

Consideration on key issues of development and management of ionized rare earth resources

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Abstract: Under the background of current times, in order to practice the “green” production concept, our country classifies ion-type rare earth into specific mines which carry out protective mining, and also carry out the corresponding protection measures around the sustainable development concept. This paper analyzed the current status of development and management of this resource, discussed the existing problems, on the basis of which put forward specific solutions, such as formulating development strategy, strengthening punishment and so on.

Key words: Ionic rare earth; Development management; Key issues

I. Status of development and management of Ion-type rare earth resources

1. Management of mining rights and integration of resources

Since the beginning of the new era, in order to protect rare earth resources, the administrative departments have suspended the establishment of new rare earth exploration licenses nationwide, continued to strengthen the efficient management of rare earth mineral rights, further optimized the management of mineral rights, and effectively rectified the order of mine development. After several years, at present, rare earth mineral enterprises and mining rights are fully integrated, which has greatly promoted the development of rare earth exploration and mining work, and made relevant work more scientific and organized.

2. Management of total quantity control indicators

Based on actual analysis, at the current stage, in order to effectively solve the problem of excessive mining of rare earth resources, China has begun to implement a total control index management system for rare earth mining, and strictly manage enterprises holding rare earth mining rights. After the implementation of this measure, the situation of excessive mining of rare earth resources has been gradually improved. With the continuous strengthening of management, the amount of rare earth mined by legal mining enterprises (that is, enterprises that hold rare earth mining rights and meet the requirements of mining indicators) has gradually been strictly controlled within the range of mining indicators. Through this series of measures, the situation of over-target mining has been effectively controlled, which has played a positive role in the promotion and stability of rare earth prices. However, it should be pointed out that despite the remarkable achievements, illegal mining still occurs from time to time, and there are still some enterprises and individuals outside the control of mining quotas.

3. Supervision over the development and utilization of rare earths

In order to achieve effective supervision of the development of rare earth minerals, in recent years, China has established a corresponding development and supervision regional linkage mechanism, and the linkage mechanism continues to expand its coverage area, and in order to achieve accurate and effective management, China has merged the southern and northern regional linkage mechanisms, and gradually formed a unified and coordinated rare earth development and supervision regional linkage mechanism across the scope. The implementation of this mechanism has cracked down on most illegal acts to a large extent, and also achieved close cooperation between neighboring regions, and established the mining area assistant system and identification plate system, which fully guaranteed the standardized management and sustainable development of mineral development.

II. Existing problems and related analysis

1. The degree of exploration is insufficient

Through the integration and analysis of the data, there are the following obvious problems in the exploration stage of ion-type rare earth deposits at this stage: First, the technical means used in the exploration. In the geological exploration of rare earth minerals under the current background, the exploration means for ion-type rare earth deposits focus on well exploration and drilling, but in engineering projects, the process is slow, the cost is high, and the safety of the project is low, which makes the exploration project face many challenges. In recent years, the relevant engineering has been gradually replaced by sampling shovel, in order to ensure the progress and quality of the project, It is necessary to pay attention to the regularity of the content of rare earth mineral exploration. Secondly, the object of investigation and evaluation. The total amount of rare earth is considered as the core factor in the exploration and evaluation of ion-type rare earth deposits in the existing technical regulations of rare earth resources exploration in China, and the general standard of mining area division and reserve estimation is formulated accordingly. However, only the easily soluble rare earth resources can be effectively exploited. Therefore, the ore body determined solely by the total amount of rare earth is not completely consistent with its recoverable reserves. Because of the contradiction between the evaluation target and the use target, the ore body divided according to the total reserves is difficult to guide the scientific development of the mining area, and is not conducive to the efficient management of such resources.

2. The contradiction between the mining right and the mountain forest right

In some areas, mineral resources have a strong nature of paying village, so there is a great relationship between forest land rights and rare earth mining rights. With the deepening of the reform of forestry property right system, the property right of most of the state-owned forest land in China has been confirmed. In this process, a large number of minerals and forests have been transferred to a large number of dispersed farmers. However, in the name of forest development, some people entered into contracts to encroach on the rich surface forests. In this context, there are a large number of equity transfer costs in China's mining enterprises at present, among which, some parties to the split share structure tend to take their potential rights and interests into account, resulting in a higher cost of the reform of the split share structure, which causes great difficulties for mining companies to participate in mining development and management. For a long time, the mining rights of rare earth mining areas in China were separated from the real mining owners. Many artisanal miners leased or bought some mountains containing rare earth minerals and invested in the construction of mines.

3. The administrative approval of rare earth minerals is complicated

At the current stage, the rare earth production and operation license still has the restrictive factor of difficult administrative examination and approval. On the one hand, the approval threshold is high, such as the new establishment of exploration rights, safety facilities acceptance, etc., need to go through the national level of approval. On the other hand, it involves more links, such as rare earth mine from the project to obtain mining license, need to complete the necessary environmental impact assessment report, safety pre-assessment report and other programs, these reports, programs cover the development and reform, environmental protection and other key departments, according to relevant regulations, these reports, programs need to go through the approval process of the administrative department. Specifically, it needs to be submitted to the county, city, province and national four level administrative departments for review in accordance with the requirements, and to ensure that it is passed by the administrative departments at all levels.

At the same time, each project contains a number of sub-projects, and these sub-projects have complex interdependencies. Some items of administrative examination and approval may be preconditioned by other items, and some items are preconditioned by each other, forming a complicated examination and approval chain. In addition, the content of some reports and plans overlaps and duplicates. For example, the mining geological environment protection and restoration management program, land reclamation program and soil and water conservation program, these three programs are formulated by the land geological environment department, the land and agriculture protection department, and the water conservancy and water protection department according to the environmental management needs of the mining area, although their management goals are the same, the engineering measures taken are similar, and the goals are similar. However, different industry evaluation indicators, evaluation indicators are different, resulting in different project evaluation indicators set points are not uniform.

