

# Construction of a Legal System for International Cooperation on Natural Gas Pollution Control under a Community with A Shared Future for Mankind

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**Abstract:** In order to prevent the deterioration of natural gas energy pollution, it is necessary to build a legal system of international cooperation, clarify the responsibility distribution system, and innovate the existing regulatory mode. We will introduce cooperative supervision and joint governance in traditional regulation and enhance global cooperation. The choice of this system is in line with the display demand of global energy and environmental pollution risk supervision, conforms with the trend of global cooperative governance, in line with the value concept of a community with a shared future for mankind, and has positive significance for the optimization and sound development of the system. However, at the present stage, the regional contradictions are prominent, the competition for energy is fierce, the lack of systematic international legal norms, the regulatory system has not been constructed and improved, and the rigid operation mechanism is not smooth. In the common vision of the global destiny of mankind, the collaborative innovation of international energy and environment law and domestic energy and environment law is legitimate, and the two goals are consistent. In view of this, the overall concept of legal construction of natural gas environmental pollution cooperation between international law and domestic law is emerging. Based on the holism thinking of the construction of gas environment pollution cooperation legal system, require countries to fulfill their duties and obligations under international law, and in the rule of law and the rule of law thinking reflect the international consensus, not only pay attention to establish and perfect the public regulations and private law relief synergy comprehensive legal mechanism, and based on energy and environmental protection of systematic, international to promote the construction of global gas environment pollution cooperation legal system.

**Keywords:** Natural Gas; Environmental Pollution; International Cooperation; Legal System.

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## 1. Introduction

On September 26, 2022, according to Swedish and Danish officials, two leaks of the Nord Stream 1 pipeline and a Nord Stream 2 pipeline were found around Bornholm Island. Nord Stream 1 is a branch line of natural gas pipeline, located in Germany, Viborg in the east, through the Baltic Sea to Germany. It is the main pipeline of gas transmission from Russia to Europe. Nord Stream 2 is a gas pipeline from Russia to Germany via the Baltic Sea. [1] The incident not only highlights the energy security issues, but also seriously affects the environment. Whether the international standards have universal applicability and authority, and whether the relevant international institutions can undertake the convincing regulatory function and reliable information technology support are all questions to be verified. [2] In other words, the international natural gas environmental pollution supervision legal mechanism also lacks the operability and enforcement of the restraint of national behavior and protect the interests of other countries.

## 2. The Necessity of Constructing the International Cooperative Legal System of Natural Gas Ring Pollution

### 2.1. Pollution Hazard of Natural Gas

As a non-renewable resource, natural gas is hidden in the underground porous rocks, including gas fields, coalbed

methane, oil and gas fields, and coal-forming fields. As an important chemical raw material and high-quality fuel, it is mainly used for fuel, which can make liquefied petroleum gas, carbon black, chemical drugs and so on. [3] Butane and propane produced by natural gas are important raw materials in modern industry. Natural gas is mainly composed of a mixture of gaseous low molecular hydrocarbon and non-hydrocarbon gas. Methane was 85%, ethane 9%, propane 3%, nitrogen 2% and butane 1%. [4]

Comparatively speaking, natural gas is a clean and environmentally friendly and high-quality energy source. Increasing the proportion of natural gas consumption can reduce the highly polluting energy sources such as traditional coal and oil. Natural gas contains almost no sulfur, dust and other harmful substances, produces less carbon dioxide than other fossil fuels, is economical and can improve the quality of life. [5]

However, natural also has certain pollution hazards. First, when the concentration of natural gas in the air reaches a certain extent, people will suffocate and damage the biological respiratory system. Second, natural gas, as a fuel, is prone to explosion in the process of mining, transportation, storage and use, thus causing casualties and environmental damage. Third, methane is the main component of natural gas. In air, the lower explosion limit is 5% and the upper limit is 15%. [6] So far, Nord Stream 1 and Nord Stream 2 have leaked about 7.78 million square meters of natural gas, which means the explosion released an estimated 500,000 tons of methane. The methane leaks have caused plenty of greenhouse gases to enter the atmosphere. Some predictions

suggest that the next 20 years will have a huge impact on global weather and trigger a series of butterfly effects. For example, the global sea level rise, the climate out of control, and the melting of glaciers will also release some viruses and bacteria originally hidden in the permafrost layer, causing great damage to human health, and destroying biodiversity, and making the ecosystem out of balance. [7]

It can be seen that the exploitation, transportation, storage and use of natural gas may cause environmental pollution, especially the explosion damage and aggravate the greenhouse effect. Due to the application advantages of natural gas, there is a lack of attention to the environmental hazards. If natural gas environmental pollution cannot be effectively prevented and effective measures are taken to cooperate it, it will cause irreparable damage to the ecological environment.

