

Allegation Letter to United Nations (‘UN’) Special Rapporteurs Mr. Marcos A. Orellana, on toxics and human rights, Mr. David Boyd on human rights and the environment, and Mr. Michael Fakhri on Right to Food Regarding the Management of Radioactively Contaminated Water at the Fukushima Daiichi Nuclear Power Station by the Government of Japan and Tokyo Electric Power Holdings Company.

August 9, 2023

Dear respectful UN Special Rapporteurs Mr. Marcos A. Orellana, Mr. David Boyd, and Mr. Michael Fakhri

We respectfully submit this allegation letter concerning the urgency of the unjustified management of radioactively contaminated wastewater at the Fukushima Daiichi Nuclear Power Station(‘FDNPS’) by the Government of Japan and Tokyo Electric Power Holdings Company(‘TEPCO’).

The dumping of the radioactive wastewater into marine environment violates fundamental human rights convention and the scientific safety standard and principle. The following allegation letter documents these violations based upon a review of available records of responsible institution including the Government of Japan and TEPCO.

We stand ready to provide any assistance needed to proceed and greatly appreciate your time and attention.

Most respectfully,

Name:

Position:

1. Summary

Despite of the concerns of the international community, the activity of dumping¹ of radioactively contaminated wastewater at the FDNPS into the marine environment by TEPCO is imminent under the approval of the Japan Nuclear Regulation Authority ('NRA'). It poses the serious risks to the marine environment and the enjoyment of human rights of affected populations including future generation.

The dumping of the radiological wastewater that has been formed from the meltdown disaster at the nuclear power plant into marine environment of pre-existing radioactive risks is unprecedented in human history. Alternatives shall be considered and pursued actively according to safety standards. For the radiological environmental impact assessment('REIA') of the dumping, all the basic factors including long-term marine ecosystem impact shall be fully considered.

However, the revised REIA report issued by the TEPCO in 2023 made no analysis of the pre-existing radioactive risks. The report fails to apply the justification safety requirements of the International Atomic Energy Agency ('IAEA'). The Government of Japan also fails to manage the approval process in accordance with the standards and principles for the protection of human health and marine environment. For the future generation, the imminent activity of dumping shall be stopped immediately.

2. Submission of Information

The Democratic Party of the Republic of Korea

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¹ London Protocol, 1996. Protocol to the convention on the prevention of marine pollution by dumping of wastes and other matter defines "Dumping" as any deliberate disposal into the sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea (Article (4))

3. Victims

People in Pacific coastal states

4. Perpetrators & related entities

1) TEPCO

- 2) The Government of Japan

CONTENT OF PETITION:

I. Case Background

After the 2011 East Japan Earthquake caused the FDNPS disastrous accident where fuels in Units 1,2 and 3 melted down, the contaminated underground water at the FDNPS, which is highly radioactive, has been leaked into the marine environment.

In April 2022, the Government of Japan announced <Basic Plan on Handling of APLS Treated Water at the FDNPS> in order to dump the contaminated water into the marine environment.

Recently, on 7 July, 2023, the NRA issued the Certificate of Completion for the Pre-Use Inspections of ALPS Treated Water Dilution/Discharge Facility at the FDNPS.²

The stored contaminated wastewater includes tritium and carbon-14, neither of which be removed by the Advanced Liquid Processing System ('ALPS'), and a plenty of radioactive materials that are not produced at the ordinary nuclear power plant.

According to the revised REIA report issued by the TEPCO in 2023, ocean dumping is

² https://www.tepco.co.jp/en/hd/newsroom/announcements/archives/2023/20230707_01.html

supposed to be carried out for 30 years. There is uncertainty and risk that the radioactive materials can accumulate and the concentration would increase as they move all the way up through the marine food web system, resulting in possible exposure impacts on humans.

II. Issues Concerned

Right to Clean Environment

The UN Rio Declaration on Environment and Development 1992 stipulates that States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. This is reflected in the United Nations Convention on the Law of the Sea. And the human right to a clean, healthy and sustainable environment resolution adopted by the Human Rights Council in 2021 recognizes the right to a clean, healthy and sustainable environment as a human right.

Pre-existing Radiological Risk

Under the TEPCO's REIA report published in February 2023, the amount of radioactive contaminated water generated by groundwater leaching from FDNPS was from about 540 m³/day as of May 2014 to about 130 m³/day as of 2021³.

