# THE ENVIRONMENT IN BRAZILIAN MINERAL LEGISLATION FROM 1934 TO 1988

# O MEIO AMBIENTE NA LEGISLAÇÃO MINERAL BRASILEIRA DE 1934 A 1988

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#### Resumo:

O modelo metodológico utilizado neste trabalho foi a realização de uma pesquisa bibliográfica na legislação mineral brasileira na esfera Federal, elencando Leis, Decretos, regulamentos, portarias e resoluções desde 1934, até 1988, com o objetivo de demonstrar de que forma ocorreu a evolução da legislação mineral brasileira no sentido de proteger o meio ambiente neste período. Desde o Primeiro Código de Minas do Brasil, que entrou em vigor em junho de 1934, a Legislação Mineral Brasileira já estabelecia medidas que deveriam ser seguidas pelas mineradoras afim de promover a proteção do meio ambiente. Neste período, os ideais de sustentabilidade, ainda tímidos, não eram muito difundidos perante a sociedade, porém, mesmo assim, as questões ambientais estão presentes neste Código, que estabelece os cuidados que deveriam ser tomados para evitar que fossem contaminados e poluídos o ar, as águas e os solos. Em 1937, já exigia-se a elaboração de um plano de boa utilização da mina, que deveria ser apresentado aos órgãos responsáveis, e executado de forma que a mina fosse aproveitada de maneira consciente.

O novo código de minas, publicado em 1940 trouxe ainda mais avanços ambientais, como a proibição da chamada de lavra ambiciosa, prática que impossibilita um uso futuro da mina. A preocupação com os recursos hídricos foi ampliada com proteção aos corpos d'água contra a poluição gerada em consequência das atividades de mineração, além do estabelecimento de que as jazidas de água mineral devem ser protegidas e conservadas. Em 1945 houve mais um salto de sustentabilidade com a criação do Código de Águas Minerais, que regulamentou o aproveitamento econômico das fontes de águas minerais e potáveis de mesa, determinando inclusive, de um perímetro de proteção dessas fontes.

No ano de 1967 foi criado o Código de Mineração, que exerce o papel de principal base legal da gestão da mineração brasileira, e que não sofreu mudanças em questões ambientais por várias décadas, até a entrada em vigor de um novo regulamento em 2017. Este Código, juntamente com seu respectivo regulamento, definiu uma série de sanções administrativas, como multas e cassação do título de concessão de lavra para os empreendimentos que causassem impactos ao meio ambiente. Foram também reeditados alguns trechos dos códigos de minas anteriores afim de permitir melhor interpretação jurídica. Um exemplo é a definição de mais clara de lavra ambiciosa, que na época, caso fosse praticada, acarretaria em multa e perda do título de concessão mineral. Nos casos em que houvesse a poluição do ar e da água por consequência da atividade de mineração, ou que fosse ignorada a proteção das fontes de água mineral, o infrator também estava sujeito a multa. Havia também a preocupação de impedir o abandono da mina sem sua correta recuperação, que seria interpretado como um passivo ambiental.

Com este levantamento é possível perceber que já desde o primeiro código de mineração, juntamente com as regulamentações posteriores, a legislação mineral já se preocupava em estabelecer regras visando à proteção ambiental no Brasil.

Palavras Chave: Mineração no Brasil; Meio Ambiente; Legislação Mineral Brasileira.

#### Abstract:

The methodological model used in this work was to carry out bibliographical research on the Brazilian mineral legislation in the Federal sphere, listing Laws, Decrees, regulations, ordinances and in force from 1934, until 1988, with the aim of demonstrating how Brazilian mineral legislation evolved in order to protect the environment during this period. Since the First Mining Code of Brazil, which came into effect in June

1934, the Brazilian Mineral Legislation has already established measures that should be followed by mining companies to promote the protection of the environment. During this period, the still timid ideals of sustainability were not very widespread in society, but even so, environmental issues were present in this Code, which established precautions to prevent air, water, and soil contamination. In 1937, the elaboration of a plan for the proper use of the mine was already required, to be presented to the responsible agencies and executed consciously.

The new mining code, published in 1940, brought even more environmental advances, such as the prohibition of so-called "ambitious mining," a practice that made future use of the mine impossible. The concern for water resources was expanded with the protection of water bodies against pollution generated as a result of mining activities, in addition to the establishment that mineral water deposits must be protected and conserved. In 1945, there was another leap in sustainability with the creation of the Mineral Water Code, which regulated the economic use of sources of mineral and table drinking water, even determining a perimeter to protect these sources.

