The Permanent Mission of Japan to the International Organizations in Geneva presents its compliments to the Office of the High Commissioner for Human Rights in Geneva and, with reference to the letter Ref. AL JPN 1/2021, dated 13 January 2021, has the honour to transmit herewith the reply from the Government of Japan to the Joint Communication sent by Mr. Marcos A. ORELLANA, Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Mr. David R. BOYD, Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Mr. Michael FAKHRI, Special Rapporteur on the right to food, Mr. Clement Nyaletsossi VOULE, Special Rapporteur on the rights to freedom of peaceful assembly and of association, Ms. Tlaleng MOFOKENG, Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Ms. Cecilia JIMENEZ-DAMARY, Special Rapporteur on the human rights of internally displaced persons, and Mr. Pedro ARROJO-AGUDO, Special Rapporteur on the human rights to safe drinking water and sanitation.

The Permanent Mission of Japan to the International Organizations in Geneva avails itself of this opportunity to renew to the Office of the High Commissioner for Human Rights in Geneva the assurances of its highest consideration.

Geneva, 11 March 2021

Enclosure mentioned
Response to the Joint Communication from Special Rapporteurs from the Government of Japan

11 March 2021

Referring to the information request dated 13 January 2021 sent by the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes; the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment; the Special Rapporteur on the right to food; the Special Rapporteur on the rights to freedom of peaceful assembly and of association; the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health; the Special Rapporteur on the human rights of internally displaced persons and the Special Rapporteur on the human rights to safe drinking water and sanitation, the Government of Japan (GOJ) takes note that the Special Rapporteurs are interested in measures taken on TEPCO's Fukushima Daiichi Nuclear Power Station (FDNPS). The GOJ believes that this communication is a good opportunity to provide the Special Rapporteurs with an update on the topic and to promote their accurate understanding on it. In the following response, the GOJ explains its position on the topic followed by answers to the questions posed by the Special Rapporteurs.

A. The GOJ's Position

a. Regarding environmental and human rights concerns

1. The Government of Japan (GOJ) has taken and continues to take necessary measures to:
   - protect the environment, human rights, and public health in the decommissioning of TEPCO’s FDNPS;
   - maintain and enhance the living environment in areas where environmental regeneration and evacuation orders have been lifted;
   - support long-term evacuees;
   - support the reconstruction and revitalization of difficult-to-return areas, the construction of industrial infrastructure in Fukushima Prefecture, and the self-reliance of disaster-affected businesses;
   - dispel adverse impacts on reputation, and;
   - ensure confidence in food safety by carefully monitoring agricultural, forestry and fishery products.

2. The issue here is the handling of the water, treated by systems such as Advanced Liquid Processing System (ALPS), not the handling of contaminated water itself generated in the plant buildings. As the GOJ explained in its previous response dated 12 June 2020, there is an important distinction between the water produced when cooling water mixes with groundwater and rainwater which seeps into the buildings (which may be called “contaminated water”), and the water that results when that
contaminated water has been through various purification devices (which may be called “treated water”). While the GOJ recognizes other significant misunderstanding on facts in your description (e.g. performance of re-purification of the water\textsuperscript{1}, radiation impact of the tritium\textsuperscript{2}, and for other points, please refer to our following response), it will not repeat what it stated in the previous response.

3. In regard to water that has been treated, the GOJ has not reached a conclusion on the method of the handling or the schedule of such decision, as of 11 March 2021. Having fully taken into account the potential impact on the environment as well as on the health and safety of people, the GOJ will never approve discharge of the contaminated water, without any treatment, into the environment. If the treated water (not the contaminated water) were to be discharged into the environment, such discharge would be implemented only when the relevant national regulatory standards are met. Accordingly, TEPCO would purify/re-purify the water until nuclides other than tritium would meet the regulatory standards by using systems such as ALPS, and thereafter sufficiently dilute the water. It means that the concentration of tritium and all other nuclides will be far below the regulatory standard value, set based on international standards.