The TEPCO's 2023 REIA report writes: "*Currently, by multilayered countermeasures, we [TEPCO] manage to prevent leakage of contaminated water out of the building.*"⁴ This shows that there has been a steady ocean leakage of uncontrolled underground or other radioactive contaminated water. Before TEPCO's planned dumping, pre-existing radioactive risk exists.

For existing exposure situations, under the General Safety Guide (No. GSG-8) of the IAEA, exposures can be reduced only by either protective action or remedial action on the source.

According to the report of OECD, it is recognized that it is very difficult to justify discharge of liquids into the environment after an accident, even if such discharges would be within

³ TEPCO, Radiological Environmental Impact Assessment Report Regarding the Discharge of ALPS Treated Water into the Sea (Construction stage / Revised version) February 2023. p. 1
<https://www.tepco.co.jp/en/hd/newsroom/press/archives/2023/pdf/230220e0101.pdf>

⁴ Ibid.

operational discharged limits.⁵

However; the TEPCO's additional dumping of radioactive materials does not consist of either protective actions or remedial action in IAEA safety guide. Further, in the revised 2023 REIA report issued by TEPCO, there is not any analysis of the pre-existing radiation risks. No baseline radiological risks assessed scientifically.

Justification Principle

Justification is a fundamental principle for the international standards of radiation protection. For planned exposure situations, each party with responsibilities for protection and safety shall ensure that **no practice is undertaken unless it is justified**. Also, it considers that activities giving rise to radiation risks must yield an overall benefit (IAEA, GSR Part 3)

TEPCO does not need to dump the contaminated wastewater. Different alternative as well as some other better ways of treating the wastewater are available.

But None of them was actually looked into. TEPCO has not taken into account any best technology internationally available in the field of environmental impact study as well as handling of the radiologically contaminated equipment from a nuclear plant decommissioning.

TEPCO can store the contaminated water longer to allow the tritium to reach its half-life. It is said that finding the land or space available to store is difficult. But it is never impossible. Storing would allow tritium time to decay (with a half-life of 12.5 years) and thus reduce the inventory of stored radioactive waste.

Under the 2020 report of the 'subcommittee on handling of the ALPS treated water' of the NRA, the dumping approach is the cheapest method compared with other alternatives including (i) geosphere injection, (ii) vapor release, (iii) hydrogen release and (iv) underground burial. Dumping approach costs only 3.4 billion Yen, as compared with the 243.1 billion Yen of underground burial. ⁶ With only its monetary benefit into consideration, TEPCO chooses ocean dumping at the sacrifice of the public health and life. TEPCO violates the justification principle.

⁵ OECD(2016), Management of Radioactive Waste after a Nuclear Power Plant Accident (<https://www.oecd-nea.org/upload/docs/application/pdf/2019-12/7305-mgmt-rwm-npp-2016.pdf>)

⁶ https://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20200210_alps.pdf

The ALPS

For this dumping case, even IAEA itself fails to apply its basic safety standard to FDNPS. In order to verify the safety of the radioactive wastewater released into the ocean, the performance capability of the ALPS must be ensured in the first place. However, in July, 2023, the IAEA acknowledges that “Under the IAEA’s safety review, the performance of the ALPS treatment process was not a relevant factor for assessing conformity with the relevant international safety standards.”⁷ The ALPS’ adsorption capability, decontamination factor, operation procedures and pre-operational tests is not verified. In addition, detailed prescription of manuals for retreatment to the ALPS in the case of wastewater which does not meet the discharge criteria remain still not informed and unclear.

REIA

The UN Convention on the Law of the Sea provides the environmental impact assessment (‘EIA’) obligation. The ICJ held that conducting transboundary EIA is considered a requirement under general international law. The EIA should take account of the likely adverse impact on the environment.

The dumping of millions of tons of radioactive wastewater results or is likely to result in such deleterious impacts as harm to living resources and marine life, hazards to human health. The analysis of an accumulated impact of leaked and/or released radioactive materials on the marine ecosystem with a standard set of indicators is essential to implement a comprehensive radiation monitoring plan (‘CRMP’) at the REIA.

However, TEPCO merely monitors and evaluates a short-term discharge plan of the Fukushima wastewater within a limited area. It seems as a discharge plan review, not an environmental impact study. CRMP is not included in the environmental radiation impact study.

