On-site Report

The Radioactive Contamination due to Fukushima Daiichi Nuclear Power Plant Accident

The State of the Contamination 2019 in Nihonmatsu City and "Black Soil" Contaminated by Radioactive Materials—

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• **Summary** • The Fukushima Daiichi Nuclear Power Plant located in Fukushima Prefecture was destroyed by the huge earthquake, whose magnitude was 9.0, on March 11, 2011. The large amounts of radioactive elements were scattered in the environment such as atmosphere, soil, lake, river, and ocean by the destruction of the nuclear power plant. On March 15, Nihonmatsu City was attacked by the radioactive plume that was carried in the east wind and the ground surface on the city was contaminated with radioactive material. The air radiation dose (1m above the ground) at southern areas in the central part of Nihonmatsu City was measured from May in 2019 to September. The number of the measurement point was 5921, the range of the radiation was $0.06 \sim 2.56 \,\mu$ Sv/h, and the average value was $0.28 \,\mu$ Sv/h. The number of the points from 0.1 to 0.4 μ Sv/h, which is about 82% of the total points, was 4832. In addition, the existence of black soils with high radiation doses, where the maximum air radiation dose was 2.26 μ Sv/h, was confirmed again since the measurement 2014 in Koriyama City.

Key Words: Fukushima Daiichi Nuclear Power Plant, contamination with radioactive materials, air radiation dose rate, Nihonmatsu City, soil contaminated with radioactive materials

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