

The 4<sup>th</sup> emergency recommendation regarding the response to the Great East Japan Earthquake

## Urgent proposal related to measures for earthquake disaster waste and prevention of environmental impact

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Science Council of Japan

Great East Japan Earthquake Task Force

Waste material generated by the Great East Japan Earthquake extends of such a wide range and is so enormous in volume that measures that are based on previous experience and knowledge will not be viable. While trying not to disturb emergency operations and respecting the existing laws and regulations, it is necessary to establish fundamental policies to minimize the scale of the waste processing and environmental impact, based on drastically new concepts, enlisting all of Japan in this effort and securing the collaboration of industry, government, university, and citizens. The Science Council of Japan urgently proposes the following four fundamental precepts as a framework for planning this waste disposal.

1. Conduct emergency waste disposal keeping the public hygiene and proper handling of hazardous waste as high priorities. Give priority to the disposal of decomposed matter, removing it promptly from the city and streets or taking measures to delay the decomposition (dispersing ash, etc.). Confirm where hazardous waste (medical waste, asbestos, PCB, etc.) is located and strive to process each type in the manner appropriate to it. Depending on the level of urgency, conduct measures such as disposing in a human waste treatment plant, burning at the site (except for the matters that contain plastic and soaked with sea water), cleaning with environmental water, and temporary disposal of marine resources etc. back to the ocean, keeping in mind the related regulations and maintaining a hygienic environment.
2. Provisionally designate places to deposit waste, considering the water environment and separate it by type in a uniform manner.  
Designate the collection places immediately and do not mix together decomposed matter (including items coated with sludge), flammable items, nonflammable items, debris, and hazardous waste. Huge amounts of sludge generated by the tsunami have been observed, and waste that is of an unknown nature needs to be

provisionally stored and then treated appropriately. Take care not to create mountains of deposits, to prevent any fire or other accidents or excessive contamination of water, soil, and ground water.

3. Consider ways of recycling that can supply resources for the recovery and restoration processes.

Among the earthquake disaster waste are recycle resources effective for the recovery and restoration, such as concrete, gravel, metals (including broken automobiles), and wood scrap. It is desirable to plan waste disposal processes that recycle resources over large areas, keeping an image of the future restored area in mind, e.g. recycling heavy materials such as concrete waste for the recovery and restoration of the affected regions, and using alternatives to fossil fuel such as wood scrap for thermal power stations.

4. Promote regional employment and a wide-range of cooperation for the disaster waste recycling

Concretely select the second stage collection places and methods for separation of types of waste, and at the same time take care that the implementation of the disaster waste processing leads to regional employment (internationally, this is promoted as “Cash for Work”). For the smooth implementation of this type of process planning, collaboration at the regional and national levels is important, and the support and collaboration of all concerned parties is much desired.