



Exploration Stage

Technical exploration is the first stage of the concession contract and must be carried out during the three (3) years following the registration of the concession contract in the National Mining Registry.

What should be done in this stage?

During the exploration stage the concessionaire must carry out the necessary works and studies to establish and determine the existence and location of the mineral(s) in the contract, as well as the geometry of the mineral deposits within the concession area in economically exploitable quantities and quality, the technical feasibility to extract them and the environmental and social impact of their extraction processes.

This stage seeks to establish and technically calculate the reserves of mineral(s), their location and characteristics of the deposit(s), the mining activities plan, the exploitation means and methods, and the expected production scale and duration.

Can extensions be requested?

Yes, they can. Extensions are granted for a two-year period to complete or add the necessary studies and works and confirm the existence of the minerals in the concession contract and the technical and economic feasibility to exploit them. If the extension is approved, the building and assembly stage is also extended until the extension ends.

However, if the concessionaire needs an extension of more than 2 years, concessionaires may carry out exploration activities by requesting additional two-year extensions up to a limit term of 11 years. Requests for extensions must be technically and economically supported, in addition to provide proof of exploration works, compliance with the Mining-Environmental Guidelines and describe the works to be executed (duration, investment and payment of ground rent).

EXPLORATION STAGE MILESTONES
<input type="checkbox"/> Three-year term, extendable for up to 11 years
<input type="checkbox"/> Delimitation and devolution of areas
<input type="checkbox"/> Additional exploration areas
<input type="checkbox"/> Submission of Construction and Work Plan
<input type="checkbox"/> Submission of Environmental Impact Study
<input type="checkbox"/> Submission of mining-environmental policy
<input type="checkbox"/> Payment of surface rent
<input type="checkbox"/> Submission of Mining Basic Form (F.B.M, Spanish)
<input type="checkbox"/> Prior Consultation

What is the Mining-Environmental Exploration Guide?

The Mining-Environmental Exploration Guide is a conceptual and methodological consultation and guidance tool to improve the mining-environmental administration, management and performance. Its objective is to introduce the concessionaires the relevant aspects related with the development of an exploration program based on the Terms of Reference of mining activities established by the Government. Mining concessionaires must adopt the guidelines set forth in the captioned guide according to the specific characteristics and conditions of the area requested to be explored, through a specific environmental process.



When should the delimitation and returning of areas take place?

At the end of the exploration stage, the definite delimitation of the zone within the given area where the exploration works will take place, in addition to the necessary zones for ore dressing, internal transportation, support services and environmental works, must be submitted. To that end, the value, location, and calculation of existing reserves must be taken into account, as well as the expected production (which must be included in the Construction and Work Plan). It is during this very stage when concessionaires must return those areas where no activities will be developed, taking into account that the areas held must be contiguous.

There is no prohibition regarding returns of areas before the exploration stage ends. Therefore, area reductions are allowed.

Are exploration activities allowed during the building and assembly stage?

Concessionaires may request, for a term no longer than 2 years, authorization to hold contiguous zones to the given area in order to continue developing technical exploration activities, which must also be included in the Environmental License. If such areas are to be exploited, they must be included in the Construction and Work Plan and request the necessary modifications of the Environmental License.

What are the Terms of Reference for Exploration Works (LTE, Spanish) and the Construction and Work Plan (PTO, Spanish)?

The Terms of Reference for Exploration Works and the Construction and Work Plan define the general scope of the requirements, elements, and conditions of the studies and works of the mining industry in their technical exploration, building and assembly, exploitation, benefits, transformation and transportation of the mineral resources. These documents ensure that the commercial and industrial utilization of the minerals is carried out pursuant to the non-renewable natural resources and environmental exploitation principles and regulations, framed within an integrated concept of sustainable development and the economic and social strengthening of the country.

How the Terms of Reference can be applied and used?

The Terms of Reference have a generic nature and therefore each applicant or concessionaire must adopt them according to the particular characteristics of the project, as well as to the genesis and type of rock linked to the minerals in the concession contract.

