# Study on the Legal System of Environmental Risk Warning

#### Lin Shenjie

Humanities and Law School, Shanghai Business School, Shanghai, 200235, China

*Keywords:* mining industry; environmental protection; risk early warning; early warning mechanism

Abstract: Mining environmental pollution and damage are more serious than other industries. To prevent the consequences of environmental damage at the minimum cost, it is necessary to build an early warning mechanism for mining environmental risk. Based on the principles of systematicness, representativeness and operability, an early warning index system for mining environmental risk is established by independent members of relevant professions. According to the index score, the alert degree is divided into five sections, each of which represents one of the alert states. Big data technology provides access for people's substantive participation in early warning. It is also necessary to form a long-term early warning mechanism in the aspects of police disposal, democratic participation and department supervision. It is necessary to prevent the traditional risk preference of enterprises when facing the cost of early warning.

## 1. Preventing and Controlling Environmental Damage in Mining Industry through Environmental Risk Early Warning Mechanism

The impact of mining development on the environment around the mine has significant characteristics: not only polluting the environment, but also destroying the ecology. Environmental damage caused by mining development

The forms are mainly manifested in three aspects: first, the occupation and destruction of land resources by mining development. Drilling holes, mining sites, industrial squares, mining roads, waste residues and tailings piled up in mining development need to occupy and destroy a lot of cultivated land for a long time; mining development can easily cause geological disasters such as land subsidence, landslides, debris flows and surface cracks; it often causes traffic interruption in rural roads, resulting in river silting, or the destruction of civilian houses, etc. Secondly, mining exploitation destroys water resources. In mining development, groundwater is drained and drained, and even deep and strong drainage is needed, resulting in the destruction of regional water balance, the decrease of groundwater level and the formation of precipitation funnel, the leakage of water in ponds and wells dries up, and the depletion of groundwater resources leads to the invasion of saltwater. Third, the "three wastes" discharged from mining development cause pollution. Waste water, including pit water, mineral processing and refining wastewater and tailings pond water, contains a large number of toxic and harmful elements, which can easily pollute rivers or land; exhaust gas, mining and refining workers. Hazardous pollutants from industrial exhaust emissions pollute the air. The damage of mining development to the environment is widespread and serious. Once the fact of damage appears, mining enterprises should assume the tort liability of environmental damage according to the provisions of the Tort Liability Law and the Environmental Protection Law, and assume all liability for compensation or even criminal liability. Mining enterprises may stop production or even go bankrupt for this reason. The consequences of environmental damage also produce an accidental undertaking for the surrounding people. Bearing social costs will make the already unbearable ecological environment more fragile.

#### 2. Establishment of early warning mechanism for mining environmental risk

According to the characteristics of mining environmental risk early warning, we should establish the mechanism of mining environmental risk disposal, democratic mechanism of mining environmental risk early warning and supervision mechanism of mining environmental risk early warning within the framework of system supervision and environmental damage prevention system. The establishment, coordination and efficiency of these three mechanisms are directly related to the function and function of the mining environmental risk early warning system.

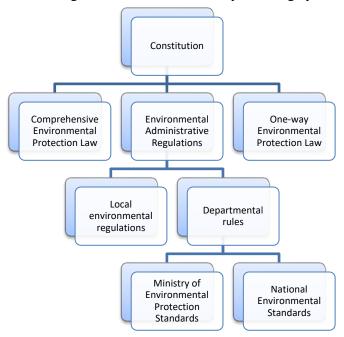


Figure 1 Framework of Environmental Protection Regulations

#### 2.1 Establishment of early warning and disposal mechanism of mining environmental risk

Establishing the mechanism of mining environmental risk collection, detection, evaluation and early warning and forecasting, the first prerequisite is to set up an independent enterprise early warning institution with relevant professional knowledge, stronger than information management and independent functions and status. Professional institutions engaged in mining environmental risk early warning shall independently perform their duties within the scope of their posts stipulated in the environmental risk early warning system, continuously improve their members'ability of forecasting and early warning and emergency response; collect, detect, evaluate and warn mining environmental risks according to their duties, and report the warning work to enterprise decision makers and environmental supervision departments in a timely manner.

#### 2.2 Improving the Democratic Mechanism of Mining Environmental Risk Early Warning

Mining environment has a greater impact on stakeholders. Protecting mining environment is the

economic responsibility of enterprises to shareholders, and also the social responsibility of enterprises to others around them. The pollution accident of Zijin Mining not only damaged the interests of shareholders but also the interests of the public. Mining enterprises should also make full use of the strength and wisdom of mine workers and the public to construct and play the role of risk early warning mechanism for the benefit of shareholders and the public. With a more open mind, early warning agencies regard the people and workers as "partners" and provide them with substantive opportunities for participation. It is an important way for environmental risk early warning to play its role to handle mining environmental risk early warning and warning disposal in a democratic way. With the development of information technology and big data technology, the cost of information transmission between the public and the employees of enterprises decreases and the expression of will increases.

### 2.3 Strengthening the early warning and supervision mechanism of mining environmental risk

For mining development, strict entry control should be applied to the utilization of mining environment. For those who enter the market to engage in mining development, enterprises that implement environmental impact assessment according to law are allowed to enter, and the entrants are granted environmental use permits. The mining environment shall not be allowed to be used at any time without a permit for environmental use. In the administrative contract of mining environmental protection, it is agreed to set up the contents of the early warning and pre-control system of mining environmental risk, and the organs of environmental supervision and the enterprises that promise to perform are the main bodies of the contract.

#### 3. Conclusion

On the premise of governing the country by law, we must carry out the construction of Mines governed by law and environment governed by law. The scope of governance should be standardized and institutionalized in the early warning system, mechanism and procedure of environmental risk. Especially in respect of legal liability for mining environmental damage and mining environmental pollution, strict liability systems such as the principle of no-fault and the principle of full compensation should be implemented. The pressure of the rule of law and strict responsibility system forces enterprises to enhance their awareness of environmental protection. The environmental awareness of economic responsibility and social responsibility is set to change the attitude of mining enterprises to risk.

#### Acknowledgement

On Risk Alert in the Perspective of Administrative Law (15&CF019)

#### References

- [1] Zheng Li etc. Construction of internal control of environmental protection in mining enterprises [J]. Environmental Protection, 2016, (17): 45-47.
- [2] Peng Tao, Ye Zhengmao. Perfecting and perfecting the early warning mechanism of public crisis management in China [J]. Administration and Law, 2014, (4): 69-73.
- [3] Li Hongquan. Establishing an early warning mechanism for corruption risk in key areas and links [J]. Social Scientist, 2012, (6): 31-38.
- [4] Mi Feng etc. Study on the construction of forestry ecological security early warning index system [J]. Forestry Economic Review, 2012, (2): 9-17.