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REVIEW OF DOCTORAL THESIS

Scientific and methodological approaches to development of sanitary protection zones with the use of new technologies that reduce the environmental pollution
by Almas Kenessary

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The topic of the thesis is of current interest due to the intensification of integration processes in the world, the exchange of information, resulting in a significant convergence of approaches in the field of environmental management and, in particular, the establishment of the sanitary protection zones.

There are examples of reduction of sanitary protection zones of industrial objects through the introduction of the concept "protection via technology". The mentioned above concept is widely used in all developed countries, thus often resulting in establishment of boundaries of sanitary protection zones that almost fully coincide with the boundaries of the industrial site regardless of the object's hazard class.

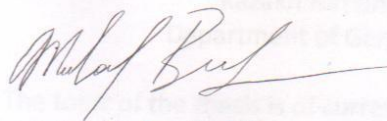
The thesis clearly demonstrates that concept "protection via distance" which is widely used in the Republic of Kazakhstan does not refer to the modern sanitary technology. The concept of "protection via technology" is considered safe for the population and economically viable, since it does not only improve air quality but also reduce the expenses on zone maintenance.

The work presents the results of research in the region of Karachaganak oil and gas field and "Sagyz" oil region: the health and epidemiological situation of research areas have been assessed; hygienic estimation of the basic indicators of population health and public health risk assessment were accomplished in this work. Subsequently, there is a comparative analysis of two concepts of sanitary protection zones establishment such as "protection via distance" and "protection via technology".

A. Kenessary proved to be scrupulous and conscientious researcher, consistent in the accomplishment of the tasks and objectives of his thesis. Materials of this study are presented in a number of publications in both local and foreign editions. Valuable scientific data were received as a result of research.

One of the main scientific outcomes was the optimization of sanitary protection zone in the "Sagyz" oil region. Author offers practical recommendations for technological, sanitary-engineering, planning and medical-organizational issues of oil and gas deposits.

In my opinion, the reviewed thesis fulfills all requirements posed on theses aimed for obtaining PhD degree. This thesis is ready to be defended orally, in front of respective committee.



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