

Retraction

Retracted: Soil Pollution Detection and Waste Classification Management of Environmental Protection Enterprises Based on 5G Internet of Things

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.


The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] M. Yu, Y. Liu, and J. Song, "Soil Pollution Detection and Waste Classification Management of Environmental Protection Enterprises Based on 5G Internet of Things," *International Transactions on Electrical Energy Systems*, vol. 2022, Article ID 5021755, 11 pages, 2022.

Research Article

Soil Pollution Detection and Waste Classification Management of Environmental Protection Enterprises Based on 5G Internet of Things

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Soil is the foundation of human existence, the foundation of development, and an important part of the ecological environment. The current situation of soil pollution in China is severe, and the environmental hazards caused by soil pollution are endless. At present, soil testing mainly studies the basic soil environment through electronic technology and monitoring technology and cannot carry out in-depth research. In soil testing, due to some geological problems, it is impossible to accurately detect in soil testing. It has become a consensus to strengthen soil environmental protection and implement special laws on soil pollution prevention and control. In the absence of legislation, strengthening research on the legal system for soil pollution prevention and control is in line with the basic laws of legislation. This article uses 5G Internet of Things soil pollution detection; from the strategic height of soil ecological safety, combined with the current national conditions in China, it is necessary to strengthen the timely detection of the status of soil environmental quality and strengthen the evaluation of soil environmental quality. In addition, this article applies 5G Internet of Things to the waste sorting management of environmental protection companies. In recent years, with the advancement of urbanization, residents' living standards and consumption levels have continued to improve. This has also led to a sharp increase in the amount of domestic waste. The disposal of a large amount of domestic waste has caused a huge burden on the ecological environment and has also caused some environmental problems. Under the background that the party and the state attach great importance to the environmental protection awareness of the whole people, local governments have also actively supported and promoted urban waste management and prevention work in order to achieve the purpose of "harmless, reduced, and resource-based" waste classification. In this article, environmental protection companies' use of IoT 5G to classify garbage can provide impetus for the future development of garbage classification. The 5G Internet of Things provides new ideas for enterprise waste classification management and soil pollution detection.

1. Introduction

The soil pollution detection system is a soil pollution detection system that controls urban and rural soils, improves soil ecological quality, and protects human health in accordance with certain principles, standards, and methods [1]. Investigate, analyze, and classify the soil on the contaminated site when the use right or use purpose is changed, and implement a series of measures to prevent or eliminate soil pollution and ensure the quality and safety of the soil

environment [2]. At present, China's soil quality evaluation rules are mainly technical legal documents, and some local laws have strong regional characteristics in evaluating soil quality [3]. There are mainly no corresponding parameters in the index system, and the evaluation method needs to consider many factors because of different soil environments. Soil environmental pollution is complex, and pollutants also have polymorphic characteristics. The implementation of the soil quality assessment legal system faces many difficulties. The relevant laws and regulations of

soil quality assessment in the United States and other countries provide best practices for this article [4]. In response to the challenges of China's soil environmental quality assessment legal system, this article uses IoT 5G to make efforts in the following aspects: first, environmental management is the only assessment framework to improve administrative efficiency; second, change the current soil quality environmental standards and increase soil quality environmental assessment content [5]. This paper adopts a research method that combines theory and practice. Based on existing theoretical research, through questionnaire surveys and on-site interviews, we understand the development status and existing problems of waste classification and propose effective solutions to the problems found [6]. Through questionnaire survey and analysis, this paper found that there are many problems in the classification of waste in environmental protection enterprises: politically oriented, the assignment of tasks is not clear, which leads to weak environmental awareness [7]. The inconsistency of subject responsibility and standard classification leads to the lack of initiative of citizens, and insufficient financial funds hinder the problem of infrastructure construction [8]. During the implementation of the action, due to poor publicity, citizens did not understand garbage classification, and the short-sighted behavior of residents reduced their enthusiasm for garbage [9]. The lack of classification awareness also affects the development of classification habits: the reward and punishment mechanism is not perfect, the incentives and fines for the residents are not enough, the management system is not perfect, and there is a multipronged problem [10]. In response to the above problems, this article proposes measures to encourage the development of waste classification at the government, urban residents, and community levels, use the 5G Internet of Things to create and improve the cooperation mechanism of competent authorities, encourage the construction of waste classification infrastructure, optimize supervision and management skills and levels, and improve incentives mechanism, mobilize the enthusiasm of urban residents to participate, introduce unified system implementation standards, and improve public awareness and education [11].

2. Materials and Methods

2.1. Research Methods. The exploratory thinking of this paper is based on the current situation of serious soil pollution, combined with the connotations of China's credibility theory, environmental law theory, environmental management theory, and sustainable development theory, and on the basis of researching and reading a large number of documents such as jurisprudence and environmental law, to scientifically understand the formation of soil and pollution, and find corresponding solutions [12]. The important problems of soil remediation responsibility are mainly that the public does not have a good understanding of the current environmental system requirements and does not have a sufficient understanding of the soil environment, and people are often eager for quick success and fail to implement them, the responsibility and obligations are not clear, and the

technical standard system is not perfect. There is a lack of specifications, the research and development of equipment technology and engineering technology are not high, and the industry development speed is relatively slow. This article understands the current scientific research trends, the progress of academic achievements, understands the results and status of the research, and compares and studies with the local national system [13]. The relevant regulations of the soil pollution remediation responsibility system of the local governments in the United States, Japan, and Russia are compared, and relevant practices that can be used for reference are proposed. Taking this as a guide, and combining with China's specific reality, several proposals suitable for the Chinese system are proposed [14].