In 1967, the Mining Code was created, which plays the role of the main legal basis for the management of Brazilian mining, and which did not change in terms of environmental issues for several decades until the entry into force of new regulation in 2017. This Code, together with its respective regulation, defined a series of administrative sanctions, such as fines and revocation of the mining concession title for undertakings that caused impacts on the environment. Some excerpts from the previous mining codes were also reissued to allow for better legal interpretation. One example is the clearer definition of "ambitious mining," which, if practiced at the time, would result in a fine and loss of the mineral concession title. In cases where there was air and water pollution as a result of mining activity, or where the protection of mineral water sources was ignored, the offender was also subject to a fine. There was also a concern to prevent the mine from being abandoned without proper recovery, which would be interpreted as an environmental liability.

With this survey it is possible to see that since the first mining code, together with subsequent regulations, mineral legislation was already concerned with establishing rules aimed at environmental protection in Brazil

**Keywords:**Mining in Brazil; Environment; Brazilian Mineral Legislation.

#### 1 - Introduction

The methodological model used in this work was to carry out a bibliographical research on Brazilian mineral legislation at the Federal level, listing Laws, Decrees, regulations, ordinances and resolutions from 1934 to 1988 (year of promulgation of the Brazilian Federal Constitution). From this survey, a compilation was made of legislation that deals, in some way, with the protection of the environment and natural resources; as well as the promotion of mining activity in a sustainable manner. Therefore, this work aims to demonstrate that, since the first mining code in 1934, these concepts were already being introduced into Brazilian mineral legislation, and have continued to evolve.

Brazilian environmental agencies and legislation cover various sectors of the economy, including mining and extraction activities. However, in addition to environmental legislation, there is also mineral legislation that safeguards the environment, with mining regulatory bodies operating under the framework of laws that govern mining enterprises in Brazil. It should be noted that, in line with the objectives of this work, no environmental legislation originating from Brazilian environmental agencies was included in this research.

Brazilian mineral legislation encompasses a significant number of provisions aimed at promoting sustainability and environmental protection independently while also complementing environmental laws. The first Mining Code came into effect in 1934, and even before a broader dissemination of these concepts, measures were already in place to promote environmental protection.

# 2 - 1934 Mining Code

The first Mining Code of Brazil came into effect during the early government of President Getúlio Vargas. It is known as Decree No. 24.642, issued on July 10, 1934. This code was promulgated in the period between the First and Second World Wars, well before the emergence of sustainability concepts and the use of terms such as "environment" and "environmental preservation." Despite this, there was already a concern on the part of the Brazilian Legislative and Executive branches, establishing measures to prevent contamination and pollution of the air, waters, and soils.

The preservation of water resources is provided for in Article 67 of this Code. Although somewhat faintly, the 1934 Code already established rules regarding the prohibition of water body pollution. Despite the concern for protecting water resources contained in this article of the Mining Code, it is observed that the responsibility for monitoring lies with the residents around the mining area, which conveys an idea of fragility concerning its enforcement efficiency. Another factor that indicates the fragility of the environmental defense in the provisions of this article is the remediation measures, which are limited to the miner's economic capacity and place the responsibility on the government to arrange for damages' reparation.

Below is the complete transcription of the article<sup>10</sup>.

"Article 67. In cases where the waters of springs, streams, or rivers are polluted as a result of mining, causing complaints from neighboring landowners and communities, the Government, having consulted the competent agencies of Public Health and others, shall provide instructions and measures that are necessary to prevent public harm, taking into consideration, as much as possible, the economic conditions of the mining operation."

Regarding soil protection, Article 72 can be evoked, which assigns the then National Department of Mineral Production - DNPM, now replaced by a competent agency, to manage how soil management will be carried out. Additionally, it gives the DNPM the responsibility to develop technical standards concerning the safety of employees and mining facility installations.

"Article 72. The technical regulations for the protection of soil, construction safety, and personnel shall be organized by the National Department of Mineral Production and, after approval by the Government, published in the Official Gazette and communicated to mining companies."

<sup>&</sup>lt;sup>10</sup>All the transcribed texts from the legislation are following the Portuguese language orthography used in Brazil at the time when the legislation was promulgated.

Therefore, it is possible to perceive a difference between the management of soil protection and water protection. In the case of soil protection, the Government designates the DNPM as the regulatory body, whereas in the issue of water pollution, there is no direct oversight from any government department, and this responsibility falls to the neighboring community.

