1 Introduction

Phosphate is one of Chinese Agricultural production of nitrogen, phosphorus and potassium fertilizer three basic raw materials, is also an important guarantee of national food security reserve. An increasing amount of phosphate ore will be exploited because of agricultural development and the accompanying increasing demand for phosphate fertilizer. Therefore, to achieve its sustainable development of phosphate resources is not only related to its prosperity of phosphate fertilizer industry, but also related to the safety of our food production.

2 Phosphorus Ore Resource of China

The world's phosphorus ore resource distribution is very broad, but the distribution is uneven, with industrial mining and commercial development of high quality phosphate bed is can counted on our fingers. In China, there are 519 phosphate origin totally, accounting for 30% of the world's phosphate resources, distributing in 27 provinces (Ren and Yao, 2006). By the end of 2008, it is proved that the ultimate resource reserves are 17.762 billion tons, which reserves of 1.358 billion tons, foundational reserves are 3.564 billion tons, with an average grade of 17% from China’s Mineral Resources Report (Liu, 2008).

Phosphorus ores of mining difficult distribute uneven on geography, and the deposit type is mainly sedimentary phosphate rock. Raw material supply and product costs have great influence on fertilizer companies for the uneven distribution between phosphate resources and ore quality, while also restricting the resources development who have the production capacity.

3 The Problems of Phosphorus Ore Mining

Two ways of phosphate mining one is Underground mining and the other is surface mining. The proportion is 60% and 40%, respectively. With increasingly phosphate resources exploited every year, there are many problems in the process, mainly summed up about four:

The first, Predatory exploitation: In recent years, with the increasing demands for phosphate resources, which is leading to the price of phosphate rocks continued to heat up. Driven by economic interests a number of private small and medium enterprises carry out predatory exploitation of phosphate resources, who abandon the poor mining. This phenomenon is not only a serious waste of resources, but also exacerbated the contamination of the environment.

The second, mining of phosphate resources in the implementation are public and private policies concurrently, and small and medium private enterprises are more than significant who have brought great difficulties in environmental management of phosphate mining resources, which also makes mining environmental issues are increasingly becoming a bottlenecks in economic and social development.

The third, China attaches great importance to economic development. Take no proactive measure for environmental pollution caused by enterprises, brings environmental issues.

The last, at present, China has not been established for the country during the mining of phosphate resources management laws and regulations of pollutants (Yao, 2002; Liu, 2005; Wang and Zhang, 2007; Tan, 2011; Cheng, 2012).
4 Exploitation Strategies and Recommendations of Phosphate Mining

We should change our mode of phosphate mining to reduce the phenomenon of waste, improve the interest rate of phosphate resources, at the same time, emphasis the willing crisis of resources. We should improve relevant laws and regulations, which make sustainable development of environmental resources.

References