- (1) *Literature Analysis Method.* Starting from the basic theory of soil remediation responsibility, this document has collected a large amount of literature, progressively, and put forward important issues of soil remediation responsibility [15]. Collect basic soil pollution data in relevant areas, identify influence and evaluation factors, and focus on the research and determination of pollution sources and soil indicators for environmental pollution evaluation methods [16]. Impact analysis, prediction, and evaluation mainly include the following aspects: (1) soil pollution detection and evaluation factor verification; (2) establishment and prediction of pollution and soil reclamation evaluation index system and determination of evaluation methods; (3) the impact of local autonomous agencies on the prevention and control of soil pollution in the region; (4) analysis of sustainable development of regional ecological environment and soil vitality; and (5) remediation and protection of soil pollution based on public responsibility system and mitigation measures [17].
- (2) *Comparative Analysis Method.* Compare the laws, regulations, and guidelines of soil remediation in different countries, as well as soil testing standards and other related content [18]. This article aims to highlight the differences in Chinese local government responsibilities, and accountability methods through the interpretation and research on the responsibilities of local governments in the United States, Japan, Russia, and other countries, as well as the analysis of the United States, Russia, and other countries [19]. It is necessary to learn from the positive actions of the three countries to eliminate soil pollution and the relatively complete regulatory framework and to improve and explore the responsibility mechanism of the Chinese local government for soil remediation. After comparison and analysis, local Chinese authorities are planning appropriate assessment standards to eliminate soil pollution [20].
- (3) *Empirical Analysis Method.* Understanding the responsibility of soil restoration is a real development need. Therefore, its in-depth research requires in-depth research on legislation and judicial and law

TABLE 1: Correspondence between 5G communication characteristics and IoT system requirements.

5G communication characteristics	IoT system requirements
High rate	Mass data transmission
High capacity	Information interconnection of all things
High reliability	IoT system reliability
Low latency	Flexible response and collaborative control
Low energy consumption	Battery life guarantee

enforcement practices, as well as empirical research on related cases, and clarifies the various issues that need to be resolved in the creative process. Through the research and analysis of the laws and status quo of soil remediation at all levels of government; based on objective reality, combined with relevant legal knowledge, a legal system has been formed. From this perspective, this article puts forward the ideas, analysis, and conclusions of basic ecological research on adaptation factors of urban soil reclamation and attempts to proceed from existing problems, objectively seek truth from facts, and try to describe how to solve problems in a truly original way. Improve relevant laws and regulations to repair local compensation and soil pollution control measures and provide appropriate and mature countermeasures and suggestions for these construction sites.

2.2. Algorithm Principle. This article analyzes the main characteristics of 5G communication and the point of contact with the ubiquitous Internet of Things, which is shown in the following formula:

$$C = B \ln \left(1 + \frac{S}{N} \right), \quad (1)$$

where C is the channel capacity, B is the channel bandwidth, S is the signal power, and N is the noise power.

5G's "High Three, Low Two" communication characteristics meet the basic requirements of the Internet of Things system, as shown in Table 1.

First, simulate the calculation of the credit value of a node, and the calculation of loan cost is divided into two situations. The first is loan incentives, as shown in the following formula:

$$C_i = \left(\frac{n_i}{N} \right) \times K - \left(\frac{t}{T} \right) \times Z + X. \quad (2)$$

The second one is credit penalty, as shown in the following formula:

$$C_i = \left(\frac{n_i}{N} \right) \times K - \left(\frac{t}{T} \right) \times Z - X. \quad (3)$$

Throughput is the number of transactions completed per second. The calculation formula for determining throughput is shown in the following formula:

$$TPS = \frac{(\text{Size Block}/\text{SizeTx})/\text{SizeTx}}{T_{\text{block}}}. \quad (4)$$

In order to estimate the bandwidth and latency of the CPBFT algorithm, this article tunes the Intel Core i7-6700M@3.40GHz processor and 16 GB memory installed on a 64-bit Windows PC and implements PBFT programming in Java through the Eclipse2018 platform and the CPBFT algorithm. And perform latency and throughput tests are performed. The implementation and testing of the PBFT algorithm uses a piece of code shared by the PBFT Simulator project on the GitHub platform, as shown in Table 2. In order to ensure higher consensus efficiency, the number of PBFT consensus nodes is chosen to be small, usually less than 20. If the number of consensus nodes is selected too much, it will easily lead to inaccurate throughput test results and large errors. For example, on the Hyperledger project Fabric testnet, the Hyperledger project Fabric uses the PBFT algorithm and the number of selected consensus nodes is 4, and the number of malicious consensus nodes is 1. In this simulation analysis, the number of consensus nodes is selected as 8, and the number of malicious consensus nodes is selected as 2, which meets the simulation conditions.

When DBFT is applied to the Internet of Things, the bandwidth overhead is as shown in the following formula:

$$\text{Bandwidth}_{dbft} = k \times (2N^2 - 2N + N + 1) \times \text{Size Block} + N_V \times \text{Vote}. \quad (5)$$

3. Results

3.1. Forward Simulation Analysis of Oil and Gas Pollution Model. According to the load components at different depths, the study area can be divided into 5 parts within 10 meters from the surface to the bottom, as shown in Table 3.

