

# International Governance and China's Path to Nuclear Discharge in Japan

Zhengyan Zuo<sup>1</sup>

<sup>1</sup> China Institute of Boundary and Ocean Studies, Wuhan University, China Correspondence: Zhengyan Zuo, China Institute of Boundary and Ocean Studies, Wuhan University, China.

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# Abstract

Japan's plan to discharge a huge amount of nuclear sewage into the ocean may jeopardize the overall interests of all mankind, the national interests of all countries, and the interests of individual citizens. The current international nuclear pollution control treaty system has some regulations on Japan's behavior, but there are also many shortcomings in the legal system of marine nuclear pollution control, insufficient binding force of the existing rules on the control of international nuclear pollution, difficulties in the pursuit of responsibility for marine nuclear pollution. Ineffective international cooperation in the governance of marine nuclear pollution. In this regard, under the guidance of the concept of the community of maritime destiny, China needs to comply with the existing international rules, and at the same time do a good job in the comprehensive rule of law strategy plan that combines legal, diplomatic and public opinion means.<sup>1</sup>

Keywords: Fukushima nuclear accident, nuclear pollution control, liability remedies

# 1. The Rules of Existing International Treaties on the Act of Discharging Nuclear Sewage from Fukushima

# 1.1 The Regulation of Fukushima Nuclear Wastewater Discharge Under the Law of the Sea Convention

Fukushima nuclear wastewater discharge involves the use of marine resources, once the discharge plan is implemented, the nuclear wastewater will cause pollution to the marine environment. Therefore, Japan should fulfill the obligations of States Parties under the framework of UNCLOS to protect the marine environment. UNCLOS provides for both substantive and procedural obligations relating to the protection of the marine environment. Specifically, Japan's discharge of Fukushima nuclear wastewater shall be subject to the general obligation to protect the marine environment under article 192 of UNCLOS, the obligation to prevent pollution of the marine environment under article 207, the obligation to prevent, minimize and control pollution from land-based sources under article 207, the obligation to cooperate under articles 197-201, and the obligation to monitor and evaluate the environment under articles 204-206.

#### 1.2 Regulation of Fukushima Nuclear Wastewater Discharges Under the Convention on Nuclear Safety (CNS)

The Convention on Nuclear Safety (CNS) is one of the core international conventions on nuclear safety. Nuclear safety in a broad sense includes the safety of nuclear installations, radiation safety, the safety of radioactive waste management and the safety of transportation of radioactive substances. The International Atomic Energy Agency (IAEA) defines nuclear safety as "the achievement of normal operating conditions, the prevention of accidents or the mitigation of the consequences of accidents, and the consequent protection of personnel, the

<sup>&</sup>lt;sup>1</sup> Luo Huanxin, (2021). A Comprehensive Legal Interpretation of Japan's Nuclear Sewage Discharge: A Comprehensive Analysis of Liability Provisions in International and Domestic Law. *The Japan Journal*, (04), 35-61+145+149.

public and the environment against undue radiation hazards".

By contrast, article 3 of the Convention limits its scope of application to the "safety of nuclear installations", where "nuclear installation" means "any land-based civil nuclear power plant under its jurisdiction, including facilities located on the same site and directly related to the operation of such plant, which is not subject to the provisions of the Convention". The term "nuclear facility" means "any land-based civil nuclear power plant under its jurisdiction, including facilities located on the same site and directly related to the operation of such plant, which is not subject to the provisions of the Convention". The term "nuclear facility" means "any land-based civil nuclear power plant under its jurisdiction, including facilities located on the same site and directly related to the operation of the plant, such as facilities for the storage, handling and processing of radioactive materials". As can be seen, the Convention adopts a narrow concept of nuclear safety.

The safety of radioactive wastes is beyond the scope of the safety of nuclear facilities and does not fall within the narrow definition of nuclear safety as stipulated in the Convention, and thus the discharge of nuclear wastewater from Fukushima does not fall within the scope of the Convention. Moreover, the Convention on Nuclear Safety emphasizes self-regulation of national nuclear safety regulations and has limited enforcement power.

# 1.3 Regulation of Fukushima Nuclear Wastewater Discharge Under the London Dumping Convention

Japan's direct discharge of nuclear wastewater containing radioactive substances into the sea will affect the quality of seawater use and damage seawater biological resources and marine ecosystems, and the resulting consequences will fall into the category of "Pollution of the Marine Environment" regulated by Article 1 of the London Dumping Convention, but whether the "discharge" of nuclear wastewater can be recognized as "pollution of the marine environment" under the London Dumping Convention. However, it is doubtful whether the "discharge" of nuclear wastewater can be recognized as "dumping" of nuclear wastewater can be recognized as "dumping" of nuclear wastewater can be recognized as "dumping" as "any intentional disposal of wastes or other matter in the sea from a ship, aircraft, platform or other man-made structure at sea". From the point of view of textual interpretation, pipeline discharges should hardly be covered by dumping. Moreover, since the Fukushima nuclear power plant, located in the northeastern region of Japan, is geographically located on the sea shore rather than in the sea, the "underground drainage system" of the nuclear power plant should not fall into the category of "marine artificial structures" in the above definition either. Pipeline discharges are land-based discharges, and on the premise that Fukushima nuclear wastewater is not discharged from ships, the disposal of Fukushima nuclear wastewater by land-based discharges does not fall within the scope of application of the London Dumping Convention.

