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## CONTRIBUTION TO THE STUDY OF THE ENVIRONMENTAL HERITAGE OF A FORMER CHEMICAL PLANT

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### **Abstract**

The former Arad Chemical Fertilizer Plant had an important polluting effect on environment and, although it was shut down in 1990, its environmental heritage still exists. The paper contains a short description of the former plant and its impact on the environment, mainly on the quality of water and soil and emphasizes the effects of polluting heritage that still exists. Today, one of the major problems on the platform of the former Fertilizer Plant is the existence of all concrete buildings which now have not any use. During the planned demolishing operations, it is obviously necessary to prevent any damage of environment with special care to the possible spreading out of radioactive materials. The mentioned polluting potential is due to the radioactivity of the raw material that was processed in some of the buildings. Special care is necessary in spite of the fact that the former raw material had a low level of radioactivity. In this respect new researches were carried out and the suitable technology was proposed. Such way any significant polluting effect can be prevented and the area can get a good new economic use. The research and its result are important so for protecting the underground water reserve in the area that is used for drink water supply of a large city and of the surrounding villages as for protecting soil and restore the aspect of the area. Also the research can have positive economic results by using either some of the remaining buildings or of the freed area.

*Key words:* environmental protection, groundwater pollution, impact, radioactivity

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