evaporation ponds;
- Water consumption: identify all points of demand, volumes, sources of freshwater, recycling opportunities, clean storm water run-off management, as well as a water demand management plan, aimed at reducing the amount of freshwater consumed and maximising the amount of recycling and reuse of water on the mine;
- A plan showing the location of all mine infrastructure such as the process plant, ore stockpile sites, conveyors, compressors, smoke stacks, water treatment plants, workshops and garages, storage areas for chemicals and explosives, all pipelines, power lines, substations, mine haul roads and mineral transfer routes, waste disposal sites, storm water management systems, sewerage pipes and treatment plant, tailings and slime dams, final effluent treatment and disposal infrastructure and all underground structures;
- Geochemistry of the ore and waste products, especially those which contain sulphides and other acid-producing minerals.

Detailed environmental description of the mining rights area and surroundings:

Where possible the EIA study team must make use of existing plans e.g. the biodiversity plan, and/or published research on the area in question. If there are no existing data, the consultants are required to conduct new studies

according to the methods and techniques described in the regulations and Annex IX:

- Topography, geology and soil utilisation;
- Climate and air quality;
- Water resources;
- Hydrogeology, including modelling of contaminants and flows;
- Terrestrial fauna and birds, including habitat on site and migration patterns;
- Vegetation mapping with identification of different ecosystems, identification of rare and protected species;
- Identification of sensitive environments on and adjacent to the site.

Detailed socio-economic description:

- Identification of all settlements on and around the site, including the local government authorities;
- Sources of income of the local communities;
- Demographic profile of all affected parties;
- Current levels and sectors of employment;
- Tracks and paths used by the local communities through the mining area.

Impact assessment:

Annex IX provides details regarding the analysis of impacts that should be undertaken and requires that for every aspect of the operation, the consultant must identify the positive and negative impacts, the direct and indirect impacts and the risks associated with those impacts on the environment of the site and in the surrounding areas.

Each impact must be evaluated in terms of:

- The intensity and scale of the impact, based on the degree of environmental perturbation, degree of environmental sensitivity, vulnerability, uniqueness or rarity of the component being affected;
- The spatial extent of the impact;
- Duration of the impact and its reversibility;
- Frequency of the impact and its probability of occurrence;
- Level of uncertainty or confidence in the prediction;
- Benefits for the affected parties and the risks to the safety and well-being of these communities;
- Cumulative effects of the proposed development with others in the vicinity.

The analysis of impacts should include at least the following: noise and vibration, air quality, surface and groundwater resources, community health and the risks of accidents.

5.4.2 Environmental Management Programme for the Project and Mitigation and Rehabilitation Plan

Title V of Annex IX of the Mining Regulations spells out in great detail the contents of the EMPP and the MRP. The holder of, or applicant for a mining right must present a mitigation and/or rehabilitation plan for each negative impact identified in the EIS for each phase of the project. If possible, alternative measures should be provided and an analysis made of the residual impacts after mitigation has been applied.

The EMPP/MRP must address in detail the following:

- Noise attenuation;
- Control of vibrations;
- Air emissions;
- Water pollution;
- Soil degradation;
- Rehabilitation of mine wastes and residues;
- Worker safety and occupational health;
- Safety and health of affected parties and local communities in the areas surrounding the mine;
- Emergency plans;
- A closure plan detailing the measures to be undertaken to eliminate the risks to the health and safety of people, limit the production and propagation of harmful substances into the receiving environment, e.g. acid mine drainage, and to leave the mine site in a state acceptable to the local community and compatible with some future land use. The details of the closure plan are set out in Articles 95-105 of Annex IX.

In addition to the EMPP/MRP, the holder of, or applicant for a mining right must put together and submit a detailed budget and financial plan to implement the EMPP/MRP.

