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Analysing the Implications of Environmental Exigencies in the Protection of Mining Contracts: The Cameroon Mining Law Explanation

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Abstract

Just like many other African countries, since independence, efforts have been directed towards attaining development through industrialisation and exploitation of the rich mineral resources the country is endowed with. To ensure that revenue from resource exploitation effectively propel the much-needed development, measures have been taken to attract and maintain mining companies. Today, Cameroon is host to a wide number of mining companies with whom mining contracts have been concluded and mining concessions granted. It is no surprise that in the early days of the strife to achieve economic development, little consideration was given to the environmental effects of mining activities. As a result, when environmental problems arose from mining activities, they were traditionally considered to be "in the public interest" and the government assumed principal responsibility for ensuring environmental safety, and generally bore the obligation of mitigating any damage. As a result, environmental protection never occupied any priority position on the agenda of the state as well as the companies. Conscious however of the fact that the much-needed development cannot be sustainably guaranteed without the environment given a priority position, the state of Cameroon has taken measures through legislations and now incorporates the exigencies of environmental protection in mining contracts. While acknowledging the initiative in these laws and mining contracts the question as to whether they are sufficient to effectively guarantee environmental protection is a big debate. This is especially so as sanctions previewed through the repressive technique have not been stringent enough to effectively deter mining companies from violating environmental law. This is justified by the increase in the number of non-rehabilitated abandoned mining sites in violation of the law. We therefore recommend the total commitment of contracting parties (the state and mining companies) and the imposition of more stringent sanctions on violators of mining laws.

Keywords: Analyses, Exigencies, environmental protection, mining contracts, Cameroon

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INTRODUCTION

Cameroon has a relative abundance of natural resources. Besides oil and gas, minerals that are found in the country include aluminium, bauxite, cobalt, diamonds, gold, and iron ore among others. The mining sector of Cameroon has evolved over time, beginning from the German colonisation to present day. Very little is known about the country's mining sector during German colonisation [1]. The Germans conducted exploration in what is today the Far North Region of Cameroon and found promising samples of tin, bauxite, gold, limestone, and laterite [2]. However,

Cameroon's transfer to French and English occupation created a mining boom, driven by European demand for minerals in the lead up to and during World War II [3]. The extraction of Tin, Tin Oxide, Gold, and Titanium Oxide among other minerals, gave momentum to the mining sector which grew to represent over 20% of Cameroon's GDP during WW II. It is however unfortunate that contribution of the sector fell to 5.5% in 1945 and 0.6% in 1959 [4]. This was accounted for by the fact that the mining sector was neglected during the post war period which transitioned into Cameroon's independence.

At independence [5], the preoccupation of the country was development. Prior to the modern periods, the country saw development in the light of industrialisation. As a result, resources were channelled to attracting foreign industries, while at the same time creating home industries [6]. After independence, development efforts centred on the exploitation of natural resources, especially petroleum products in order to earn the foreign currency needed for financing the development of other sectors. Unfortunately, the 1970s witnessed the worst calamities in the oil fields. Supplies dropped drastically and prices rose steeply leading to a serious crisis. When this crisis hit the country, marking an end to the period of rapid growth, efforts were redirected to agriculture and mining [7]. This made Cameroon one of Africa's most exciting mining destinations, with over 600 research and mining permits already granted to companies [8]. Despite these impressive reserves, Cameroon's mining industry made little progress in the 1990s. This was as a result of outdated legal and fiscal framework coupled with administrative bottleneck.

In its effort to attract and maintain industries and to enhance economic development through the exploitation of mining resources, little consideration was paid to the environmental consequences of these activities. No thought was given to rational and sustainable exploitation of these resources which though abundant are subject to extinction. To remedy the situation, the government of Cameroon, with the advice of the World Bank set to revise the legal and fiscal frameworks for the sector. These efforts came to fruition in 2001 and 2002 with the adoption of Cameroon's Mining Code [9] and its Decree of application [10] respectively [11]. Another upshot has been the ratification of many international environmental conventions having a bearing on the subject matter under discussion.

Since the legal reforms, Cameroon has seen a steady increase in mining permit applications; partially due to the improved legal regime, but mostly due to record high mineral prices. This activity which was previously artisanal in execution is now largely performed in a mechanised form by mining exploitation companies. The problem that this study seeks to address therefore, is, how Cameroon integrates the exigencies of environmental protection in mining contracts concluded with foreign investors who operate in the mining sector.

LEGISLATIVE GUARANTEE OF ENVIRONMENTAL PROTECTION IN MINING CONTRACTS

As stated earlier, since independence, the focus of the government has been to drive the country towards development. For a country richly endowed with natural resources, these resources constitute a major source of income. The effective exploitation of these resources so that they generate the much-needed income to propel this development, has seen the grant of several mining exploitation concessions. Their exploitation constitutes a major source of direct and indirect employment to many Cameroonians. Conversely however, their exploitation continues to inflict a wide range of complications to safety, health and environmental quality [12]. To ensure that the exploitation of mines does not constitute environmental disaster, the government of Cameroon has taken measures to ratify international conventions as well as articulate domestic legislations requiring the incorporation of environmental protection in contracts for the exploitation of mines.

The section examines the domestic legal policy framework established to guarantee environmental safety while exploiting mines. The first part profiles the few domestic legal and policy instruments

having a bearing on mining. It examines in the second part, the techniques of environmental protection incorporated in mining contracts.

Domestic Legislative and Regulatory Guarantee of Environmental Protection in Mining Contracts

The most important legal text regulating mining in Cameroon are the Environmental Code [13], the Mining Code [14] and their implementation decrees [15]. The 2001 Mining Code revoked any other existing law that regulated the mining sector before its coming into force, notably Law No. 64/LF/3 of April 1964 Governing Mineral Substances and Law No. 78/24 of December 1978 Fixing the Fiscal Regime for Collecting Mining Revenue. The recent Mining Code which is more detailed than the old one undertakes a more integrated approach and is envisaged to include environmental regulations, incorporate community/local participation and provide transparency in terms of quantities extracted and financial revenues. It provides for a new investment incentive including a holiday for tax and import duties during the exploration phase and on production equipment during the construction phase through to commercial production. It has equally added more stringent social and environmental regulations and instituted different permit processes for different mining classes [16]. Two main mining activities are addressed by this law: artisanal and industrial mining. It further identifies two major types of resources: land based solid materials [17] and geothermal deposits [18].

