

Change of Rules Related to Radiation Protection Gear (Expansion of Area not Requiring Full-face Mask)

Though full-face mask is basically required within the site of Fukushima Daiichi Nuclear Power Station, the areas where the radioactivity density of the air is confirmed to be less than the level requiring full-face mask are designated as areas not requiring full-face mask for the purpose of reducing burden on workers and improving workability while ensuring appropriate radiation control. The following areas will be added to the areas not requiring full-face mask starting from April 2013.

1. Construction areas (Newly designated as the areas not requiring full-face mask)

Full-face mask will no longer be required in the following areas after completing tree trimming, surface soil removal and gravel installation and once the radioactivity density of the air is confirmed to be less than the level requiring full-face mask. Dust mask (such as N95) will still be required during work to ensure safety.

- (1) Multi-nuclide removal equipment construction area (Early April)
- (2) Temporary cask storage facility (Early April)
- (3) Parking lots in the power station site and parking lot construction area outside of the power station site (Late April)
- (4) Incineration facility construction area (April or May)

2. Vehicle contamination inspection area (to be added to the areas not requiring full-face mask)

As it has been confirmed that there is hardly any impact of the dust generated from construction vehicles, etc. on the lanes where vehicle screening is performed*, the lanes without a continuous dust monitor installed will be added to the areas not requiring full-face mask. Though a continuous dust monitor was previously installed in each lane, continuous dust monitor will be installed in the representative lane only from now on to continue monitoring.

*The continuous dust monitor alarm has not gone off due to an increase of dust density during the period from August to December 2012. The filter attached to masks worn by measurement staff was not contaminated.

Areas not Requiring Full-face Mask

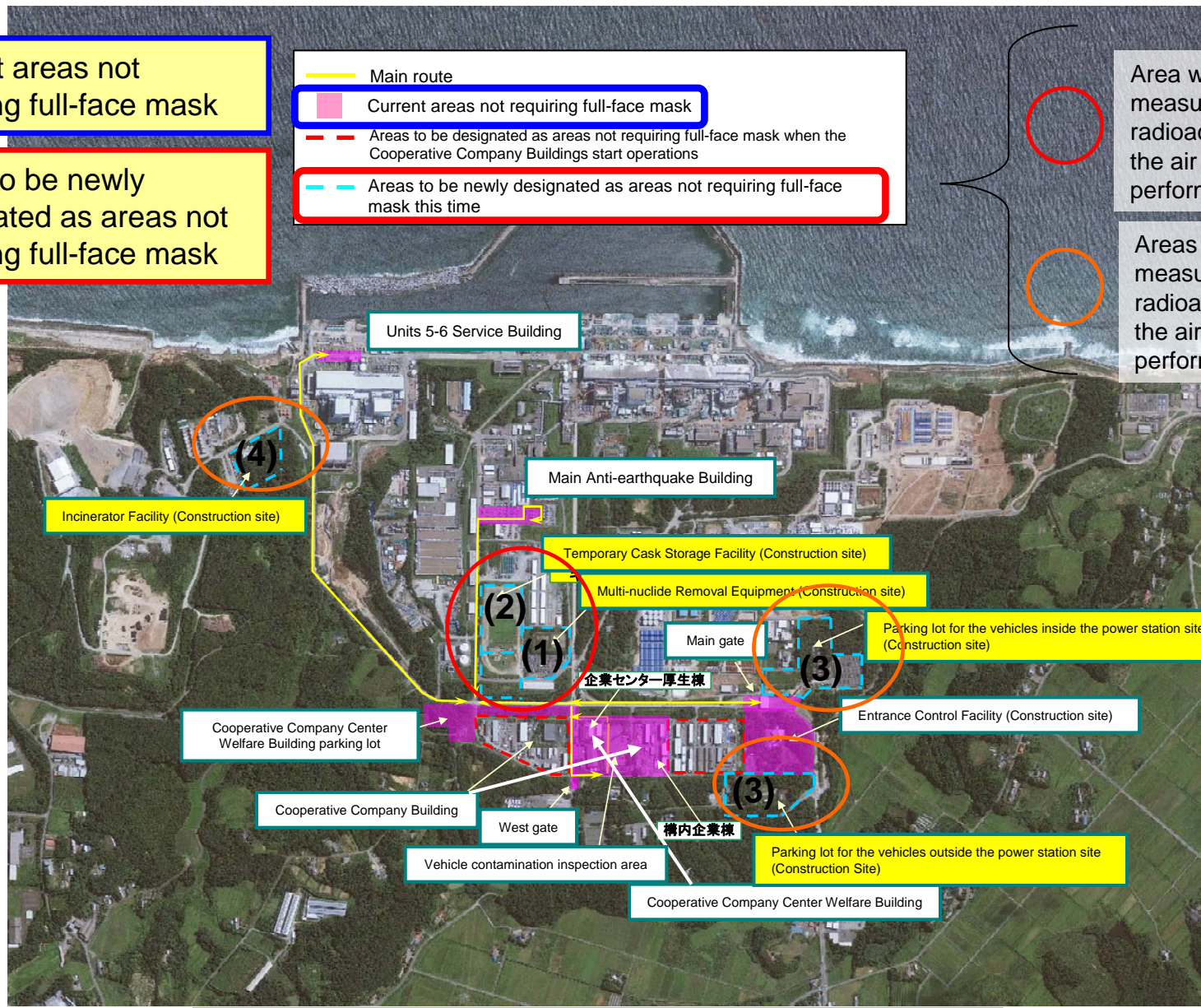
Current areas not requiring full-face mask

