

THE FUKUSHIMA DAIICHI ACCIDENT

(STI/PUB/1710)

CORRIGENDUM

Technical Volume 5

1. Page 100. In the third paragraph, “10 mSv/y” should read “10 μ Sv/y”.

Note: The corrigendum to this publication, as well as corrected pages, can be downloaded from:
<http://www-pub.iaea.org/books/IAEABooks/Corrigenda>

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managed according to the Act on Special Measures Concerning the Handling of Radioactive Pollution. The Act also specifies the roles and responsibilities of the institutions involved, such as the national Government, prefectural governments and municipalities. Furthermore, it defines responsibilities for monitoring, decontamination and waste management, as well as for the provision of financial resources.

On-site waste is generated mainly from activities that involve the cooling of the reactors, gaining access to the reactors, dismantling, decontamination and cleanup, and demolition. On-site waste is currently regulated by the Reactor Regulation Act [6].

Regulations on clearance levels for on-site and off-site waste

Waste streams for on-site waste arising from the operation and decommissioning of commercial NPPs are defined under the Reactor Regulation Act. In 2005, the concept of clearance levels was added to the Act, conforming to IAEA Safety Standards Series No. GS-R-1 [177], which was valid at that time. The clearance level is based on the fact that the risk of the material containing extremely low levels of radioactivity affecting human health is negligible. After the accident, in June 2011, the NSC provided the additional document Near-term Policy to Ensure the Safety for Treatment and Disposing of Contaminated Waste Around the Site of Fukushima Daiichi Nuclear Power Plants [178]. This document made provisions for the possibility of reuse or recycling of material if the activity concentration is lower than a concentration equivalent to 10 $\mu\text{Sv/y}$. It also includes provisions for waste disposed of as industrial waste after approval and confirmation by the government [6].

As mentioned above, there was no legislation available for waste streams for off-site waste before the accident. The waste streams for off-site waste were established in 2011 under the Act on Special Measures Concerning the Handling of Radioactive Pollution [27], which is the main legal instrument that deals with materials contaminated by the accident, as well as the management of materials that have been generated during remediation activities. The Basic Principles were published in November 2011 [29].

Licensing of storage, treatment and disposal facilities

For off-site waste, the MOE is responsible for establishing facilities for the management (characterization, treatment and conditioning, storage, and disposal) of contaminated waste and soil in the SDA (see Section 5.2) and for the management of designated waste in other areas. In order to facilitate timely implementation of recovery activities, it was very important to rapidly establish a regulatory framework and guidance for the implementation of waste management, including treatment, storage, transport and disposal. The MOE has established advisory committees to assist in the implementation of decontamination, the siting and design of the Interim Storage Facility (ISF) and off-site waste management [29].

Waste generated on-site includes debris resulting from the earthquake, tsunami and the accident, as well as waste from decommissioning and dismantling operations. Secondary waste is generated during water treatment. Licensing of on-site waste management facilities for treatment, transportation, storage and disposal is the responsibility of the NRA, according to the Reactor Regulation Act [6]. For licensing, TEPCO submits an application and an implementation plan that requires approval by the NRA.

Classification and characterization of contaminated materials after the accident

The Act on Special Measures Concerning the Handling of Radioactive Pollution [27] provides a description of the categories of waste generated during the off-site remediation of areas affected by the nuclear accident and arising from the earthquake and tsunami that hit the coastal area of Tohoku.