

# Practice and Experience of Air Pollution Control

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**Abstract:** A good ecological environment and its protection and governance work are the foundation for the sustainable development and progress of the Chinese nation, a priority area for improving people's livelihood and well-being, and a necessary condition for building a beautiful China. As an integral part of the ecological environment, the protection and governance of the atmospheric environment has a long way to go. Based on the investigation and review of the progress of atmospheric environmental protection and governance in China, this paper makes corresponding reflections and prospects for the current situation of atmospheric environmental protection.

**Keywords:** Atmospheric Environment; Protection; Governance

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## Introduction

Nowadays, with the continuous development of industry and the gradual improvement of living standards, the protection of the atmospheric environment has gradually become a common international proposition. Facing the situation that atmospheric environmental protection and governance work has gradually become indispensable, only according to the actual situation, the past development history, status quo and development trend of the air pollution protection and governance industry should be investigated and a corresponding investigation report should be formed. Only with some adjustments can we promote the more practical development of the atmospheric environmental protection and governance industry.

### 1. Causes of air pollution

Air pollution means that when the pollutants in the air exceed a certain concentration, they will adversely affect people's health and the environment, and cause certain damage to the atmospheric circulation, resulting in serious consequences. According to the analysis and investigation of the current atmospheric conditions, it may cause different hidden problems, including human health, industry and transportation, etc., which is not conducive to the long-term development of the city. In the treatment of air pollution in environmental engineering, in order to ensure that The effectiveness of the treatment requires an analysis of the causes of air pollution, which mainly include the following aspects.

#### 1.1 Air pollution caused by natural factors

In ecological system, natural factors is the leading cause of air pollution, such as volcanic eruption, earthquake and other severe earth would cause the dust particles, carbon dioxide and other emissions of pollutants and spread, they will enter into the atmosphere, will not only affect the current environmental climate, even will affect the air environment in the form of flow through. In addition, forest fire is also an important cause of air pollution. This is because forest provides corresponding guarantee for air circulation and purification to a certain extent. Once forest is damaged by fire or fire, it will produce different pollutants, and it is difficult to restore the original atmospheric state in a short time. Natural sources account for 93 percent of global nitrogen emissions and 60 percent of sulfur oxide emissions.

## **1.2 Air pollution caused by industrial and agricultural production**

In the current stage of urban planning and construction, in order to meet the needs of economic development, its industrial structure has been significantly upgraded, and the production and processing of industry and agriculture are significantly different from those in the past. First of all, as far as industry is concerned, it includes different types such as petrochemical enterprises, metal enterprises and coal mining enterprises. At work, the concentration of harmful substances in the air may increase due to the emission of pollutants, and its pollution types have certain complexity, including carbon dioxide and other gases emitted by petrochemical enterprises, metal element smoke emitted by metal smelting, and emissions from iron and steel enterprises. It is difficult to deal with the air pollution caused by the dust. In addition, in agricultural related activities, for example, if pesticides are not effectively treated in use, their residues will enter the air through dust, and straw burning may also cause large-scale gas pollution.

## **2. Problems existing in air pollution treatment in environmental engineering**

### **2.1 Insufficient awareness of preventive treatment**

At present, the main problem is the lack of awareness of prevention and treatment of relevant departments, do not realize the importance of pollution source prevention and control, most of them are to reduce pollution as the core content, but this way can not meet the expected standard requirements, can not effectively solve the possible existence of pollutants. On the other hand, there is a certain imbalance in the distribution of work content of relevant personnel, which can not effectively improve the atmospheric environment, so that the governance efficiency can not be effectively improved. Especially for some remote areas, there is a lack of analysis and governance work at the source.

### **2.2 Lack of perfect management mechanism**

In the work of air pollution treatment, the relevant enterprises do not set its management mechanism according to the actual situation, and do not provide the corresponding space for the treatment equipment. From the perspective of the source of air pollution, it is by the industry, agriculture and ecology caused by different factors, such as the diversity of the types of pollutants, if the enterprise did not form a complete set of controls, atmospheric pollution problems can not get effective governance, or the treatment effect is limited, it may cause secondary pollution and other issues.