# 1.4 Regulation of the Discharge of Fukushima Nuclear Wastewater Under the Joint Convention

The Joint Convention is currently the most important specialized convention on radioactive waste management. The preamble of the Convention states that "each State has the right to prohibit the entry into its territory of radioactive wastes from other States". Article 2 of the Convention defines "radioactive waste" as "radioactive material which is not expected by a Contracting Party to be used in any further way and which is controlled as radioactive waste by the regulatory authority in accordance with the legislative and regulatory framework of the Contracting Party".

Accordingly, radioactive waste should satisfy three elements: it is waste that is no longer to be utilized; it is radioactive; and it is controlled as radioactive waste by the Contracting Party in accordance with its national legislation. The central issue in determining the applicability of the Convention to the Fukushima nuclear wastewater discharges is whether or not the Fukushima nuclear wastewater is "radioactive waste" and whether or not its discharge at sea can be recognized as an act of "control".

First, the identification of radioactive waste. It is generally recognized that radioactive waste refers to waste containing radioactive substances generated during the operation of a nuclear power plant, not just nuclear waste. The cooling water from the Fukushima nuclear wastewater reactor after the accident was in direct contact with the reactor core and was contaminated with radioactive substances, and TEPCO's plan to discharge it into the ocean means that the Fukushima nuclear wastewater no longer has any value for use and has yet to be disposed of, and thus the Fukushima nuclear wastewater should be characterized as "radioactive waste". This characterization is also in line with the general understanding of the international community.

Secondly, the question of whether or not marine discharges can be recognized as "controlled" acts. The Joint Convention does not provide a specific definition of "control". However, on the basis of the expression "management and safety" in the title of the Convention and the provisions of article 20 of the Convention, which stipulates that Contracting Parties shall designate regulatory bodies to perform the functions of "management and control", it can be assumed that "management" and "control" are the same as "control" in the Convention. The meanings of "management" and "control" in the Convention are basically the same.

Fukushima's nuclear wastewater is purified and treated at the Multinuclide Removal Facility (MRF) and stored there for a long period of time. The official term used by the Government of Japan for the discharge of Fukushima nuclear wastewater into the Pacific Ocean is "discharge", while the term "release" is mostly used in the international media. The difference between the two lies in the planned and controlled nature of the act, i.e.,

the former refers to the "planned and controlled release" of radioactive material into the environment. The agency that regulates the safety of radioactive waste management in Japan is the Japan Atomic Energy Regulatory Commission (JAERC). The fact that the Agency, as the regulatory body, has licensed the Fukushima nuclear wastewater discharge plan indicates that the Government of Japan believes that the discharge of Fukushima nuclear wastewater into the sea is planned and controllable.

In conclusion, Fukushima nuclear wastewater is "radioactive waste", and discharging it into the sea is one of the manifestations of "control", and therefore, the discharge of Fukushima nuclear wastewater in Japan should be subject to the regulation of the Joint Convention.

#### 1.5 Regulation of the Discharge of Nuclear Wastewater from Fukushima Under the Notification Convention

The Notification Convention is an international treaty formulated by the International Atomic Energy Agency (IAEA) to strengthen international cooperation in the field of nuclear safety after the accident at the Chernobyl nuclear power plant. Article 1 of the Notification Convention provides that the Convention applies to "any accident in which an installation or activity of a State Party, or of persons or legal entities under its jurisdiction or control, results in or is likely to result in a release of radioactive material which has caused or is likely to result in a transboundary release of an international character which is of radiological safety significance to another State".

Together with the above analysis of the Notification Convention, it is clear that the discharge of nuclear wastewater from Fukushima into the sea can at least be recognized as a "release". Therefore, in determining whether or not the Fukushima nuclear wastewater discharge is applicable to the Notification Convention, the main focus should be on whether or not the discharge meets the following two elements: first, whether or not the Fukushima nuclear wastewater discharge was carried out directly by a State party or under its control; and second, whether or not there is a possibility that such an act could jeopardize the radiation safety of other States.

Since the Fukushima nuclear wastewater is clearly exposed to certain radiation hazards due to contamination with radioactive substances from the reactor, the applicability of the Convention depends on the condition that the discharge of Fukushima nuclear wastewater into the sea can be recognized as an act of a State.

