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Room:Convention Hall

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Liquefaction-Fluidization Phenomena in northern east coast of Tokyo bay at The 2011 off the Pacific coast of Tohoku Earth

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March 11, 2011, the earthquake with a Magnitude 9 directly hit east Japan. Chiba prefecture is suffering from damages of Tsunami and Liquefaction-Fluidization Phenomena by the earthquake.

We describe damages of Liquefaction-Fluidization Phenomena on man-made strata in northern east coast of Tokyo bay.

Area and damage

Sodegaura, Narashino city : large quantities of sand volcano and quick sand, crack (Bump:20-40cm; length: 50m), lean of houses and utility poles, warp in road. The sewer is stopped up.

Kasumi, Narashino city : large quantities of sand volcano and quick sand, lean of houses and utility poles, warp in road. The sewer is stopped up.

Akitsu, Narashino city : small quantities of sand volcano. The sewer is stopped up.

Akanehama, Narashino city : large quantities of sand volcano and quick sand, collapse of river-levee protection, warp in road. The sewer is stopped up.

Shibazono, Narashino city : large quantities of sand volcano and quick sand, , warp in road. The sewer is stopped up.

Yastu-higata, Narashino city : no sand volcano in natural tidal flat, warp in road. The sewer is stopped up.

Makuharinishi, Mihamaku, Chiba city : small quantities of sand volcano, warp in road.

Makuharicho, Hanamigawaku, Chiba city : very small quantities of sand volcano.

Keywords: Liquefaction-Fluidization, land subsidence, sand volcano, warp in road, lean of utility poles