## **3. Measures to strengthen air pollution treatment in environmental engineering**

### **3.1 Formulate periodic air pollution treatment goals**

Air pollution in the environment engineering work, has certain longevity and continuity, in order to improve the work efficiency and quality of air pollution treatment. Relevant departments need to strengthen the process of air pollution control work, together with the actual situation, to develop targeted treatment goals.

First of all, in the atmospheric treatment work, the relevant personnel need to analyze the relevant information, clear the specific situation of pollution sources and the harm caused by the problem, at the same time, the relevant data and information in the atmospheric monitoring in a timely manner to receive, clear the main situation of the current atmospheric environment quality, formulate specific goals.

In addition, in the setting of the target, relevant departments also need to take into account the current economic, environmental and other limiting factors, try to control the target within a certain range, avoid too high or too low, and improve the initiative of staff.

### **3.2 Raise awareness of atmospheric preventive treatment**

In the air pollution treatment of environmental engineering, relevant personnel need to improve the awareness of air pollution emission prevention, from the source to avoid the pollution problem.

First of all, since the air pollution sources have a certain diversity, the staff need to collect the pollution samples, by professional institutions to test it, to identify the main elements of air pollution, so as to trace it back to the source, take effective measures to deal with.

Secondly, in the atmospheric prevention and treatment work, relevant departments need to strengthen the industrial control work, including the emission of waste gas, can be comprehensive planning to adjust the existing industrial structure, including the supervision of industrial areas, need to make atmospheric impact investigation report according to the actual environmental capacity. In addition, it is also necessary to control and control automobile exhaust, optimize the existing automobile structure, improve people's attention to air pollution, and actively implement relevant policies.

### **3.3 Improve the air pollution treatment management system**

In the treatment of air pollution, the relevant departments should strengthen the improvement of the system content, combine the current geographical and environmental characteristics, strengthen the recycling of resources, and improve the application scope of purification technology.

First of all, the air pollution treatment work should be combined with laws and regulations and environmental management regulations as the main basis for system formulation to ensure normative and standardization.

Secondly, in the setting of the management system for air pollution treatment, different departments can also be set up to ensure the management and control at the grass-roots level and increase the enforceability of the system. In addition, it is necessary to improve the comprehensive quality and ability level of the staff, build the current management system, and ensure the orderly development of the work.

### **3.4 Innovative air pollution treatment methods**

With the development of the times, relevant departments can innovate the existing air pollution treatment methods and apply information technology to them, so as to improve the treatment efficiency.

First of all, the equipment can be improved in the industrial production process to avoid the increase of the concentration of pollutants in the flue gas, such as the circulating fluidized bed boiler is applied to it, and the configuration of flue gas desulfurization device, not only can improve the utilization rate of fuel, but also can achieve the purpose of treating pollutants. At the same time, biotechnology and remote sensing technology can be applied to provide real-time data and information for air pollution treatment and optimize it from different perspectives.

### **3.5 Strengthen the improvement of energy structure**

For the current environmental engineering, the difficulty of air pollution treatment work is to deal with the balance between development and environmental protection, in the pollution treatment work should be as far as possible to reduce the impact on the market and economy. On this basis, relevant departments need to improve the existing energy structure, realize the full use of it, strengthen the rural, urban and other aspects of research and investigation work, specific analysis for the existing coal application.

First, relevant departments need to concrete analysis of the application of coal, including multiple aspects, such as rural and urban heating heating, enhance the utilization of energy, according to the actual situation of the application of the energy flow is analyzed, the applications of advanced technology and facilities to them, so as to realize the full combustion of coal, reducing emissions of pollutants in the air. In addition, it can also strengthen the application of clean energy, and realize the replacement of natural gas and other energy sources for coal when conditions permit.

To sum up, green development is an inevitable requirement for building a modern economic system and a fundamental solution to the pollution problem. To develop the industry of atmospheric environment protection and control is an effective means to control air pollution. Therefore, it is necessary to explore a road of coordinated development of society, economy and ecology, and strengthen the construction and development of the industry of atmospheric environment protection and control. Only by fully analyzing the development process and current situation of the air pollution control industry and

reflecting accordingly on its development trend can we achieve certain achievements in the protection and control of the air environment and promote the construction of a resource-saving and environment-friendly society.

## References

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