

Decision of the Council for the Promotion of Managed Recycling for the Realization of Final Disposal of Removed Soil and Waste Outside Fukushima Prefecture

Basic Policy on the Promotion of Managed Recycling for the Realization of Final Disposal of Removed Soil and Waste Outside Fukushima Prefecture

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1. Basic Concept

In order to promptly reduce the impact of environmental contamination due to radioactive materials discharged from the accident at Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station (hereinafter “TEPCO’s FDNPS) in March 2011 on human health and the living environment, environmental restoration initiatives such as decontamination, treatment of contaminated waste, and development of the Interim Storage Facility have been promoted based on the “Act on Special Measures concerning the handling of Environment Pollution by Radioactive Materials Discharged by the Nuclear Power Station Accident Associated with the Tohoku District-Off the Pacific Earthquake That Occurred on March 11, 2011” (Act No. 110 of 2011, hereinafter “Act on Special Measures”), and other laws and regulations.

Regarding soil and waste arising from decontamination activities in Fukushima Prefecture (hereinafter “removed soil and waste”), “Law for the Japan Environmental Storage and Safety Corporation (Act No. 44 of 2003)” (hereinafter “JESCO Law”) clearly stipulates that the national government shall take necessary measures to complete final disposal outside Fukushima Prefecture within 30 years after the start of interim storage. For the reconstruction of entire Fukushima, the national government will take responsibility for implementing this project, bearing in mind the circumstances that led to the difficult decision by the local communities to accept the Interim Storage Facility.

To realize final disposal outside Fukushima Prefecture, it is important to promote the volume reduction and managed recycling of removed soil and waste by the government as a whole with the understanding of the public. The “Amended Basic Guidelines for Reconstruction in Response to the Great East Japan Earthquake from the Second Reconstruction and

Revitalization Period (Cabinet decision on March 19, 2024)” decided on a policy to “promote initiatives to establish a government-wide system for creating managed recycling sites through enhanced cooperation between relevant ministries and agencies.” Based on this, the Council for the Promotion of Managed Recycling for the Realization of Final Disposal of Removed Soil and Waste Outside Fukushima Prefecture (hereinafter, the “Promotion Council”) was established on December 20, 2024, to promote measures for reducing the volume of final disposal through the managed recycling of removed soil generated in Fukushima Prefecture and measures to dispel harmful rumors. In addition, at the first meeting of the Promotion Council, it was decided to compile a basic policy with three pillars: “promotion of managed recycling,” “fostering understanding and risk communication for the implementation of managed recycling,” and “promotion of efforts for final disposal outside Fukushima Prefecture” in order to advance the revitalization of Fukushima.

Based on the idea that “without the reconstruction of Fukushima, there will be no reconstruction of Tohoku, and without the reconstruction of Tohoku, there will be no revitalization of Japan”, this basic policy outlines the government's unified approach to the final disposal of removed soil and waste generated in Fukushima Prefecture outside of Fukushima Prefecture, which is one of the key challenges for achieving the revitalization of Fukushima.

2. Initiatives to date

The volume of removed soil and waste arising from decontamination activities in Fukushima Prefecture is enormous. In order to reduce the volume of final disposal outside Fukushima Prefecture, it is important to promote volume reduction and managed recycling of removed soil and waste.

To date, in accordance with the “Technology Development Strategy for Volume Reduction & Recycling of the Removed Soil and Waste under Interim Storage,” (formulated in April 2016, Ministry of the Environment (hereinafter “MOE”)) efforts have been made to develop volume reduction technologies, conduct demonstration projects for the managed recycling of removed soil, and foster nationwide understanding. After discussions at the advisory committee, the Ministry of the Environment compiled the results of the initiatives to date and formulated the “Results of Initiatives to Date toward Final Disposal Outside Fukushima Prefecture and Approaches

beyond FY2025” (hereinafter “Approaches beyond FY2025) on March 28, 2025, which outlines the approaches beyond FY2025 for “Promotion of managed recycling,” “Considering the direction of final disposal,” and “Fostering nationwide understanding.”

With regard to managed recycling of removed soil, standards¹ and guidelines² on managed recycling were formulated on March 28, 2025, based on scientific findings obtained from demonstration projects in Fukushima Prefecture and discussions among experts in Japan and overseas.