#### 3 - Decree-Law No. 66, dated December 14, 1937

Enacted one month after the promulgation of the Federal Constitution of 1937, Decree-Law No. 66 made a few modifications to the 1934 Mining Code. With only 3 articles, the changes were primarily related to introducing the nationalist character of the Estado Novo under Vargas. However, in Article 3, there is a provision that can be considered an advancement in environmental protection, as it enhances the regulatory power of the government. Notably, the seventh clause and the second paragraph should be highlighted.

The seventh clause introduces the concept of a "plan for the proper use of the mine," which means that before the commencement of mining activities, a plan must be drafted and submitted for approval by the federal government. This measure, in addition to increasing regulatory aspects, instilled in mining enterprises the idea that the mine should be used appropriately and conscientiously, with the risk of the plan not being approved by the government if not adhered to.

"VII) The mining authorization shall aim at implementing a plan for the proper utilization of the mine or mineral deposit, which must be previously submitted for government approval."

Finally, the second paragraph of Article 3 introduces the Government as the regulator and grants it the power to take measures that compel enterprises to meet the requirements, also calling for the involvement of the responsible technical agency. This provision modifies the text of the 1934 Code, which placed the responsibility of monitoring the entrepreneur on the neighboring residents of the mined area.

"§ 2nd The execution of this plan shall be monitored by the Government, and the authorized party shall comply with the provisions related to the mining concession that are applicable, as determined by the competent technical body."

### 4 - 1940 Mining Code

Decree-Law 1,985 of March 29, 1940, known as the 1940 Mining Code, completely replaced the old 1934 Code. Like its predecessor, this Code was also signed by Getúlio Vargas, but in a significantly different historical context, as Brazil was under the dictatorship of the Estado Novo, and the Second World War was underway. Some advancements compared to the Decree

from six years earlier were observed, but the changes related to the regulation of sustainability issues and environmental impact mitigation were still relatively insignificant. The main change can be found in Article 34, which stands as a kind of avant-garde, containing several clauses that require mining operators to implement a series of measures aimed at mitigating environmental damage.

The first of these is clause V, which addresses responsibilities related to more severe and extreme situations, such as the possibility of mine collapse.

"Article 34. The applicant for the authorization undertakes to respect the following conditions, in addition to others listed in this Code:

[...]

V - Take the necessary measures indicated by federal oversight, within the specified timeframe, when the mine is at risk of collapse, either due to poor workmanship or any other circumstance;"

The second one is clause VI, which establishes care for mining, ensuring that it is not carried out irresponsibly, preventing future use of the mine.

"VI - Not hinder or prevent, through ambitious mining, the future utilization of the deposit;"

Clause XV places the miner as responsible for compensating damages caused to third parties as a consequence of their activities, even indirectly. This wording excludes the government's accountability that was present in the 1934 Code.

"XV - Be liable for all damages and losses to third parties resulting directly or indirectly from mining;"

Regarding the preservation of water resources, clauses IX, X, and XII of Article 34 can be highlighted.

Clause IX addresses even waters that may accumulate in the pit. The required measures are to ensure that the pits are drained in a way that does not cause impacts to the neighborhood. There is also a concern to prevent water loss.

"IX - Take the necessary measures to prevent the misdirection of water and irrigation or to drain accumulated water in the works that may cause damage and losses to neighbors;"

A significant point in environmental protection is clause X, which demands measures to avoid air and water contamination and poisoning.

"X - Take the necessary measures to avoid pollution and contamination of water and air resulting from mining operations and ore treatment"

The 1940 Code, in Article 3, classifies mineral deposits, among which mineral, thermal, and gaseous waters are included in class XI. Clause XII of Article 34 designates two Federal Government agencies as regulators: The National Department of Public Health - DNSP and the DNPM. It also demands that in the case of mining mineral, thermal, or gaseous waters, the sources must be protected and preserved.

"XII - In the case of deposits of Class XI, protect and conserve the water sources, use the water according to technical principles approved by the National Department of Mineral Production, and also consult the National Department of Public Health;"

Regarding the closure of operations and mine closure, the legislation was quite concise. Regulated by clause VII, also from Article 34, it was established that the holder of the mining authorization should inform the Government in advance of the closure of activities and that the mine should be left in "good condition." There were no other legal requirements.

"VII - Do not suspend mine operations without prior notification to the Government, and leave them in good condition;"

Finally, Article 43 establishes that the Government is responsible for taking the necessary measures to provide the recovery of contaminated water sources due to mining activities.