The risk of a nuclear accident is a public risk, and the State should assume the obligation of preventing and controlling the public risk, or else it will bear international responsibility. Modern international law on the elements of international responsibility, there are "dualism", "ternary theory" and "quadratic theory" theory differences, but all of them are based on the "behavior attributable to the state". "Attributable to the State" is the main factor.

Traditional international law held that only the acts of State organs and their staff were attributable to the State, until the United Nations International Law Commission's Draft Articles on Responsibility of States for Internationally Wrongful Acts enriched the meaning of State conduct in 2001.

According to article 11 of the Draft Articles on State Responsibility, an act of an organ shall be recognized as an act of the State if it is carried out with the approval of the Government of a State in accordance with its internal law. Once the Fukushima nuclear wastewater discharge plan is implemented, the actual implementer is TEPCO, but the discharge of Fukushima nuclear wastewater by TEPCO requires the approval of the Government of Japan, and the act of discharging nuclear wastewater into the sea implemented in accordance with this shall be recognized as an act of State. Therefore, the act of discharging Fukushima nuclear wastewater should procedurally fall within the scope of application of the Notification Convention.

# 2. Problems Existing in the Existing International Nuclear Pollution Governance Order

# 2.1 The Legal System for the Governance of Marine Nuclear Pollution Shows Fragmentation

The risk of marine nuclear pollution involves the transportation of nuclear materials by sea, the construction and use of coastal nuclear power plants, armaments at sea, nuclear tests at sea and other fields, and the governance of marine nuclear pollution includes different phases such as prevention, treatment and aftercare, etc. The complexity of the governance requires that the international legal system be comprehensively and uniformly implemented throughout the entire process of nuclear pollution governance, but currently there is not a specific legal system for the nuclear energy regime, the law of the sea or environmental law. However, at present, there is no international convention specifically addressing the issue of marine nuclear pollution, whether in the international nuclear energy regime, international law of the sea or international environmental law.

Existing legal documents on marine nuclear pollution mostly appear in a sporadic and decentralized manner in different fields, and there are limitations in their application to the international issue of marine nuclear pollution. Treaties such as the Convention on the Law of the Sea stipulate the principles of marine ecological environmental protection, but there are no specialized provisions on specific matters, especially those related to the management of nuclear pollution; the provisions on specific areas of nuclear pollution management are

scattered in many treaties, and there are limitations in their application, for example, the Convention on Nuclear Safety has little to say about compensation for large-scale transboundary pollution and pollution of the high seas, and the Joint Convention applies only to civilian nuclear reactors and does not apply to the management of military areas. The Joint Convention applies only to civil nuclear reactors and not to military-related regulatory activities, nor does it apply to the regulation of spent fuel kept in reprocessing facilities; and neither the international nuclear energy regime, the international law of the sea, nor international environmental law explicitly provides for a system of compensation for ecological damage to the oceans.

The fragmentation of nuclear-related treaties in different fields has led to fragmentation among them, and there are inconsistencies between different legal documents in the case of intersection. For example, in the relationship between the Joint Convention and the IAEA safety standards, some countries believe that the safety standards are the technological basis, and therefore use the safety standards to interpret the provisions of the Joint Convention; while others believe that the Convention and the standards are independent of each other. These differences in understanding have led to a dispute over standards in the implementation of the Convention by the States Parties. The limitations in the application of the treaties and the lack of coordination among them have made it urgent for all countries in the world to have a complete and unified international legal system to regulate the new problem of marine nuclear pollution.

#### 2.2 Insufficient Binding Force of the Existing International Rules on Nuclear Pollution Control

At present, international law has not really established a universally binding international regime in the field of marine nuclear pollution. For example, it is stipulated in the Law of the Sea Convention that "dumping in the territorial sea and the exclusive economic zone shall not take place without the prior express approval of the coastal State, which shall have the right to authorize and control such dumping only after due consideration of the matter with other States likely to be adversely affected by the dumping." However, there is no specific sanction or punitive measure for Japan's nuclear wastewater discharges into the sea after it has clearly violated that provision.

This is because most of the content of important conventions such as the Convention on Nuclear Safety and the Joint Convention is of an encouraging nature, and the provisions of principle, which contain words such as "should" and "encourage", only establish the basic framework obligations for the States Parties, and do not establish clear and specific obligations. They do not establish clear, specific and legally binding obligations with regard to nuclear energy safety standards and nuclear liability and are not mandatory in the legal sense. Abstract provisions bring about consequences that are not conducive to practical operation, and thus States parties are not required to fully implement the obligations in the Convention immediately but are allowed to define and determine their corresponding domestic legislative, judicial, administrative and other standards of nuclear safety on their own, so as to gradually meet the standards of nuclear safety. Although a convention of an encouraging nature is more acceptable from the perspective of contracting, nuclear contamination itself is an international problem with extremely serious consequences, and the violation of obligations related to nuclear safety is not only a matter of national reputation, but also a matter of the living environment and lives of people all over the world. The safety standards and codes of conduct formulated by the International Atomic Energy Agency in respect of the construction and operation of nuclear energy facilities are also not mandatory and binding and can be implemented by national entities on a voluntary basis.

