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Application of Environmental Monitoring in Ecological Environment Protection

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Abstract: China's social economy has maintained steady growth and the ecological environment has been constantly improving in recent years. On the whole, however, the environmental pollution situation is still serious, and people must continue to make harder effort on environmental protection. As an important means to protect the ecological environment, environmental monitoring can provide data support for the restoration and governance of the ecological environment to avoid ecological environment from deteriorating. Based on this, this article analyzes the important role of environmental monitoring in ecological environment protection, and puts forward corresponding application strategies.

Keywords: Environmental Monitoring; Ecological Environment; Protect and Governance

Introduction

Environmental monitoring is an effective means of environmental protection and suppression, which can not only provide technical support, but also effectively improve environmental protection effect. People can carry out real-time monitoring to effectively control pollutant emissions. Environmental monitoring has high requirements on personnel and equipment, which has not been fully applied due to various factors, seriously restricting the development of environmental protection work. Environmental monitoring takes a long-term period, and it is necessary to coordinate the relationship between each link. At present, people should monitor the source of environmental pollution, strengthen environmental management and control, improve the environmental monitoring effect through coordination in all aspects, and effectively protect the ecological environment.

1. The connotation of environmental monitoring

Environmental monitoring is of great significance to environmental protection. It can monitor the dynamic changes of the environment in real time, grasp the changes of the ecosystem, and provide certain data reference for environmental management. To some extent, environmental monitoring is to monitor the ecological environment such as atmospheric environment, water environment and soil environment by relying on advanced monitoring technology. By analyzing the monitoring data, we can understand the changes of the environment and judge whether it is damaged or not and whether the ecosystem is stable. Environmental monitoring is complex, so it is necessary to comprehensively consider various influencing factors. Before environmental monitoring, make preparations, such as monitoring equipment arrangement and controll-

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-ed personnel arrangement. The quality should be strictly in the monitoring process, and the environmental chemical indexes and ecological stability should be comprehensively analyzed after the monitoring is completed. The specific process of environmental monitoring can be divided into: collecting and sorting the information of the field environment; Comprehensive analysis of the sorted data. The specific process of environmental monitoring can be divided into: collecting and sorting the information of the field environment; Make a comprehensive analysis of the sorted data and formulate a feasibility monitoring plan; Control and monitoring stations; Test and analyze the collected samples; According to the results of statistical analysis of data, the environmental conditions in the monitoring area are comprehensively evaluated. If the stability of the ecosystem is destroyed, it will seriously affect the sustainable development of the environment, so environmental monitoring should be careful to avoid human error.

2. The role of environmental monitoring in ecological environmental protection

2.1 To promote the coordinated development of economy and ecological environment

Environmental monitoring can effectively improve the effect of environmental protection and find out environmental problems by monitoring the environment in real time through modern scientific and technological means. The environmental monitoring data are relatively accurate, which can provide reference for management departments, so as to effectively solve environmental problems and promote the coordinated development of ecological environment. At present, cities should follow the concept of green development, strengthen environmental monitoring and realize the coordinated development of economy and ecological environment.

2.2 To strengthen environmental management and implement the sewage permit system

Pollution discharge is an important part of environmental monitoring. At present, industrial enterprises must strictly control pollutant discharge and effectively deal with pollutants, so as not to threaten the safety of ecological environment. Ecological and environmental departments should strengthen the supervision of sewage enterprises, clarify the categories of pollutants, and control the pollutant emissions of enterprises in a reasonable range. Enterprises involved in pollution should be severely punished, pollutant emissions should be strictly controlled, and the stability of ecological environment system should be improved.

2.3 To combat environmental pollution crimes

Economic development cannot be at the expense of over-exploitation of resources and sacrifice of environment. At present, some industrial enterprises ignore national laws and regulations by hook or by crook for short-term benefits, and discharge pollutants at will without obtaining a pollutant discharge permit, causing serious damage to the ecological environment. Environmental monitoring can provide a variety of data, provide data basis for punishing enterprises involved in pollution, and effectively combat environmental damage.

2.4 To prevent sudden environmental pollution

Sudden environmental pollution is sudden and difficult to control. If no timely measures are taken, environmental pollution sources will spread rapidly and destroy the ecological environment. People should make use of environmental monitoring for early warning, start emergency monitoring in the shortest time when pollution occurs, analyze its pollution trend, and then gradually take measures to control the diffusion of pollutants and effectively protect the ecological environment.

3. The application of environmental monitoring in ecological environmental protection

3.1 Specific application measures

Environmental monitoring technologies are diverse, different monitoring methods are suitable for different environments, and monitoring results are also representative. However, there are some limitations in environmental monitoring. In order to meet the

development needs of the times, people should constantly develop and improve environmental monitoring technology. Monitoring personnel can choose the most suitable monitoring method by comparison, improve monitoring equipment and innovate environmental monitoring technology, and effectively improve environmental monitoring efficiency. In addition, it is necessary to strengthen the technical training of monitoring personnel. If the monitoring personnel do not have excellent technology, it will be difficult for the environmental monitoring to achieve the expected results, and the reliability and accuracy of the monitoring data cannot be guaranteed. Therefore, it is necessary to strengthen the construction of monitoring team, improve the professional skills of monitoring personnel and ensure the orderly development of environmental monitoring. Monitoring quality is the focus of environmental monitoring, and people must coordinate the relationship among all links of environmental monitoring to ensure the accuracy of environmental monitoring data. First, do a good job in preparatory work, configure advanced equipment, and improve technical operation specifications. Second, the scientific quality monitoring management system of Liu Jianli is systematically regulated to comprehensively improve the quality of environmental monitoring. The environmental monitoring station should rationally allocate each sub-node, timely summarize the environmental monitoring data of the sub-nodes, ensure the connectivity among the nodes, conduct unified management, carry out visual analysis, and intuitively understand the ecological environment status of various regions in China. At present, it is necessary to establish a strict supervision system, strengthen communication and cooperation among various departments, supervise each other, manage together, and improve environmental protection to ensure the sustainable development of ecological environment.