In a bid to strike a balance between the economic benefits of mining and guaranteeing a safe environment, the legislator has carved out environmental protection responsibilities for miners in Chapter V of the Mining Code [19]. This chapter which recognises the importance of preserving the environment, re-echoes the need to protect the environment against the activities of mining companies as it states *inter alia* that: "*.....any mining operations undertaken by companies must comply with the laws and regulations relating to environmental protection and management*" [20]. This provision is further strengthened by the Mining Decree of 2002 which provides that all mining exploitation operations undertaken must conform to the laws and regulations in force relative to environmental protection and management [21]. From these provisions, the legislator's position on the protection of the environment is made clear as both instruments emphasise the need for companies to respect environmental obligations.

The Mining Code further demonstrates the need to protect the environment as it requires that mining contracts must stress the use of adapted techniques and methods to protect the environment [22]. Again, in a bid to guarantee sustainable development and as a preventive obligation, the Mining Code specifies in Section 87 that:

In order to ensure the rational exploitation of mineral resources in line with environmental protection, holders of mining and quarry titles shall be responsible for:

- Preventing or minimising the discharge of waste in the open;
- Protecting fauna and flora;
- Promoting and maintaining the general health of the population;
- Reducing waste as much as possible:

Disposing of none-recycled waste in such a manner as to ensure safety of the environment, after informing and receiving the approval of the authorities in charge of mining and the environment [23].

From the provisions of this Article, it may be objective to interpret that the interest of the State in ensuring environmental protection and safety is demonstrated through the legislator. Clearly, the contracts awarding mining and quarry titles require holders to ensure not only the rational exploitation of resources, but most importantly, to prevent or minimise the disposal of waste so as to avoid any negative impact on the environment. In furtherance of the above, the legislator demonstrates how important information in the sense of disclosure is, with regards to environmental protection. It is in

this regard that the Mining Code clearly, through the mining contract, requires miners to carry out disposal of none-recycled waste in such a manner as to ensure safety of the environment, only after informing and receiving the approval of the authorities in charge of mining and the environment [24].

In the same light of guaranteeing environmental protection in mining contracts, the Decree implementing the Mining Code articulates that, in conformity with the provisions of Article 91 [25] all postulants for the acquisition of mining or quarry permits or titles must, prior to the grant of the permits, conduct an environmental impact assessment accompanied with an environmental management plan [26]. It is expected that within the exploitation period, the environmental management plan should clearly show the management of impacts relating to soil and geotechnics, hydrogeology and surface water, air quality and meteorological impacts, land use and infrastructures, socio-economic effects and health of the community [27]. Article 141 (1) and (2) of the Mining Decree further emphasise the need for exploiters to conduct environmental impact assessment. This article provides *inter alia* that:

All those demanding exploitation permits or titles for mining or quarry must present an environmental impact study as requested by law and articles 65 and 91 of the present decree.[28] This study must be conducted in conformity with Law No. 96/12 of 5th August 1996 on the Framework Law on Environmental Management and its decree of application … [29].

Again, in its effort to ensure protection of the environment, the Environmental Code includes the obligation to restore mining sites to their original state after exploitation. According to this code, holders of mining permits or quarrying permits shall rehabilitate the exploited sites [30]. These permit holders referred to in sub section (1) above, may either execute the rehabilitation by themselves or choose to pay the financial cost of rehabilitation carried out by the competent administration [31]. Support to this is found in the Mining Code which requires inclusion in the mining contracts, the obligation to restore mining sites to their original state after exploitation. This is accompanied by the requirement for mining industries to protect the different milieus in which they operate. The Code stipulates that: "*Holders of mining and quarry titles shall be responsible for: Restoring damaged sites to stable conditions of safety, productivity and appearance acceptable to the authorities in charge of mining and environment*" [32]. It is in a bid to prevent or minimise the damage that may occur from mining exploitations that the law requires that where environmental harm has occurred, the architect of the harm must restore the site to a stable condition. In its effort to strengthen the Mining Code, the Mining Decree stresses the need for companies to shoulder the obligation to rehabilitate the environment in the mining or quarry site. To ensure that this rehabilitation is effectively done upon the closure of the site, the Decree obliges every temporal or permanent exploiter of quarry to provide an account hosted in its name in a local bank [33].

Techniques of Environmental Protection Incorporated in Mining Contracts

Protection techniques here, refer to measures envisaged to effectively ensure that environmental protection is given pride of place whenever mining contracts are concluded. This is with the view to attaining the general objectives of the law within the framework of an integrated management, ensuring sustainability in the use of resources and ecological balance. For preventive reasons, the law defines certain activities which can only be carried out following particular procedures. It imposes mandatory requirements aimed at preventing or minimising environmental harm. It is argued that any genuine legitimate effort to protect the environment must lie in an attempt to prevent rather than cure environmental damage. This is because it is more costly to repair environmental harm than preventing same. We cannot, however, deny the fact that curative actions where harm has occurred is an option.

Preventive Techniques of Protection Incorporated in Mining Contracts

These are described as techniques that are taken to prevent events, the occurrence of which may cause damage to the environment or to mitigate the amount of destruction that may occur and repair

damage that has occurred. These measures can be categorised into Environmental Impact Assessment, outright prohibition of certain activities and Environmental Auditing and Monitoring.

Environmental Impact Assessment

The first very important preventive technique usually incorporated in mining contracts is Environmental Impact Assessment [34]. This is clearly articulated in Section 17–20 of the Environmental Code [35]. Section 17(1) provides *inter alia* that:

The promoter or owner of any development, labour equipment or project which may endanger the environment owing to its dimension, nature or the impact of its activities on the natural environment shall carry out an impact assessment, pursuant to the prescriptions of the specifications. This assessment shall determine the direct or indirect incidence of the said project on the ecological balance of the zone where the plant is located or any other region, the physical environment and quality of life of populations and the impact on the environment in general [36].

The need to establish methods for measuring the potential for negative impacts on the environment, and to preserve these in statutes, was first felt in the United States of America and Europe where it became necessary to manage the choices being made in the way new technologies were applied [37]. More recently, the Cameroonian legislator has also found it necessary to take steps to regulate in a similar manner, as pressures on the environment increase in response to increasing population, resource exploitation, economic development, and other factors.