In addition, the Terms of Reference and Mining-Environmental Guidelines are the basis to define the scope of the activities, which allows the annual estimation of the economic investment to be made, as it is a vital requirement when proposing for a concession contract.



What is the Environmental Impact Study (EIA, Spanish)?

The Environmental Impact Study collects the necessary data to know the supply and demand of natural resources that can be used during the development of the mining project in order to establish the assignments, management, and level of intervention that can be performed on them. In this regard, the natural resources to be used, utilized or affected during the development of the exploitation activities must be listed. Concessionaires must submit the EIA to the environmental authority, as well as the Construction and Work Plan to the Mining Authority. To obtain the Environmental License, it is necessary to obtain the approval of the Environmental Impact Study first, which includes the measures to prevent, mitigate, correct or compensate the environmental impact caused.

What is the Construction and Work Plan?

The Construction and Work Plan is the final report of the exploration stage which provides the technical, logistics, economic and commercial baselines to decide whether or not to invest and develop a mining project. Before the exploration stage finishes, meaning 30 days before, concessionaires must submit their PTO for approval to the National Agency of Mining. The Construction and Work Plan, attached to the concession contract, must include the following:

1. Definite delimitation of the exploitation area
2. Topographic map of the exploitation area
3. Detailed cartographic information and, in case of marine mining, bathymetric features
4. Location, calculation and features of the reserves to be exploited during the development of the project
5. Description and location of the facilities and mining works, mineral deposits, benefit and transportation, and if necessary, transformation.
6. Mining Exploitation Plan, detailing the technical guidelines to be used
7. Geomorphological landscape and forest rehabilitation of the altered system
8. Scale and duration of the expected production
9. Physical and chemical characteristics of the minerals to be exploited
10. Description and location of the works and necessary facilities to execute the rights of ways inherent to mining activities
11. Exploitation closure and infrastructure and assembly abandonment plan

What are the phases included in the Exploration Works?

Exploration works involve the following phases:

- Phase I. Surface Geological Exploration
This phase involves the geological surface studies and characterization of a specific zone which allows establishing the sectors with the best geological manifestations or evidence which indicates the presence of a mineralized substance and proposes specific locations where such substance can be evaluated by applying direct or indirect techniques.



- Phase II. Subsoil Geological Exploration
This phase seeks to delimit the most probable profitable deposit, by including more specific size and mineral content estimates, defining the real geologic mining potential of the deposits.
- Phase III. Assessment and Geological Model.
With the results obtained from the previous phases, the real potential of the deposit can be defined, and the planning and designing of the Construction and Work Plan may commence.
- Phase IV. Construction and Work Plan.
The Construction and Work Plan is drafted. The Construction and Work Plan shall simultaneously be submitted with the Environmental Impact Study to the competent authorities, and it will be the basis upon which the Environmental License will be granted. The Environmental License is a vital requirement to continue to the next stage of the concession contract: Building and Assembly.

What is the Mining-Environmental Policy? What does it cover?

Once the concession contract is signed, concessionaires must acquire a performance policy to protect the compliance of the mining and environmental obligations, the payment of fines and caducity. The mining-environmental policy must be approved by the mining authority and be in force during the concession contract, its corresponding extensions and 3 more years.

The insured amount is calculated based on the following criteria:

- Exploration stage: 5% of the annual amount planned to be invested in exploration
- Building and Assembly stage: 5% of the annual investment
- Exploitation stage: 10% of the result of multiplying the estimated annual production volume of the mineral in the contract by the price of the mineral at the mine pithead as annually fixed by the Government.

What is the ground rent?

The ground rent is an economic compensation charged during the exploration and building and assembly stages; and in the exploitation stage if the concessionaire has held areas to continue with exploration activities.

Ground rents are equivalent to:

Area	Annual Value of the Ground Rent
Less than 2000 ha	1 LMDW* per hectare
From 2000 to 5000 ha	2 LMDW* per hectare
Higher than 5000 ha up to 10000 ha	3 LMDW* per hectare

*LMDW = Legal Minimum Daily Wage



The ground rent is paid annually and in advance. The first payment is made within the three (3) days following the registration of the concession contract.

