APPLICATION OF GAMMA SPECTROMETRIC LOGGING FOR IDENTIFICATION OF SOURCES OF RADIOACTIVE CONTAMINATION OF UNDERGROUND MEDIUM

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Using the results of the joint analysis of the bulk and spectrometric gamma logging, that have been carried out in boreholes around power Unit 4 of Chornobyl nuclear power plant, the regions of radioactive contamination of soils below the pre-accident level of the ground have been discovered. It was shown, that gamma-logging data in combination with hydrogeology data gives the possibility to distinguish the influence of potential sources of radionuclides. For instance, soils, contaminated by fuel particles, high active water from Unit 4, etc.