



Lessons learnt from the red sludge accident of 4 October 2010 in Ajka, Hungary

Tamás Lipovics (1,2), Sándor Czakó (1), and István Kelemen (1)

(1) CK-Trikolor Consulting Ltd, Budapest, Hungary (lipo@ludens.elte.hu / Phone: +36-1-3151101 /), (2) Eötvös Loránd University, Institute of Geography and Earth Sciences, Department of Geophysics and Space Science, Budapest, Hungary

Although, it is still the question under debate that the event was naturally triggered or not, the red sludge accident in Ajka was definitely the largest ecological accident ever happened in Hungary. On 4 October, 2010 at 12:35 local time the dam of a sludge reservoir owned by a private company collapsed. Mixture of nearly one million cubic meters of red sludge and caustic water flooded an area of 40 square kilometres. The flooding killed 10 people and injured more than 100 in nearby villages. Estimated economic losses due to the accident amount to 25-30 billion HUF.

Investigation of the accident is still in progress, however, questions regarding to specific circumstances have already arisen. The released red sludge is not dangerous according to Hungarian and EU laws, therefore, the supervision of its storage conditions does not need special care. Thus, the accident shed light on the possible deficiency of environmental regulations. Leaders and some co-workers of the owner company are charged with criminal negligence leading to a public catastrophe, but the question of responsibility is not clear, yet. The company declared that they have been complied with all of the operational requirements under control of the authorities. Additionally, there are further sludge and other type of surface reservoirs in Hungary containing millions of cubic meters of substances. Re-examination of their status and risk level has already started with special attention to the liability insurance of the owner companies.

We present the conclusions and lessons learnt from the accident considering the regulatory, insurance and hazard aspects of sludge reservoirs.