When studying the high-density resistivity method and the landfill ground penetrating radar method, through the inversion and interpretation of the collected data, the underground characteristics of the shallow sedimentary layer and the buried layer under the landfill were studied, which proved its reliability providing a basis for predicting future development trends of pollutants and engineering management. This article attempts to analyze several typical pollutants with different physical parameters in soil or groundwater pollution, heavy metal pollution, and landfill leachate through modeling and investigation. This paper selected six standard samples with nominal element content for quantitative analysis: GBW07407, GBW07405, GBW070008, GBW070009, GBW070010, and GBW070011. Taking Pb as an example, the concentration of Pb in the above six types of topsoil is shown in Table 4, and the concentration range is 14–1141 ppm.

TABLE 2: Simulation parameter table for evaluating algorithm throughput and delay.

Parameter	Value
Total number of nodes	10000
Number of failed nodes	100
Number of consensus nodes	8
Malicious consensus node	2
Number of requests that can be processed simultaneously	4000
Total number of request messages	1, 10, 100, 1000, 2000, 10000
Basic network delay between nodes	2 ms
Network delay disturbance range between nodes	1 ms
Rated bandwidth of the network between nodes	30×10^6 bytes
The size of the request message	250 bytes

TABLE 3: Underground layered structure of the study area.

Depth (m)	Soil type	Colour
0~2.3	Miscellaneous fill	Yellowish brown
2.3~5.3	Clayey silt	Brown and yellow
5.3~7.7	Fine sand	Dark brown
7.7~9.1	Silty clay	Grayish brown
9.1~10	Fine sand	Brown and yellow

TABLE 4: Soil samples and their Pb content.

Sample number	1	2	3	4	5	6
National standard GBW	07407	070010	070011	07405	070005	070009
Pb element concentration (ppm)	14	110	283	552	675	1141

TABLE 5: Soil spectral line information used in the experiment.

Characteristic line	Wavelength (nm)	Characteristic line	Wavelength (nm)
Si I	288.16	Na I	589.04
Al I	309.33	K I	769.90
Fe I	404.58	Ca I	422.67
O I	777.42	Ti I	521.04

Since the LIBS spectrum of the upper soil layer is mainly composed of the spectral lines of Si, Al, Fe, O, Ca, Ti, Na, K, and other elements, the spectral lines of these elements fully reflect the properties of the upper soil layer. Therefore, the characteristic spectra of these elements were selected in this experiment. Taking the straight line as the classification spectrum, the specific spectrum is shown in Table 5, in which Si element is the main element of the matrix. In order to reduce the influence of laser energy fluctuation on the spectral stability, Si selects the 288.16 nm spectrum to normalize all the characteristic spectra.

As shown in Figure 1, a simple oil and gas pollution model was created. The background medium is divided into two layers: the surface layer is 0.5 meters; its physical parameter conductivity is 0.001, the relative permittivity is 2.0, and the second layer is 4.5 meters; its physical parameter conductivity is 0.005, and the relative permittivity is 12. Assuming oil and gas pollution objects, the physical conductivity is 0.0001, and the relative permittivity is 1.9. The antenna center frequency is 500 MHz, the distance step is set to 0.0025 meters, and the number of scans is 48. Numerical simulations are carried out on the three models of massive,

layered, and triangular pollution states, and the direct modeling results are shown in Figure 1.

Figure 2 shows the direct modeling results of the pollution model based on the physical parameters of oil and gas. The target pollutants are abnormal in massive, layered, and triangular shapes. There are significant differences in the abnormal shapes of target pollutants with different shapes. The abnormal shapes of heavily polluted targets and stratified polluted targets are similar, but the anomalies of layered targets are more obvious. The abnormal features of triangular target anomalies are symmetrical. It has a good correspondence with the two sides of the triangle target. In general, the pollution model based on the physical parameters of oil and gas has better forward simulation results, and the anomalous properties are more obvious.

3.2. Forward Simulation Analysis of Heavy Metal Pollution Model. In terms of heavy metal pollution, three pollution models were also numerically simulated: massive, layered, and triangular. The model size is 5.0×5.0 meters. The physical parameters of the background environment are the