## 2.2. Global Natural Gas Reserve Layout

At present, the distribution of global natural gas reserves is relatively stable, with relatively concentration and high imbalance. [8]

**Table 1.** The data

Major Natural Gas Producers In the Early 21st Century (Unit: billion cubic meters)		
Country	Reserves	Annual Output
Russia	481.400	6328
Iran	275.000	896.63
Qatar	257.800	378
Saudi Arabia	67.500	656.8
United Arab Emirates	60.600	458
U.S.A	56.000	5532.77
Algeria	45.200	820
Norway	44.600	880
Venezuela	41.900	284
Nigeria	34.000	223.88

According to the data in the table, the top five countries are Russia, Iran, Qatar, Turkmenistan and the United States. It shows two basic characteristics: first, natural gas reserves are concentrated in local regions such as the Middle East and Eurasia; second, many countries, including developed and developing countries, lack necessary natural gas resources, which leads to the high imbalance of natural gas supply and demand, which makes international trade more frequent. With the deepening of international cooperation, the cross-regional mobilization of natural gas is inevitable. The establishment of international legal cooperation system on natural gas environmental pollution is conducive to clarifying the responsibility mechanism, cooperative management, increasing international cooperation and exchanges, and reducing frictions and conflicts.

## 2.3. International Natural Gas Organizations

At present, there are mainly several established international organizations related to natural gas. One is the International Natural Gas Union, or IGU for short. [9] It is currently an authoritative, non-profit international organization in the natural gas industry around the world. The alliance was founded in 1931 and has since been joined by natural gas industry associations in 67 countries. The IGU actually represents the majority of natural gas production and

consumption areas worldwide and also covers a wide range of areas, including, but not limited to, exploration, development and processing of natural gas; underground storage; liquefied natural gas; gas delivery; gas distribution; civil and commercial natural gas; industrial use and use of natural gas; environmental, safety and health of natural gas; international gas strategy, economy and regulations; the economic impact of natural gas on developing countries. [10] Second, the Natural Gas Exporting Countries Forum was established in Germany in 2001. [11] The initial members included Iran, Russia and Qatar. However, due to the lack of perfect constitution and fixed member structure at that time, it was relatively scattered and its influence was limited. Third, France Gas Information Center, or CEDIGAZ, is an international association specializing in providing gas-related letters. [12] Currently, it has 195 members, covering 44 countries. The organization focuses on the middle and downstream markets of the natural gas chain. Fourth, the International Energy Agency, or the IEA. This agency is an energy-focused international organization with strong influence. The focus of our work is mainly related to policy adjustment, market reform, and energy and technology cooperation.

It can be seen that the number of international natural gas cooperation institutions is small, with great regional limitations, lack of pertinence based on the energy law, and focus on market transactions while ignoring the importance of sustainable development. The establishment of the legal system of international cooperation on natural gas environmental pollution is the prerequisite for the establishment of natural gas environmental pollution cooperation in accordance with the law, and also the basis for enhancing the sense of responsibility and international cooperation.

## 3. Problems Existing in the Current Legal System of International Cooperation

### 3.1. Lack of a Coordinated and Unified International Legal System for Natural Gas Environmental Pollution Control

Nowadays, the international legal system or treaties on natural gas environmental pollution mainly focus on the civil liability of environmental pollution, which does not involve the control and compensation standards after the occurrence of natural environmental pollution. It can be seen that so far, no international law or international treaty has focused on the supervision of natural gas environmental pollution, and there is no specific content of the distribution of responsibility and damage compensation. Although the international energy union has signed the relevant treaty on gas accident, but in the north stream pipeline explosion, including but not limited to the United Nations environmental protection organization, international environmental organizations, Russia and other main body is not in advance prevention link and prevent the spread of pollution timely response processing, did not show a positive attitude, also did not put forward effective measures. It is undeniable that many problems, such as generality, principle and one-sidedness, are dispersed in the existing international legal system of natural gas environmental pollution control, which are embodied in the following points. First, the compulsion is insufficient. The existing

international systems for the establishment of natural gas environmental pollution control are mostly initiatives, which are manifested in principle, and the punishment mechanism for violations is also perfect, so it does not have universal binding force and coercive force. Secondly, the legal system and treaties related to natural gas are lack of pertinence, relatively broad and lack of practice. Finally, the regulation is weak. The supervision of natural gas environmental pollution is mainly carried out through the self-supervision, review and reporting of various countries and regions, and there is a lack of unified standards and implementation regulations. The above defects embody the lack of consensus on the top-level legal design of natural gas environmental pollution control, unclear rights and responsibilities, and conflicts and tensions between national sovereignty in the international legal system in the field of natural gas and other energy sources. This problem is particularly prominent in the Nord Stream pipeline explosion. [13]

