

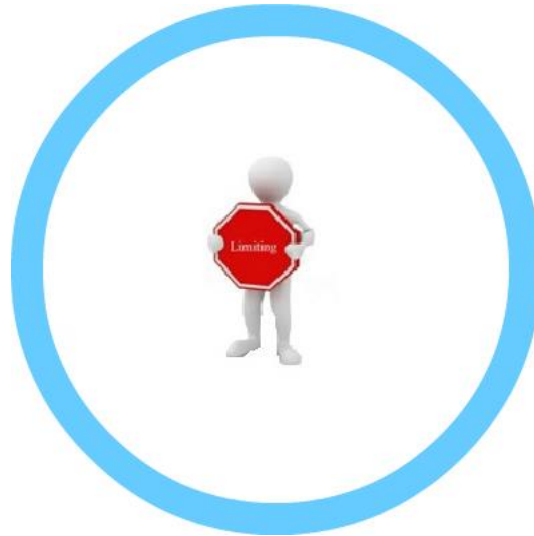
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Methodology for Limiting of Radioactive Discharges to the Environment in the Russian Federation



Limiting of Radioactive Discharges in Russia

- The regulatory body establishes authorized limits for discharges



- Methodology for setting discharge limits is developed by Rostechndazor's technical and scientific support organization (TSO) - SEC NRS

Criteria for Regulatory Control of Sources

- If annual effective dose created by the source more than $10 \mu\text{Sv}$ (without dilution), this source shall be regulated



- A simple and effective way that does not require complex calculations

Regulated Sources

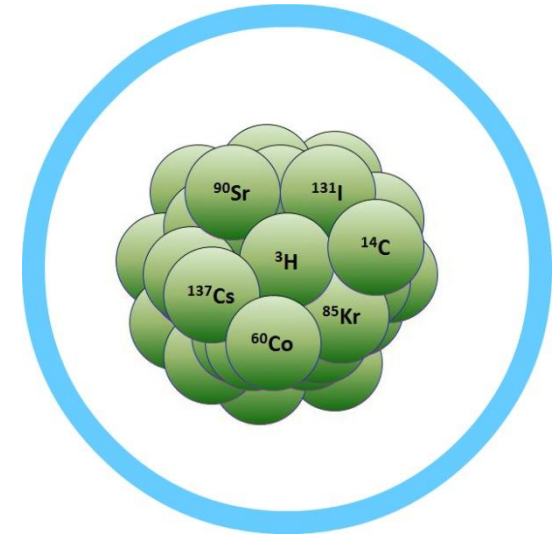
- Both organized and unorganized sources of radioactive discharges shall be regulated



- Establishment of discharge limits is not required for organizations whose liquid discharges do not affect the volumetric activity of radionuclides

Criteria for Selecting Radionuclides

- The list of limited radionuclides consists of 94 radionuclides for airborne effluents and 81 radionuclides for liquid effluents, including ^3H и ^{14}C



- Setting discharge limits is required for those radionuclides from the list that contribute to the annual effective dose of 99% (taken into account dispersion)

Methodology for Limiting of Radioactive Discharges

- The basic condition: non-exceeding of dose constraints (due to radioactive discharges)



- Methodology contains criteria aimed at ensuring a favorable environment

Scientific Provision of Discharge Limiting Methodology

- Criteria and principles for setting discharge limits are established in the acts of Rostechnadzor



- The Rostechnadzor's safety guides contain recommended calculation methods and radiological parameters

Graded Approach in Methodology

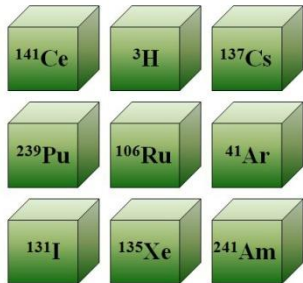
- Field researches may be conducted for complex facilities



- Safety guides contain comprehensive information necessary for setting discharge limits for simple facilities

Control of Radioactive Discharges

- The requirements for controlling radioactive discharges arise from discharge limitation



- Limited radionuclides are controlled separately

Harmonization

- The legal and regulatory basis of discharge limitation is established in the Federal laws, acts of the Government, acts and recommendations of Rostechnadzor



- The provisions of more than 20 documents of international organizations are taken into account in the development of the legal and regulatory basis

Thanks for your attention!