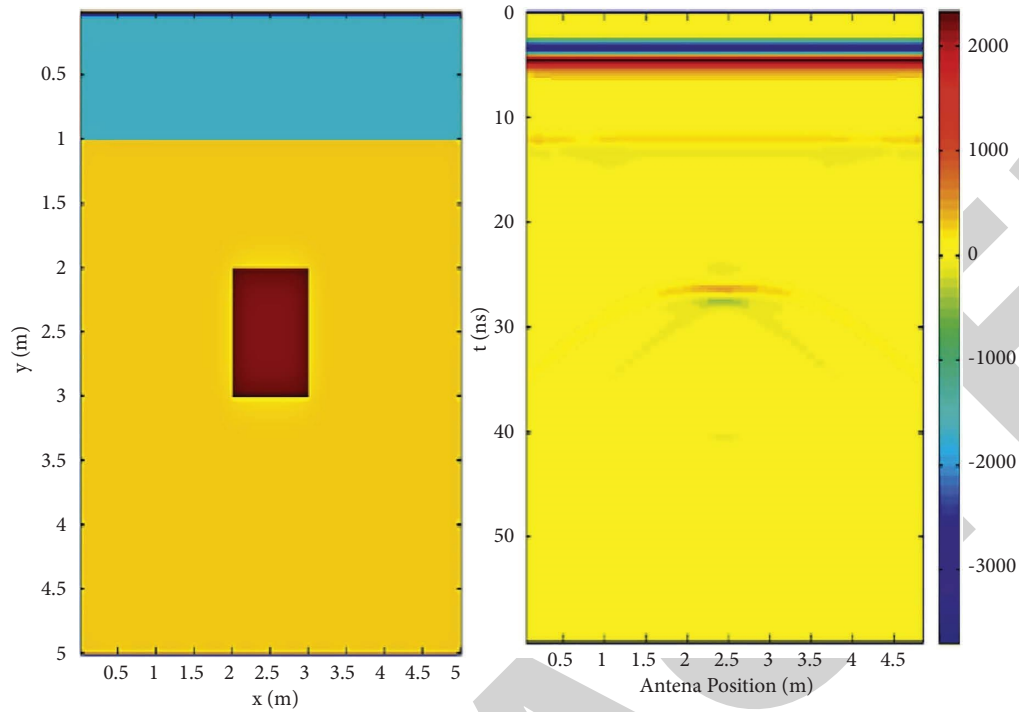


FIGURE 1: Massive oil and gas pollution model and forward modeling results, left x(m), right antenna position (m).

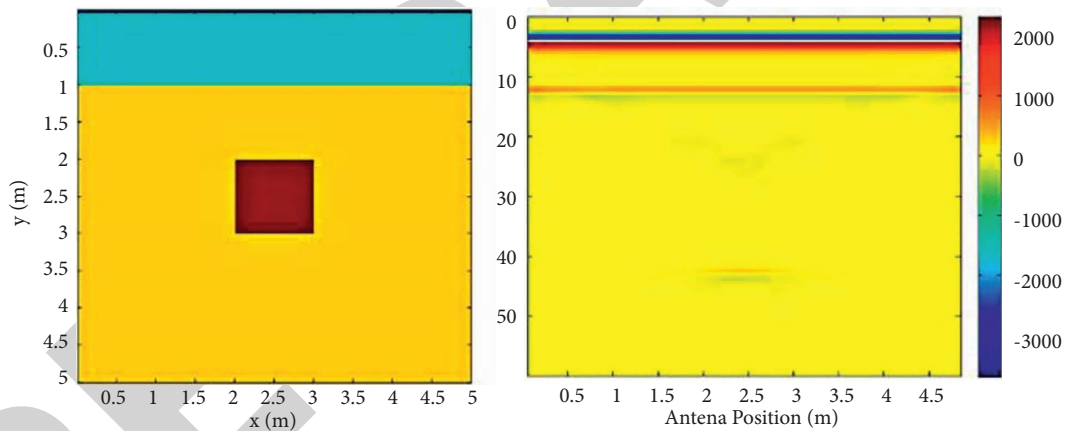


FIGURE 2: Layered oil and gas pollution model and forward modeling results, left x(m), right antenna position (m).

same as above. In the background environment parameters, the abovementioned heavy metal pollutants are 2.5 meters in depth, 1 meter in length, and 1 meter in thickness, with a conductivity of 0.05 and a relative permittivity of 20. The antenna center frequency is 500 MHz, the distance step is set to 0.0025 meters, and the number of scans is -48 . The forward simulation result is shown in Figure 3.

3.3. Forward Simulation Analysis of Landfill Leachate Pollution. This paper created a 5.0×5.0 m model and performed forward simulation analysis. The physical parameters of the background environment are the same as the above model. Because the water content of the landfill leachate and the surrounding environment is good, the organic matter content in the waste filter is high, and the

electrical the constant is high. Therefore, it is considered that their physical parameters are conductivity of 0.001 and relative permittivity of 30. Similarly, three pollution models are numerically simulated: blocky, stratified, and triangular. Assuming that the antenna center frequency is 500 MHz, the distance step is set to 0.0025 meters, and the number of scans is 48 times; the forward simulation results are shown in Figure 4.

3.4. Analysis of the Status Quo of Urban Residents' Perception of Domestic Waste Classification. After a series of explanations on the relevant concepts and theoretical foundations of waste classification and treatment of environmental protection enterprises, it is important to combine the specific situation of environmental protection enterprises' waste

