Major Disaster Surveys

1 On-site guidance for sewerage facilities concerning damage by heavy rain in the Chugoku District

Because of heavy rain in the northern and central parts of Yamaguchi Prefecture in July 2013, extensive damage occurred within the Hagi Environmental Protection Sewerage System (Susa Treatment Area),. More specifically, slopes of an adjoining national highway collapsed and the sediment flowed into the wastewater treatment plant whereby causing a shutdown.

To maintain sewerage services, vacuum trucks from Hagi City joined with vacuum trucks from three other cities in the prefecture in support. The trucks pumped the sewage and prevented wastewater flooding in the community. However, it was difficult to continue in the long-term transport of wastewater, therefore Hagi City had to recover the treatment facilities as soon as possible. In this regards, the National Institute for Land and Infrastructure Management (NILIM) gave guidance on the relevant organizations to consult and step-by-step procedures for recovering wastewater treatment.

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2 On-the-spot survey of a bridge damaged by the April 13 earthquake near Awajishima Island

An earthquake with its hypocenter near Awajishima Island at 5:33 a.m. on April 13, 2013 (M6.3, max. seismic intensity: weak 6) caused large cracks on a bridge abutment of a cable-stayed bridge (Suhama Bridge, administrated by Sumoto City, Hyogo Prefecture, bridge length: 149m) on Awajishima Island. Responding to a request from the Kinki Regional Development Bureau, the Bridge and Structures Division conducted an on-the-spot survey as TEC-FORCE, with the Public Works Research Institute. They provided technological guidance concerning safety evaluations and restoration measures.

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3 On-site guidance for sediment-related disasters in Senboku, Akita

The debris flow in the Kuyobutsu District of Senboku, City, Akita Pref., which occurred due to a slope failure induced by heavy rain that began at dawn on August 9, 2013, caused serious damage -- 6 deaths, 2 injured, 16 houses damaged (including 10 vacant houses). In response to the request of Akita Prefecture for the dispatch of disaster survey personnel, the Erosion and Sediment Control Division conducted an on-site survey on August 10 and gave technical advice to Akita Prefecture and Senboku City on a future warning and evacuation system. For this study, Akita Prefecture formed a "Warning / Evacuation Review Committee for Senboku Kuyobutsu Debris Flow," to which we are continuously giving technical advice.

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