#### 2.3 Difficulties in Pursuing Responsibility for Marine Nuclear Pollution

From the perspective of customary law on State responsibility, the responsibility for international maritime nuclear pollution can be categorized into State responsibility and State liability. State responsibility refers to the international legal responsibility of a state subject for its internationally wrongful acts, and State liability refers to the international liability of a state subject for the consequences of transboundary damage caused by its implementation of activities not prohibited by international law. State liability is not a form of responsibility arising from the triggering of responsibility for danger, the breach of an international obligation or an internationally wrongful act but is merely a balancing mechanism for the relief of victims in the event of a conflict of rights between subjects of international law. In the light of Japan's conduct in the Fukushima nuclear accident, its decision to discharge wastewater into the sea was an act of State decision-making, and the act violated such treaty obligations as the obligation to protect the marine environment under UNCLOS, the obligation to take relevant measures to minimize the risk posed by marine discharges, and the obligation to prohibit the dumping of radioactive wastes under the Protocol to the London Convention, and so on, there is no doubt that Japan should bear State responsibility. However, since there is no clear and effective system of rules of international law on State responsibility, there is only a relatively unanimous consensus in the international community on the civil liability of the operator, and the issue of liability arising from nuclear damage relies to a large extent on civil liability. The Convention on Nuclear Safety stipulates that "States having jurisdiction over nuclear installations shall assume responsibility for nuclear safety", but there are no further specific provisions on the composition, mode, scope and ways of pursuing responsibility, so it is difficult for the international community to use the rules of international law to hold Japan accountable for the damage to the marine ecosystem caused by its nuclear discharges into the sea and to urge the Japanese government to stop the discharge of nuclear wastewater. It is difficult for the international community to use the rules of international law to hold Japan responsible for the damage to the marine ecosystem caused by its nuclear discharge into the marine ecosystem caused by its nuclear discharge into the sea, and to urge the Japanese government to stop the subsequent behavior of nuclear wastewater discharge into the sea.<sup>1</sup>

#### 2.4 Ineffective International Cooperation on Marine Nuclear Pollution Governance

In the face of emerging global problems, international organizations play a limited role due to their own limitations, and developed countries in the West have become passive due to the fact that national behavior is often more focused on national interests because of the profit-seeking nature of capital. Although the International Atomic Energy Agency (IAEA) has sponsored the signing of many treaties on nuclear pollution control, it has not been able to play an active role in the deterioration of the situation following the nuclear pollution accident in Japan. In the face of Japan's decision to discharge nuclear water into the sea, the IAEA representative who investigated the treatment of nuclear effluent from Fukushima in December 2013 said, "Measures to deal with the discharge of diluted nuclear effluent are also utilized in nuclear power facilities in other parts of the world." Before the investigation, IAEA Director General Grossi stated that "the approach chosen by Japan is in line with global practice" and that "nuclear safety is a national responsibility, and it is up to the Japanese government to decide how to address the key issue of water management," and dispatched a technical team to provide technical support on the issues of safety and transparency. The April 2, 2020 IAEA report on Japan's treatment of Fukushima nuclear wastewater concluded that Japan's "dilution and discharge into the ocean" method is technically feasible. The fact that the IAEA still made a positive assessment of Japan, knowing full well that Japan is concealing the facts and does not possess the technology to effectively treat radioactive substances in nuclear wastewater, reflects the unfairness and injustice of the organization. In addition to the IAEA's endorsement and support for Japan's decision, U.S. Secretary of State Blinken and State Department Spokesman Price issued separate articles after Japan's decision to publicly express their support and appreciation for Japan's response, and steered international mainstream public opinion through their own influence in the IAEA and the international community. The stance of the U.S. and IAEA, which did not follow objective investigation and scientific argumentation, is to safeguard political interests, disregarding the fact that nuclear effluent damages the global ecosystem and undermining the credibility and prestige of international authoritative organizations in the field of nuclear energy.

