

< Reference >

February 3, 2012

Tokyo Electric Power Company

Radiation dose reduction by collecting dust and small rubbles at the parking lot in front of Main Anti-Earthquake Building of Fukushima Daiichi Nuclear Power Station

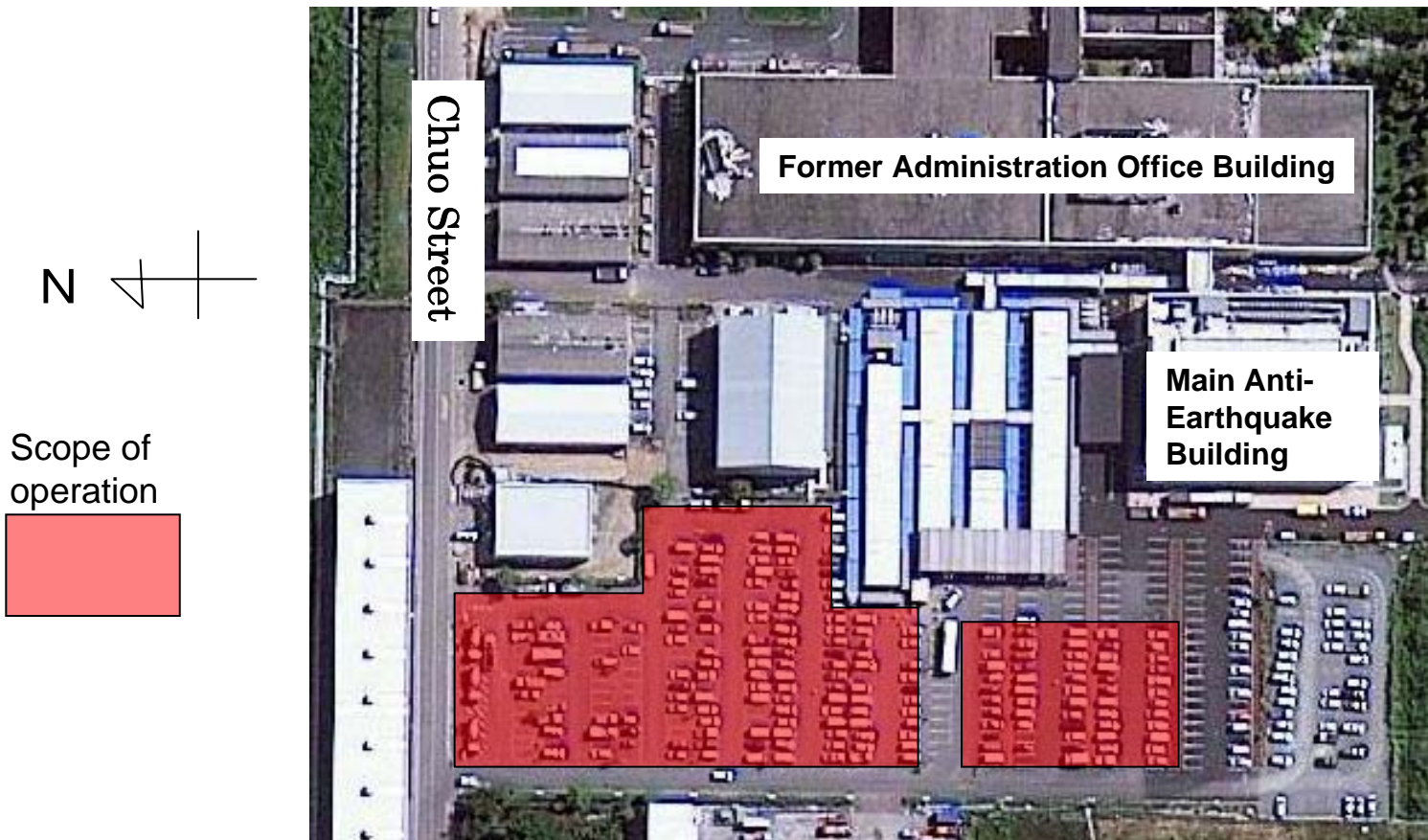


<Full view of dust collector system>

Outline of work

Period: January 7 - 30, 2012 (operation period of heavy machinery)