Citing Sadler [38], Bitondo [39] defines Environmental Impact Assessment as a process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration for each particular application. ElA is used by the competent authority to obtain an independent and objective view of the environmental (biophysical and social) components that could arise during the operation or the modernisation of the existing facilities. EIA has equally been defined as *"the formal and systemic collection and analysis of information relating to the possible environmental effects of new or significantly altered projects in relation to the physical, social and economic environment surrounding that development"* [40]. The content of this definition seems to align with the provision of Section 4 Paragraph 0 of the Environmental Code which though varies in the choice of words, summarises the content of its counterpart in a few words. This section defines environmental impact assessment as "*a systematic examination, with a view to determining if a project is environmentally harmful or not*" [41]. The Prime Ministerial Decree on its part defines EIA as: "*a systematic examination in view of determining whether or not a project has an unfavourable effect on the environment*" [42]. Whatever the appropriate definition is, one thing that is clear is that the essence of EIA is to ascertain the effect of a project on the environment prior to its execution. Impact assessment is a process that is proving useful for industrial projects, a sector which is seen to have created some significant environmental problems in serving as the driver of development. The implementation of the EIA legislative framework in mining contracts in Cameroon portrays that the Cameroonian government is committed towards protecting the environmental. As Alemagi [43] puts it, the directives of nearly all donors, be they governments or banks, of nearly all countries requires that before funding is made available it is imperative that projects likely to be detrimental to the environment undergo a sound and thorough EIA prior to the commencement of these projects.

Cameroon, like many other African countries (such as Ghana, Kenya, Mozambique, Nigeria, South Africa and Zimbabwe) has made efforts to establish EIA procedures [44]. This commitment is further reflected in the fact that Environmental Management Laws although not fully regulated, had been inherent in relevant Cameroonian legislation [45]. The procedure for conducting EIA has been articulated by Prime Ministerial Decree No. 2005/0577/PM of February 2005, enacting the process and procedural framework governing EIA in Cameroon. In response to the provision of Article 6 of this Decree, [46] Ministerial Order No. 0069/MINEP ("Arrete" No. 0069/MINEP) and Ministerial

Order 0070/MINEP (Arrette No. 0070/MINEP) were established in March 2005 and 22 April 2005 respectively by the Minister of Environment and Nature Protection (MINEP). These Ministerial Orders have prescribed the different categories of projects that would require an EIA. If well implemented, EIA is a fundamental tool that can help in the integration of the environment into mining contracts. The modalities for carrying out such impact assessment and the category of projects subject to it as articulated in Section 19 of the Environmental Code [47] are clearly outlined in the above-mentioned laws [48].

As an environmental protection measure, EIA operates in the mining sector to limit the numbers of corporate institutions carrying out mining activities or place certain restrictions, conditions or requirements to be complied with. A common established case is the mining contract between the State of Cameroon and GEOVIC. It was required of the mining company GEOVIC as a prerequisite for obtaining a mining permit, to obligatorily conduct feasibility studies [49]. This is in conformity with the provision of Section 16 [50] and 46 [51] of the Mining Code. The contract stipulates that "*The mining permit application file shall include the feasibility study carried out in accordance with Sections 16 and 46 of the Mining Code, and appended as Annex II of this contract*". From the wordings used above, the effectiveness of this practice will very much depend on the exact terms under which this potentially damaging activity is allowed. In the overwhelming majority of cases, the Environmental Code leaves the exact term for authorising such activities to be determined by sectorial laws. If properly implemented, environmental impact assessment could well operate as one of the best ways of restricting and controlling corporate conduct and protecting the environment.

Outright Prohibition of Certain Activities

The second variant of preventive control aimed at protecting the environment incorporated in mining contracts is outright prohibition of certain activities. An attempt has been made in the Environmental Code to ban certain activities and the use of certain instruments on account of the risk of extensive environmental damage that may be caused. It equally defines certain activities which can only be carried out upon an authorisation and imposes mandatory requirements. Illustrative of this are Sections 21, 31, 44, 49, 50 and 60. Section 21 of the Code states:

"The following shall be prohibited:

- endangering the quality of air or provoking any form of modification of its characteristics thus possibly producing harmful effects on public health and property;
- discharging any pollutant into the air, especially smoke, toxic, corrosive or radioactive dust or gases beyond the limits laid down by the enabling instruments of this law, or by special instruments as the case might be;
- discharging odours which, by virtue of their concentration or nature, are particularly inconvenient for man" [52].

What seems to be evident in the provisions of this section is the intension of the legislator who, from his choice of words, pays little attention to the perpetrator of the act. This means that it is of little relevance whether the acts mention in the said section are perpetrated by individuals or corporate bodies. The section at least anticipates the necessity to quantify the amount of discharges that may be acceptable. The legislator precises that the quantum of the discharge must not exceed the limits laid down by the enabling instruments of the law or by special instruments as the case may be [53].

A clearer corroborative support to this section is provided by the Mining Code when it states that, in order to ensure the rational use of mineral and quarry resources in line with environmental protection, holders of mining and quarry permits shall be responsible for:

- Preventing or minimising the discharge of waste in the open;
- Protecting fauna and flora;
- Promoting or maintaining the general health of the population;

- Reducing waste to the possible minimum;
- Disposing of non-recycled waste in such manner as to ensure safety of the environment, after informing and receiving the approval of the authorities in charge of mining and the environment;
- Restoring the damaged sites to stable conditions of security, productivity and visual appearance adequate and acceptable by the administration in charge of mines and the environment [54].

From the content of this Article, one is led to conclude that the act of discharging waste in itself is lawful. But, it only becomes unlawful where the substance endangers human health, pollutes the air, endangers fauna and flora and downgrades the value of authorisation. Here again, the onus of determining the substances, their discharge of which is capable of causing the above, is shifted to the executive. It is in this regard that in 2011, a Prime Ministerial Decree was elaborated to regulate this [55]. This decree has classified the list of substances considered as obnoxious, the use of which is outlawed. Two categories of substances are identified here; Substances which are out rightly prohibited [56] and those that are submitted to prior authorisation before discharge [57].

To ensure that the desire to protect the environment, maintain the general health of the population, control pollution and prevent species extinction is not limited at the level of legislative Codes [58] and implementation decrees [59], mining contracts require as a prerequisite for the grant of authorisation, the annexation of concrete management plan. A case in point is the mining contract between the State of Cameroon and GEOVIC, according to which:

GEOVIC shall undertake to carry out operations of mining, transportation and storage of products and minerals according to the international technical and safety standards prevailing in the mining industry, the mining code and Cameroon's legislation relating to the protection of the environment and the population, on the one hand and in accordance with the terms laid down in annex I concerning the environmental impact study and management plan, approved before hand by the state on the other [60].

