Problems of risk modeling influence of uranium storage's on environment.

A.K. Tynybekov,
Ainura Emil kyzy

The difference in physical-geographical conditions of Kyrgyzstan is mountainous surface. On the territory there are more than 20 (out of 70) natural processes which damage environment and population. Because of mountainous relief on the territory in case of disasters "synergetic" or natural-technological can occur. it is possible that chemical or radiological dangerous objects can be in the zone of disaster which would be reason goedynamical and ecological catastrophe

Critical situations occur where the conditions of geology and environment under influence of natural and especially industrial factors threaten the system of life support of population. The total of ecological problems go up to crisis catastrophe level.

In this case the object of research is Ton region which is locate on the south coast of the lake Issyk-Kul. Given region is situated in ecologically damaged zone, so population of the region are under potential risk every day. We have to note that closing of mines influenced economy, ecology, migration (ecological and economical migration) and development of towns. In particular it influenced decrease in functioning of industrial companies, objects of infrastructure and decreased the quality of education and health services.

On the territory of the given region sets of research took place. The general radioactive background of the territory and physical-chemical contents of surface waters. The result of the research showed the radiation is higher indoors than outdoors, also the separate areas with high level of radiation were determined. The study of surface waters is characterized by high level of piritization and lack of essential components. Besides in the given territory is distinguished from others by often earthquakes, water flows, snow avalanches and landslides.

Relatively natural processes, valley of the river Ton is distinguished by water flows and floods. In the top of the river there are 3 lakes (Tuyk-Tor, Keltor, Korumdy) which are glacier lakes and represent danger of hitch. The possibility of hitch increases with the global warming of environment. The research showed that climate of Tien-Shan range had an increased warming of maximum 0.6 deg. of C and minimum of 0.2. In the seasonal flow the most effected is winter-spring period (1.1 C-0.8 C) the least effected is highland area (0.1 C). In case of warming on o.5 C the speed of melting-icing of Tien-Shan glaciers increases and takes 30-40 more.

The hitch of the lakes can cause floods along the river up to 2335 M^3/s. This is dangerous for the people living in the river valley. The zone of destruction would be the village Kadji-Sai which is located in Ton region.

The seismically danger is higher in Ton region comparing it to the Jeti-Oguz region. In the Ton region (8 points) there are 7 village and 3180 houses with the population of 22 000 people.

In our case there is a high level of possible influence of the uranium storages that are located is the risk zone. The location in the risk zone can lead to the ecological catastrophe, because the preventive dam is not secure enough. The destruction of uranium storages will cause radioactive, chemical pollution of the huge area with rivers, agricultural lands, villages and the coast of the lake Issyk-Kul.

It is necessary to carry out practical researches and complex testing on modeling of risk or Risk Assessment.