4. It is noted in this context that the report of the Subcommittee on Handling of the ALPS treated water, an advisory Committee to the GOJ, published on 10 February, 2020, concludes, by using the method adopted in the UNSCEAR, that the radiological impact on the public from vapor release or discharge into the sea would be no more than one-thousandth of the exposure impact of natural exposure (2.1 mSv/year according to “Living Environment Radiation,” Nuclear Safety Research Association, 2011), even if the total amount of the water stored in the tanks at this moment (including 860 TBq of Tritium and other radionuclides) were to be discharged in a single year. Even so, such a discharge, all in one year, is not even remotely contemplated. In the event the discharge were to be implemented over decades, the annual impact would be a small fraction of that amount. It

\textsuperscript{1} In the case that the treated water will be released into the environment, TEPCO will conduct re-purification until the concentration of radionuclides other than tritium meets the regulatory standards for discharge. In addition, all of 64 radionuclides will be monitored, before the actual discharge, as described in the “TEPCO Draft Study Responding to the Subcommittee Report on Handling ALPS Treated Water” (24 March 2020). (URL: https://www.tepco.co.jp/en/decommission/progress/watertreatment/images/200324.pdf)

Regarding the result of re-purification test conducted by TEPCO, please also refer to “Results from secondary treatment performance confirmation tests on water treated with multi-nuclide removal equipment (final report)” (24 December 2020). (URL: https://www4.tepco.co.jp/en/decommission/progress/watertreatment/images/201224.pdf)

\textsuperscript{2} Please refer to “The Subcommittee on Handling of the ALPS Treated Water Report” (10 February 2020), which summarized scientific information on tritium’s impact on human health. (URL: https://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20200210_alps.pdf)
should be noted that the UNSCEAR-specified method takes into account internal exposure from intakes of marine food sources.

5. Upon request from the GOJ, the IAEA reviewed the Report of the Subcommittee. In its Review Report of 2 April 2020\(^3\), the IAEA Review Team concluded *inter alia* that:

- "(T)he review of possible technologies for tritium separation has been undertaken appropriately based on the Tritiated Water Task Force assessment. The IAEA Review Team is not aware of a solution currently available for the separation of tritium commensurate with the concentration and the volume of ALPS treated water.
- The IAEA Review Team also notes that the ALPS treated water will be further purified as necessary to meet the regulatory standards for discharge before dilution.
- *(T)*he methodology used to estimate prospectively the radiological impact of the two solutions is appropriate at this stage for the purpose of informing the decision on the possible solution, and would allow the initiation of discussions with the national regulatory body (NRA).
- The IAEA Review Team positively notes the level of understanding of the methodology to assess radiation exposures to the public, and the efforts of the Japanese experts to adjust the well-established UNSCEAR methodology to the specific case of Japan."

6. The GOJ is fully aware of the importance of protection of the environment, including the marine environment, as well as of human health. The GOJ will discharge the water only if it concludes, based on all available scientific evidence, that there would be no environmental risk nor human health risk caused by dealing with the water at FDNPS.

b. Information access and consultation with the public

7. The GOJ has explained, in a transparent manner, to the international community about the ALPS treated water and the status of consideration about the handling of the water. More specifically, the GOJ has reported on the decommissioning of FDNPS to the IAEA, provided explanations for international organizations, including the IAEA, put relevant information on the website of the government, and engaged in the other efforts described below. The GOJ also responded four times to the previous Special Rapporteur requests (dated 8 June 2017, 17 August 2018, 5 September 2018 and 12 June 2020), and provided the information that was sought on the ALPS treated water and all other matters. Further information is provided in response to question 6 below.

---

8. Based on the proposal made by experts and specialists, which contains scientific lessons as a result of their more than six years of consideration, the GOJ has conducted a series of exchanges of opinions and views with a wide range of people, including those from local governments, business communities and fishery industries. More than 1,500 time briefings and exchanges have been carried out so far. In addition, the GOJ received various types of opinions in different formats through the public comment process conducted from April to July 2020 and on the occasion of a series of “Meetings as Opportunities for Receiving Opinions” attended by State Ministers of relevant government ministries, which were held since April 2020. Further specific examples are provided in the response to question 5 below.