Areas to be newly designated as areas not requiring full-face mask

- Main route
- Current areas not requiring full-face mask
- - Areas to be designated as areas not requiring full-face mask when the Cooperative Company Buildings start operations
- - Areas to be newly designated as areas not requiring full-face mask this time

Area where the measurement of radioactivity density of the air has been performed

Area where the measurement of radioactivity density of the air will be performed



Areas not requiring full-face mask in Fukushima Daiichi NPS

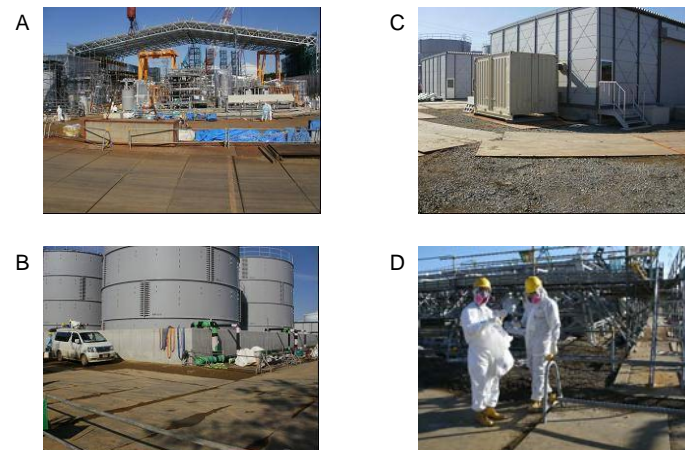
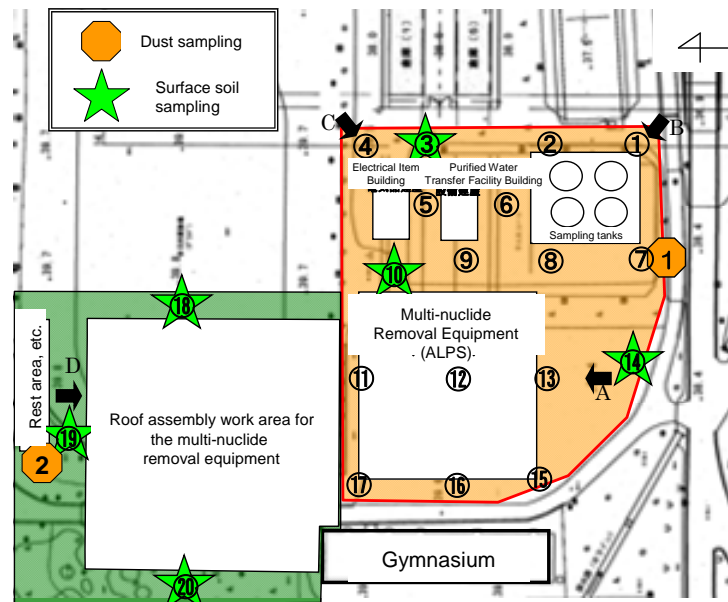
Survey Results Obtained in the Multi-nuclide Removal Equipment Construction Area

Place of sampling	Name of sampling	Date of sampling	Cs-134*1	Cs-137*1	Cs-134+Cs-137*1, *2	(Reference) Ambient dose
1	Dust	Jan 31, 2013	< 1.6E-06	< 2.1E-06	Below the detection limit density	-
2	Dust	Feb 14, 2013	<1.2E-06	<1.5E-06	Below the detection limit density	-
⊙	Surface soil	Jan 31, 2013	7.3E+03	1.3E+04	2.1E+04	5.0 μ Sv/h
⊙	Surface soil		1.9E+03	3.7E+03	5.6E+03	<1.0 μ Sv/h
⊙	Surface soil		1.2E+04	2.3E+04	3.5E+04	5.2 μ Sv/h
⊙	Surface soil		3.5E+04	6.4E+04	9.9E+04	12 μ Sv/h
⊙	Surface soil		1.5E+03	2.8E+03	4.3E+03	2.0 μ Sv/h
⊙	Surface soil		4.1E+03	7.4E+03	1.2E+04	25 μ Sv/h

*1 Unit for dust radioactivity density: Bq/cm³, Unit for surface soil radioactivity density: Bq/kg
 *2 Dust mask with particle filtration efficiency of more than 95% is required for work handling highly radioactive contaminated soil (exceeding 5.0E+05Bq/kg) and highly radioactive dust (exceeding 10mg/m³) in accordance with the regulation related to ionizing radiation during decontamination.

