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The Influence of the Collection of the Waste Classification on the Control of the Domestic Waste Incineration

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ABSTRACT

with the continuous development of social economy and the continuous improvement of national living standards in our country, people put forward higher requirements for the quality of living environment around us, and the domestic waste produced in people's daily life and the waste treatment produced in the production process have become the key and difficult points that people pay close attention to, and the treatment of domestic waste is related to people's health and quality of living environment. Therefore, we should pay attention to the influence of garbage classification collection on the control of domestic waste incineration pollutants. According to my own relevant experience and combined with a wide range of social practice investigation and research, the author discusses the influence of garbage classification and collection on the control of domestic waste incineration pollutants, hoping to provide reference.

Keywords: Domestic Waste; Incineration Treatment; Pollutant Control; Influence

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The waste incineration is one of the most important methods of the domestic and rural domestic garbage treatment in China, and the waste incineration can greatly reduce the volume of the domestic garbage, and the weight is also reduced, and in the process of domestic garbage incineration, Advanced science and technology can also be applied to recover heat energy and to be used. but the garbage produced in daily production and the daily production process has certain complexity, is relatively rich in species and has non-uniformity, and a large amount of acid gas, organic pollutants or particles can be generated during the garbage incineration process, which brings problems to the treatment of the domestic garbage, in that process of domestic waste incineration in China, there are still a lot of shortage, and the significance of energy-saving and emission reduction is not recognized and understood by the general people, so it is necessary to pay attention to the collection of the garbage classification and to study the influence of the control of the waste incineration pollutants, The classification and collection of the domestic garbage can be made, and the recycling and utilization of the waste are promoted.^[1]

1. Current situation of the development of garbage classification

According to the relevant investigation and research, the amount of domestic waste generated in recent years in China is becoming more and more large, and the production of domestic garbage in urban and rural areas of our country has increased continuously and is in the process of continuous growth. ^[2] In recent years, the government has paid more and more attention to the classification of waste, and various kinds of domestic garbage treatment facilities have been developed and perfected, and the

recovery and utilization rate of the resources of all kinds of garbage is increasing, and the quantity of garbage can be increased, and the capacity of domestic garbage treatment is greatly improved. The development trend of domestic waste components is becoming more and more obvious, and more and more recyclable domestic garbage, such as plastic and waste paper, is more and more, in which the increment of plastic waste is amazing. Recyclable waste, such as paper, rubber, plastic and the like, has been increasing, and the value of garbage collection and utilization is promoted to a certain extent. At present, our country undefined participation in the domestic garbage collection and treatment mainly includes the waste products, the garbage collection personnel of the sanitation department, the road cleaning personnel and the street personnel, the informal waste recycling system is beneficial to the recycling and reuse of the domestic garbage in China, and also is beneficial to the treatment of the domestic garbage. But there are some problems in the process of the recycling of domestic garbage: first, there is no protective measure in the treatment of domestic garbage, and it has a certain effect on the health of the garbage collector. Second, in the process of domestic garbage, the self-employed operators have a large liquidity, the operation management is in a disorder state, and the waste recycling treatment also has problems, so that the recovery and treatment benefit of the domestic garbage is low.

2. The importance of incineration and treatment of domestic waste

With the continuous development and progress of social economy, the level of municipal solid waste treatment has been improved, and the treatment technology of municipal solid waste has also been greatly developed. ^[3] In recent

years, the domestic waste treatment facilities in China have been continuously developed and improved, the domestic waste treatment equipment has developed rapidly from no to many, the removal volume of domestic waste has also increased rapidly, and the application of all kinds of advanced domestic waste treatment equipment and high-end material equipment has also promoted the continuous improvement of the level of domestic waste treatment. At present, the proportion of domestic waste in our country is kitchen waste, fiber, lignin and other slow degradation of domestic waste, but the proportion of kitchen waste is relatively easy to deal with, the application of landfill treatment is not conducive to the conversion of energy, so it is not suitable to use garbage landfill for treatment, it should be treated by incineration of domestic waste. The related investigation and research show that the treatment of domestic waste by MSW incineration consumes $50\text{KW} \cdot \text{h} / \text{t}$ electric energy, while the heat energy generated by MSW incineration can generate electricity, the electric energy generated by MSW incineration is $200\text{KW} \cdot \text{h} / \text{t}$, and its superenergy is far more than energy consumption. Therefore, we should pay attention to the research and application of MSW incineration treatment technology, increase the research of MSW reduction, innocuity and recycling of MSW resources in the process of MSW incineration treatment, improve the treatment level of MSW, and then promote the conservation of resources and the efficient development of energy.