From the above quotation, the intention of the legislator to protect the environment is demonstrated in the choice of the word "management plan". This is a requirement that must accompany the impact study for the exploitation authorisation to be granted. This plan is supposed to detail clearly measures anticipated by the exploiting company to ensure that the requirements of the law on environmental protection are not transgressed.

Furthermore, the Environmental Code clearly stipulate that the introduction, discharge, storage or transit of waste on the national territory and produced outside Cameroon shall be formally prohibited given the international commitments of Cameroon [61]. The question that one may be tempted to ask is whether, with this legal dispensation incorporated in mining contracts as a technique for protecting the environment, no such activities are executed in violation of the law. Contrarily, the bone of contention here should not be whether such activities are carried out, but whether they are perpetrated within the limits of what is authorised.

Continuous Administrative Control through Environmental Auditing and Monitoring

Continues administrative control refers to the measures adopted to ensure that the execution of any activity with potential environmental repercussion is permanently monitored. Environmental monitoring involves the on-going checking, inspection, and examination of equipment, management system, operational activities and their effects on the environment on a regular and frequent basis [62]. Monitoring is exercised at different levels and involves different categories. The different types of monitoring include: monitoring equipment to ensure they are in good working condition, monitoring the company's impact on the environment, [63] monitoring the state of the environment [64] and monitoring the implementation of environmental impact studies. Monitoring ensures

compliance with environmental regulations and with any conditions imposed on development on the basis of Environmental Impact Assessment (ESIA).

It differs from outright prohibition in that, it relates to the manner in which an activity is carried out rather than whether it should be carried out at all. Although in practice the two techniques usually co-exist and are naturally supportive, it is still important to differentiate one from the other.

Section 57 is instructive on this particular technique. This section provides:

Harmful and/or dangerous chemical substances which, on account of their toxic nature or their concentration in biological chains, or likely to be a danger for human health, the natural environment, and the environment in general when they are produced, imported into the national territory or dumped into the environment, shall be controlled and monitored by the competent technical administrative units, in cooperation with the administration in charge of the environment [65].

Two key words are discernable from this quotation, namely control and monitoring. This is indicative of the fact that individuals or mining companies must not have a free hand to do whatever they want, as their actions will most often, cause damage to the environment. It is, however, incumbent on the competent Technical Administrative Unit to carry out control and monitoring. When an exploitation licence is granted to a company, the government and precisely the administrative unit in charge must conduct controls and monitor to guarantee that the activities of the company are executed within the prescriptions of the law.

It is extremely important to recognise the fact that Decree No. 2005/0577/PM [66] also has provisions for monitoring and evaluation. This Decree requires relevant government services to undertake administrative and technical compliance monitoring, evaluation and enforcement. This is indeed carried out to ensure that there is effective and efficient implementation of the Environmental Management Plan (EMP) included in the Environmental Impact Study (EIS) [67]. The Decree stipulates that the EIS must be accompanied by an EMP approved by the Administration in charge of the Environment and must comprise the following items:

- A summary;
- The introduction: context, activity of installation studied;
- The site: location, environmental and historical context, land status;
- The environmental management plan: facilities for the management of the environment, air emissions, effluents, management of waste, storage of chemical products, noise, emergency plan, maintenance of installations, underground water and contaminated soils, etc.;
- The investigation on compliance with the laws, regulations and policies;
- Conclusions and all recommendations for additional studies.

In compliance with the provisions of the law, the technique of continuous administrative control through auditing and monitoring is usually incorporated in mining contracts as an obligation on the contracting company in a bid to guarantee a safe environment. In the mining contract between the State of Cameroon and GEOVIC, it is stated that during the mining phase, GEOVIC shall be subject to administrative monitoring and technical inspections relating to safety and standards as well as to the protection of the environment and the population provided for by Cameroon legislation [68].

As for the conduct of the control and monitoring, it is incumbent on the State to designate specifically for this purpose three (3) of its agents, be they civil servants or not, to carry out, without negative impact on company's operations, all monitoring and inspection operations, and to witness the trials and tests enumerated below [69]. Such personnel, in this capacity, shall have access to all the works, installations and sites targeted by their inspection. It shall be their mission to verify compliance of GEOVIC's activities with safety provisions of the regulations, in particular: (a) To

verify twice yearly the reports established following the inspections carried out by GEOVIC and to initial the registers instituted for such inspections, (b) To witness at least once a year, or according to the frequency of the operations if they are carried out at intervals of more than one (1) year, the inspections carried out by GEOVIC or, on behalf of GEOVIC, by third parties chosen by GEOVIC among bodies approved by the State, and competent to carry out the following operations:

- Inspection of the condition of safety valves and protection systems;
- Corrosion management;
- Inspection of tests of fire-fighting equipment;
- Analysis of effluents;
- Testing of pressure vessels;
- Quality assurance;
- Solid waste management;
- Other tests and inspections as mutually agreed to by the Parties [70].

Still within this framework of administrative monitoring, the mining company shall be bound to send to the Minister in charge of mines and geology not later than the fifteenth (15^{th}) of each month a copy of the bills of lading for all shipments of Product during the preceding month [71]. In addition, prior to 31 March of each year, GEOVIC is required to provide to the Ministers in charge of Mines and Geology, Industry and the Environment, respectively, a progress report for the previous Fiscal Year. Such report shall contain, in particular:

a. The quantities and qualities of products shipped;
b. A list of GEOVIC's personnel by category;
c. A list of lost time accidents and significant incidents relating to the protection of the environment, specifying their characteristics as well as the steps taken to prevent a recurrence or to limit the consequences thereof;
d. Information on the major works carried out and the measures taken to reinforce safety and the protection of the environment;
e. The balance sheet certified by a chartered accountant;
f. The state of implementation of the Environmental Management Plan provided for in Article 6 of the contract [72].

Curative or Remedial Techniques of Protection Incorporated in Mining Contracts

It is hard to think that the country can exploit the riches of its natural resource endowment through mining without negatively affecting the environment in one way or the other. What is important however, is that the effects of this activity on the environment are mitigated to the barest minimum. This is the reason why, whether accidentally or not harm is done to the environment, it must be corrected. Unfortunately, though, it is an undeniable fact that once damage is done to the environment, no amount of correction can guarantee restoration to its original state. The Cameroonian legislator anticipates that circumstances will arise such that, irrespective of all the preventive efforts put in place, harm will still be done to the environment whether voluntarily or involuntarily. Furthermore, it is no news that certain projects cannot be executed without a resultant negative impact on the environment and that the line of business for some companies are naturally environmentally unfriendly. Cognisance of all of these, in order to ensure that such situations are effectively managed to minimise their impacts on the environment, the remedial or curative technique has been articulated in available legal instruments and incorporated in mining contracts.

