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Assessment of environmental risk nearby NPP construction site.

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There is no single source of energy that is able to satisfy demands of future generations. The nuclear power with the latest achievements in technology and safety must become one of the main source of energy in future.

Republic of Belarus has decreed that a NPP with reactors of new generation should be introduced into the energy system of the country .
Monitoring of effect of NPP operation on ecosystem requires the researches of the ecological state of environment in a region nearby NPP location.

This paper discusses methods, which were developed basing on original results and on international recommendations, for processing and analysis of data on environmental monitoring to assess risk of adverse ecological consequences. The methods considered are also applicable for the data relevant to the territories nearby NPP construction site.

Factor of both radiational and non-radiational origin which may cause adverse health effects are analyzed.

A potential environmental contamination form radioactive gaseous and aerosol emission during normal operation of 2 VVER-1200 units has been estimated.

Individual annual exposure of population due to gaseous and aerosol emissions during normal operation of 2 VVER - 1200 units has been calculated.

Experimental measurements of pollutants' content in the atmospheric air on the territory near NPP construction were done at Republic Center for Radiation Control and Environmental Monitoring.

A comparison of calculated values of air pollutants concentrations, emitted by point-type stationary facilities located nearby NPP, with results of analysis of air samples taken in the NPP construction site in Belarus has been made.

It has made possible to estimate risk to human health from environmental pollution in the area of NPP construction.