

Contribution by Ambassador USHIO Shigeru in The Mercury (21 July, 2023)

ALPS treated water: Japan prioritizes safety for the environment and transparency

I feel compelled to write this article to provide basic facts and scientific data with regard to the article entitled “BRICS summit must discuss release of Fukushima nuclear wastewater and its harmful effects on the planet” written by Mr. Jaya Josie on June 29th and “Nuclear waste discharge extremely irresponsible” written by H.E. Mr. Chen Xiaodong, Chinese Ambassador to the Republic of South Africa on July 13th.

The Government of Japan will never discharge "nuclear waste" nor “nuclear-contaminated water” that exceeds regulatory standards into the sea. The water to be discharged is "ALPS treated water” that has been sufficiently purified until the concentration of radioactive materials other than tritium is below the regulatory standard, and will be further diluted. After the dilution, the concentration of tritium will be 1/40 of the regulatory standard and 1/7 of the WHO drinking water standard, and the concentration of radioactive materials other than tritium will be less than 1/100 of the regulatory standard.

In handling the ALPS treated water, Japan has been taking measures strictly abiding by relevant international law while giving due consideration to international practices.

The assessment of radiological environmental impacts was conducted in line with the international guidelines, taking into account the effect of bioaccumulation and long-term accumulation. It shows that the impact on humans and the environment would be minimal, considering biological concentration and long-term accumulation. The impact on humans is about one-thousandth of the radiation dose received from a single dental x-ray.

Please be fully aware that "nuclear wastewater" or “radioactive wastewater,” which is used in your media reporting promotes a false understanding and harmful rumors that water released exceeds regulatory standards and adversely affects humans and the environment. We would like you to refrain from using such factually incorrect expressions and to publish reports that are based on the facts.

In more detail, we will manage the annual discharge volume of tritium so it will not exceed 22 trillion Bq, which is equivalent to the target discharge management value for the Fukushima Daiichi Nuclear Power Station before the accident. Other countries also discharge tritium into the sea in compliance with their own domestic laws and regulations; for instance, according to China Nuclear Energy Association website, China, discharging 112 trillion Bq from Yangjiang Nuclear Power Plant (NPP), 102 trillion Bq from Ningde NPP, 90 trillion Bq from Hongyanhe NPP in 2021. The amount of tritium in the ALPS treated water is smaller than the amount of tritium discharged from many nuclear power plants and other facilities in other countries.

Furthermore, the Government of Japan has held briefing sessions for the diplomatic missions in Tokyo as well as explanatory sessions at international conferences including those organized by the IAEA, providing information on the government website to the international community in a transparent manner based on

scientific evidence, with an emphasis on providing sufficient data.

All the data which demonstrates on the safety of ALPS treated water is available on our website (<https://www.mofa.go.jp/dns/inec/alps.html>). Radionuclides contained in all of ALPS treated water before dilution will be analyzed again.

The IAEA is an international organization, which is authorized to adopt and apply international safety standards in the field of nuclear energy under the IAEA Statute that implements safeguards for the purposes of promoting the peaceful uses of nuclear energy and preventing the diversion of nuclear for military purposes through consultation with all Member States.

On July 4th, IAEA Director General Grossi handed the IAEA Comprehensive Report on the Safety Review of the ALPS Treated Water at TEPCO's Fukushima Daiichi Nuclear Power Station to Prime Minister Kishida. This report presents the results of the IAEA's nearly two-year review of the safety of ALPS treated water from a neutral and expert standpoint based on scientific evidence. In the report, the IAEA has concluded that the approach to the discharge of the ALPS treated water into the sea and associated activities are consistent with relevant international safety standards, and the discharge will have a negligible radiological impact on people and the environment. In addition, the Report states that the IAEA's additional review and monitoring activities are envisaged that will continue during and after the treated water discharges occur. The IAEA's review is advised by internationally recognized independent experts, serving on the Task Force, from Argentina, Australia, Canada, China, France, the Marshall Islands, the Republic of Korea, the Russian Federation, the United Kingdom, the United States, and Viet Nam. Japan will continue to provide necessary information to the international community in a transparent manner based on the conclusion of the comprehensive report and will continue efforts to gain further understanding from the international community regarding the handling of ALPS treated water.

(<https://www.iaea.org/newscenter/pressreleases/iaea-finds-japans-plans-to-release-treated-water-into-the-sea-at-fukushima-consistent-with-international-safety-standards>)

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