#### 3. Connotation of the Concept of a Community of Maritime Destiny in International Law

The community of maritime destiny, as the extended development of the community of human destiny in the field of the ocean, has rich connotations. In response to a series of follow-up reactions triggered by the discharge of nuclear sewage in Japan, our country can take the existing community of maritime destiny as a guide to the next step of international nuclear pollution control activities. Focusing on the four dimensions of marine security, marine interests, marine ecology and the maintenance of marine sovereignty, the concept of the community of maritime destiny has three connotations in the field of marine nuclear pollution control: a common and comprehensive view of the ocean as a whole, a new type of peaceful and safe view of marine security, and a view of marine development of international cooperation of interconnection and interconnectivity.<sup>2</sup>

# 3.1 Ideology of Marine Nuclear Pollution Governance Led by Holistic Viewpoint

Led by the overall view of the ocean, the governance of marine nuclear pollution needs to form a community, i.e., international subjects, non-state subjects based on the common interests of the ocean, the governance of marine nuclear pollution under the common needs of the marine field to form a unified response collective. The management of marine nuclear pollution is a complex, international social project. The connotation of the holistic view of the oceans puts forward the need for a change in the thinking on the governance of marine nuclear pollution. First, the management of marine nuclear pollution is not limited to the management of national or regional territorial sea areas that are or may be contaminated, but also to the high seas, deep oceans, polar regions and other marine areas that also need to be managed for nuclear pollution. The division of the ocean into zones may be conducive to the division of jurisdiction to reduce the pressure of governance, but the mode of governance of ocean zones is obviously insufficient to deal with the global, long-term and persistent

<sup>&</sup>lt;sup>1</sup> Luo Huanxin, (2021). Comprehensive Legal Interpretation of Japan's Nuclear Wastewater Discharge — A Comprehensive Analysis of the Provisions on Liability Relief in International and Domestic Law. *Japan Journal*, (04), 35-61+145+149.

<sup>&</sup>lt;sup>2</sup> Sun Jin, (2022). Research on International Governance System of Marine Nuclear Pollution under the Perspective of Ocean Destiny Community. Shenyang University of Technology. DOI:10.27322/d.cnki.gsgyu.2022.001223.

problem of marine nuclear pollution. Secondly, the overall view of the ocean represents that the impact of the ocean problem is global, the overall interests of the ocean are shared, the overall responsibility for ocean governance is shared, the governance of marine nuclear pollution needs to be jointly discussed by the international community, and all aspects and stages of the governance of marine nuclear pollution are an integral whole, which requires the joint participation of the whole world.

#### 3.2 Maintaining the Environment for the Governance of Marine Nuclear Pollution with the Concept of Safety

The new concept of maritime security reflects China's pursuit of an international security order in the new pattern of the world's oceans and fits the common aspiration of the world's people to build a marine environment of lasting peace and universal security. Maintaining peace, tranquility and good order in the oceans is the proper meaning of the concept of a community of maritime destiny. The new concept of maritime security focuses on non-traditional maritime security issues. On the one hand, in recent years, the development of international law has been sluggish and underpowered, and the international governance system is difficult to cope with new types of global problems such as marine nuclear pollution, which requires that the international community begin to pay attention to the impact of marine environmental pollution and the crisis of marine species brought about by the growing problem of marine nuclear pollution, and to carry out timely and effective control before it evolves into a catastrophic problem that cannot be remedied. On the other hand, it is important to ensure peace and security in the oceans and seas. On the other hand, the prerequisite for ensuring peace and security in the oceans and seas is the need for a unified and comprehensive international legal system to safeguard them, detailed and complete governance standards to apply, and sound and comprehensive preventive, emergency response, communication and monitoring mechanisms to deal with the occurrence of problems. The freedom of the sea enjoyed by a country is not the privilege of one country, and while exercising its rights, it is necessary to protect the security of other countries and the international sea, rationally handle maritime disputes, properly manage and control maritime security crises, and build a generalized security environment for the security of the country's homeland and the security of the international sea as a whole.

# 3.3 Promoting Cooperation in the Management of Marine Nuclear Pollution with the Concept of International Cooperation and Development

The common interests of the ocean mean that in the face of global ocean governance problems such as marine environmental pollution and marine ecological damage, individual countries or international organizations can no longer respond effectively on their own, and it is necessary for countries to abandon the zero-sum game and strengthen cooperation. The theory of global ocean governance has been influenced by a combination of factors, including the deepening of globalization, the frequent occurrence of global ocean problems and the development of global governance theory, and has evolved from a disorderly state of power competition to an ocean order centered on rules and mechanisms. Based on the mobility and internationality of the oceans themselves, the practice of global ocean governance predates global governance in a general and theoretical sense. At the current stage of global governance, in terms of the main body of governance, the state and intergovernmental international organizations are still the most important main body of governance, especially in the field of marine environmental protection, conservation of marine resources and other areas reflecting the common interests of mankind, intergovernmental international organizations play an increasingly important role; in terms of the object of governance, it mainly refers to global problems in the field of the ocean that have affected or will affect the interests of all mankind, broken down into global marine pollution, marine ecological imbalance, piracy and the impact of global marine pollution. The object of governance mainly refers to global problems in the ocean area that have affected or will affect the interests of all mankind, broken down into global marine pollution, marine ecological imbalance, piracy and maritime terrorism, as well as maritime disputes. At present, the global oceans are facing ecological and environmental crises related to nuclear energy, and although a series of treaties, such as the Convention on the Law of the Sea and the Convention on Nuclear Safety, have established basic legal principles for the governance of nuclear pollution in the global oceans, they are unable to solve all the new problems that have emerged in the course of international development. Therefore, it is necessary to rationally choose effective governance programs based on advanced science.