3.2 Improve the legal system

In order to give full play to the role of environmental monitoring in ecological environmental protection, it is necessary to formulate corresponding legal system and establish a perfect environmental protection system. Specifically, local government departments need to issue environmental protection policies and formulate specific environmental protection projects and measures according to their own conditions and relevant principles and standards of ecological environmental protection. In particular, it is necessary to further strengthen local environmental monitoring, arrange special funds to support the environmental monitoring of environmental protection departments, and at the same time, it is necessary to do a good job in personnel construction to lay the foundation for effective environmental monitoring. It is also necessary to arrange relevant personnel to manage local environmental monitoring to ensure the implementation of relevant monitoring projects, the accuracy of results and the quality of environmental monitoring. It is also necessary to formulate specific monitoring items according to the local environment, so as to provide support for comprehensively and accurately grasping the specific conditions of the local ecological environment and lay a foundation for effective environmental protection.

3.3 Do a good job of publicity

In order to improve the consciousness and initiative of environmental monitoring staff, and to improve the society's understanding of environmental protection, it is necessary to do a good job of related propaganda work in combination with the actual situation. Through this process, we can further create a good atmosphere of environmental protection awareness in the whole society and provide support for strengthening environmental monitoring. Local environmental protection departments should attach great importance to environmental monitoring, actively implement relevant environmental monitoring projects, and do a good job in equipment and personnel management to ensure the accuracy and scientificity of monitoring results. In addition, it is necessary to guide the society to form an ideology of paying attention to environmental protection, provide support for further strengthening local protection of natural ecological environment, and lay a foundation for further strengthening natural ecological environment protection.

3.4 Improve the environmental monitoring quality management system

The quality of environmental monitoring directly affects the understanding and mastery of local ecological

environment. Based on this, it is necessary to establish a perfect quality control system of environmental monitoring, so as to lay a foundation for scientific and effective monitoring and for the formulation and implementation of subsequent environmental protection measures. In order to effectively improve the practical quality of local environmental monitoring, it is necessary to strengthen management to ensure that specific environmental monitoring measures are carried out in accordance with relevant standards, and it is also necessary to invest in equipment, train the professional knowledge and practical skills of staff, and improve the working ability of staff. Secondly, we should do a good job in environmental monitoring quality management system, manage and check the monitoring data of environmental protection departments, and ensure that departments at all levels achieve good work quality in the process of environmental monitoring, and ensure the accuracy and scientificity of environmental monitoring data. Moreover, it is necessary to establish an overall management system to monitor the local environment comprehensively and provide guidance and supervision for regional monitoring.

3.5 Apply remote sensing technology

In the new era, China's remote sensing technology has developed rapidly, and it has been widely used in various environmental monitoring. At present, China is faced with ecological environment problems such as air pollution, water pollution and soil pollution. To effectively carry out ecological environment control, people must pay attention to macro-ecological environment monitoring. Air pollution seriously affects human health, and there are many sources of pollution. Remote sensing technology can't measure gas composition, but it can reflect the degree of air pollution by spectral principle. Remote sensing technology can analyze air pollution according to the change range of near infrared band; Spectral analysis of atmospheric molecules can be performed to reflect the specific distribution of atmospheric molecules in the air; It can track the pollutants in the air in real time and make clear the distribution state of air pollutants, so as to carry out air pollution control. Water is the basic resource for human survival, and it is an important part of human body. Water pollution is extremely harmful to human health. Direct discharge of industrial wastewater and domestic sewage will pollute water sources and lead to water quality decline. At present, people should make rational use of remote sensing technology to monitor the water environment in real time. There are many rivers and lakes in China, so remote sensing technology can analyze water quality parameters and get the degree of water pollution. China's soil pollution is serious, and remote sensing technology can't measure the content of heavy metals in soil. People can use remote sensing technology to analyze soil moisture content, surface temperature, etc., and get the general condition of soil. Most plants are provided with nutrients by soil. Soil pollution seriously affects the quality of agricultural products and threatens human health. At present, people should make rational use of remote sensing technology to monitor the change of soil environment. Remote sensing technology can analyze the crops growing on each land, observe the growth and change of crops, and at the same time use spectrum to know the distribution information of surface vegetation, rivers and buildings. Remote sensing technology is an effective method for soil environmental monitoring, which has wide coverage, fast information transmission and clear imaging, and can directly reflect the surface information. At present, China has established a satellite remote sensing monitoring platform to grasp the land pollution and improve the soil environment.

4. Conclusion

There are increasing serious damages to the ecological environment caused by the development of social economy in recent years. These damages not only directly affect people's daily life, but also have impacts on the sustainable development of social economy. So, the problems must be put highly attention to. In order to make improvements in environmental protection, it is necessary to do a good job in environmental monitoring. Through environmental monitoring, the development and change of local ecological environment and pollution level can be accurately learned, which is the premise and foundation for implementing follow-up environmental protection measures and formulating environmental protection strategies. Environmental protection is very important. In environmental protecting process, it is

necessary to accurately characterize the development and change of local ecological environment, which is the basis of environmental protection. Environmental monitoring is the key measure to learn the specific situation of local ecological environment, so its importance is self-evident and needs to be paid close attention to all the time.

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