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TRANSLATION. ORIGINAL TEXT IN FINNISH.

Activity limits for the discharges of radioactive waste into the sewer network or otherwise into the environment

By virtue of Section 23 of the Radiation Decree (1512/1991), the Radiation and Nuclear Safety Authority (STUK) has set the following activity limits for the discharges of radioactive waste originating from the use of unsealed sources.

The activity limits concerning the discharges of radioactive waste into the sewer system are as follows:

The activity discharged into the sewer system from one place of use of radiation at one time may be at most equal to the exemption value for each radionuclide, but no larger than 100 MBq.

The activity discharged into the sewer system from one place of use of radiation over one month may be at most 10 times the exemption value set for each radionuclide.

However, the activity discharged into the sewer system over the course of one year must not exceed 100 GBq.

If the responsible party discharges several different radionuclides into the sewer system, the total activity must meet the following condition in terms of single discharges:

$$\sum_k \frac{A_k}{A_{E,k}} \leq 1 \quad (1)$$

and the following condition for monthly discharges:

$$\sum_k \frac{A_k}{A_{E,k}} \leq 10 \quad (2)$$

In the formulas, A_k is the activity of radionuclide k and $A_{E,k}$ is the exemption value for the said radionuclide k .

When delivering waste to an incineration plant or dump site, the activity limits are as follows:

The activity contained in a single waste package may be at most equal to the exemption value for each radionuclide, but no larger than 100 MBq.

The activity delivered to a dump site or incineration plant from one place of use of radiation over the course of one month may be at most 10 times the exemption value set for each radionuclide.

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However, the activity delivered to a dump site or incineration plant over the course of one year must not exceed 100 GBq.

If the waste contains several different radionuclides, the total activity included in the waste must meet the condition (1) for one waste package and condition (2) for waste that is delivered for disposal within one month.

The activity limits for radioactive substances discharged into the air from the place of use of radiation are as follows:

When radioactive substances are discharged into the outside air, the discharges must be limited in such a way that the effective dose to a representative person is not more than 10 µSv per year.

The exemption values for radionuclides that this decision refers to have been provided in the Radiation and Nuclear Safety Authority's decision 5/3020/2013.

Director General

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