For managed recycling, based on the additional exposure doses to the public (1 mSv/year) set as international safety standards for radiation, it was decided that the additional exposure dose should be less than 1 mSv/year (equivalent to a radioactivity concentration of 8,000 Bq/kg or less³).

The final report of the International Atomic Energy Agency (IAEA)-MOE Japan Experts Meeting on Volume Reduction and Recycling of Removed Soil Arising from Decontamination Activities, published in September 2024, assessed that approach and activities implemented by MOE Japan to date for the managed recycling and the final disposal are consistent with the IAEA Safety Standards and that looking ahead, with continuous efforts to meet fully the advice provided by the team of experts, MOE Japan’s evolving approach will be consistent with the IAEA Safety Standards. The report also presented the following conclusions.

- The dose criterion of 1 mSv/year for additional effective dose is an appropriate criterion for the managed recycling of removed soil.

Under appropriate management, it is possible to sufficiently achieve the

¹ Standards for managed recycling (Use of removed soil processed into recycled materials under appropriate management) as stipulated in Article 58-4of the Ordinance for Enforcement of the Act on Special Measures concerning the handling of Environment Pollution by Radioactive Materials Discharged by the Nuclear Power Station Accident Associated with the Tohoku District-Off the Pacific Earthquake That Occurred on March 11, 2011 (Ordinance of the Ministry of the Environment No. 33 of 2011).

² This refers to the Guidelines for Managed Recycling (published by the MOE on March 28, 2025).

³ The radioactivity concentration of 8,000 Bq/kg or less is based on model calculations that ensure that the annual additional exposure dose of workers during construction, who will be most exposed, will be 1 mSv or less. The shielding effect of the covering soil used to prevent dispersal and runoff, as specified in the standards for managed recycling, will significantly reduce the annual additional exposure dose in the vicinity of the managed recycling site. (According to the results of the model calculations, the annual additional radiation dose is 0.017 mSv when the thickness of the top layer of soil is 20 cm and 0.00086 mSv when it is 50 cm.)

dose criterion by using recycled soil of 8,000 Bq/kg or less. In addition, on February 27, 2025, the Radiation Council issued a report stating that the draft standards for managed recycling are deemed appropriate.

As for fostering nationwide understanding, initiatives have been taken to disseminate information and raise public awareness throughout Japan, including Fukushima Prefecture and the Tokyo metropolitan area, regarding the necessity and safety of managed recycling, to promote managed recycling.

3. Promotion of managed recycling

The safety of managed recycling has been confirmed through demonstration projects implemented in Fukushima Prefecture to date. In addition, based on assessments and advice from the International Atomic Energy Agency (IAEA) and reports from the Radiation Council, standards and guidelines for managed recycling have been formulated.

In light of these circumstances, it is important to foster nationwide understanding of the necessity and safety of managed recycling based on these standards and guidelines, and to promote initiatives to build momentum for managed recycling for the revitalization of Fukushima, foster a sense of peace of mind and satisfaction, and enhance social acceptance. Based on the progress of these initiatives, it is necessary for all ministries and agencies to work in unison to implement managed recycling in a practical manner.

Based on this idea, it is necessary to fundamentally strengthen initiatives to foster nationwide understanding and risk communication regarding the necessity and safety of managed recycling, and to promote initiatives as described in Section 4.

In addition, from the perspective of promoting a broad understanding among the public regarding managed recycling, in order to promote managed recycling, the government will take the initiative in creating leading models, starting with consideration of its use in the Prime Minister's Office.

Furthermore, based on the state of understanding and social acceptance of managed recycling, ministries and agencies will collaborate to create projects for the practical application of managed recycling and promote its

full-scale implementation and expansion.

4. Fostering understanding and risk communication for the implementation of managed recycling

In implementing managed recycling, it is important to gain the understanding of the public and relevant organizations, and to foster a nationwide understanding of its necessity and safety. Along with this, taking the formulation of standards for managed recycling as an opportunity, efforts will be made to foster momentum for managed recycling and to further promote understanding through interactive initiatives such as site visits, with the aim of creating projects for managed recycling and continuously fostering peace of mind and satisfaction, as well as expanding and deepening social acceptance.