5.4.3 Public Consultation Programme

The public consultation programme should be conducted during the drafting of the EIS in order to provide the public with information about the project and to obtain the comments from the public. The principles, methods and programme of consultation with interested and affected parties must be described in an annex attached to the EIS. The annex report should include details about the meetings held, attendance and location of the meetings, questions raised and answers provided, as well as the author's conclusions about the consultation programme.

5.4.4 Submission and Review of EIA and EMPP

Article 42: Environmental Evaluation

In accordance with the provisions of Article 15 of the Mining Code and the provisions concerning each type of mining and/or quarry right, the Department responsible for the Protection of the Mining Environment evaluates the EIS and the EMPP/MRP. At the end of the evaluation, it provides its opinion on the environmental aspects to the Mining Registry, within the deadline/time period set forth for each type of mining and/or quarry right.

Within a maximum period of *5 working days* following receipt of the opinion on the environmental aspects, the Mining Registry proceeds:

a) To display the opinion on environment aspects provided by the Department responsible for the protection of the mining environment, in the premises set forth in the Mining Regulations. A copy of the opinion on the environmental aspects is provided to the applicant.

b) To send the file relating to the application, including the opinions of the registrar and department, to the competent authority for a decision.

Article 43: The decision to grant rights
Upon receiving the file relating to the application, together with a favourable opinion from the registrar, and if applicable, favourable technical and environmental opinions, the competent authority makes its decision regarding the granting of the rights, and sends it to the Mining Registry within the specified time period to render a decision for each type of application for mining or quarry rights.

Article 44: The decision to refuse to grant rights
Upon receiving the file relating to the application with an unfavourable opinion from the registrar, and if applicable, unfavourable technical and environmental opinions, the authority makes its decision regarding the refusal of the rights, and sends it to the Mining Registry within the specified time period to render a decision for each type of application for mining or quarry rights.

Article 75: Time limit for the environmental evaluation for the application for the Exploitation Licence
The environmental evaluation of the EIS and the EMPP/MRP relating to an application for an Exploitation Licence must be carried out within a period not exceeding *180 working days,* from the date that the file containing the application is sent by the Mining Registry Directorate to the Department responsible for the Protection of the Mining Environment of the Ministry of Mines.

Article 76: Minister's decision
If the registrar and technical opinions following the processing of the application for the Exploitation Licence are favourable, but the environmental opinion has not been issued yet, the Minister may make a *preliminary and conditional decision* within a period of *20 working days,* from the date that the file containing the application is sent to him by the Mining Registry, and postpones his final decision to grant or refuse the licence until he has received the environmental opinion.

The Minister's preliminary and conditional decision has the effect of definitively ratifying the registrar and technical opinions. The final decision on the granting of the application is conditional on receipt of a favourable environmental opinion. The Minister makes and sends his reasoned decision to grant or refuse the Exploitation Licence to the Mining Registry within a period of *30 working days,* from the date he receives the environmental opinion sent by the Mining Registry.

Article 80: Renewal of the Licence
The licence is renewable for successive periods of fifteen years if the holder, *inter alia,* obtains approval for an updated EIS and EMMP/MRP.

The time period allowed for the environmental evaluation for the approval of the update of the EIS and EMMP/MRP cannot exceed *90 working days* calculated from the date the file is sent by the Mining Registry to the Department responsible for the Protection of the Mining Environment of the Ministry of Mines.

After the evaluation, the Mining Registry sends the application file, together with the technical opinion of the Directorate of Mines, to the Minister within a maximum period of *5 working days,* from the time the environmental opinion is received.

ACRONYMS

DRC	Democratic Republic of the Congo
EIA	Environmental Impact Assessment
EIS	Environmental Impact Study
EMPP	Environmental Management Plan for the Project
I&APs	Interested and Affected Parties
MRP	Mitigation and Rehabilitation Plan
NGO	Non-Governmental Organisation
NRM	Natural Resources Management
SADC	Southern African Development Community
USAID	United States Agency for International Development