Although the natural gas energy security standards and governance norms recognized and established by the state have a certain legal binding force. However, the safety standards and governance norms established between different countries are different, the legislative level is uneven, and it is difficult to coordinate and unify in practice, which is not conducive to the development of the international legal system of natural gas environmental pollution control. In addition, there are some unreasonable ways to define the same discharge safety standards and treatment methods for natural gas leakage in different situations and different pollution levels.

### **3.2. The Relevant Laws and Provisions of International Cooperation are too Principled**

Russia and other relevant countries are not very clear about the release of relevant data and information and the specific plan of pollution treatment in the natural gas pipeline explosion. In addition to the current complex conflict situation between Russia and Ukraine, it is also limited by the inherent defects of the legal system of natural gas pollution control. First of all, whether it is the Energy Charter Treaty or the Vienna Convention for the Protection of the Ozone Layer, both the provisions of energy pollution control standards for natural gas and the sharing of international obligations only remain in principle, and the lack of targeted, specific and detailed legal norms. Although the general provisions establish a buffer band for state sovereignty, state secrets and information and data sharing, it lay a foundation for each subject to formulate diversified specific rules according to the actual situation of each region. However, in the case of the United Nations Framework Convention on Climate Change, for example, there are no strict provisions on the obligation and notification time of natural gas pollution and leakage. There is no unified standard, each subject holds the initiative, and determines the final notification, when, the specific content and the degree of information disclosure, etc., such vague provisions of the authenticity and validity of information transmission has a great impact. It can be said that to some extent, the damage for the upgrading of natural gas environmental pollution buried safety risks. International cooperation not only requires countries to face, negotiate and solve the control of natural gas environmental pollution together, but also considers the technology, capital and management mechanism for the prevention and control of

natural gas pollution. With the advancement of globalization and gas energy deepening of cross-border trade exchanges, in developed countries, more and more developing countries also actively start the multifunctional application of clean energy, and because they in natural gas mining technology, transportation, storage and use management is not mature, safety problems and environmental pollution problems is increasingly prominent. [14] At present, even if the international environmental protection convention and other relevant international environmental protection convention has emphasized the importance of international cooperation, but some developed countries blindly pursue the economic benefits of monopoly energy industry, is not willing to share with other countries technology or aid funds, lack of international cooperation spirit and human destiny community consciousness, which intensified the international cooperation dispersion and conflict, is not conducive to maintaining the stability of the world gas pollution control benign development.

### **3.3. The Natural Gas Environmental Pollution Control and Supervision Model is Not Perfect**

In the early days of natural gas energy application, dealing with emergencies was usually achieved with the development of detailed technical safety measures, and the reliability of supervision, management and authorization was questioned to some extent. The inoculation of a series of natural gas pollution accidents sounded the alarm and made the global natural gas regulators gradually realize that the regulatory model based on technical safety measures does not seem to cover legal reporting, due procedures, authorized supervision, etc., so the actual operation scope has great limitations and is not easy to expand. Gas pollution caused by the chain and harmful characteristics need the international community to seriously natural gas production base establishment and operation covers the whole process of comprehensive management and supervision, from the location of natural gas production base, construction, and to the late evaluation, set up feasible effective emergency measures standards and so on a series of problems. The supervisory organ shall strictly check each stage and take the initiative to verify the rationality and practical operability of the relevant measures. International gas union, said facilities in the field of gas use cycle, to achieve and maintain a high level of safety and environmental protection needs to improve the legal and regulatory framework, shall establish safety, environmental standards and provide the corresponding review services to help the contracting party members strengthen prevention, build regulatory mechanism. [15]