(Reference) γ ray survey results (Unit: μ Sv/h) Measurement date: January 31, 2013

Measurement point	Dose rate	Measurement point	Dose rate
①	6.0	⑪	1.9
②	6.0	⑫	1.6
③	5.0	⑬	2.4
④	8.0	⑭	5.0
⑤	2.9	⑮	2.1
⑥	3.0	⑯	1.8
⑦	3.6	⑰	2.3
⑧	2.9	⑱	12
⑨	2.0	⑲	2.0
⑩	<1	⑳	25



- The radioactivity density of the air is lower than the level requiring full-face mask (2.0E – 04Bq/cm³).
- Though radioactive materials are prevented from being stirred up through tree trimming, surface soil removal and gravel/concrete installation in the area, disposable dust mask (such as N95) will still be required during work to ensure safety.
- Full-face mask is required in the case that leakage of contaminated water is detected at the facility.

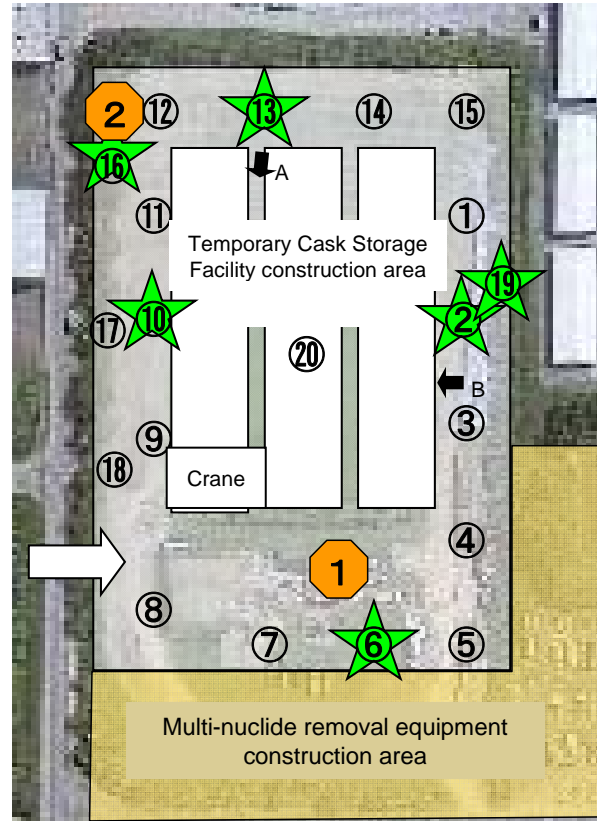
Survey Results Obtained in the Temporary Cask Storage Facility Construction Area

Place of sampling	Name of sampling	Date of sampling	Cs-134*1	Cs-137*1	Cs-134+Cs-137*1, *2	(Reference) Ambient dose
1	Dust	Jan 31, 2013	< 1.6E-06	< 2.2E-06	Below the detection limit density	-
2	Dust	Feb 14, 2013	<1.2E-06	<1.5E-06	Below the detection limit density	-
㊸	Surface soil	Jan 31, 2013	2.7E+03	4.9E+03	7.6E+03	4.0 μ Sv/h
㊸	Surface soil		2.7E+04	5.0E+04	7.7E+04	5.0 μ Sv/h
㊸	Surface soil		1.2E+04	2.3E+04	3.5E+04	3.5 μ Sv/h
㊸	Surface soil		1.8E+03	3.6E+03	5.4E+03	24 μ Sv/h
㊸	Surface soil		1.9E+05	3.6E+05	5.5E+05	25 μ Sv/h
㊸	Surface soil		8.2E+03	1.4E+04	2.2E+04	15 μ Sv/h
㊸	Surface soil					

*1 Unit for dust radioactivity density: Bq/cm³, Unit for surface soil radioactivity density: Bq/kg
 *2 Dust mask with particle filtration efficiency of more than 95% is required for work handling highly radioactive contaminated soil (exceeding 5.0E+05Bq/kg) and highly radioactive dust (exceeding 10mg/m³) in accordance with the regulation related to ionizing radiation during decontamination.

(Reference) γ ray survey results (Unit: μ Sv/h)
 Measurement date: January 31, 2013

㊸	5.0	㊸	4.0
㊸	4.0	㊸	5.0
㊸	3.0	㊸	4.0
㊸	7.5	㊸	7.0
㊸	4.0	㊸	15
㊸	5.0	㊸	25
㊸	4.0	㊸	24
㊸	5.0	㊸	26
㊸	3.5	㊸	15
㊸	3.5	㊸	2.0



- The radioactivity density of the air is lower than the level requiring full-face mask (2.0E-04Bq/cm³).
- Though radioactive materials are prevented from being stirred up through tree trimming, surface soil removal and gravel/concrete installation in the area, disposable dust mask (such as N95) will still be required during work to ensure safety.