"Article 43. When the waters of springs, streams, or rivers are polluted as a result of mining, the Government, through necessary instructions and measures, and after consulting the competent departments of Public Health and others, shall take action to remedy the situation."

#### 5 - Mineral Waters Code of 1945

In 1945, five years after the enactment of the 1940 Mining Code, the Mineral Waters Code, Decree-Law No. 7,841 of August 8, 1945, was sanctioned and remains in effect to this day (August 2022). This Code aims to regulate the use of mineral, thermal, and table drinking water in Brazil, whether for bottled water or uses in spas and hydrotherapy. It is important to highlight that since the promulgation of this Mineral Waters Code, there has been a concern to preserve the mineral water sources. This concern is present in Article 46, which designates the Ministry of Agriculture<sup>11</sup> as responsible for establishing a protection perimeter around the mineral water

<sup>&</sup>lt;sup>11</sup> Before the creation of the Ministry of Mines and Energy - MME by Law No. 3,782 of July 22, 1960, the then National Department of Mineral Production - DNPM, belonged to the Ministry of Agriculture.

sources. Within this perimeter, any activities that could pose a threat of contamination to the water sources or represent a risk to them are prohibited.

"Article 46. The Ministry of Agriculture shall establish, when necessary, a protection perimeter on the surface for mineral, thermal, or gaseous water sources authorized under the terms of this Code, within which no work or activities that may alter or harm them may be carried out without prior authorization from the Minister.

Sole Paragraph. This protection perimeter may be modified later if circumstances demand it."

#### 6 - Mining Code of 1967

The Mining Code of 1967, Decree-Law No. 227 of February 28, 1967, is an update of the 1940 Mining Code, and despite being 27 years younger, few changes occurred regarding environmental protection. Many of the advancements from the older text were maintained, with some specific changes that brought greater clarity in interpretation.

Article 10 defines the elements that must be governed by specific regulations and, therefore, do not have their legal aspects detailed in this Code. It is important to note that mineral and underground waters are part of the package that must be governed by Special Laws. One of these Special Laws is the 1945 Mineral Waters Code.

"Article 10 - Special Laws shall govern:

- I Deposits of mineral substances that constitute a state monopoly;
- II Mineral or fossil substances of archaeological interest;
- III Mineral or fossil specimens intended for Museums, Educational Establishments, and other scientific purposes;
- IV Mineral waters in the extraction phase; and
- V Deposits of underground waters."

In Articles 39 and 47, various sections address the preservation of air and water sources, although the legislation addresses water protection from the perspective of conserving a deposit rather than promoting environmental preservation. However, this can be considered an advancement from an environmental perspective, even though it is not the main objective of this legislation. From this point on, the holder of the mining concession became responsible for impacts caused in the air and water, being obliged to develop techniques to prevent such damages under penalty of sanctions.

Article 39 requires that in the case of using mineral water deposits, water use projects must be included in the economic utilization plan. Along with projects for the necessary facilities

to enable the use of the sources, the measures to be implemented to promote their protection must be presented.

"Article 39 - The economic utilization plan of the deposit shall be presented in duplicate and shall include:

I - Explanatory Memorandum;

II - Projects or preliminary projects related to:

[...]

g) Facilities for capturing and protecting sources, water supply, distribution, and utilization for Class VIII deposits."

Article 47 of the 1967 Code, which deals with the obligations of the mining concession holder, has several similarities with Article 34 of the 1940 Code. The main one is the older clause VI, which addresses ambitious mining. This clause is reaffirmed without alteration as clause VII in the newer Code, within their respective articles.

"Article 47 - The concession holder shall be obliged, in addition to the general conditions listed in this Code, to comply with the following conditions, under penalty of sanctions provided for in Chapter V:

[...]

VII - Not hinder or prevent, through ambitious mining, the future utilization of the deposit;"

Another clause that underwent minimal changes is number VIII. When addressing the concessionaire's responsibilities towards possible damages caused to neighbors, the text only added commas, and the word "todos" in the phrase "Responder por todos os danos... was replaced by the shorter form "Responder pelos danos... This clause correlates with clause XV of the 1940 Code.

"VIII - Be liable for damages and losses to third parties that result, directly or indirectly, from mining;"

Regarding Articles 34 of 1940 and 47 of 1967, by observing clauses IX, X, and XII, of the 1940 Code, it is possible to see that they are practically repeated as clauses X, XI, and XII, respectively, in the 1967 Code.