For curative reasons, the law defines certain occurrences which must be followed by a mitigating gesture from the perpetrator. It imposes mandatory requirements aimed at mitigating and deterring social and environmental harm from occurring. It is safe to say that any genuine legitimate effort to protect the environment must lie in an attempt to prevent rather than cure environmental damage. Key within the framework of curative technique is the obligation to mitigate environmental harm resulting from mining activities.

Mitigating Environmental Harm Resulting from Mining Activities

The responsibility on mining companies to correct environmental harm resulting from their operational activities is a curative technique backed by the Polluter and User Pays Principle [73]. Under this principle, States are enjoined to take actions necessary to ensure that polluters and users of nature's resources bear the full environmental and social costs of their activities. The principle integrates environmental protection and economic activities, by ensuring that the full environmental and social costs including cost associated with pollution, resource degradation and environmental harm are reflected in the ultimate market price for a good or service.

In response to this responsibility bestowed on states, this principle has been transcribed into the framework law on environmental management in Cameroon. This law holds that within the framework of regulations in force, rational environmental and natural resource management are based on principles [74]. The most reflective amongst these, is the principle of liability enshrined in Section 9, Paragraph (d) of the Cameroon Environmental Code. The principle of liability is to the effect that "*any person who, through his actions, creates conditions likely to endanger human health and the environment shall eliminate or cause the said conditions to be eliminated in such a way as to avoid the said effects"* [75]. In either case, it is clear that whosoever causes harm to the environment whether knowingly or by accident, is mandated with the responsibility to restore the environment or cause it to be restored to its original state.

Furthermore, but yet in another instance, Section 37 (1) of same law provides that "*holders of mining permits or quarrying permits shall rehabilitate the exploited sites*" [76]. This can either be done by holders of the said permit themselves or paying the financial cost of rehabilitation carried out by the competent administration [77].

Further legislative support to this is provided by the Mining Code and its implementation decree, allocating responsibility to rehabilitate exploitation sites. The new Code articulates that each operator shall be responsible for the restoration, rehabilitation and closure of the mining and quarry sites [78]. The operations referred to in Section 136(2) above, shall include removal by the operator, of all facilities, including any mining or quarry plant found on the land. The operator shall only be relieved of this obligation after the post inspection establishment of the proper rehabilitation and restoration of the mining sites by the authorities in charge of mines and the environment or any other relevant authority. Where this is ascertained, the result is the grant of a discharge which shall release the former operator of any obligations concerning its former mining title, its quarry licence or permit [79]. Practical confirmation of this provision is evident in Article 6(3) of the mining contract between the State of Cameroon and GEOVIC which provides that: "*if mining operations should at any time come to an end, the parties shall review the status of rehabilitation, on order to determine whether any rehabilitation remains to be done, following the initial program*" [80]. However, the former operator shall remain responsible for any damage discovered subsequently in connection with his previous activities on the site.

The seriousness to guarantee rehabilitation of the exploitation site is demonstrated in the requirement that an account for environmental rehabilitation be opened by every exploiter in a local bank in accordance with the regulations in force [81]. This requirement is again given attention whenever a mining contract is concluded. In Article 6(2) of the mining contract between the State of Cameroon and GEOVIC, it is provided that with effect from the commencement of operations, GEOVIC shall undertake to furnish the guarantees necessary to ensure the rehabilitation of the site in accordance with the conditions provided for in the environmental management plan. Interestingly, the law gives latitude for holders of mining and or quarrying permits to choose to pay the financial cost of rehabilitation carried out by the competent administration.

Unfortunately however, is the fact that the legislator has neither stated any precise amount to be charged for the mitigation of the harm or rehabilitation of the site damaged by the individual or

corporate body nor even indicated that the amount shall be fixed by another law or enabling decree. The reason for this silence is evident in the reasoning that, the intensity of the damage done and the degree of rehabilitation to be conducted can only be assessed on a per-occurrence basis. In the event that the guarantee is in the form of a bank account, the balance of the account shall be returned to GEOVIC, once the work has been accepted by the State, according to applicable legislation. The comprehensive nature of the anticipatory administrative control technique in the Environmental Code shows an emphasis on preventive rather than remedial measures.

The Repressive Techniques of Protection Incorporated in Mining Contracts

Apart from the preventive and remedial techniques, the legislator equally adopts the repressive technique to guarantee environmental protection in the conclusion of mining contracts. Unlike the former techniques which defines certain activities whose commission or omission is prohibited or must be done under strict observance of certain conditions, the latter, which is only applicable after the law has been breached, adopts a deterrent strategy. Under the Mining Code and its implementation decree, both civil and criminal measures are envisaged to serve as a mechanism for integrating environmental protection in mining contracts. While the mining legislation adopts both the criminal and civil punishment, samples of concluded contracts reveal that only the civil and most precisely administrative sanctions are incorporated in the mining contracts. This does not mean that criminal sanctions shall not be inflicted on violators where applicable. The most prominent repressive administrative measures expressly mentioned in mining contracts is suspension of rights and benefits and withdrawal of mining permits.

Suspension and Withdrawal of Exploitation Licences

Countries like Cameroon, from an economic perspective, consider the imposition of criminal sanctions as generally more expensive [82] than the use of civil and administrative sanctions. Thus, preference is given to administrative fines than court sanctions. On the contrary, civil and administrative sanctions are rarely used to protect the environment of other countries like Britain. Local authorities are able to impose fixed penalties for certain minor offences such as noise pollution [83]. Suspension is a temporal stop on the exploitation rights of a license holder, when an alleged illegal act is said to have been committed or in cases of irregularities. Withdrawal on the other hand, is a complete termination or stop on the exploitation rights of a license holder because of the illegal act before the expiry of the duration of the license.

Before an individual or corporate body is allowed to carry out mining operations, they must obtain a permit which shall be granted by a decree of the President of the Republic on the recommendation of the Minister in charge of Mines [84]. However, the fact that exploitation and trade licenses are issued by the administration, it is logical that the powers to suspend or withdraw such authorisations in cases of violation rest with the one who granted them, in this case, the competent administration. The power to pronounce such a decision is vested on the Minister in charge of mines. Legal backup to this is provided by the implementation decree to the mining code.