Scope of work: Parking space of Main Anti-Earthquake Building's parking lot excluding bus lane (approx. 6,000m²)



Procedure of collecting dust (in 2 steps)

1st Step: removing surface soil etc. by man-power (direct management)



- Removing surface soil of planting
- Scraping road by metal spatula and brush
- Mopping/wiping road

<Results>

14 times, 60 persons in the total number

Sandbags: 150

2nd Step: collecting dust and small rubbles by heavy machinery



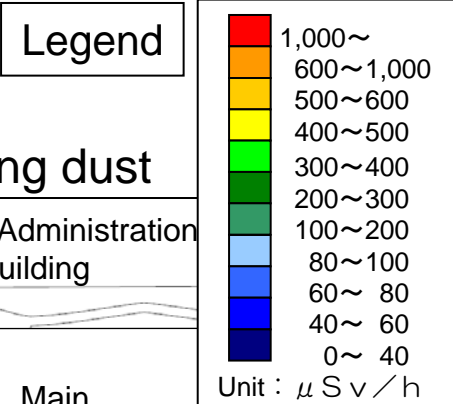
Scraping the road



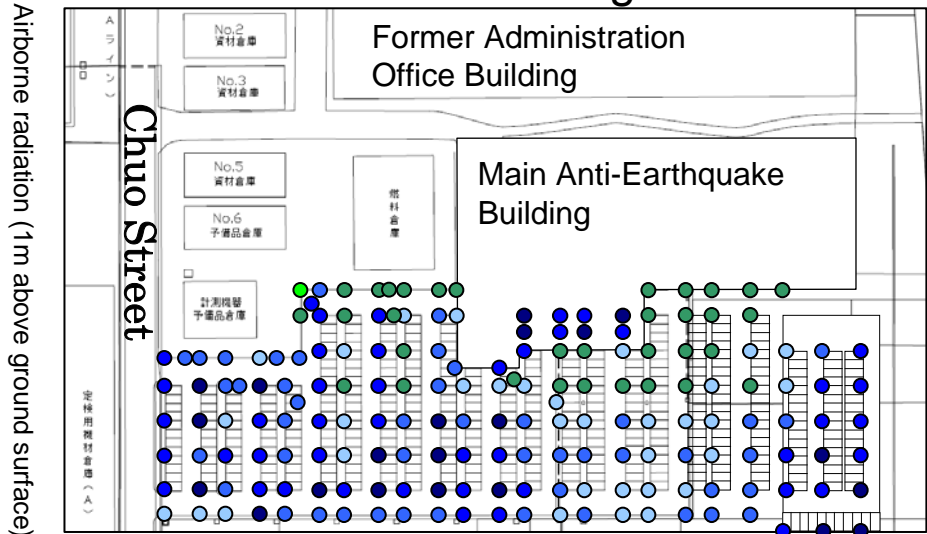
Collecting dust

- Scraping the road with wire brush attached to the bucket of backhoe
- Suctioning dust and small rubbles with dust collector (patent pending)

