Interim Storage Facility

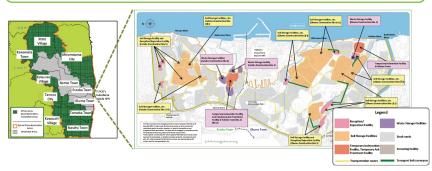
# Interim Storage Facility for Removed Soil and Waste

#### Outline of the Interim Storage Facility

- In Fukushima Prefecture, large quantities of contaminated soil and waste have been generated from decontamination works.
- O Currently, it is difficult to clarify methods of final disposal of the soil and waste.
- Olt is necessary to establish an Interim Storage Facility (ISF) in order to manage and store the soil and waste safely and intensively until final disposal.

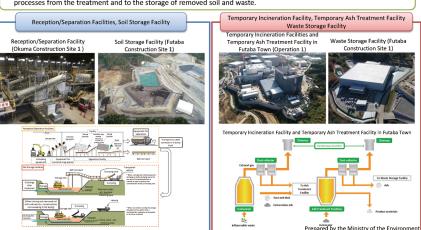
(Site Area: approx. 16 km²)

- Removed soil and waste generated from decontamination works in Fukushima Prefecture and incineration ash with radioactivity concentrations exceeding 100.000 Ba/kg are stored.
- The national government has legally specified its intention to take measures necessary for completing final disposal outside Fukushima Prefecture within 30 years after the commencement of interim storage (the Amended JESCO (Japan Environmental Storage & Safety Corporation) Act was promulgated in November 2014).



# Construction of Interim Storage Facility

- As a site for constructing the Interim Storage Facility (ISF), the national government plans to secure approx. 1,600 ha. As of the end of December 2020, the national government concluded contracts for approx. 1,205 ha (approx. 75.3% of the envisaged construction site; with regard to privately-owned land, 91.1% of the total area was acquired) with 1,787 registered land owners (approx. 75.7% of the total). The acquisition of required land has thus been progressing steadily.
- The development of the facilities also progressed steadily, and in March 2020, the ISF commenced operations for all processes from the treatment and to the storage of removed soil and waste.



# Transportation of Removed Soil and Waste

- Transportation of the soil and waste from Temporary Storage Sites (TSS) to the Interim Storage Facility (ISF) has been implemented mostly using 10-ton dump trucks.
- Transportation was commenced at the end of FY2014. In FY2020, removed soil and waste were transported from 25 municipalities.
- Safe and secure transportation is being conducted through managing the whole amount of material to be transported and operation of trucks used for transportation, and conducting environmental monitoring, etc.

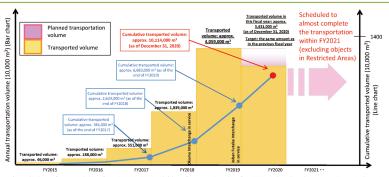


Even in municipalities where transportation has been completed, if any object that needs to be transported is generated, such object is to be transported to the ISF.

## Interim Storage Facility

# Current Status of Transportation to the Interim Storage Facility

- In order to transport the whole amount of material to be transported to the Interim Storage Facility (ISF) (approx. 14,000,000 m³), transportation is being conducted on a safety-first policy, in light of the status of acquisition of the required site and development of facilities, while making efforts to obtain understanding of local residents.
- It is expected to almost complete transportation of removed soil and waste that have been temporarily stored in Fukushima Prefecture (excluding those in Restricted Areas) to the ISF by the end of FY2021.
- In FY2020, the same amount of removed soil and waste as in the previous fiscal year is to be transported on a safety-first policy. So far, a total of approx. 10,110,000 m³, which accounts for over 70% of the whole amount of material to be transported, has been transported to the ISF (as of December 31, 2020).

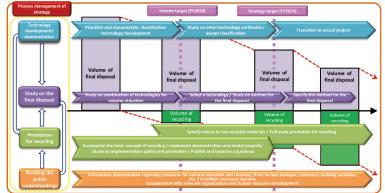


(Source) Volumes of transported objects from FY2015 to FY2019, with (planned) transportation volume for FY2020 as indicated in Policy on Interim Storage Facility Project in FY2020

#### Interim Storage Facility

## Final Disposal Outside Fukushima Prefecture and Technology Development Strategy for Volume Reduction & Recycling of the Removed Soil

- Regarding the soil and waste removed in off-site decontamination work in Fukushima Prefecture, the national government is to take necessary measures to complete final disposal outside the prefecture within 30 years from the start of transfer to the Interim Storage Facility. In order to reduce the final disposal volume, the government has been making all-out efforts for volume reduction and recycling of removed soil and waste.
- Specific efforts for volume reduction and recycling have been made in line with the "<u>Technology Development Strategy for Volume Reduction & Recycling of the Removed Soil under Interim Storage</u>" and the "Process Chart," which the Ministry of the Environment formulated in 2016 and revised in 2019.



## Basic Concept for Safe Use of Removed Soil Processed into Recycled Materials

- The Ministry of the Environment (MOE) released "Basic Concept" in June 2016 to realize the use of the removed soil under proper management after volume reduction and recycling materialization on the premise of securing radiation safety.
- According to a policy of Basic Concept, MOE implements demonstration and model projects, confirms radiation safety, studies specific management systems, while fostering understandings of public all over Japan and developing an environment towards full-scale recycling.

#### **Limited Use**

- The use of contaminated soil is to be limited to public project whose management entity and responsible system are clear such as basic structure of banking, which assumed not to change shape artificially for a long time.
- E.g. coastal levees, seaside protection forests, embankment materials for roads, cover soil for waste disposal sites, landfill materials and filler for land development, and farmland for flowers and resource crops

#### **Proper Management**

- The additional exposure dose should be restricted below 1 mSv/y during the construction.
  - Radioactivity concentration recycling level of Cs-137 included in the soil is below 8,000 Bq/kg as a principle, and is set separately for each use.
- Shielding is installed to cover soil and prevent the leakage and scattering.
  The data is also recorded.