The Community of Ocean Destiny puts forward a new concept of international cooperation and development, believing that international problems should be jointly participated in by all actors and resolved through dialogue and friendly consultation on an equal footing, and promoting the participation of all countries in the world in global ocean governance with the value goal of win-win cooperation. The concept of international cooperation and development of the community of maritime destiny is to harmonize the interests and values of the oceans among different actors in the face of conflicting interests and conflicting values of various international subjects. General Secretary Xi Jinping emphasized that "all countries should adhere to equal consultation, improve crisis communication mechanisms, strengthen regional security cooperation, and promote proper resolution of

#### sea-related differences."1

As the international community begins to realize the necessity of the global governance mechanism for the oceans in the new era, the existing international ocean governance mechanism needs to be innovated and developed to play the role of diversified subjects from states, international organizations, non-governmental organizations to individuals in order to achieve effective governance of the oceans.

The concept of international cooperation and development under the community of maritime destiny requires the strengthening of international cooperation. The existing principles and rules of international law relating to environmental protection emphasize international cooperation, but there is currently a lack of political will to participate in addressing the issue of marine nuclear pollution, and there are still some countries that have adopted a negative attitude towards environmental challenges such as nuclear pollution control and biodiversity conservation. Therefore, international law needs to continue to strengthen the rules and mechanisms of international cooperation in order to provide a more effective institutional guarantee for addressing new global environmental issues such as marine nuclear pollution.

The international legal system is a platform for the establishment of a community of destiny for the oceans, and the concept of international cooperation for development, which includes the connotation of joint consultation and joint construction, is a deepening of the connotation of "cooperation" in the international legal system. As one of the major global issues facing the world, the concept of international cooperation and development requires all countries in the world to further consult on the distribution of responsibilities and rights and obligations for nuclear pollution, jointly build an international cooperation platform, construct a multi-level system for the governance of marine nuclear pollution, and promote the establishment of a mechanism for oceanic cooperation based on joint consultation and joint construction.

# 3.4 Promoting Cooperation in the Governance of Marine Nuclear Pollution Through International Cooperation and Development

The common interests of the oceans mean that in the face of global ocean governance problems such as marine environmental pollution and marine ecological damage, individual countries or international organizations are no longer able to respond effectively on their own, and it is necessary for countries to abandon the zero-sum game and strengthen cooperation. The theory of global ocean governance has been influenced by a combination of factors, including the deepening of globalization, the frequent occurrence of global ocean problems and the development of global governance theory, and has evolved from a disorderly state of power competition to an ocean order centered on rules and mechanisms. Based on the mobility and internationality of the oceans themselves, the practice of global ocean governance predates global governance in a general and theoretical sense. At the current stage of global governance, in terms of the main body of governance, the state and intergovernmental international organizations are still the most important main body of governance, especially in the field of marine environmental protection, conservation of marine resources and other areas reflecting the common interests of mankind, intergovernmental international organizations play an increasingly important role; in terms of the object of governance, it mainly refers to global problems in the field of the ocean that have affected or will affect the interests of all mankind, broken down into global marine pollution, marine ecological imbalance, piracy and the impact of global marine pollution. The object of governance mainly refers to global problems in the ocean area that have affected or will affect the interests of all mankind, broken down into global marine pollution, marine ecological imbalance, piracy and maritime terrorism, as well as maritime disputes. At present, the global oceans are facing ecological and environmental crises related to nuclear energy, and although a series of treaties, such as the Convention on the Law of the Sea and the Convention on Nuclear Safety, have established basic legal principles for the governance of nuclear pollution in the global oceans, they are unable to solve all the new problems that have emerged in the course of international development. Therefore, it is necessary to rationally choose effective governance programs based on advanced science.

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<sup>&</sup>lt;sup>1</sup> Zhang Weibin, Zhu Yongqian, (2020). The construction of global marine ecological environment governance system under the perspective of ocean destiny community. *Pacific Journal*, 28(05), 92-104. DOI:10.14015/j.cnki.1004-8049.2020.05.008.

sea-related differences." <sup>1</sup>As the international community begins to realize the necessity of the global governance mechanism for the oceans in the new era, the existing international ocean governance mechanism needs to be innovated and developed to play the role of diversified subjects from states, international organizations, non-governmental organizations to individuals in order to achieve effective governance of the oceans.

