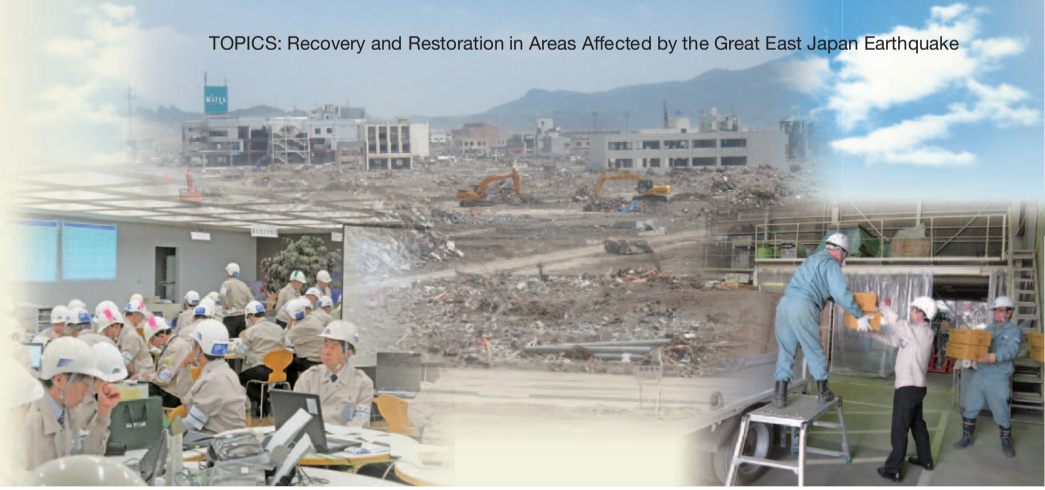
TOPICS

Recovery and Restoration in Areas Affected by the Great East Japan Earthquake

Shimizu has undertaken various initiatives to promote recovery and restoration in the areas that suffered massive damage in the Great East Japan Earthquake. Immediately after the quake, we implemented emergency relief measures, including transporting aid materials to affected areas and assisting with the emergency restoration of damaged buildings.

We plan to continue with efforts that reflect our understanding that our role in society is to promote, over the long term, activities that meet the needs and expectations of local communities and society. These activities include the disposal of disaster-related waste, decontamination of radioactive materials, response to accidents at the Fukushima Daiichi Nuclear Power Station, and urban development that helps revitalize affected areas.



Initial response based on the Earthquake Response Guidelines

Immediately after the earthquake, Shimizu Corp. established an Earthquake Disaster Headquarters (EDH), based on the Earthquake Response Guidelines and operating under the leadership of President Miyamoto at its Tokyo head office. We confirmed the safety of all our employees and their families and began to assess damage to company-related facilities and construction sites. We also began assessing the damage sustained at client facilities.

Friday, March 11

Establishing the Earthquake Disaster Headquarters (EDH) immediately after the quake

- 2:46 pm: The earthquake strikes.
- 4:50 pm: President Miyamoto delivers instructions to Emergency Task Forces (ETFs) nationwide through a videoconferencing system
- 11:30 pm: The first group of trucks loaded with emergency relief supplies from the Niigata sales office departs for Sendai (arriving at the Tohoku Branch at 7:00 am on March 12).

Saturday, March 12

Dispatch of emergency relief supplies and investigation teams

- Damage investigations begin at completed buildings in the Tohoku, Kanto, Hokuriku, and greater Tokyo areas. Safety measures and emergency restoration work begin for damaged buildings.

Sunday, March 13

Full-scale emergency restoration work

- Around-the-clock shipments of emergency relief supplies and materials for restoration work from the head office and the Niigata sales office begin.
- Full-scale investigations launched in the Tohoku region.
- The Kanto Branch finishes inspecting some 800 cases of initial damage at six Kanto prefectures, mainly in Ibaraki and Tochigi.
- Each branch launches full-scale safety measures and emergency restoration work for damaged buildings.