However, only from the point of existing international laws and treaties, it is because of the lack of specific rules, the regulation of natural gas environmental pollution regulation is very vague, stand in different angles will appear different interpretation at the same time, so in actual operation how to conduct regulatory activities, how to ensure the effective regulation of a series of content in the gray area, regulatory effect. This problem is mainly because of the national internal affairs and sovereignty involved in the gas pollution problem, and countries generally take a conservative attitude towards it. Therefore, the International National Natural Gas Alliance, the Natural Gas Exporting Countries Forum and the International Energy Agency can only play a limited auxiliary role in providing regulatory services, and the establishment of

more specific regulatory mechanisms and the operation of regulatory purchase are dominated by national laws and regulations. For example, for the joint convention for member states should through the national report to the meeting of the party and explain the regulatory obligations and implementation of the country, submitted on the expected application of the policy can be used as an effective basis for international supervision and management, but the report of the true degree and public depth cannot be determined, the formalism of review can not actually meet the effect of the prevention of natural gas environmental pollution. It can be seen that the single choice of supervision that only depends on the domestic institutions will impact the independence and effectiveness of supervision. As can be seen from the environmental pollution caused by the leakage of the pipeline, there are problems in preventive measures and post-remediation. The negative attitude towards these problems is also due to the consideration of complex factors such as politics, economy and diplomacy. At the same time, the international community cannot rely on the specific legal system to effectively manage it, and the lack of prevention and supervision in advance causes the occurrence of damage.

### **3.4. Lack of Targeted Responsibility Distribution Mechanism**

Gas pollution dispute refers to the in the process of development and utilization and transportation of natural gas energy, natural factors or man-made gas leakage or explosion, resulting in a large number of methane leakage aggravating greenhouse effect, and within the scope of the countries and regions of environmental pollution or personal and property damage, international law for responsibility distribution, pollution control and damages for many other problems, such as contradiction, caused by international disputes. Often such disputes have relevance, uncertainty, and diversity characteristics.

First, the dispute of natural gas environmental pollution is not only political or legal disputes, but also can be factual disputes. The dispute affects territorial sovereignty, national security, responsibility identification and factual identification, and is related to the political, economic, cultural and social conflicts of interests between countries. After the occurrence of damage, it is very difficult to identify the scope and degree of damage, collect relevant evidence, and sort out and clarify causal relationships, which are mainly affected by the trans-regional, potential and long-term influence characteristics. Compared with ordinary disputes under international law, it is more complicated, both substantive and procedural.

Second, the current international way to resolve natural gas environmental pollution disputes, such as negotiation and consultation, can also force the injured party to fulfill its international obligations according to law and bear the corresponding responsibility for damages. In reality, international arbitration institutions have the prescribed scope and requirements for accepting cases, and the coverage is not enough. Most of them are international commercial trade disputes, and natural gas environmental pollution disputes involve specific professional technologies. At present, the international organizations to solve energy and environmental pollution disputes are not detailed enough, and there is no special one for the control of natural gas environmental pollution. The rationality and professionalism of the current arbitration need to be optimized. In addition, the consent of

the countries concerned in the dispute must be obtained either by arbitration or by international judicial means. If the state concerned does not recognize the legitimacy of the arbitration or deny the jurisdiction of the court, and does not cooperate actively, then the dispute settlement is still superficial and in a static situation, and cannot be effectively resolved.

Third, the current involving gas dispute settlement is limited to the energy charter treaty and the Vienna convention on the protection of the ozone layer and other part of the law and convention, the application of the relevant rules focus on the processing for members to notice and assistance when the disputes, other disputes about natural gas environmental pollution can not find applicable specific legal provisions. Based on this situation, it is urgent to build a set of comprehensive and targeted and practical outcome mechanism of natural gas environmental pollution disputes covering substantive law and procedural law rules. This will have an important theoretical basis and prominent practical effect on the existing conflicts and disputes and the possible disputes in the future, so as to cope with the increasingly complex and frequent international natural gas environmental pollution conflicts and effectively protect the "one earth".

