<Reference>
October 16, 2013
Tokyo Electric Power Company

Debris Removal Work on the Roof Top of the Unit 3 Reactor Building at Fukushima Daiichi NPS

Completion of Large Debris Removal and Implementation of Lowering Radiation Dose

東京電力
TEPCO

Completion of large debris removal and implementation of lowering radiation dose

- On October 11, 2013, we completed the large debris removal on the operating floor.
- On October 15, 2013, we started the radiation dose lowering (decontamination and shielding), for the purpose of installing the fuel removal cover and the fuel handling machine.

■Whole view of operating floor

Before large debris removal

After large debris removal

Debris Removal on the Roof Top of the Unit 3 Reactor Building at Fukushima Daiichi NPS

Completion of large debris removal and implementation of lowering dose

■Whole view of reactor building north side

Before large debris removal

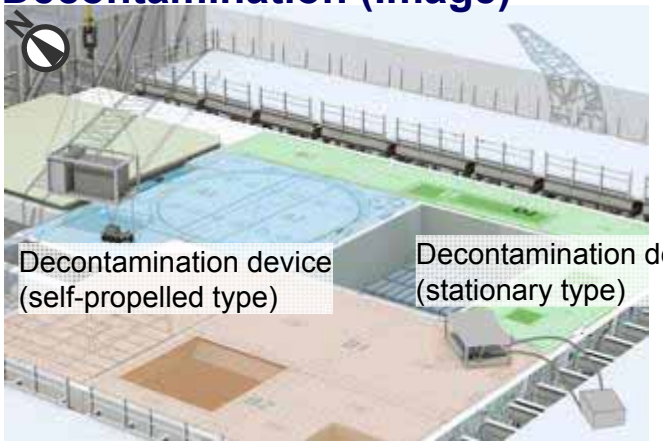
After large debris removal

Completion of large debris removal and implementation of lowering dose

■Radiation dose lowering

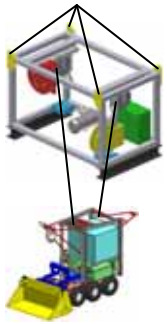
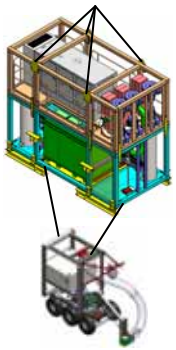
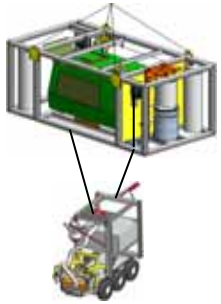
After decontamination (collection, suction, cutting of small debris) on the operating floor with remote-controlled unmanned heavy equipments, the shielding material will be installed.

■Decontamination (Image)



■Shielding (Image)

■Decontamination equipments (Image)

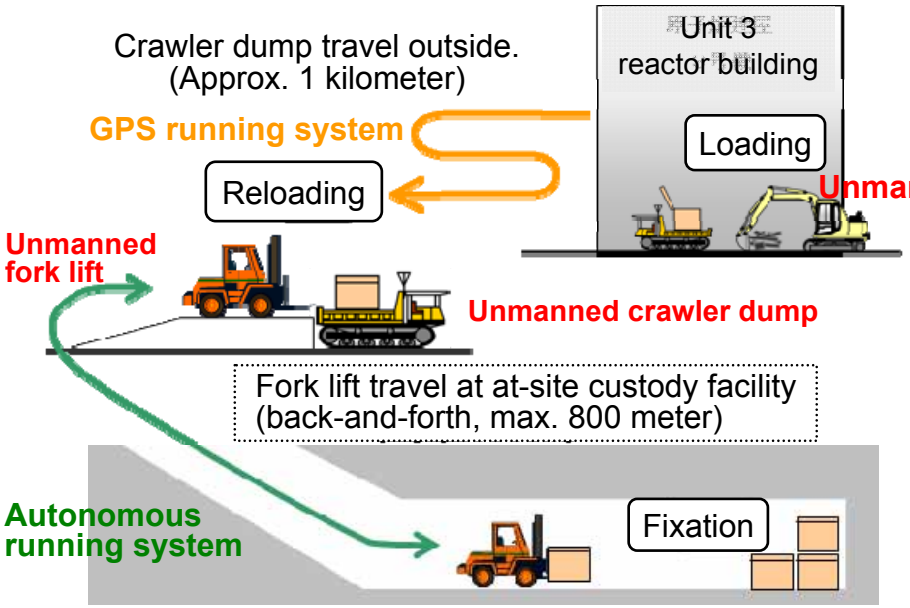
Decontamination device (self-propelled type)			Decontamination device (stationary type)
			
Debris collecting device	**Suction device**	**Cutting device**	**High-pressure water cutting device**

Debris collection, transport, and custody

Debris collected in this debris removal work on the roof top of the Unit 3 reactor building will be transported by unmanned heavy equipments installed with autonomous running system, and stored in the at-site custody facilities at night in which we have less work. All these procedures are adopted for the purpose of lowering the radiation exposure of workers.
We introduced this autonomous running system with the cooperation of Kajima Corp. and some affiliated companies.

*Kajima Corp. received an award “Innovate Technique Award” for this system by Japan Society of Civil Engineering in FY2012.

■Debris collection, transport, and custody



■Autonomous running system with GPS measuring apparatus and sensor