9. Accordingly, the GOJ is confident that there has been no lack of access to information, and no lack of public consultation. That said, the GOJ is ready to spare no effort to provide relevant information if needed at any time. Please inform us if you require additional information on any point.

B. Response to the questions

1) Does your Excellency’s Government see any necessity for revising the Mid-and-Long-Term Roadmap towards the decommissioning of TEPCO’s Fukushima Daiichi Nuclear Power Station? It is our understanding that a certain level of flexibility regarding eventual revisions based on emerging needs is maintained by Japanese authorities.

10. Japan is not facing obstacles to achieve the targets for contaminated water management as alleged by the Special Rapporteur, and there are no plans to make further changes to the Medium- to Long-term Roadmap at this time. The Roadmap can be revised flexibly according to the progress of decommissioning, as indicated in Principle 3 of the Roadmap: “Continuously update the Mid-and-Long-Term Roadmap in consideration of the site conditions, progress in the decommissioning and contaminated water management efforts, and the latest R&D results.”

2) Does your Excellency's Government consider the objective of resolving the water crisis efficiently by 2020 achieved by this time or has the target goal undergone any modifications?

11. As indicated above, the goals to be achieved by the end of 2020 as described in the Mid-and-Long-Term Roadmap (namely (1) restricting the amount of contaminated water generated to under approximately 150m3 per day, and (2) completing stagnant water removal and treatment from the plant buildings, excluding the reactor buildings of Units 1 to 3, Process Main Buildings, and High Temperature Incineration Building) have already been achieved.
12. The amount of contaminated water has decreased to approximately 140 m$^3$/day (on average in 2020, according to TEPCO\textsuperscript{4}) from 540 m$^3$/day in May 2014 (before measures conducted) by measures such as pumping up groundwater and sub-drainage, paving the land to prevent rainwater penetration, and constructing frozen-soil walls.

3) Does your Excellency’s Government envisage the possibility of discharging any contaminated water into the marine environment?

13. The GOJ does not anticipate any possibility of discharging contaminated water into the environment.

14. With respect to the treated water, as of now, the GOJ has reached no conclusion on how to handle the treated water. The GOJ has given, and continues to give, the utmost consideration to the possible impacts on the environment as well as on public health and people’s safety, and will never approve the discharge of the water into the environment unless it meets the regulatory standards set based on international standards.

4) In which ways is the Japanese Government enabling scientific peer review of scientific monitoring and findings related to the consequences of the nuclear disaster?

15. The GOJ has continuously conducted radioactive substances monitoring, including at lakes, marshes, seas and other areas based on the Comprehensive Radiation Monitoring Plan, and has made the results of the monitoring public on the websites of the GOJ.

16. In addition, the GOJ has closely worked, and continues to work, with independent experts from non-governmental sectors such as academia, to put together information on scientific expertise.

17. Furthermore, it should be pointed out that the latest “UNSCEAR 2020 report” concluded from a scientific viewpoint that “no adverse health effects among Fukushima residents have been documented that are directly attributable to radiation exposure from the FDNPS accident.”\textsuperscript{5}

5) We would appreciate receiving concrete examples of activities undertaken by Japanese authorities with the aim of engaging concerned populations in decision making processes regarding the resolution of the contained water issue. Have there been any surveys conducted, public

\textsuperscript{5} Please refer to paragraph (q) on page 107, “UNSCEAR 2020 REPORT: SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION”, Annex B: Levels and effects of radiation exposure due to the accident at the Fukushima Daiichi Nuclear Power Station: implications of information published since the UNSCEAR 2013 Report, 9\textsuperscript{th} March, 2021. (URL: https://www.unscear.org/docs/publications/2020/UNSCEAR_2020_AnnexB_AdvanceCopy.pdf)
hearings, virtual forums or other activities taken place in the recent months/years? Is there any data produced showing public sentiments over envisaged solutions?