The payment, collection and allocation of the ground rents are responsibility of the National Agency of Mining.

What is the Mining Basic Form (F.B.M., Spanish)?

The Mining Basic Form is a standard form to collect mining data that meets the requirements technical, economic, and statistical information related with the existing mining titles.

The Mining Basic Form seeks to:

- Guarantee the compliance of the objectives foreseen in the conceptual design of the Colombian Mining Information System (SIMCO, Spanish).
- Collect dynamic information that allows the generation of basic statistics related to the mining activity, the mining gross domestic product (GDP); information of the different sectors and other data the State deems basic to diagnose, project, and plan within the mining sector.
- Provide information to help other mining and statistic public entities to fulfill their functions.

The mining right holders must fill out and submit the Mining Basic Form to the deputy Mining Authority exercising the competence regarding the minerals and location of the mining contract, as follows:

- Within the first 15 calendar days of July, for the first semester of the year, with the corresponding information for the January – June period for the current year.
- Within the first 15 days of January, with the information of the immediate preceding year – January to December.

What are the steps to obtain an Environmental License?

By submitting the Environmental Impact Study, the awarding process of a Global Environmental License commences. The license involves the necessary permissions, authorizations and concessions to use resources for the mining activities. The validity of such permissions shall be the same as the one of the environmental license.

Those interested in obtaining the environmental license must request it by writing to the competent environmental authority. Such request must include, at least, the following:

- Name or corporate name, ID number and domicile of the requestor
- Description of the project, work or activity
- Estimated cost of the project, work or activity
- Description of the general environmental characteristics of the targeted area
- List of the renewable natural resources to be used, utilized or affected during the execution of the project, work or activity
- Indicate if the project, work or activity affects special areas, forest reserves or wetlands regarded as of national or international importance



Attached to the request, the following documentation must be included:

- Duly authorized power of attorney if acting through an attorney in fact
- Certificate of incorporation and legal representation issued within the immediately previous month to the actual month the request is being submitted, if a legal entity
- Certificate issued by the Ministry of the Interior stating whether there is presence of indigenous communities
- Environmental Impact Study

What is it meant by Prior Consultation?

The Prior Consultation right is a fundamental right of the indigenous peoples and the ethnic communities to be consulted on any decision (legislative or administrative) before carrying out projects, works or activities within their territories so that their cultural, social and economic integrity are protected and their right to inclusion and participation in the decisions is guaranteed.

At what stage does the Prior Consultation take place?

The Prior Consultation right is a mandatory process that must be complied with according to the habits and customs of each ethnic community when decisions affecting them have to be made, such as:
a) Administrative Measures such as the issuance of an environmental license for the exploitation of natural resources, and b) Legislative Measures such as the issuance of regulations that involve or affect these communities.

Legal References

Mining Code – Act 685 of August 15th, 2001

Mining-Environmental Guide - Resolution 18-0861 of August 20th, 2002 by the Ministry of Mines and Energy

Resolution 428 of 2013 by the National Agency of Mining, by which the terms of reference dealt with in Section f) of Articles 271, 278, 339 and 340 of the Mining Code are adopted.

Terms of Reference – Resolution 18-0859 of August 20th 2002 by the Ministry of Mines and Energy

Decree 1993 of September 6th, 2002 – F.B.M.

Resolution No. 181515 of December 18th, 2002 by the Ministry of Mines and Energy, amended by Resolution 181756 of December 23rd, 2004 by the Ministry of Mines and Energy

Ministry of Mines and Energy through Concept 2009010221 of March 6th, 2009

Concept filed under No. 2008042919 of September 18th, 2008 by the Ministry of Mines and Energy

Concept filed under No. 2009010172 of March 5th, 2009 by the Ministry of Mines and Energy

Judgment T-382 of 2006 by the Constitutional Court

