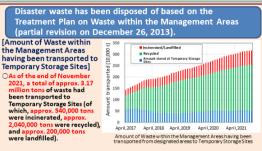
# Progress of Disposal of Disaster Waste Directly Governed by the National Government in Designated Areas in Fukushima Prefecture







### [Removal of tsunami rubble]

OTsunami rubble in former Restricted Areas was all transported to Temporary Storage Sites in March 2016, except for such rubble left in Restricted Areas.

### Installation of Temporary Incineration Facilities

v treating ster waste, etc.	Namie Town, Okuma Town and Futaba Townn

Disposal of disaster waste completed

Nov

disa

Kawauchi Village, litate Village (Komiya district), Tomioka Town,Minamisoma City, Katsurao Village, litate Village (Warabidaira district), and Naraha Town



Demolition of a damaged house, etc.

\*Tamura City and Kawamata Town use existing waste disposal facilities for disposing of disaster waste.

\* Futaba Town has two Temporary Incineration Facilities.



# **Ensuring Safety for Temporary Storage of Designated Waste**

Temporary storage work (in the case of agricultural and forestry waste)



## Structure of a Temporary Storage Site (in the case of agricultural and forestry waste)

- •Take measures to prevent scattering and runoff of waste
- Take required measures against radiation (isolation or shielding using sandbags, etc.)
- Take measures to prevent infiltration of rainwater using impermeable sheet, etc.



### Checking of storage status

The status of storage at Temporary Storage Sites is to be checked to ensure that designated waste is properly stored in compliance with the standards, etc. specified in the Act on Special Measures





Staff of the Regional Environmental Office checking the storage status

# Procedures for Disposal of Designated Waste in Fukushima Prefecture

O The Ministry of the Environment has been carrying out a program to reduce volume and stabilize properties of designated waste through incineration and drying, etc.

○ With regard to designated waste generated in Fukushima Prefecture, waste with radioactivity concentrations exceeding 8,000 Bd/kg but 100,000 Bd/kg or below is to be transported to the existing controlled landfill site, while waste with radioactivity concentrations exceeding 100,000 Bd/kg is to be transported to the Interim Storage Facility.

forestry waste,

and

Agricultural

### Specified waste

Designated waste (exceeding 8,000 Bq/kg)

Waste in the Countermeasure Areas (former Restricted Areas and Deliberate Evacuation Areas)

Incineration at Temporary Incineration
Facilities (combustible waste)

100,000 Bq/kg or below Exceeding 100,000 Bq/kg

Existing controlled

Interim Storage Facility

### Volume reduction project

Terminal treatment plant in Horikawa Town, Fukushima City

Drying treatment of dehydrated sludge, etc. was completed at the end of October 2014 and the plant was demolished at the end of March 2016.



Samegawa Village

Incineration of agricultural and forestry waste was completed at the end of July 2015.

Switching stations
(Tamura City and Kawauchi Village)

Volume reduction of agricultural and forestry waste generated in 24 municipalities in the central and southern parts of Fukushima Prefecture; Operation started in August 2017. Incineration was completed by the end of February 2021.



Fukushima Prefecture Central

Purification Center (Koriyama City)
Indineration of dehydrated sludge, etc. was
completed in March 2014, and Fukushima
Prefecture took over the work and indinerated
waste with radioactivity concentrations
8,000 Bg/kg or below and the indineration
work was completed at the pend of May 2016



Warabidaira District, Litate Village

Volume reduction of contaminated waste generated in litate Village and surrounding five municipalities; A Temporary Incineration Facility started operation in January 2016 and wide-area waste treatment was completed in November 2018.

Incineration was completed by the end of February 2021.

Adachi District (Nihonmatsu City)

Volume reduction of agricultural and forestry waste and combustible waste generated by decontamination in three municipalities in the Adachi District (Nihonmatsu City, Motomiya City, and Otama Village).

Operation started in June 2019.