‘Cesium Black Rockfish’

In June of 2023, it is reported that a black rockfish of which cesium concentration was 180

⁷ Para. II. 3. in the IEAS’s written reply letter to the DPK delivered on 9 July, 2023

times over the safety standard was caught in the inner coast of the FDNPS.⁸ It was not the first case of the discovery of fish exceeding safety radiation standards. Those cases are the evidences of the risks of the long-term radioactive accumulation and concentration in the marine ecosystem and marine organisms through the food web system.

Further, the Fukushima wastewater ocean dumping plan is closely linked to the decommissioning plan of the FDNPS, considering the constant generation of wastewater from the plant. Although TEPCO presumes the spanning of 30 years, it is clear and obvious that it takes longer than 30 years.

However, the REIA report of the TEPCO does not consider those evidence of the long-term accumulation and concentration. The report merely monitors and evaluates a short-term discharge plan of the Fukushima wastewater within a limited area. It is just a kind of the discharge plan review, not a comprehensive environmental impact study.

Transboundary Environmental Impact

The FDNPS area is the site of level 7 major accident. The site is severe contaminated by various radionuclides and radioactive wastewater includes several radionuclides which are not discharged from the ordinary nuclear power plant. The environmental impact assessment should be source-specific and site-specific. It is expected that the impact would be environmentally on any other states crossing ocean borders. Japan must assess the potential impacts of any activities which may lead to the release of radioactive water on the transboundary marine environment. And the result must be communicated with potentially affected States. One of the countries is certainly the Republic of Korea. Actual radionuclides remaining in the original contaminated tanks and the impact of their release into the marine environment, including in sediments and marine organisms, both in areas beyond national jurisdiction and in Korean waters shall be assessed according to scientific principle. However, the REIA report of the TEPCO has no specific transboundary study.

⁸ Analysis Results of Fish < Sampled from the Port Area of the Fukushima Daiichi Nuclear Power Station > (Preliminary Reports) dated June 5, 2023.

https://www.tepco.co.jp/en/hd/decommission/data/analysis/pdf/2023/fish01_230605-e.pdf

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of complete scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. Nevertheless, the REIA report of TEPCO neglects the precautionary principle. For example, the data level '7.9E-6' of Cs-137 concentration in the seawater data in the report shows the report uses data that is unrealistically far below from the level in the actual Fukushima coast sea.⁹

Access to Information

In 1987, the Government of Japan signed the Convention on Early Notification of a Nuclear Accident. It has been established by the Convention that in the event of a nuclear accident which may have transboundary impacts, States have an obligation under international law to inform them at an early stage. Nuclear accident defined as the release of radioactive material or transboundary releases that could be of radiological safety significance for another State includes the dumping of the radiological wastewater.

The notification should be appropriate in terms of the nature of the accident, the time of occurrence, and available information on minimizing the radiation consequences to the affected countries.

However, under the 2023 records of the Korean Atomic Power Safety Authority, the Government of Japan did not provide the full radioactive information on the deep sea water and sediment, let alone the sample of original contaminated wastewater before treatment of the ALPS. And for the whole process of the decision, it was made by the government of Japan only without the agreement of the republic of Korea. The dumping of radioactive wastewater without full consultation with the bordering countries and full information will violate the Convention on Early Notification of Nuclear Accidents.

III. Conclusion

The UN community calls upon States and business enterprises to ensure a clean, healthy and sustainable environment for all. Also, international society recognizes the right of everyone to the enjoyment of the highest attainable standard of physical and mental health at the International Covenant on Economic, Social and Cultural Rights.

⁹ TEPCO. Op cit. p.102

<https://www.tepco.co.jp/en/hd/newsroom/press/archives/2023/pdf/230220e0101.pdf>

However, the TEPCO's unprecedented activity of dumping from the meltdown accident nuclear power station site into the marine environment of pre-existing radioactive risk by TEPCO pose an obstacle to international commitments.

Even according to the REIA report of TEPCO, the ALPS facilities fail to remove tritium and carbon-14. Other radioactive materials produced from the nuclear accident are not totally removed. Further, dumping will be made at least 30 years.

For the future generation and marine ecosystem, the activity of ocean dumping shall be stopped immediately. International community including UN Human Rights Council shall engage and cooperate in order to protect the health our children and clean ocean from the ocean dumping of the radioactively contaminated wastewater.