Exploitation authorisation may be withdrawn by the authority that granted the license for the following reasons:

- when one of the conditions previewed by the present decree is not fulfilled and the exploiter does not respect that within the months prescribed for by the Provincial Delegate of mines;
- where exploitation has been stopped for a period of twelve (12) months or where the activity has never been commenced within a deadline of twelve (12) months, from the date of notification of the authorisation except in the case of force majeure;
- In the case of violation of professional usages noticed by the agents in charge of monitoring and technical control [85].

It is required that for any suspension taken, the reasons be stated, and the offender notified.

Practical support to this is provided in the mining agreement with GEOVIC which states that the State may, in the following cases, suspend the rights and benefits granted to GEOVIC by this Convention. Consequently, the State may then withdraw the Mining Permit, and terminate this agreement under the conditions provided for in Article 27: a) non-payment within the deadline of all taxes, duties, royalties and fees after a formal notice in accordance with the General Tax Code and under the conditions laid down in this Convention; b) non respect of the clauses concerning environmental management [86].

Suspension of rights and benefits may only occur after notification of an official statement in lieu of formal warning. Such suspension may take effect no sooner than forty-five (45) days after notice to GEOVIC [87].

It is important to note that before the suspension of an exploitation permit by the competent administration, the contracting company must have been served a notice indicating the breaches and insufficiencies committed and a time frame to regularise same. It is only after this is done that a decision to suspend can follow suit. This is the purport of Article 25(1) which is to the effect that whenever the Republic of Cameroon determines that the performance by GEOVIC of any of its obligations under this agreement is insufficient, the Republic of Cameroon shall provide written notice of the insufficiency, with a statement of the reasons therefor, and indicating the time period within which GEOVIC is expected to remedy such insufficiency, unless a specific time period is stated in the contract for such opportunity to remedy deficiencies. In any case, GEOVIC shall be allowed a reasonably sufficient time under the circumstances to comply [88].

If a dispute relative to suspension is submitted to arbitration, such suspension shall be stayed temporarily during the arbitration proceedings. If the issue that motivated the suspension of the mining permit has not been solved after thirty (30) days, and an arbitration procedure has not been commenced, GEOVIC shall be considered as not having performed its obligations under the rights conferred by the mining permit, which shall be withdrawn and the present agreement terminated [89]. Any notice of default given pursuant to this Article shall be cancelled immediately, and any suspension that has taken effect shall be lifted, when the default has been corrected and any applicable penalties paid.

On the contrary, when, pursuant to Article 25(2), the State notice a case of violation and the default has not been corrected in the time periods provided for above, the rights and benefits referred to in Article 25(2) shall be suspended for a period of no more than one hundred and eighty (180) days from the notification of such action to GEOVIC. Such suspension of rights and benefits shall terminate prior to the expiry of the one hundred and eighty (180) days period if the State takes note that the default has been regularised and that, where applicable, penalties provided for in the present agreement have been paid. During the period of suspension of rights and benefits, activities undertaken under such agreement shall proceed in accordance with its terms and with the legislation in force [90].

Finally, if, at the expiry of the suspension period, either (a) the dispute has not been resolved by arbitration, or (b) the default has not been regularised and penalties provided for by the contract have not been paid, the Mining Permit may be withdrawn and the contract terminated, with effect from the date of notification of such termination to the contracting company by the State. Suspension of the rights and benefits as well as withdrawal of the mining permit, and, if applicable, termination of the mining contract, shall not release the parties from their legal and contractual obligations accrued as of the effective date of such measure [91].

Unfortunately, it is difficult to lay hands on any cases of suspension or withdrawal of exploitation licenses by the administration in charge of mines and that of environment. Usually where the

administration chooses to suspend the license, the wrong doer would most likely be required to pay a fine and stop the wrongful act. This explains why it is difficult to find court cases that exist in the area. If the Ministry is reluctant to drag violating companies to court, then it is even more reluctant to suspend or withdraw authorisations, licenses and permits. The justification has always been the desire not to chase away the companies and to avoid the companies from closing down because of draconian sanctions.

CONCLUSION

If one were to judge from the perspective of the quantum of regulations, it would be fair to say that Cameroon has fared reasonably well in guaranteeing environmental protection in mining contracts. Since the reform of the mining legislation done in 2001 and 2002, the country has witnessed the increasing incorporation of environmental protection in mining legislations. Increasingly also, contracts granting exploitation authorisations to mining companies now witnessed the integration of environmental protection. The integration of environmental protection in mining contracts is done through the use of several techniques. These techniques are preventive, remedial and repressive in nature. Unfortunately, this effort, laudable as it may, has taken place within the ambit of weak and insufficiently articulated repressive measures. It has been demonstrated in this paper, the legislative efforts, contractual techniques and sanctions aimed at protecting environment in mining contracts in Cameroon. The efforts made in this respect are enormous: prescription of specific conducts for mining companies, prohibition of certain activities, provision of extra judicial (administrative) sanctions such as imposition of fines, rehabilitation, a stop to certain conduct, suspension and withdrawal of authorisation. But, as far as any careful observer can see, these sanctions are not satisfactorily implemented, and this accounts for the several un-rehabilitated abandoned mining sites in Cameroon.

REFERENCES

1. Nodem Valery, Bamenjo Jaff Napoléon, Schwartz Brendan. *Gestion des Recettes Naturelles au Niveau des collectivités locales au Cameroun: Redevances Forestières et Minières à Yokadouma, Est Cameroun.* Réseau de Lutte contre la Faim (RELUFA). Revenue Watch Institut 2012.
2. Belinga, Eno SM *Géologie et Recherche Minière des Deux Adamaoua sous le Cameroun Allemand, Une Bonne Page de Notre Histoire, Peuples et Cultures de l'Adamaoua (Cameroun)*. *Orstom. Paris Editions* [Online]. 1993, P.23–30. Available from: http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_6/colloques2/40373.pdf (visited 20/11/2020).
3. Several reasons accounted for the participation of Cameroon in World War II. Among them are, the fact that Britain and France were the administering authorities in Cameroon, Cameroonians therefore had a moral obligation to support them; Many Cameroonians accepted the appeal of de Gaulle and fought for the free French movement, which was formed by de Gaulle; Britain and France claimed that they were fighting for a free world and this propaganda encouraged some Cameroonians to join the war; The war was a means of employment as Cameroonians who served in the war as (soldiers, carriers) were paid for their services; the need for raw materials was a factor that encouraged Britain to involve Cameroonians in the war so that they could supply raw materials; Some Cameroonians did not want the Germans to come back to Cameroon and so fought to get them out; Britain and France involved Cameroon in the war in order to stop a possible German come back.
4. *Loc cit*, note 3.
5. It is worth stating that French Cameroon got independence in 1960, under the name La République du Cameroun while Cameroon on the other side of the Mongo (West Cameroon) under British colonial rule, gained independence on October 1st 1961, by joining La République du Cameroun.
6. To attract and facilitate industrial sector, the government through the State institution MAGZI calved out industrial zones in certain areas of the country. Of all the industrial zones, the one hosting the highest number of industries is the Douala-Bassa industrial zone.
7. Cameroon is identified to have one of the richest sub soils in sub-Saharan Africa, a rich potential which is not yet fully developed.

