

Field Survey to Verify Measures to Reduce Air Dose Rates at Schoolyards or Playgrounds of Schools, etc.

1. Objectives, etc.

The “top/bottom substitution method”(*1), which prevents the surface soil of schoolyards, playgrounds and other outdoor areas of schools, etc. from being taken out of the premises, is considered to be an effective means to reduce the radiation doses that pupils and others receive at schools in Fukushima Prefecture to the greatest possible extent. From this standpoint, a field survey regarding air dose reduction measures will be conducted in order to carry out on-site verification of the actual effects and concrete methods, etc.

2. Survey date

May 8, 2011 (Sunday)

3. Survey sites

Schoolyards and playgrounds, etc. of the junior high school attached to Fukushima University and of the kindergarten attached to Fukushima University (*2)

4. Survey details

- (1) Identify the distribution status of the air dose rates at the ground surface of schoolyards, playgrounds, etc.
- (2) Identify the status of doses caused by radioactive materials in the soil of schoolyards and playgrounds, when changing depth.
- (3) Check the effect of the local top/bottom substitution method, etc.

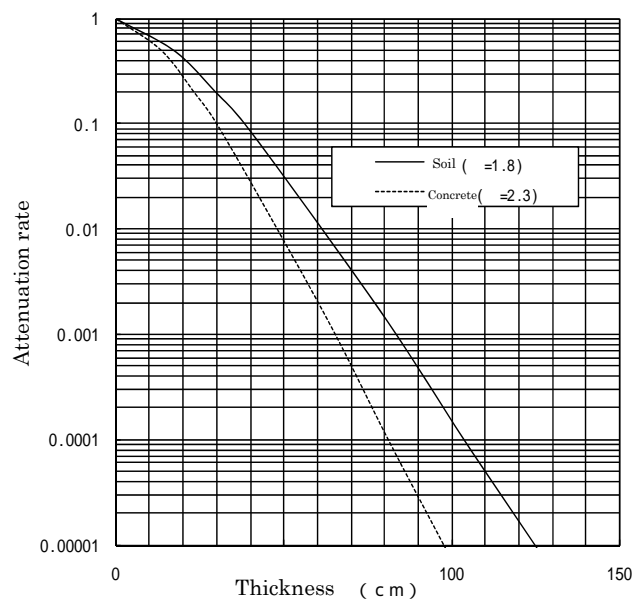
5. Executing body

Japan Atomic Energy Agency (Ministry of Education, Culture, Sports, Science and Technology)

(In cooperation with Fukushima University)

- *1 The method of substituting surface soil and subsoil in the same premises
- *2 Schools where air dose rates of at least 3.8 $\mu\text{Sv}/\text{hour}$ were measured in a survey conducted by MEXT on April 14

Reference: Reduction effect of radioactive dose by cover soil or substitution
(top/bottom replacement)



How much of the radioactive soil should be coated depends on the situation of the radioactive materials on the site. Coating enables a large reduction of surface dose rates.

(Japan Radioisotope Association, Radioisotope Notebook 11th ed., p.174;
converted against soil density using the transmission rate of Cs-137 through
concrete)