4. Repeated bans on the mining and circulation of private mines

At present, China's rare earth "black" industry chain has fully covered all important fields such as mining, smelting, separation, deep processing and utilization. However, since the manufacturing of this chain does not have any resource and environmental protection costs, it makes it excessively chase the interests of the market, thereby increasing its output. This phenomenon has greatly disturbed the market of our country, resulting in a large number of cheap rare earth products into our market, resulting in a sharp decline in the transaction cost of rare earth products in our country.

5. It is difficult to supervise and the law enforcement basis is insufficient

Most of the ionized rare earth resources exist in the shallow layer of the surface, and the overall production process is relatively simple and the mining difficulty is low, which also leads to the theft of minerals is particularly serious. At present, the price of rare earth resources continues to rise, making the theft of mineral resources occur from time to time, which makes the overall supervision more difficult, and illegal acts are difficult to effectively eliminate. Government departments in different regions have also implemented corresponding crackdown measures, but it involves a lot of manpower and financial resources, so it is facing greater pressure. In addition, the existing laws and regulations give mining management departments limited means of law enforcement, and compulsory measures are scarce, resulting in some illegal mining activities can not be effectively cracked down on. In the process of implementation, law enforcement personnel often encounter problems such as the escape of illegal personnel and the difficulty in identifying the responsible person for illegal mining. There are also many difficulties in the implementation of penalties for illegal acts. According to the provisions of the Mineral Resources Law, the punishment for illegal mining includes two forms: administrative punishment and criminal punishment. Although criminal punishment has a deterrent effect on illegal miners, it is difficult in practice.

III. Understanding and judgment

1. Formulate China's development strategy for ionic rare earth

First, establish a management responsibility mechanism from the legal level. This mechanism should clarify the responsibilities and powers of governments and departments at all levels to ensure the rational development and utilization of resources. At the same time, a punishment mechanism for illegal activities should be established to severely crack down on illegal and illegal mining of rare earth resources to form an effective deterrent. This will not only effectively curb illegal mining activities, but also provide a strong legal guarantee for the healthy development of the rare earth industry. Secondly, the entry threshold of the rare earth development industry should be raised. At present, there are some low-level and high-energy enterprises in the rare earth development industry, which have a certain impact on

the environment. In this regard, the entry threshold of the rare earth development industry should be raised, and external costs such as environment and safety should be reflected in the cost of rare earth development, which will help eliminate backward production capacity and effectively promote the transformation and development of relevant industries. In addition, the development of land and forest resources can be combined with the exploration and development of mineral resources, so that it can not only protect the land, but also ensure the exploration and development of mineral resources, and ensure the harmonious development of the two. And on the basis of the reasonable value of forest right, the owners of forest land and mining industry can share the benefits. The valuation of forest right should take into account not only the economic benefit of forestry, but also its ecological value and social value.

2. Strengthening supervision and punishment measures

A complete legal system should be established for the different stages of rare earth exploration and processing. The establishment of such a legal system, starting from the exploration stage, should formulate strict exploration standards and procedures to ensure the legality and standardization of exploration activities. Moreover, for illegal exploration activities, rigid law enforcement measures should be given to crack down on illegal mining activities to ensure the deterrent of the law. In terms of simplifying the illegal identification procedure, the right to identify illegal activities can be delegated to the municipal level to make law enforcement more efficient and flexible. At the mining stage, strict supervision of mining enterprises is needed to ensure that mining activities meet environmental protection requirements and avoid damage to the ecological environment. Moreover, for illegal mining activities, an operational sentencing standard for illegal rare earth resource activities should be formulated to clarify the nature of illegal activities and the severity of punishment, so as to make law enforcement more operable. At the stage of transportation, marketing and processing, a sound supervision mechanism should be established to ensure the legal circulation, processing and utilization of rare earth resources. Efforts should be intensified to crack down on illegal transportation, marketing and processing, and those involved should be held legally accountable. In addition, it is also necessary to further clarify the responsibilities of forest rights owners in rare earth resource areas. As the direct stakeholders of the location of rare earth resources, forest rights owners should actively participate in the protection and management of rare earth resources. The forest right owners who participate in and cooperate with the illegal mining of rare earth resources should be punished accordingly, so as to serve as a warning.

3. Continue to promote the strategy of large enterprises and conglomerates

In order to achieve the set goals, it is necessary to fully take into account the actual situation of resource areas and the interests of all parties, and carry out mergers and acquisitions of various types of enterprises such as mining, smelting, separation and utilization. On this basis, fully implement the goal of “market-oriented, through the establishment and improvement of the market mechanism, guide the benign, stable and sustainable development of enterprises in the market”. In this process, the state should reduce more management involvement in enterprises, so as to gradually eliminate its long-term dependence on enterprises, especially state-owned enterprises, and independently manage and make decisions in accordance with market rules. Relevant departments should optimize the approval procedures for rare earth resources at an appropriate time. In this process of transformation, we should focus on avoiding relying on intermediary organizations to compile relevant plans and reports, but should focus on urging and supervising enterprises to truly implement relevant measures, so that the administrative costs of enterprises in the examination and approval process can be reduced to the greatest extent.

Statements:

To sum up, in-depth analysis of the key issues in the development and management of Ion-type rare earth resources at this stage is conducive to improving production efficiency and effectively promoting the development of related industries. Therefore, in the new era, the government and relevant departments should be based on the reality, further explore the different restrictive factors existing in the management of resource development, and in view of the problems, from the perspective of optimizing the management mechanism, increasing penalties, and further strengthen the top-level design to achieve the goal of industrial transformation.

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