18. With regard to the handling of the ALPS treated water, the GOJ has repeatedly engaged with concerned populations and readily shared all available information with them. More specifically, from 2013, experts spent more than six years to consider the matter at the ALPS Subcommittee and on other occasions, and as a result of the consideration produced a report in February 2020 that is based on scientific evidence and expertise.

19. Since the report was produced, the GOJ has organized hundreds of opportunities to exchange views with, and listen to the opinions of a wide range of people, including those from local governments and the agriculture, forestry and fishery industries. The GOJ also invited opinions in writing from the general public for a period of about four months (April to July 2020) and received more than 4,000 opinions, while continuing to conduct briefings and exchanges with concerned populations. Furthermore, the GOJ organized a series of “Meetings as opportunities for Receiving Opinions” six times. At the Meetings chaired by the State Minister for Economy, Trade and Industry, 43 representatives from 29 local community-based organizations among others were invited to express their views and opinions.

20. Through such opportunities, the GOJ has received valuable opinions from a broad range of people. Many of the opinions that have been received regard the handling of the ALPS treated water with a particular concern about safety and possible rumor-based adverse impacts on reputation as a result of the discharge of the water.

21. The GOJ considers it important to receive and consider these opinions in making a decision on the handling of the ALPS treated water. Currently, the GOJ is carefully considering what steps or approaches are possible to address the concerns that have been expressed, in order to prevent, inter alia, any rumor-based adverse impact on reputation.

6) How is your Excellency’s Government engaging other States potentially affected by a release of contaminated water to the Pacific Ocean, are there any forms of collaboration with other states under regional instruments protecting the seas?

22. The GOJ has been explaining, in a transparent manner, to the international community, including neighboring countries, about the status of the ALPS treated water and the options for the handling of the treated water. The GOJ is continuing to engage in an ongoing dialogue and exchange of information with some of its neighbors, in a spirit of cooperation and openness.

23. More specifically, the GOJ has been organizing briefing sessions on the status of TEPCO’s FDNPS for diplomatic missions in Tokyo, notifying

reports on the decommissioning to all diplomatic missions in Tokyo and to the IAEA every month in principle. The GOJ also held explanatory sessions during international conferences of the IAEA as well as other international organizations, while providing relevant information on websites of the government ministries concerned.

24. The GOJ will continue to explain its efforts on the decommissioning to the international community in a transparent manner, while providing accurate information based on scientific evidence.

7) Please indicate whether any measures are being envisaged in order to continue to assist those persons in need, in particular persons internally displaced because of the Fukushima disaster, including those from areas which were not designated evacuation areas, or where the evacuation order has been lifted or areas which had their classification as a Difficult-to-return zone terminated, and to prevent conditions leading to further displacements related to the Fukushima disaster.

25. The GOJ has taken measures to assist victims and evacuees, including children who were affected by the nuclear accident.

26. For example, under the Act on Promotion of Support Measures for the Lives of Disaster Victims to Protect and Support Children and Other Residents Suffering Damage due to Tokyo Electric Power Company’s Nuclear Accident, the GOJ has carried out various assistance measures for evacuees from outside of the evacuation order area such as:
- organization of various counselling and exchange meetings at 26 life reconstruction assistance bases across the country;
- measures to facilitate moving into public apartments; and
- waiving of highway fees for evacuated families living separately.

27. The GOJ will continue to work closely with Fukushima prefecture and relevant government ministries to assist evacuees.

8) Please inform us of what measures your Government is taking to guarantee the protection and human rights of internally displaced persons according to international standards, including the requirement to provide the conditions for them to achieve durable solutions, and whether any consultation has been held with internally displaced persons concerned and what efforts have been made to ensure their meaningful participation in the decision-making.

28. The GOJ respects the “Guiding Principles on Internal Displacement”. With regard to assistance for evacuees up until recent years, please refer to the reply (dated 5 November 2018) to the request for information (AL JPN 2018/6) dated 5 September 2018. The GOJ and relevant local governments will continue consultation with evacuees to ensure their substantial participation in the decision-making process.