## **4. The Theory of Legal System under The Perspective of Community of Shared Future for Mankind**

Thought leads action, and direction determines the way out. Since the 18th CPC National Congress, the CPC Central Committee with General Secretary Xi Jinping at the core has gained a deep insight into the evolution of the new international pattern, adhered to the concept of peace and development, and finally put forward a Chinese plan to build a community with a shared future for mankind and promote common values through continuous excellence. A community with a shared future for mankind, as the name suggests, means that the future and destiny of every nation and country are closely linked. We should stand together through weal and woe to build the planet where we were born and grew in into a harmonious family and turn the aspirations of people around the world for a better life into reality. [16] The concept of a community with a shared future for mankind reflects the common values of all mankind of peace, development, fairness, justice, democracy and freedom. COVID-19 outbreak more proved we are now in the world "a glory, a loss", has a strong joint effect, especially in deepening energy cooperation, under the background of global environmental problems increasingly prominent, an urgent need to prison tree global, overall view, the perspective of human destiny community to deal with the national natural gas environmental pollution control problem. On the security issue, we should create a security pattern of justice, justice and sharing; on the ecological aspect, we should build an ecological system respecting nature and green development. [17] We should stop losses in time, resolutely deny the unsustainable development path during the industrial Revolution, oppose development before governance, and be obsessed with immediate interests. We should not only develop clean energy such as natural gas, but also pay attention to the environmental pollution and greenhouse effect caused by natural gas. Gold and silver mountains are clear waters and green mountains. To realize the harmonious coexistence between man and nature, respect the choice of the path of different cultures to realize the value with an inclusive

attitude, and discuss and build a legal mechanism for natural gas environmental pollution control with an inclusive attitude, so as to share the benefits of green development. [18]

## **5. The Specific Construction Path of the International Cooperative Legal System**

### **5.1. Formulate a Uniform and Coordinated International Legal System for**

Natural Gas Pollution Control In order to solve the problems existing in appeals and to restrain the contracting member states and reduce the friction caused by sovereignty disputes, systematic mandatory standards and specific implementation measures can be determined through negotiation.

In this way, the Convention can be truly effective and valuable. To construct a system of international law with practical effective coercive force. Prevention precedes treatment, and prevention before pollution is less difficult than remediation after remediation, which can reduce costs and is more effective. Therefore, the prevention of treaties signed by member states should be strictly checked to prevent problems in the future. In addition, with the prediction, management, governance of dangerous activities, and the understanding of the risks brought by these activities, the fulfillment of prevention obligations is operable and necessary. In view of the preventive obligations of states parties to the Convention, the author believes that the following aspects should be paid attention to:

First, prior verification and confirmation. Within the provisions of the party, the State concerned shall not allow within its jurisdiction to engage in activities at serious risk of natural gas pollution without approval. Therefore, prior agreement and verification is an important aspect of the precautionary principle. With the collective consent of the majority of the contracting State, the activities of the contracting State can be carried out in accordance with the agreement, thus reducing the possibility of risk at the source. Second, establish a risk assessment mechanism. In the prior verification phase, it is necessary to refer to the assessment of the activity to the associated damage, especially in the area of environmental impact. According to a United Nations study, environmental impact assessment has shown the value of applying and strengthening sustainable development, which not only combines risk prevention principles with environmental damage prevention principles, but also promotes public participation. [19]

Third, improve communication. If the results of the risk assessment show the risk of significant linkage damage, the State party conducting the activity shall promptly notify the risk and assessment, and take the initiative to exchange information and negotiate solutions with relevant countries that may be affected, including submitting existing technology and information related to the evaluation basis.

Fourth, implement the principle of equality. In the process of remediation after the natural gas pollution accident, especially after the accountability and compensation, the countries and regions affected by the pollution accident should participate in the role of equal dialogue. Criticism will not help solve the problem, but will create new conflicts, especially for countries with contiguous territory, to avoid further intensifying conflicts.

### **5.2. Strengthen the Multilateral Cooperation Mechanism for Natural Gas Environmental Pollution**

It is necessary to establish a unified international legal document as the normative basis for action, and a unified and coordinated international legal system for natural gas pollution control is the guide for action and the fundamental to follow. But, to make the law "live", need to set up regional gas pollution control organization, effectively to the contracting parties in natural gas mining, transportation, storage, application of pollution supervision and management, and the responsible gas pollution treatment process and effect, in order to avoid similar to the north cream pipeline explosion accident affected countries and regions cannot get compensation and properly handled. It can be seen from the above review that, in general, there are few regional natural gas organizations, let alone institutions for natural gas pollution control. Regionally, there is an imbalance, especially the lack of gas-related cooperation institutions in Asia. We can refer to the European Community Organization, use its mature framework and concept, and then combine the characteristics of Asia, to establish the "East Asian Gas Community". It can promote natural gas technology exchanges among Asian countries and regions to prevent the occurrence of natural gas pollution. At the same time, it can also build a platform for cooperation and dialogue to clarify the responsibilities of various countries and urge the implementation of compensation responsibilities. [20] Uniform regional assessment standards shall be established, and the user countries in the community shall be required to provide relevant technical data and information required for the medium and long-term assessment of natural gas safety and pollution prevention and treatment, and shall not shirk responsibility or refuse regional cooperation in the event of natural gas pollution incidents.