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In summary, in the international governance of marine nuclear pollution, the pursuit of new values and the direction of development of the community of maritime destiny have contributed to the importance attached by the international legal system to a universally safe world and green and sustainable development, which have been reflected in the provisions of the newly revised treaty; the power of action provided by the community of maritime destiny has prompted all countries of the world to consult peacefully and cooperate in the governance of nuclear pollution, so that the existing system of international law can be realized and implemented in all aspects of nuclear pollution control. This will enable the existing international law system to be implemented in all aspects of nuclear pollution control.<sup>2</sup>

#### 4. The Future of Marine Nuclear Pollution Governance of the Response to the Proposal

#### 4.1 Establishment of Risk Prevention Preparation Measures

Recently, the General Administration of Customs has issued a decision to fully suspend the import of Japanese aquatic products, combined with the current situation, China should be launched as soon as possible on the Japanese nuclear wastewater discharged into the sea risk prevention and danger monitoring, and the development of relevant emergency plans. According to the provisions of the Transboundary Emergency Management Regulations on the Radiological Effects of Nuclear Accidents, monitoring and protection should be the mainstay of monitoring the level of contamination in the sea area for nuclear accidents outside the country. Since the contamination is mainly from the sea, customs and inspection and quarantine agencies should step up their monitoring efforts to monitor the level of radioactive contamination of imported seafood, ships and people coming from the contaminated area, and so on. By summarizing and utilizing the various monitoring data mentioned above and combining them with real-time developments and relevant information from outside the country, the development of the situation will be assessed on an ongoing basis, and the development trend will be predicted as accurately as possible.<sup>3</sup>

# 4.2 Adopting the Means of Combining Diplomatic Negotiation and Public Opinion Pressure

In the case of the Japanese side's blatant violation of many international treaties, the Japanese side's behavior of discharging nuclear wastewater can be restricted by a combination of diplomatic intervention and public opinion measures. The Deputy Permanent Representative of China to the United Nations, Mr. Geng Shuang, made the following statement: "If Japan's nuclear-contaminated water is safe, there is no need to discharge it into the sea,

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<sup>&</sup>lt;sup>2</sup> Jing Fangyu, (2021). China's Path to Trans-Regional Marine Pollution Governance under the Concept of Community of Ocean Destiny. Xiamen University. DOI:10.27424/d.cnki.gxmdu.2021.002758.

<sup>&</sup>lt;sup>3</sup> Ma Zhongfa, Zheng Changqi, (2022). International Law Response to Japan's Decision on Nuclear Sewage into the Sea. *Journal of Guangxi Institute of Finance and Economics*, 35(01), 124-139.

and if it is not safe, there is even less reason to discharge it into the sea. The representative of Japan has repeatedly cited the assessment report of the International Atomic Energy Agency (IAEA) in his statement and in the recent pronouncements of the Japanese Government. Representatives should be reminded that IAEA Director General Grossi has repeatedly emphasized at the forefront of the report and in the relevant press conferences that discharging into the sea is a national decision of the Government of Japan and that the report of the Agency is neither a recommendation nor an endorsement of this policy, and that the report of the International Atomic Energy Agency does not constitute the IAEA report is not a "passport" for the Japanese side to push forward the discharge of nuclear contaminated water into the sea, and the report cannot give the Japanese side the "legitimacy" and "legality" of discharging water into the sea, nor can it absolve the Japanese side of its moral responsibility and obligations under international law. Nor can it absolve the Japanese side of its moral and international law obligations."

Therefore, in the face of the Japanese side's blatant violation of international treaties and its attempt to use the IAEA report as an endorsement for discharging nuclear wastewater into the sea, we should intervene in the long term through diplomatic channels and public opinion and force the Japanese government to make amends for the violation of the law by means of comprehensive pressure.

# 4.3 Seek Judicial Remedies such as Litigation and Arbitration

In the face of Japan's nuclear sewage discharge behavior, the establishment of risk prevention and preparedness measures, combined with the relevant diplomatic channels and public opinion channels to pressure the Japanese side to respond to the two measures mentioned above at the same time, the judicial level should also do a good job in response to the relevant preparations.

## 1) Seek judicial relief from the International Tribunal for the Law of the Sea (ITLOS)

The International Tribunal for the Law of the Sea (ITLOS) is a special tribunal established under the United Nations Convention on the Law of the Sea (tribunal is different from the ordinary courtroom), an independent judicial organ, has existed since the entry into force of the United Nations Convention on the Law of the Sea on November 16, 1994, aimed at adjudicating disputes arising out of the implementation (interpretation and application) of the Convention, the Tribunal has set up a Chamber of Summary Procedure, a Chamber for Fisheries Disputes and a Chamber for Environmental Disputes. The Tribunal has established a Chamber for Summary Procedure, a Chamber for Fisheries Disputes, a Chamber for Marine Environment Disputes and, at the request of the parties, a Chamber for Special Disputes.