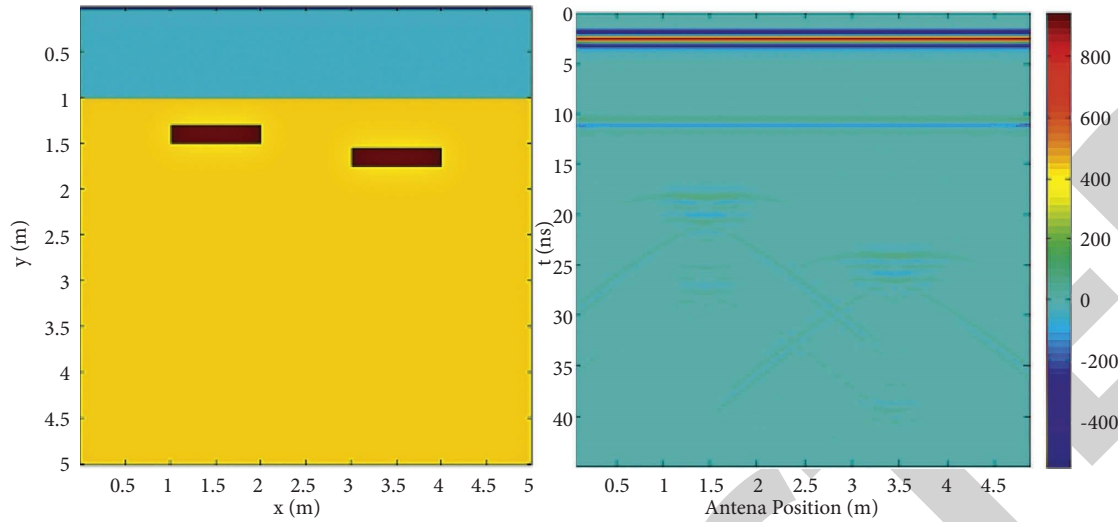


FIGURE 3: Block heavy metal pollution model and forward modeling results, left image x(m), right image antenna position (m).

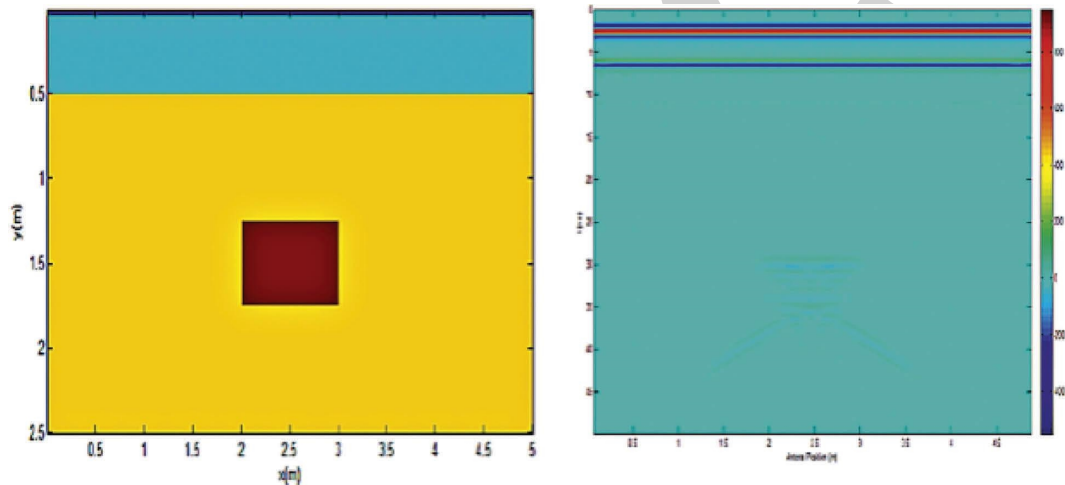


FIGURE 4: Block leachate pollution model and forward modeling results, left image x(m), right image antenna Position (m).

classification management, combine theory with practice, and find the correct way of classification and treatment of environmental protection enterprises' waste. The level of citizens' awareness of waste sorting management determines their degree of behavioral control in the implementation of waste sorting, and it is also an important factor in advancing the waste sorting management system. Based on the questionnaire data, this article elaborates on the knowledge level of the residents of a certain city on garbage classification, expounds the current understanding of the residents of a certain city on the garbage classification policy and system, and provides directions for the development of follow-up work.

(1) The results of the survey on the knowledge level of garbage classification guidelines are shown in Figure 5. 21.4% of the respondents said they did not understand the current garbage classification rules, and 28.37% of the respondents said that they knew little about garbage classification and showed that they were very good about garbage classification policies. The general accounted for 24.65%,

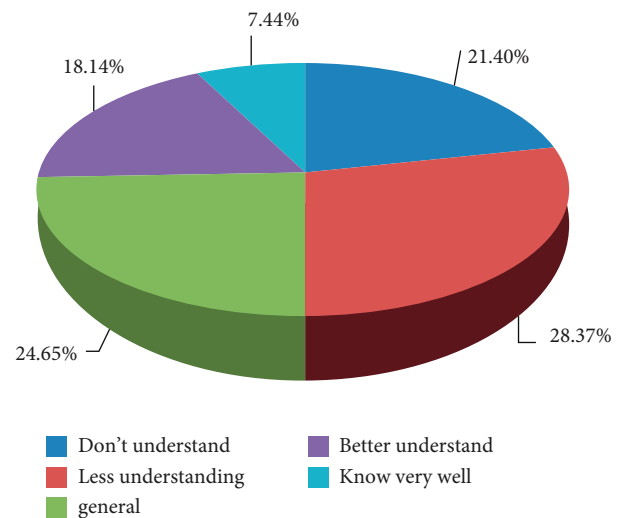


FIGURE 5: Respondents' understanding of garbage classification policies.