Prepared by the Ministry of the Environment

### Landfill Disposal of Specified Waste at Controlled Landfill Site

- O In the specified waste landfill project, transport of specified waste was commenced on November 17, 2017.
- Up until now, a total of <u>209,112 bags of specified waste was carried in</u> (as of the end of December 2021).
  - Results of the monitoring conducted before and after the commencement of transport show no abnormal increases in air dose rates.

### Developments

- Obec. 14, 2013: The national government asked Fukushima Prefecture, Tomioka Town, and Naraha Town for consent to accept the construction of the site.

  Obec. 4, 2015: Fukushima Prefecture, Tomioka Town, and Naraha Town expressed
- their intention to approve the program.

  OApr. 18, 2016: The Controlled Landfill Site (former Fukushima Eco Tech Clean Center)
- was nationalized.
- OJun. 27, 2016: The national government concluded a safety agreement with Fukushima Prefecture and the two municipalities.
- ONov. 17, 2017; Transport of waste was commenced.

Restricted Areas Temporary Incineration Facilities

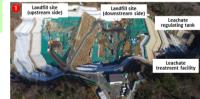
- OAug. 24, 2018: Reprun Fukushima, a specified waste landfill information center, was
- OMar, 20, 2019: Cement solidification facility commenced operation.

# Related facilities (i) Specified Waste Andfill Facility (ii) Reprun Fukushina, a specified waste landfill information center (iii) Cement solidification facility (iii) Reprun Fukushina, a specified waste landfill information center (iii) Cement solidification facility Tomicka Town As of March 10, 2020 Contaminated Waste Management

### Waste to be landfilled and period of transpor

- Waste in the countermeasure area (not exceeding 100,000 Bq/kg): Approx. 6 years
   Designated waste in Fukushima Prefecture (not exceeding 100,000 Bq/kg):
- Designated waste in Fukushima Prefecture (not exceeding 100,000 Bq/kg Approx. 6 years
- Household garbage from 8 Futaba-gun municipalities: Approx. 10 years

  Waste with radioactivity concentration exceeding 100,000 Bq/kg is
- Waste with radioactivity concentration exceeding 100,000 Bq/kg transported to the ISF.







Prepared by the Ministry of the Environment

Waste

### Status of the Five Prefectures concerning Designated Waste

### Miyagi Prefecture [Municipal mayors' conference]

1st to 4th: Oct 2012 to Nov 2013 5th: Jan 20 2014

→ Three candidate sites for detailed survey were presented (Fukayamadake, Kurihara City;

Shimohara, Taiwa-cho: Tashirodake, Kami Town). 7th (held by the prefecture): Aug. 4, 2014 → The prefectural governor announced the acceptance of a detailed survey as a consensus of all municipal mayors.

Detailed surveys were commenced at the three candidate sites in August 2014. However, an on-site survey was not possible due to protests by Kami Town. (also suspended in 2015)

Apr. 5, May 29, and Oct 13, 2015: Forum targeting prefectural residents Oct. to Nov. 2015 (twice): Opinion exchange with

Kami Town with the participation of experts 9th: Mar. 19, 2016

→ Results of the remeasurement for designated. waste and approaches of the Ministry of the Environment were explained

Apr. 15, 2016: The prefecture requested the suspension of an on-site survey until certain

prefectural policy is decided. 11th (held by the prefecture): Nov. 3, 2016 → Results of the measurement for waste other than

designated waste were released. The prefecture presented its draft policy on disposal of waste with radioactivity concentrations not exceeding 8.000 Bg/kg (excluding designated waste). 12th (held by the prefecture): Dec. 27, 2016

→ Agreement on the prefectural disposal policy was not obtained from Kurihara City and Tome City. and it was decided to have discussions again. 13th (held by the prefecture): Jun. 18, 2017 → The prefecture presented its new draft disposal

policies such as to require each district to independently treat contaminated waste generated therein.