In accordance with the Convention, the jurisdiction of the Tribunal extends to: (i) any dispute concerning the interpretation or application of the Convention; (ii) any dispute concerning the interpretation or application of other international agreements related to the purposes of the Convention; and (iii) if all States Parties to a treaty or convention in force in relation to the subject matter of the Convention so agree, disputes concerning the interpretation or application of the treaty or convention may also be submitted to the Tribunal. In addition, arbitral awards may be submitted to the Tribunal. China and Japan, as States Parties to the Convention, are supposed to be bound by the agreement of the Convention, and China may initiate arbitration against Japan in respect of its rights and interests in the marine environment in accordance with the provisions of the relevant articles of the Convention.

# 2) Seek judicial relief from the International Court of Justice (ICJ)

The International Court of Justice, the Hague International Court of Justice (The Hague International Court of Justice), the United Nations International Trial Court, is one of the six main organs of the United Nations and the most important judicial organs, is the civil judicial adjudicative body between the governments of the sovereign states, according to the Charter of the United Nations was established in June 1945, the main function of the International Court of Justice is to adjudicate on the United Nations member states. The main function of the International Court of Justice is to render legally binding judgments on cases submitted by States Members of the United Nations. Article 36 of the Statute of the International Court of Justice defines the scope of jurisdiction, i.e., the Court may take jurisdiction over a range of cases submitted by parties in accordance with international law or international conventions. Accordingly, both parties responsible for and victims of environmental pollution was also within the Court's jurisdiction. As a result of the increasing number of disputes arising from transboundary environmental pollution damage, the International Court of Justice has established a special chamber for environmental affairs. As a result, our country can file a lawsuit to the International Court of Justice for the damage caused to our marine environment by the discharge of Japanese

#### nuclear sewage.1

3) Seeking Relief from Public Interest Litigation on Marine Pollution

While the international level seeks judicial relief from the International Tribunal for the Law of the Sea and the International Court of Justice, the domestic level should also actively seek judicial relief through public interest litigation on marine pollution. Japan's nuclear sewage continuously discharged into the Pacific Ocean, will inevitably affect the marine ecological environment of China's waters, the ecology of China's marine areas has a serious impact on the damage to the public interest of our society. Marine environmental public interest litigation aimed at China's "sea" factors for the protection of the public interest, to resolve disputes involving the public interest of marine environmental pollution, compared with private litigation, the purpose of its litigation is to safeguard the public interest, different from the traditional sense of the litigation model.

It is worth mentioning that, at present, China's marine pollution public interest litigation needs to be further improved, as a response to the future due to the Japanese discharge of nuclear sewage behavior may have an adverse impact on our waters: a standardized public interest litigation claims subject to review. In the nuclear sewage discharge into the sea pollution public welfare litigation, the need for relief is the public interest in the marine environment. In the review of the qualification of the main body of the lawsuit, the principle of leniency should be adopted, and in the case of actual damage or possible damage to the public interest in the marine environment, the statutory state competent authorities or relevant public interest organizations should be allowed to file lawsuits, and do not overemphasize whether the main body of the claim and the environmental public interest has a direct interest; secondly, prudent examination of the plaintiff's litigation dispositive power in public interest litigation of nuclear sewage discharged into the sea pollution, should be focused on Concerned about the plaintiff's disposition of its litigation rights, to find out whether the disposition may lead to damage to the public interest, especially for the plaintiff's withdrawal and settlement, more should be strictly examined, so as to avoid the plaintiff damage to the public interest of the legal consequences; Third, should pay attention to play a role in the environmental public welfare organizations, environmental public welfare organizations is to promote the public interest and protection of the environment for the purpose of the nonprofit organization, which has the characteristics of professionalism, the current Environmental Protection Law of the People's Republic of China, the Civil Procedure Law of the People's Republic of China and relevant judicial interpretations of environmental public interest litigation have given environmental public interest organizations the qualification to be the main body of the lawsuit, but the current law in the field of marine environmental protection has not yet given the qualification to be the main body of the lawsuit to environmental public interest organizations and the latest version of the Marine Environment Law (the "Marine Environment Law") has not yet been adopted by the government of the People's Republic of China. A version of the "Marine Environment Law" (draft for comments) for the main body of the lawsuit has not yet made changes, from the lower law and the upper law to maintain consistency and for more efficient and flexible promotion of marine ecological environment protection point of view, hereby call for the general law with the articulation of the field of marine environmental protection to give environmental public interest organizations in the field of the main body of the lawsuit to cope with the new situation of the new situation of marine environmental protection.

With regard to Japan's nuclear sewage discharge behavior, China should take risk prevention measures to actively respond to the Japanese side's behavior through long-term and sustained diplomatic channels and public opinion channels to pressure the Japanese side to be restricted, and at the same time, should also be ready to respond to judicial remedies, and if necessary, to take judicial means of self-protection.

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