8. Penaye J, Hell JV. Abandoned Artisanal Gold Mining Sites of Eastern Cameroon: Environmental Problems and Cameroon Regulation. Yaoundé. *Institute for Geological and Mining Research.* Cameroon. 2013. See also Centre for Environment and Development (CED), Monitoring Local Content and fiscal obligations of mining companies in Cameroon: case of the Diamond mining project of Cameroon and Korea Mining Incorporation Mobilong, East Cameroon, available at www.refula.org.
9. Law No. 001/2001 of 16 April 2001 to establish the Mining Code, (hereinafter referred to as the Mining Code).
10. Décret No. 2002/648/PM du 26 mars 2002 fixant les modalités d'application de la Loi No. 001/2001 du 16 avril 2001 Portant Code Minier, (hereinafter referred to as the Mining Decree).
11. The 2001 Mining Code revoked any other existing law that regulated the mining sector before then, notably Law No. 64/LF/3 of April 1964 Governing Mineral Substances and Law No. 78/24 of December 1978 Fixing the Fiscal Regime for Collecting Mining Revenue.
12. Lenntech. Health effects of Aluminium. The Netherlands, Delft, Self-Published. 2004. Cited in Alemagi Dieudonne. Towards a Comprehensive Strategy for the Effective and Efficient Management of Industrial Pollution along the Atlantic Coast of Cameroon [Ph.D. thesis]. Cottbus: Brandenburg University of Technology; 2006.
13. Law No. 96/12 of 5th August 1996 on the Framework Law on Environmental Management in Cameroon, hereinafter referred to as Environmental Code.
14. Law No. 001 of 16 April 2001 instituting the Mining Code.
15. Prime Ministerial Decree No. 2005/0577/PM of February 2005, enacting the Process and Procedural Framework Governing EIA in Cameroon and Decree No. 2002/648/PM of 26 March 2002, fixing the modalities for the application of Law No. 001 of 16 April 2001 instituting the Mining Code.
16. The different mining classes include artisanal, quarry, industrial, etc.
17. These are ore minerals, quarry products etc.
18. Geothermal deposits are made up of spring waters, mineral and thermo-mineral water.
19. Chapter V of this law is entitled "Protection of the Environment"
20. See Article 85(1) of the Mining Code.
21. Article 118 of the Mining Decree. This is the author's translation. The original French text provides that: *"Toute activité d'exploitation minière et de carrière doit se conformer à la réglementation en vigueur relative à la protection et à la gestion de l'environnement."*
22. See Article 85 (2) of the Mining Code.
23. Article 87 of the Mining Code. For detail information on this, see Article 119 of the Mining Decree.
24. See Article 87 of the Mining Code. The authorities in this regard are the Divisional or Sub divisional representatives of the Ministry of Environment, the Protection of Nature and Sustainable Development (MINEPDED) and that of the Ministry of Mines, Water and Energy Resources (MINMEE)
25. Article 91(1), (2) & (3) makes provision on the form and content of the application for mining or quarry permits. It equally lists the documents that must accompany the filled application form that is provided by the relevant administrative authority.
26. Article 120 of the Mining Decree.
27. See Article 120 (2) of the Mining Decree.
28. Author's translation. See generally Article 124 (1) & (2), of the Mining Decree.
29. Article 141 (1) & (2), of the Mining Decree.
30. Section 37(1) of the Environmental Code.
31. Section 37(2), of the Environmental Code. It is worth noting that where the permit holders decide to pay the relevant charges, the amount and the terms and conditions for paying the relevant charges shall be laid down by an enabling decree of this law.
32. Article 87 of the Mining Code.
33. Article 122 of the Mining Decree.

34. Hereinafter referred to as EIA.
35. Law No. 96/12 of 5th August 1996 on the Framework Law on Environmental Management in Cameroon.
36. Section 17(1) of the 1996 Environmental Code.
37. Alemagi Dieudonne. Towards a Comprehensive Strategy for the Effective and Efficient Management of Industrial Pollution along the Atlantic Coast of Cameroon [Ph.D thesis]. Cottbus: Brandenburg University of Technology; 2006, p. 65.
38. Sadler B. *International Study of the Effectiveness of Environmental Assessment*. UNCED 1992, Agenda 21. Canadian. Canadian Environmental Assessment Agency 1996.
39. Alemagi Dieudonne [38], p. 34.
40. Article 2 of the 1992 United Nations Convention on Biological Diversity.
41. Section 4 Paragraph 0 of the 1996 Environmental Code.
42. Article 2 of Decree No. 96/0577/PM of February 2005, Fixing the Modalities for the Realisation of Environmental Impact Assessment in Cameroon.
43. Alemagi Dieudonne [38], p. 65.
44. Appiah, O. S. "Environmental Impact Assessment in Developing Countries: The Case of Ghana". Environmental Impact Assessment Review. 2001; 21 (1): p. 59 –71.
45. Examples include: Decree No. 84–797 of 17July 1984, Organising the then Ministry of Planning and Territorial Administration. The first indented line of article 53 assigns to the Sub-Department of Human Settlements and Environment the duty of drawing up the state of the environment throughout the territory and conducting EIA for development projects. Unfortunately, though, this decree did not give a list of projects submitted to EIA nor the legal conditions and procedures under which they should be undertaken; The 1972 Constitution of Cameroon which recognised the right of populations to a sound environment. It also considered environmental protection as a collective responsibility to name a few.
46. Article 6 (1) provides that *"the list of projects (activities) that must be submitted of either categories of Environmental Impact Assessment referred to in Articles 4 and 5 above shall be fixed by the Minister in charge of the Environment*". It should be noted that the categories referred to here is the Summary and Detailed environmental Impact Assessment.
47. Section 19(1) of the Code stipulates that "*the list of the various categories of operations whose implementation is subject to an impact assessment as well as the conditions under which the impact assessment is published shall be laid down by an enabling decree of this law".*
48. Prime Ministerial Decree No. 2005/0577/PM of February 2005, enacting the Process and Procedural Framework Governing EIA in Cameroon, Ministerial Order No. 0069/MINEP (Arrete No. 0069/MINEP) and Ministerial Order No. 0070/MINEP (Arrette No. 0070/MINEP) respectively.
49. Article 5 of the Mining contract between the State of Cameroon and GEOVIC.
50. Section 16 of the Mining Code stipulates *inter alia* that (1) "*The Mining Titles Registry shall receive and examine all mining titles or reconnaissance permit applications and forward to the Minister in charge of mines within 15 working days, it's reasoned technical opinion and a draft instrument granting the mining title, the reconnaissance permit or the transaction agreement; 16 (2) the draft instrument referred to in section 16(1) above shall undergo prior coordinated review by all stakeholders, in accordance with the conditions laid down by regulation; 16(3) in case of competing applications with equal proposals regarding work to be carried out, and technical and financial capacity, priority shall be given to the first applicant, the date and time of submission serving as evidence; ……. (6) the conditions for keeping registers and managing mining title files shall be laid down by regulation".*
51. Section 46 (1) of the Mining Code states that: "A non-industrial or industrial mining permit shall be granted by right to any holder of an exploration permit who has provided evidence of a deposit within his perimeter. 46(2) the grant of non-industrial or industrial mining permit shall entail cancellation of the exploration permit within the perimeter covered by the mining permit. However, mining related exploration shall be allowed to continue therein. 46(3). As part of the