3. Research on the Control of Domestic Waste Incineration

3.1 Control of Dioxin Emission

During the incineration process of the domestic garbage, it is inevitable that a plurality of smoke can be generated, and in the air, certain pollu-

tion is caused to the living environment, in particular the emission of the dioxin, and the influence on the living environment is very serious. The types and concentration of pollutants discharged from domestic waste incineration at home and abroad are certain, and the domestic waste incineration plant needs to strictly follow its standards, and it is required to avoid the generation of harmful substances such as dioxins, smoke and the like in the process of domestic waste incineration. It is within the scope of the safety control. According to the regulations on the emission of dioxin in 2004, the emission of dioxin in the general domestic waste incineration is much less than that of the medical waste incineration, and the dioxin discharge generated by the domestic waste incineration is only 2.5% of the total discharge amount, This shows that the process of domestic waste incineration is beneficial to the emission control of dioxins. With the development of science and technology, the emission of dioxin in the process of domestic waste incineration is decreasing, which is beneficial to the protection of the ecological environment.

3.2 Control of greenhouse gas emissions

In the process of incineration of domestic waste, greenhouse gases will also be produced, which will have a certain impact on the ecological environment. However, the application of incineration process to treat waste is beneficial to reduce greenhouse gas emissions and protect the ecological environment to a certain extent. The main reason is that in the process of MSW incineration, the CH_4 , produced by landfill waste can effectively avoid the greenhouse gas emission, and the application of MSW incineration process to treat MSW is also beneficial to the application of incineration waste heat instead of fossil fuel. Generally speaking, compared with

landfill treatment process, the application of municipal solid waste incineration process is beneficial to the control of greenhouse gas emissions and the protection of ecological environment. According to the present situation of domestic waste treatment in China, compared with landfill treatment, incineration treatment of domestic waste can reduce greenhouse gas emissions such as 0.5tCO₂ per ton of domestic waste, which is beneficial to the protection of ecological environment. Incineration treatment of domestic waste is worth popularizing and applying.

4. Reference recommendation

4.1 Attention should be paid to the planning and site selection of MSW incineration treatment

The land resources of most cities in China are scarce, which leads to the choice of MSW incineration address, and the cost of MSW incineration site will continue to increase, which affects the economic benefits of MSW incineration treatment, so the site selection of MSW incineration is very important. With the continuous development and progress of socialist market economy, the development trend of municipal solid waste (MSW) treatment must be "incineration as the main mode, supplemented by landfill". MSW incineration will gradually become the most important way to dispose of MSW. According to the relevant provisions of the Construction Standard of MSW Incineration treatment Project, it can be seen that the site selection of MSW incineration treatment should first follow the principle of moderation. It is necessary to choose a moderate place away from the urban area, which is not only conducive to reducing the impact of MSW incineration on the surrounding residents, but also conducive to saving the cost of treatment, but also conducive to the utilization of thermal energy in the process of MSW inci-

neration treatment and improve the efficiency of MSW disposal.

4.2 Attention should be paid to the control of moisture content of domestic waste components

At present, the proportion of domestic waste is kitchen waste, and kitchen waste belongs to wet waste, which is rich in water, which is not conducive to the incineration of waste, so we should pay attention to the effective control of the moisture content of domestic waste. First of all, it is necessary to avoid the soup of kitchen waste into domestic waste as much as possible, and do a good job in the classification and collection of kitchen waste. It can encourage families with certain economic conditions to apply food crusher, crush kitchen waste with more water content, inject it into sewers, and reduce the production of wet waste. Secondly, we should pay attention to the research of garbage collection and transportation system, realize the garbage removal and transportation mode of "garbage does not land", reduce the external water source into garbage, increase the water content of garbage, and then affect the incineration of domestic waste.

5. Summary

The classification and collection of the garbage can be beneficial to the storage of the effective garbage, and the processing benefit of the domestic garbage can be improved. And the incineration treatment of the garbage is beneficial to the control of the emission of the dioxin and the carbon dioxide, so that the influence on the ecological environment is reduced, and the benefit of the domestic garbage treatment is improved.

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