Clause X maintains the determination to do everything possible to prevent damage to neighbors due to the loss of water. The main modification occurred in the exclusion of the part

<sup>13</sup> Being liable for all damages

<sup>12</sup> **Δ**Ι

<sup>&</sup>lt;sup>14</sup> Being liable for damages

referring to the drainage of accumulated water in the works, being replaced only by "drenar as águas" (to drain the water). It is essential to note that the use of more generic terms increases the scope of the Decree-Law, as by legislating on very specific points, certain cases that do not fit the situation described in the legislation may be left uncovered.

"X - Avoid the misdirection of water and drain those that may cause damage and losses to neighbors;"

In the case of clause XI, the determination to avoid air and water pollution as a consequence of mining activities was maintained.

"XI - Prevent air or water pollution that may result from mining operations;"

When dealing with water protection, clause XII brought an important change in the wording compared to the 1940 code. The requirement to protect water sources was added, regardless of the type of deposit, including the obligation to observe technical precepts in the case of mining mineral water.

"XII - Protect and preserve water sources and use the water according to technical principles when dealing with Class VIII deposits<sup>15</sup>;"

Concerning clause VII of Article 34 of the 1940 Code, its wording was complemented and separated into two clauses, number XIV and number XV, both in Article 47 of 1967. The first refers to the communication of the suspension of work and the second deals with the maintenance of the mine. Initially, the obligation was to "deixar" (leave) the mine in good condition, which allows for the interpretation that there is no need to maintain this status over time. After the update, the text was reformulated, and the verb was replaced by "manter" (maintain), making it clear that the conservation of the mine must be continuous, even in the event of work suspension. The obligation to communicate the suspension of work in advance, which previously had to be done to the "government," without specifying the agency, was defined to be addressed to the DNPM.

"XIV - Do not suspend mining operations without prior communication to the National Department of Mineral Production (D.N.P.M.);

<sup>&</sup>lt;sup>15</sup> Article 5 of Decree-Law No. 227 of February 28, 1967, classifies mineral water deposits as Class VIII (Underground water sources are classified as Class IX).

XV - Maintain the mine in good condition in case of temporary suspension of mining operations to allow for the resumption of operations."

Article 48 complements clause VII of Article 47, by defining the concept of "lavra ambiciosa" (ambitious mining). This practice was already mentioned and prohibited by the 1934 Mining Code, but there was no other text where this term was defined or specified. In 1967, an article was drafted providing a little more detail on what "lavra ambiciosa" means.

"Article 48 - Mining is considered ambitious when conducted without adherence to the pre-established plan or carried out in a way that prevents the subsequent economic utilization of the deposit."

Article 64 deals with sanctions and fines to be initially applied. The fine is based on the minimum wage, which, for the date of publication of this Code, was NCr\$<sup>16</sup> 105.00<sup>17</sup> (One hundred and five Cruzeiros Novos), according to Decree No. 60,231 of February 16, 1967.

"Article 64. The initial fine shall range from 3 (three) to 50 (fifty) maximum monthly salaries of the country."

Finally, Article 65 establishes the situations where the concession of mining and exploration authorization may become void. Only five situations are defined where this penalty applies, provided in paragraphs "a" to "e." These include the abandonment of the mine, which needs to be formally defined as such; failure to meet deadlines for research and mining work; disrespect to the authorization title; the practice of ambitious mining; and recurrence of infractions three times within one year.

"Article 65. The declaration of the forfeiture of the research authorization or mining concession shall occur when any of the following violations are verified:

- a) Formal evidence of the abandonment of the deposit or mine;
- b) Failure to comply with the deadlines for the commencement or resumption of research or mining works, despite warnings and fines;
- c) Deliberate conduct of research works contrary to the conditions stated in the authorization title, despite warnings or fines;

<sup>&</sup>lt;sup>16</sup> Cruzeiros Novos (New Cruzeiros) was a currency that circulated in Brazil between the years 1967 and 1970. The Real, current currency of Brazil, came into force in 1994.

 $<sup>^{17}</sup>$  According to data from the *Calculadora do Cidadão* of the Central Bank of Brazil, the minimum wage on the date that this Code came into force, would be equivalent to R\$ 1,939.89 ( $\simeq$ 350 EUR) in February 2022, and therefore, the fines could vary between amounts equivalent to R\$ 5,819.67 ( $\simeq$ 1.050 EUR) and R\$ 96,994.50 ( $\simeq$ 17.500 EUR) if inflationary corrections are made.