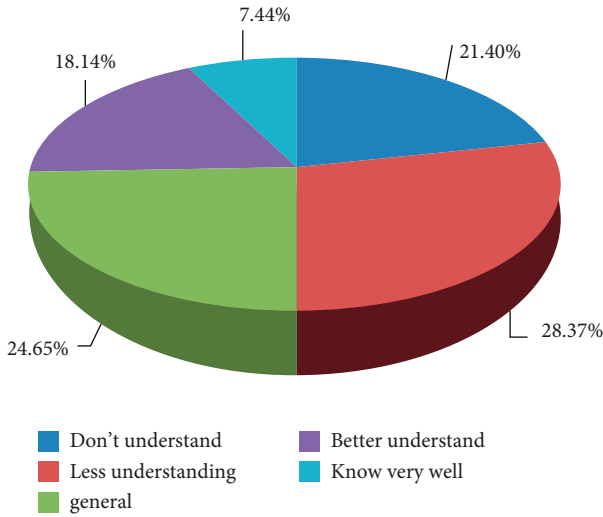


FIGURE 6: Respondents' understanding of garbage classification standards.

while 18.14% had a better understanding of the garbage classification guidelines of a certain city. Only 7.44% of the respondents said they were very familiar with the garbage classification guidelines.

(2) The survey results of understanding the garbage classification standards are shown in Figure 6. 23.26% of the respondents believed that they did not understand the current garbage classification standards in a certain city, and 35.81% of the respondents showed relatively ignorance. 18.14% of the respondents expressed a general attitude, 13.02% of the respondents believed that they knew the current garbage classification standards of a certain city, and only 9.77% of the respondents were very familiar with the garbage classification standards of a certain city.

(3) The results of the research on the promotion of garbage classification-related knowledge are shown in Figure 7. When choosing advertising channels, there are mainly three channels.

Regardless of newspapers, books, the Internet, and friends or family members, there were 138, 112, and 101 visits, respectively. The fourth place was the choice of advertising channels, such as television and radio. Only 63 members of the local committee were promoting garbage classification knowledge, and there were 28 people who have chosen to have never heard about garbage classification.

(4) The results of a study on the importance of urban garbage classification are shown in Figure 8. 26.05% of the respondents believe that garbage classification is not important and that garbage is household garbage and does not need to be classified. 41.86% of the respondents hold a general attitude, thinking that there is not a lot of garbage in their homes, and whether the garbage is classified or not has much to do with it. 32.09% of the respondents think that garbage classification is very important, because garbage classification can save resources to the greatest extent.

(5) The results of the survey on the impact of domestic waste are shown in Figure 9. 141 respondents believe that garbage pollutes the air, 137 respondents believe that

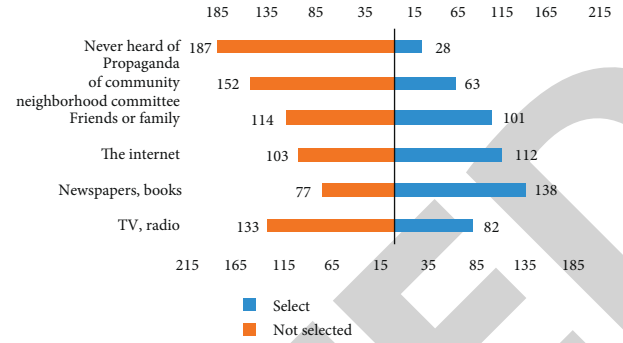


FIGURE 7: Respondents' understanding of the publicity of garbage classification.

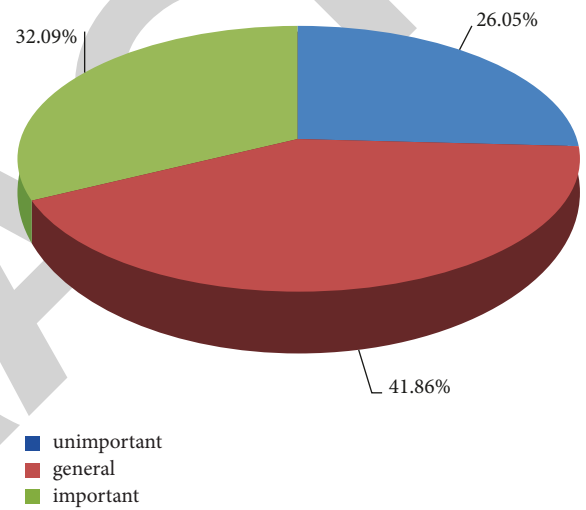


FIGURE 8: Distribution of survey respondents' attitudes towards the importance of garbage classification.

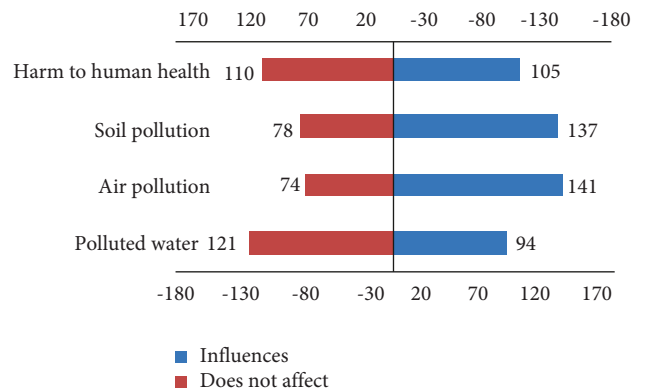


FIGURE 9: The distribution map of respondents' perception of the impact of garbage.

garbage pollutes land, 105 respondents believe that garbage is harmful to human health, and 94 respondents believe that garbage is harmful to human health. Garbage can pollute water sources.

4. Discussion

4.1. Main Problems in Waste Classification Management of Environmental Protection Enterprises. Of course, in order to make a series of progress, it is necessary to learn more about the gap between H Street in S City and other developed areas in the waste classification management of environmental protection enterprises, find related problems and shortcomings, formulate corrective measures, and significantly improve the waste classification of environmental protection enterprises.