14th (held by the prefecture); Jul. 15, 2017 → Agreement was reached on the draft disposal policy presented at the previous meeting.

Test incineration was completed in four districts, Ishinomaki, Sennan, Kurokawa and Osaki, -Ishinomaki: Full-fledged incineration was completed.; Kurokawa: Application to farmland is planned:

Sennan and Osaki: Full-fledged incineration is underway.

Tochigi Prefecture [Municipal mayors' conference] 1st to 3rd: Apr. 2013 to Aug. 2013

4th: Dec. 24, 2013 → Selection method was determined. → One candidate site for detailed survey was.

presented (Terashimairi, Shioya Town). 5th and 6th: Jul. 2014 to Nov. 2014 May 14, Jun. 22, and Sep. 13, 2015: Forum targeting prefectural residents

Survey of the effects of the heavy rain in Terashimairi, Shioya Town Dec. 7, 2015:

The mayor of Shiova Town declared the surrender of the designation as a candidate site for detailed survey. 7th: May 23, 2016

→ Remeasurement for designated waste was decided. 8th: Oct. 17, 2016 → Results of the remeasurement were released and future directions were presented.

Mar. 30, 2017: Results of the confirmation of intentions of people temporarily storing waste by themselves were released. Jul. 10, 2017: Meeting of mayors of municipalities concerning measures to ease burdens of farm households storing waste by themselves (i)

→ Draft of policyfor measures to ease burdens. of farm households storing waste by themselves were presented. Nov. 26, 2018: Meeting of mayors of municipalities (ii) → Agreement was reached on efforts to muster

opinions of municipalities, including those on remeasurement Mar. 19, 2019: Results of the remeasurement

was released. Jun. 26, 2020: Meeting of mayors of municipalities (iii) → Participants confirmed future directions.

Jun. 2. 2021: The Ministry of the Environment asked Nasushiobara City to cooperate in provisional centralized collection of waste (Oct.

to be transported in the city.)

waste by themselves

22. 2021: Designated waste having been stored by individual farm households started Efforts are to be made continuously to seek agreement on detailed surveys and make adjustments with the prefecture and municipalities storing waste regarding measures to ease the burden on farm households storing

Chiha Prefecture [Municipal mayors' conference] 1st to 3rd: Apr. 2013 to Jan.

2014 4th: Apr. 17, 2014 → Selection method was determined.

Apr 24 2015 → One candidate site for detailed survey was presented.

(Part of the premises of TEPCO's Chiba Thermal Power Station (Chuo Ward, Chiba,

May 20 and Jun. 2, 2015: Chiba City Assembly Plenary Jun. 8 and Jun. 10, 2015: Chiba City Assembly and the city mayor requested fresh

Jun. 29, Jul. 7, 13 and 20, and Aug. 7, 2015: Explanations were given to community organization leaders and residents of

Chiba City. Dec 14 2015:

discussions

Response to the request for fresh discussions was made. Jun. 28, 2016:

Chiba City requested for removal of the designation. Jul. 22, 2016: Designation was removed for designated waste in Chiba

Efforts are to be made continuously to seek agreement on detailed surveys.

Iharaki Prefecture conferencel 1st: Apr. 12, 2013

2nd: Jun. 27, 2013 3rd: Dec. 25, 2013 4th: Jan. 28, 2015

[Municipal mayors'

[Meeting of mayors of municipalities where waste istemporarily stored)

1st: Apr. 6, 2015 2nd: Feb. 4, 2016 → The policy to continue on-site storage and

promote staged disposal was determined Mar. 31, 2017: Remeasurement for designated waste, etc.

in the prefecture was conducted and the results were released.

Prepared by the Ministry of the Environment

Gunma Prefecture

→ The policy to continue

promote staged disposal

[Municipal mayors]

1st: Apr. 19, 2013

3rd: Dec. 26, 2016

on-site storage and

was determined.

2nd: Jul. 1. 2013

conferencel