- d) Continued ambitious mining or extraction of substances not covered by the Mining Decree, despite warnings and fines; and
- e) Failure to comply with repeated inspections, characterized by a third recurrence of violations with fines within a one-year interval."

# 7 - Regulation of the Mining Code - 1968

The Regulation of the Mining Code, Decree No. 62,934 of July 2, 1968, aims to regulate the 1967 Mining Code. This Regulation had the main function of establishing various bureaucratic criteria regarding mining activities, ranging from deadlines and values for issuing permits to the relationship between the miner and the surface owner, and even the procedures for creating mining consortia. However, the main issue to be discussed in this work is articles 99 and 100, where the penalties and fine amounts are established for ventures that fail to comply with the rules established in the Mining Code, especially concerning environmental care.

Article 99 establishes the penalties that research authorizations and mining concessions may be subject to. The penalties include warnings, fines, and contract termination, depending on the severity of the violation.

"Article 99. The failure to fulfill obligations arising from research authorizations or mining concessions, given the severity of the violation, shall lead to the following sanctions:

I - Warning; II - Fine; III - Forfeiture."

Paragraph one, on the other hand, relates to the authorities responsible for applying each of the sanctions. Warnings and fines are imposed by the DNPM, while termination of contracts depends on the signature of the Minister of Mines and Energy in the case of research authorizations, and the President of the Republic in the case of mining concessions.

"§ 1° The application of penalties, such as warnings and fines, shall be the responsibility of the National Department of Mineral Production (D.N.P.M.); the forfeiture of research authorization shall be decided by the Minister of Mines and Energy, and the forfeiture of the mining concession shall be decided by the President of the Republic."

Article 100, in turn, specifically deals with the fine amounts for each specific case. To reference the sanctions for each type of infraction, the regulation reorganized the obligations that

were already present in the 1967 Mining Code. Therefore, the articles and items referred to in this text are those found in this particular Regulation.

"Article 100. Offenders of the provisions of this Regulation shall be subject to fines, following these criteria"

Item I establishes a fine of 5 minimum wages for cases where mining is interrupted for more than six months without prior justification. The same sanction applies to research work that is interrupted for more than three consecutive months or one hundred and twenty non-consecutive days.

"I - Failure to fulfill obligations outlined in item III of Article 25, items I and II of Article 31, and Article 56 of this Regulation: a fine of 5 (five) monthly minimum wages of the highest value in the country;"

Item II covers most of the environmental transgressions that were provided for in the legislation up until that point. The established fine is ten minimum wages, and it applies, for example, to the waste and pollution of water and air, failure to protect water sources in the case of mineral water deposits, suspension of mining work without notification, and failure to maintain the mine in good condition.

"II - Failure to fulfill obligations outlined in Article 66, and items I, V, VI, and VIII to XVI of Article 54 of this Regulation: a fine of 10 (ten) monthly minimum wages of the highest value in the country;"

The highest fine is established in Inciso V, and it is applied for the practice of ambitious mining, prohibited by the 1940 and 1967 Codes, with the value to be paid being 50 minimum wages.

"V - Practice of ambitious mining (Article 63 and item VII of Article 54 of this Regulation): fine of 50 (fifty) monthly minimum wages of the highest value in the country"

#### 8 - Conclusion

During this initial period of environmental policy incorporated into mining legislation, which starts in 1934 and extends until the eve of the promulgation of the 1988 Federal Constitution, it is evident that the protection of the environment mainly focused on the preservation of water bodies, soils, and air. Within the context of the two Mining Codes (1934 and 1940), the Mineral Water Code (1945), and the first Mining Code of 1967, the issue of water protection was quite present and common to all of them. However, there was a lack of greater accountability for entrepreneurs

and companies for some environmental damages caused by their activities, with the federal government assuming the responsibility of providing reparations for some damages. By the end of this first phase, the monitoring power of the Union is expanded.

Through this research we can see that since 1934 there was already a concern among Brazilian mining management authorities with environmental care and protection, and even with some flaws, it is possible to see that several advances occurred between 1934 and 1988.

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<sup>&</sup>lt;sup>18</sup> Central Bank of Brazil, value correction.

<sup>19</sup> Decrees the Mining Code

<sup>&</sup>lt;sup>20</sup> Collection of Annual Laws of Brazil

<sup>&</sup>lt;sup>21</sup> Federal Official Gazette

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