The establishment of international multilateral treaty on natural gas pollution control also plays a decisive role in improving the international natural gas pollution treaty system. For example, the natural gas cooperation between China and Russia and China Fight has broad prospects, and the cooperation between various parties in natural gas transportation and trading is deepening. The matching multilateral treaties are of great significance to the responsibility sharing and interest maintenance of all parties. Therefore, the author believes that for the projects involving international natural gas joint development, the multilateral treaty for natural gas pollution risk responsibility should be updated in time to actively prevent mutual prevarication and conflict after the occurrence of pollution accidents.

Given the limitations of the International Gas Alliance, the United Nations and the WTO have greater power to prevent gas environmental pollution. Although the International Natural Gas Alliance does not focus on natural gas environmental pollution control, it is an international platform. Compared with other organizations, the advantages of the International Natural Gas Alliance cannot be ignored. It is indeed a feasible way to give full play to the advantages of the organization, enhance its voice, mobilize its enthusiasm, and help all countries and regions develop natural gas energy and deal with leakage and pollution accidents.

### 5.3. Establish an International Natural Gas Pollution Compensation Mechanism

When it is difficult for the State party to reach an agreement on the matter of compensation for governance, it may, in accordance with the principle of "special affairs", establish a compensation committee established through consultation by the State party, with representatives of each country respectively. The establishment of a compensation committee to some extent promotes communication and cooperation between States parties and plays a positive role in promoting the settlement of disputes. [21] Due to the complexity and professional characteristics of natural gas environmental pollution, internationally renowned experts, scholars and government officials of natural gas and environmental protection can be invited to participate, so as to form a joint force and promote all parties to resolve the disputes as soon as possible.

### 5.4. Establish a Dispute Settlement Mechanism for Natural Gas Pollution on the Basis of the International Environmental Legal Framework

Environmental pollution has long been a global legal issue of common concern in the international community. Under the trend of rapid development of natural gas clean energy, it is easy to ignore the international natural gas environmental pollution situation is becoming more and more serious. Considering the inherent characteristics of diffusion, complexity and mixing of natural gas pollution disputes, as well as the practical difficulties of the existing dispute settlement mechanism in the entity and even procedures, it is necessary to build a set of binding and targeted natural gas pollution dispute settlement mechanism. In the author's opinion, this mechanism can be standardized from the following three aspects.

First, on the formulation of international treaties. It is necessary to break through the limits of disputes in the United Nations Framework Convention on Climate Change, and coordinate the international legal system of the settlement of natural gas environmental pollution disputes. Can be added in the United Nations framework convention on climate change or refinement about gas environmental pollution dispute settlement mechanism, this is due to the United Nations framework convention on climate change has a considerable number of member states, and the scope of the convention and specification content more generally specific, has stronger acceptability and practical operation. Through the addition and revision of relevant laws and regulations, the compulsory application of the dispute resolution mechanism is maintained. While urging the States parties to actively fulfill their international obligations, it also provides effective relief channels and channels for the relevant regions and countries damaged by natural gas pollution.

Second, on the establishment of the dispute settlement body. International gas union as within the scope of the gas pollution control legal mechanism to build the core organization, has been the most authoritative worldwide most widely recognized international organizations, has many both gas pollution control knowledge and legal professional talents, with the possibility of solving gas safety, pollution series disputes and necessity. Specifically, the agency can set up a dispute settlement part for natural gas environmental pollution responsible for the study of relevant issues, and

specifically responsible for the handling of professional and technical pollution control disputes in the field of natural gas. In addition, it is also feasible to set up a dispute settlement committee to deal with natural gas environmental pollution. Recruitment of experts in legal, environment, science, international relations and other aspects to determine the facts and put forward feasible handling opinions.

The gas pollution caused by the North Stream pipeline leakage is not only a real disaster, but also the more valuable part of the event is that it brings us a sense of crisis and urges us to think and explore. It has fully exposed the many problems existing in the current international legal system on natural gas and the international treaties. We must abandon our narrow values and re-examine them from the perspective of a community with a shared future for mankind. How do we respond to those events that threaten the safety of all mankind? How can we coordinate the sovereignty conflicts between countries and regions? Starting with the construction of the international cooperation legal mechanism for natural gas pollution control, some new international rules may be formed, which will also bring new thinking for the construction of the legal system for international cooperation in other areas of international law.

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