Measures through Thursday, March 31

Requests for aid: approx. 2,100
Investigations: approx. 4,500 buildings

- Aid personnel dispatched from the head office to affected areas: 200 in total
- Relief supplies transported from the head office and Niigata sales office: approx. 450 trucks

Starting Friday, April 1

Full-scale restoration begins with the establishment of the Earthquake Restoration & Support Office and an office to manage measures related to the Fukushima Nuclear Power Plant and other facilities.

Activities of the Earthquake Restoration & Support Office:
Through September 2011, this office performed some 5,000 initial investigations of damaged facilities and more than 1,300 building diagnostics, preparing reports focusing on business continuity measures and measures to protect against earthquake damage.

Support for earthquake restoration

Following the Great East Japan Earthquake, our goal was rapid recovery for the numerous production and logistics facilities in the areas affected, ranging from Tohoku through the northern Kanto regions. We're continuing to apply our waste disposal, soil remediation, and other technologies to various ongoing recovery efforts, including the disposal of large volumes of disaster-related waste in coastal areas struck by the tsunami and decontamination in areas contaminated by radioactive substances following the resulting nuclear accidents.

Using high-pressure cleaners to remove sludge at Kao's Sendai Logistics Center

Restoration work at Kao's Sendai Logistics Center

Tsutomu Kiritome,
Construction Manager, Building Division, Tohoku Branch

Some of the materials scattered by the tsunami can become hazardous if mixed. We ensured these materials remained separate by training workers to identify them and by posting waste-separation lists on site. To prevent leaks, we transported this waste in flexible containers with vinyl linings. We labeled these containers as clearly as possible to prevent human error, as different transportation designations and different disposal methods were required, depending on the type of waste. We also cleaned and vacuumed the inside of the building.

Restoring the embankment used by floating cranes at Taiheiyo Cement's Ofunato Plant

Restoration work at Taiheiyo Cement's Ofunato Plant

Katsumasa Endo,
General Manager, Tohoku Branch

At Taiheiyo Cement's Ofunato Plant, we were mainly responsible for dredging rubble, restoring embankments, and repairing machinery subsidence, in addition to some marine work. All workers on site carried radios as a safety precaution in the event of tsunamis. A couple times, workers were actually evacuated in response to tsunami warnings. Even under such tense conditions, the workers on site provided the support needed to complete the work. More than 1,000 people from various vendors worked as hard as they could to restore a cement plant, one of the region's core industries. They finished in time to allow operations to resume in November 2011.

Transporting disaster-related waste from initial temporary storage locations (Ishinomaki zone)

Disposing of disaster-related waste in Miyazaki Prefecture

In the Ishinomaki zone (consisting of the cities of Ishinomaki and Higashimatsushima and the town of Onagawa) and elsewhere, Shimizu is part of a joint venture contracted to handle the disposal of disaster-related waste and tsunami deposits. The target completion date is March 2014.

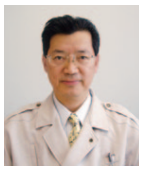
Decontamination work in a residential district of Hirono

Decontamination in Hirono

Shimizu has been contracted to handle decontamination work in the town of Hirono, Fukushima Prefecture, the first large-scale decontamination project. To reduce environmental radiation in the residential zones of the town of Hirono, we began decontamination work at public facilities, residences, agricultural land, woods and forests, roads, and other locations. Plans call for this work to continue through March 2013.

A nuclear-waste reduction experiment in a Fukushima Prefecture decontamination technology verification project

Developing nuclear waste reduction technologies



Hiromitsu Takada
Manager, Soil Environmental Business Department, Engineering Headquarters

We store soil contaminated by radioactive substances and other materials collected in decontamination work in intermediate storage facilities. A key goal is to reduce the volume of waste placed in intermediate storage by any means possible. Shimizu has developed reduction technologies based on its proofed soil remediation technologies for soil contaminated with heavy metals and other materials. In December 2011, we took part in a Fukushima Prefecture decontamination technology verification project. The results confirmed the effectiveness of our soil remediation technologies. The Ministry of the Environment decided to use these technologies in a verification project scheduled to get underway by the end of September 2012.