

BAPETEN's Statement on the Release of Treated Water Fukushima Daiichi NPP in Japan

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The Nuclear Energy Regulatory Agency (BAPETEN) is an institution that oversees all nuclear energy utilization in Indonesia through three pillars, namely the development of regulations, licensing services, and conducting the inspections. As a member of the International Atomic Energy Agency (IAEA), BAPETEN is also monitoring Japan's decision to discharge the *treated water* stored at the Fukushima Daiichi nuclear power plant into the sea beginning on August 24, 2023. The discharge of treated water into the sea by Japan can be viewed as a form of clearance, that can be understood as exemption from the supervision of the regulatory agency on radioactive waste, because tritium-containing treated water which previously under regulatory supervision, will be discharged into the sea, thereby eliminating the need for monitoring and supervision.

In a report submitted to Japanese Prime Minister, Fumio Kishida, on July 4, 2023, and based on information obtained from the IAEA's official website, Director-General Rafael Mariano Grossi stated that **the release of treated water has no radiological impact on humans and the environment**. The report is the result of nearly two years of work by an IAEA Task Force comprised of nuclear experts from eleven countries who were tasked with evaluating Japan's plan against IAEA Safety Standards, which serve as a global standard for protecting human and environmental health.

Japan's treated water is essentially contaminated water that has been treated to eradicate various contaminants, with the exception of tritium. Tritium is a byproduct of nuclear reactions between air molecules (Nitrogen and Oxygen) and high-energy cosmic radiation in the atmosphere. Tritium is a naturally occurring radioactive element found in tap water, rainwater, and our bodies. Tritium is one variety of radioactive substance discharged into the environment by a nuclear power plant during normal operation.

According to the results of routine sampling conducted by the management of the Fukushima Daiichi NPP, the value of tritium concentration in the treated water is below the limit value set by Japan, which the concentration limit of tritium in the treated water at 1,500 Bq/L, or 1/7 of the limit set by WHO for drinking water (10,000 Bq/L),

Given the fact that tritium release into the environment is actually a typical occurrence in the operation of nuclear power facilities. Japan has also established an annual tritium release limit of 22 trillion Bq/year, which is lower than the global average annual tritium release from normal nuclear power plant operations.

Responding to the release of treated water by Japan, Head of the Bureau of Legal, Cooperation and Public Communication, Indra Gunawan, representing BAPETEN views that the activity will not have a negative impact on humans or the environment, as long as the management of the Fukushima Daiichi NPP can ensure that the tritium concentration in the released treated water remains below the predetermined limit. BAPETEN is also committed to monitoring developments and continues to work with the IAEA and other nuclear regulatory agencies around the globe, to supervise the release of treated water so that it continues to meet safety requirements.

Contact person:

- 1) Head of Legal, Cooperation and Public Communication Bureau: Indra Gunawan (+62 812 1001 2371)
- 2) Public Communication Coordinator: Abdul Qohhar (+62 877 8867 4717)