exploration referred to in section 46(1) above, where a mineral substance other than that for which the mining permit was granted is discovered, the permit holder shall enjoy the preferential right to mine it. The preferential right period shall not exceed 18 months with effect from the date of notification of the discovery to the State.

52. Section 21 of the Environmental Code.
53. Section 21, paragraph 2 of the Environmental Code.
54. Article 87 of the Mining Code.
55. See Decree No. 2011/2585/PM of 23 August 2011, fixing the List of Nocive or Dangerous Substance and the Regime of their Discharge into Continental Waters. This text is translated by the author of this article.
56. These substances include: Chlordane, Aldrine, Dieldrine, Endrine, Helptachlore, Hexachlorobenzene, Mirex, Toxaphene, Chlordecone, Lindane, Polychlorobiphenyles, and DDT. See Chapter II, Article 3, Paragraph 2.
57. The latter category include substances such as ammonium (NH4), ammonium (NH14), antimoine, antrazine, silver, arsenic, barium, beryllium, bore, cadmium and its components, chrome, cobalt, mercury, nickel, uranium, sulphate etc. See Chapter III, Article 6 Paragraph 2 for complete list of these substances.
58. The Codes here refer to the Environmental Code and the Mining Code.
59. Prime Ministerial Decree No. 2005/0577/PM of February 2005, enacting the Process and Procedural Framework Governing EIA in Cameroon and Decree No. 2002/648/PM of 26 March 2002, fixing the modalities for the application of Law No. 001 of 16 April 2001 instituting the Mining Code.
60. Article 6 of the mining contract between the State of Cameroon and GEOVIC.
61. Section 44 of the Environmental Code.
62. Kimerling Judith. Environmental Justice or Business as usual? The case of Environmental Monitoring and Audit of Texaco's Amazon Oil fields", *Harv Hum.* 1994. 1. p. 199 – 201.
63. For example, emission levels, waste and the amount of energy used.
64. For example, the level of toxicity of water courses affected by resource exploitation and corporate pollution.
65. Section 57 (1) of the Environmental Code.
66. Decree No. 2005/0577/PM of 23 February 2007, fixing the Modalities for the Realisation of Environmental Impact Assessment.
67. Article 5, Decree No. 2005/0577/PM of 23 February 2007, fixing the Modalities for the Realisation of Environmental Impact Assessment.
68. See Article 7(1) of the mining contract between the State of Cameroon and GEOVIC.
69. Article 7(2), of the mining contract between the State of Cameroon and GEOVIC.
70. *Ibid.*
71. See Article 7(3), of the mining contract between the State of Cameroon and GEOVIC.
72. Article 8, of the mining contract between the State of Cameroon and GEOVIC.
73. Under this principle, States are enjoined to take actions necessary to ensure that polluters and users of nature resources bear the full environmental and social costs of their activities. The principle integrates environmental protection and economic activities, by ensuring that the full environmental and social costs including cost associated with pollution, resource degradation and environmental harm are reflected in the ultimate market price for a good or service. Environmentally, harm or unsustainable goods will turn to cost more and consumers will switch to less polluting substitutes.
74. Section 9 of the 1996 Environmental Code.
75. See Section 9 paragraph (d), of the 1996 Environmental Code.
76. Section 37 (1) of the 1996 Environmental Code.
77. Section 37 (2) of the 1996 Environmental Code.
78. Article 136(2) of the Mining Code.
79. See Article 36(5), of the Mining Code.

80. See Article 6(3) of the mining contract between State of Cameroon and GEOVIC.
81. See Article 86 of the Mining Code and Articles 122 and 130 of Decree No. 2002/648/PM du 26 mars 2002, fixing the modalities for the application of Law No. 001 of 16 April 2001 instituting the Mining Code.
82. MA Cohen. Criminal Law as an Instrument of Environmental Policy: Theory and Empirics. Cited in A Heyes (ed). The Law and Economics of the Environment. *Edward Elgar Cheltenham.* 2001. P. 198–216.
83. Sections 8 and 9, Noise Act 1996. The fixed penalty is currently £100.
84. Article 45 of Law No. 1 of 16 April 2001, laying down the Mining Code.
85. Article 161 of the Mining Decree. This is the author's translation.
86. See Article 25(2) of the Mining Decree.
87. Article 25(3) of the Mining Decree.
88. Article 25(1) of the mining agreement between the State of Cameroon and GEOVIC.
89. Article 25(5), of the mining agreement between the State of Cameroon and GEOVIC.
90. Article 25(7), of the mining agreement between the State of Cameroon and GEOVIC.
91. See Articles 25(8) & (9) of the mining agreement between the State of Cameroon and GEOVIC.