4.1.1. Insufficiency of Government Laws and Regulations and Functions of Functional Departments. The government plays an important leadership role in the waste classification management of environmental protection companies. In terms of the classification and management of waste by environmental protection companies, many legal systems have few or no relatively complete legal systems for recycling, transportation, or disposal. At present, the laws and regulations on garbage classification have a great impact on the existing system, but there is no detailed legal system for garbage classification. At the same time, due to the particularity and diversity of the basic nature of garbage, Chinese environmental protection companies also need to formulate corresponding garbage classification management plans. Because there are still gaps in the legal aspects of garbage classification, it is difficult for urban environmental protection companies to obtain effective attention for garbage classification. The work will not be fundamentally guaranteed. The government plays a very important role in the garbage disposal of environmental protection companies, but it often happens that neighborhood committees, district committees, and other grassroots organizations rely too much on the higher-level government. These management agencies are relatively simple and do not deal with garbage classification in detail. Particularly in rural areas, environmental protection companies have insufficient experience in waste sorting. In the specific government work, the government has signed too many contracts, and there has been a phenomenon of spending a lot of effort but no results, and the phenomenon of evading each other's responsibilities has caused many environmental problems, making many environmental protection companies' garbage dead ends unattended. Many waste sorting and treatment work cannot be advanced in depth.

4.1.2. Environmental Protection Enterprises' Waste Disposal Related Equipment Is Backward. Workers must first sharpen their tools if they want to do their best. In the classification and waste management of environmental protection companies, the quality of the sites and equipment used directly affects the efficiency of waste classification and treatment. The collection, removal, and treatment of urban garbage on Road H is relatively lagging, especially in rural and urban and rural areas. The garbage cans can only be divided into two levels: easy recyclability and recyclability. There is still a mixed collection phenomenon in the separate collection of

garbage. Motor tricycles are still the main equipment for garbage collection and transportation, and the garbage collection system is relatively simple. Most of them still use simple landfills. Sanitation is a problem that needs to be solved urgently. If it is not solved, it will have a greater impact on the environment. The problems caused by the environment and the problems caused by simple disposal will in turn cause many problems: secondary pollution, air pollution, groundwater pollution, mosquito breeding, and other hidden dangers, which will have an adverse impact on the long-term construction of the entire civilized city.

4.1.3. Some Residents Have Weak Environmental Awareness. At the source of waste sorting management, local residents, as the first-generation waste sorters of environmental protection companies, their environmental awareness will directly affect the efficiency of waste sorting management of environmental protection companies. Although in recent years H Street has been promoting waste sorting and disposal, some local residents are still weak in environmental protection awareness and the basic sorting is not well done, especially in rural areas. Some people believe that garbage sorting is a matter for urban residents, and that government operations are enough, and that garbage dumps in rural areas are enough. Therefore, the government has to spend a lot of manpower and material resources on the basic cleaning and sorting of garbage, which greatly affects the sorting and resource treatment of garbage.

4.1.4. Single Waste Treatment after Classification. At present, the way of sorting and disposing of garbage on H Street in S City is still very simple. Although many sewage treatment plants such as power generation and landfill sites have been built in the suburban town where H Street is located, the actual waste base of environmental protection companies is too large to meet the daily recycling needs, and considering the cost of treatment, it cannot be large-scale classification processing. Nowadays, simple and cheap garbage disposal methods are still the main method of garbage disposal. The low level of recyclability of resources has a negative impact on the environment. The processing efficiency lags far behind first-tier cities at home and abroad, and if it continues, it will definitely have a negative impact on social and economic development.

4.1.5. The Development of Garbage Classification Is Not Smooth in Some Areas. H Street covers a total area of 33 square kilometers and has 5 district committees under its jurisdiction, covering urban areas, rural areas, and urban-rural intersections. Economic strength, labor force, and industrial production capacity vary from region to region. Each region has a specific implementation of garbage classification, and the efficiency varies. In general, garbage classification in urban streets and communities is better than that at urban-rural intersections. In some areas, there is even resistance to garbage classification: individual households destroy or even sell materials for garbage classification,

making it impossible for environmental protection companies to conduct comprehensive management of garbage classification.

4.2. Strategies for Waste Classification Management of Environmental Protection Enterprises. After obtaining the garbage classification management information of H Street, it is necessary to understand the specific recycling services and the deficiencies of H Street, and investigate the reasons for the deficiencies. In terms of developing waste sorting management, H Street started late, and it should learn more from cities and regions that started earlier and achieved significant results.

4.2.1. The Development of the Market Economy Has Promoted the Waste Classification Management of Environmental Protection Enterprises. The market is the catalyst and motivation for the waste management of environmental management enterprises and the combination with the market can greatly promote the development of waste sorting business. The development of the market economy has greatly promoted the waste sorting management of environmental protection companies: on the one hand, the market is fully involved in the sorting, disposal, and sorting of domestic waste, transportation, investment in the protection of the company's environment, and waste sorting management guidelines to support technical contacts and social groups. This not only reduces the government's financial burden, but also creates more job opportunities, promotes resource recovery and reuse, and promotes economic development. On the other hand, the rapid development of the market economy has accelerated the modernization of the equipment required for waste classification management at all levels, making various equipment more scientific and convenient.