Under this approach, based on the historical fact that the electricity generated at TEPCO's Fukushima Daiichi Nuclear Power Station has contributed to the stable supply of electricity in Japan, particularly in the Tokyo metropolitan area, which is a major consumption area, and the idea that "without the reconstruction of Fukushima, there will be no reconstruction of Tohoku, and without the reconstruction of Tohoku, there will be no revitalization of Japan," initiatives will be widely promoted to create momentum for cooperation on managed recycling by all ministries and agencies in unison, toward the final disposal outside Fukushima Prefecture of removed soil and waste, which is one of the important challenges for the reconstruction of Fukushima, while utilizing the "Task Force on the Nuclear Hazard's Influence Including the Negative Reputation Impact." For example, various publicity methods such as posters and leaflets that explain the necessity and safety of managed recycling in an easy-to-understand manner, as well as the websites and social media accounts of each ministry and agency, will be effectively utilized.

In addition, initiatives will be implemented to raise public awareness and interest in the necessity of managed recycling. The safety of managed recycling will be explained in an easy-to-understand manner based on scientific evidence, taking into account the standards and guidelines for managed recycling, and the fact that it is consistent with IAEA safety standards will also be explained to the public and relevant organizations.

In fostering understanding, it is important to dispel concerns regarding managed recycling. Therefore, in order to foster peace of mind and

satisfaction, site visits to the Interim Storage Facility and actual managed recycling sites will be conducted in accordance with the status of project creation, and the areas and targets of such visits will be expanded in stages. In order to enhance the reliability of the disseminated information, efforts to disseminate information thoroughly on actual cases of managed recycling will be made, and efforts to obtain objective assessments from the IAEA and other organizations will be continued. Furthermore, from the perspective of preventing harmful rumors, necessary initiatives will be promoted to strengthen risk communication regarding managed recycling.

A nationwide web survey will be conducted periodically to confirm progress in these measures.

In addition, in order to create projects for managed recycling, consideration will be given, and initiatives will be implemented regarding the approach to communicate with relevant organizations, including local communities where managed recycling will be implemented.

5. Promotion of initiatives toward final disposal outside Fukushima Prefecture

As mentioned above, it is clearly stipulated in the law that the national government is responsible for “taking the necessary measures to complete final disposal outside Fukushima Prefecture within 30 years after the start of interim storage” for removed soil and waste within Fukushima Prefecture. Initiatives to promote final disposal outside Fukushima Prefecture need to be promoted in parallel with the initiatives described in “3. Promotion of Managed Recycling” and “4. Fostering Understanding and Risk Communication for Managed Recycling,” and the Ministry of the Environment will continue to lead discussions on volume reduction and final disposal in accordance with the approaches beyond FY2025.

In the “Approached beyond FY 2025”, based on the results of initiatives to date, four scenarios and options for final disposal outside Fukushima Prefecture have been proposed. Going forward, consideration will be given to improving the efficiency and reducing the cost of volume reduction technologies, and to facilities necessary for transporting waste from the Interim Storage Facility, including from the perspective of transport to the final disposal site.

In addition, toward the selection and study of candidate final disposal sites,

consideration will be given to the location conditions that should be taken into account in selecting candidate final disposal sites, while promoting communication with local communities, framework of coexistence with local communities and details of the candidate site selection process.

Furthermore, consideration will be given to changes in social acceptability based on the radioactivity concentration of the final disposal materials.

Taking into account the progress of these studies, the final disposal scenario will be refined, and efforts will be steadily advanced toward defining the specifications of the final disposal facility and selecting and studying candidate sites for the final disposal facility.

Conclusion

It is necessary to specify a roadmap for the next 20 years for the final disposal outside Fukushima Prefecture of removed soil and waste, which is one of the important issues for the reconstruction of Fukushima. Based on this, to steadily implement this basic policy, a roadmap will be compiled by around this summer, with the government working in unison, focusing on promoting managed recycling, fostering understanding and risk communication, which will be the main tasks for the next five years.

To ensure that the initiatives outlined in this basic policy are implemented in a planned and step-by-step manner, each ministry and agency will cooperate and collaborate in conducting the necessary studies and will continuously monitor the progress of the initiatives. In addition, this basic policy will be reviewed as necessary in light of the progress of initiatives based on this policy.

The policy of final disposal outside Fukushima Prefecture within 30 years after the start of interim storage is the responsibility of the national government as stipulated in the law. All ministries and agencies will work in unison to create projects for managed recycling and other measures toward the realization of final disposal.