Comparison of radiation dose distribution before and after dust collecting work

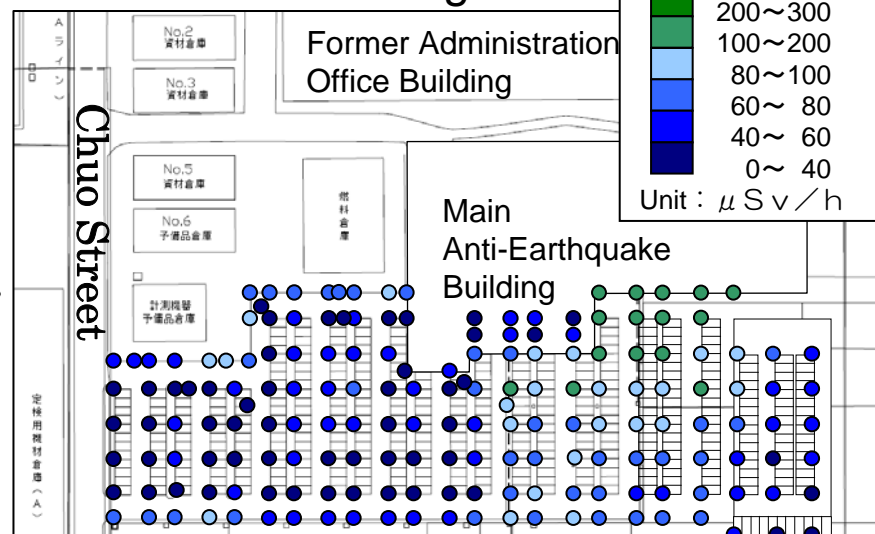


Before collecting dust



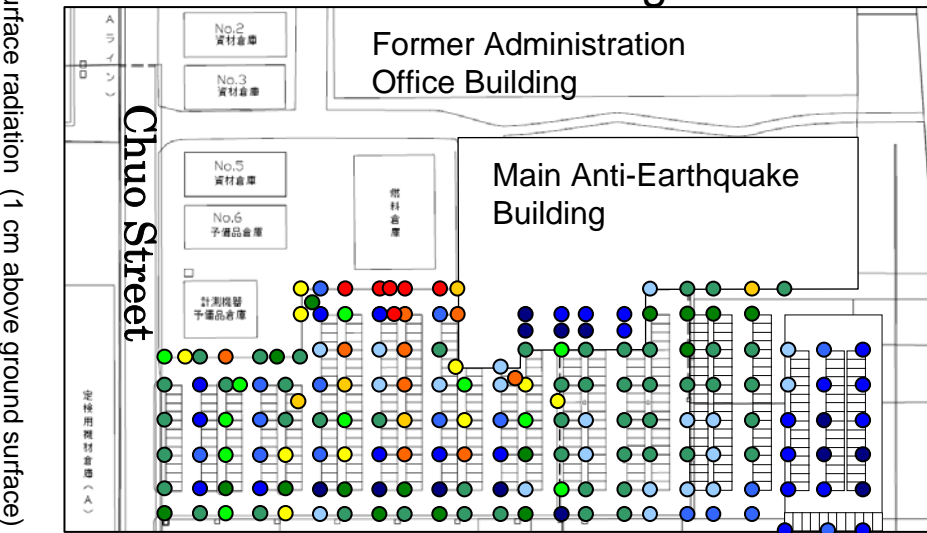
Average $82 \mu\text{Sv/h}$, Maximum $355 \mu\text{Sv/h}$

After collecting dust



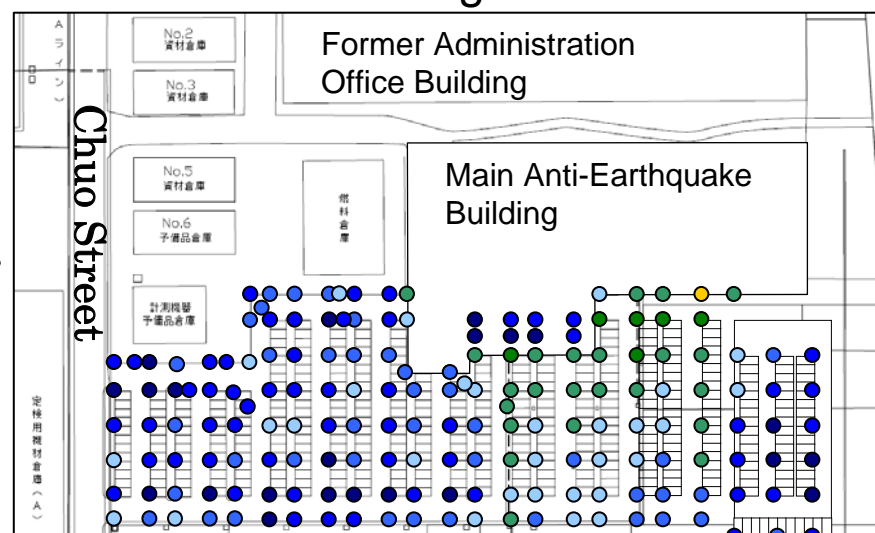
Average $54 \mu\text{Sv/h}$, Maximum $115 \mu\text{Sv/h}$

Before collecting dust



Average $254 \mu\text{Sv/h}$, Maximum $240 \mu\text{Sv/h}$

After collecting dust



Average $68 \mu\text{Sv/h}$, Maximum $181 \mu\text{Sv/h}$

Airborne radiation (1m above ground surface)

Surface radiation (1cm above ground surface)