4.2.2. The Strengthening of Environmental Awareness Will Promote the Waste Classification Management of Environmental Protection Enterprises. People's subjective initiative determines the active change of the objective world under the guidance of knowledge, and the environmental awareness of local residents directly affects the quality of waste classification management of environmental protection enterprises. The source of garbage classification produced by environmental protection enterprises is people, and the source and foundation of everything is the broadest masses of people. Developed countries have a deep understanding of this, and the most effective measures are to change people's ideological habits, increase environmental awareness, and keep environmental awareness and the concept of garbage classification in mind. Particularly in Japan, residents have been educated since childhood: all garbage can be recycled and reused. Japan passed a law very early to clearly list garbage classification as an important part of national education and integrate the concept of garbage classification into daily life. Due to long-term effects, locals regard garbage classification as a daily habit. Of course, if everyone in China

thinks that garbage sorting is a habit, then there is no such thing as littering. Ultimately, this can significantly reduce the amount of garbage and improve the accuracy of garbage collection, while also providing great convenience to the staff responsible for sorting. Therefore, it is the most effective and sustainable method to change the concept of waste classification from the consciousness.

4.2.3. Laws and Regulations Guarantee. Due to the continuous development of corresponding guidelines for garbage classification in different regions, the implementation of standards is uneven, leading to the phenomenon of "one system, multiple standards." In order to avoid the large-scale occurrence of this phenomenon, the responsible unit should proceed from the actual situation in the region, formulate garbage classification standards that are compatible with the development of the region, and form a unified garbage classification standard and classification system. When implementing policies and systems, nongovernmental organizations should follow the implemented system policies as guidelines and strictly abide by the relevant requirements of the garbage classification system. They are not allowed to modify or set garbage classification requirements in their own name or in their own community. Generally speaking, the community must take the lead, assume responsibility for supervision, pay close attention to the garbage classification behavior of community residents, and immediately persuade and treat unqualified classification behaviors. All community organizations should improve their own leadership role and strictly implement the policy guidelines of the supervisory agency. The success of foreign industrialized countries in the waste classification management of environmental protection enterprises depends to a large extent on the original environmental legislation, waste classification, resource recycling and reuse of these countries, and continuous improvement and revision to ensure progress. In terms of waste sorting, Yulu believes that politics is always the key to waste sorting management. The success of foreign industrialized countries in the waste classification management of environmental protection enterprises depends to a large extent on the timely formulation of relevant laws and regulations and the continuous improvement of follow-up work to ensure that waste classification management reaches the highest level. Lan once proposed that in order to fully implement the garbage collection work local governments must strictly follow the relevant regulations and at the same time formulate corresponding rules and regulations based on local conditions to drive and supervise the progress of garbage classification management. For the people, the law is heaven. It is a weapon that can be close to one's body, and strengthening legal restraint can greatly improve people's awareness of waste management. The development of a sound legal framework can provide some guarantees for waste management: law enforcement can encourage people to actively participate in the development of related work, it can stimulate the development of this technology to a certain extent, and it can also play a role in encouraging people to participate in this area and contribute to the smooth

development of related work. Some countries that have succeeded in this regard have many laws and implementation practices on waste classification. If China can learn from the relevant regulations of these countries and make improvements in accordance with China's national conditions, then China can also make breakthroughs in waste classification. Based on the advanced experience and enlightenment at home and abroad, using 5G Internet of Things, starting from the status quo of the development of waste classification of environmental protection enterprises, some feasible suggestions are put forward for the current problems of waste classification of environmental protection enterprises. For example, it is necessary to build a cooperation mechanism for responsible entities, promote infrastructure construction, optimize supervision and management capabilities and levels, improve incentive mechanisms, mobilize residents to participate, implement unified system implementation standards, and increase publicity and education.

5. Conclusion

This article believes that, in the absence of legislation, letting the system go first will help provide more experience for legislation. Carrying out soil environmental quality evaluation is a prerequisite for understanding the status of soil pollution and effectively preventing soil pollution. As this article said, the legal system for soil environmental quality evaluation is based on China's national conditions, drawing on foreign best practices and China's own practices and adopting 5G Internet of Things legislation, evaluation objects, evaluation objects, evaluation content, evaluation procedures and laws to improve the legal system of soil environmental quality evaluation, and put forward their own opinions on the implementation of the legal system of soil environmental quality evaluation. With the continuous deepening of the ecological concept of "green water and green mountains are golden mountains and silver mountains," all parts of the country are actively promoting the construction of ecological civilization, and urban residents' awareness of domestic waste classification can promote the construction of ecological civilization and promote garbage classification. Based on the guidance of existing policies, this paper conducts a questionnaire survey on the status quo of domestic waste classification of environmental protection companies and finds out some problems existing in the current classification of domestic waste of environmental protection companies. The policy has problems, such as lack of sense of responsibility, inconsistent classification standards, and imperfect infrastructure construction. From the perspective of the implementation of measures, local residents do not understand garbage classification, have low participation, and are weak in classification habits and awareness. In terms of result feedback, there are problems, such as imperfect reward and punishment mechanism and imperfect governance system. We should strengthen publicity, encourage residents to participate in garbage classification, and implement relevant laws and policies.

Data Availability

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Disclosure

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Conflicts of Interest

The authors declare that they have no conflicts of interest regarding the publication of this paper.

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