

The Radioactivity of the Transdanubian coal ash

Hungarian Gulf-syndrome?



Kolontár – Budapest 2012
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Spring 2012 half a years the red sludge disaster another unpleasant effect occurred in the area what draw attention to itself. This is the dust what is covering the area and appears to be gray and redish.



Chemical composition of the dust in general, regardless of the mere physical basis, classified according to the diameter of the particles. The particles smaller than 100 microns are breathable already, but most of these particles get trapped and stay in the nose, mouth and larynx but it does not get deeper into the airways. Smaller than 10 microns get into the pharynx, and smaller than 4 micron gets into the lungs. Size of a 2.5 microns and smaller than that is not at all or hardly eliminated from the lungs. From the health point of view the 10. And 2.5 micron dust particles have significance, and on these PM_{10} and $PM_{2.5}$ notation is used.

In all cases if silicosis inhaled, it can cause lung and respiratory disease. The dust in the Kolontar region however, causing a bigger problem. Even the bauxite grinding is made about half a millimeter in size, but these particles are typically disintegrated in the caustic exploration (cooking). After the bauxite clay minerals (particles beyond 20 microns of minerals) or even among those also include a finer particle size, so Kolontar dust is typically less than 5 microns, many $PM_{2.5}$ fraction.



Recent studies (USA and Australia) have shown that such fine particles not only the cause of silicosis disease and other similar sickness, but because the vascular damage is caused to a significant extent, it is responsible for cardiovascular diseases such as stroke or heart attack. Complex problem of gray slag (slag coal burning power plant, ash, filterpernye) gray sludge caused a problem. The gray sludge in Ajka (formerly coal burning power plant) burns the remains of an aqueous slurry is transferred into the pond. Although the particle size of the sub-filterpernye reason is dangerous, unfortunately, is much more than that.

Earlier former coal mine charcoal remaining after combustion of typical chemical composition of the waste ("officially"), by weight:

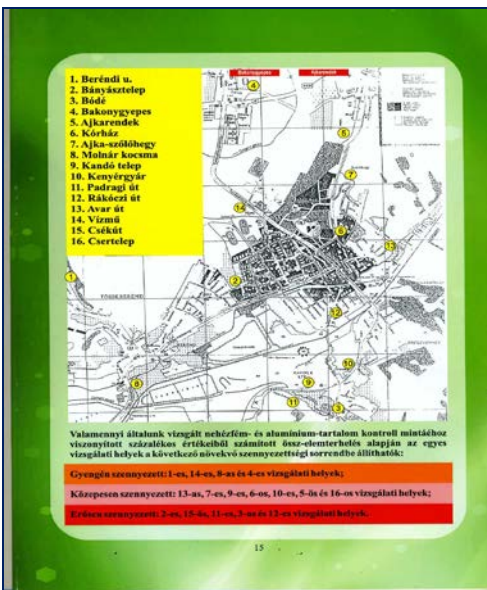
Silica	12%
Aluminium oxide	18%
Iron oxide	6%
Calcium oxide	34%
Magnesium oxide	34%
Sodium oxide	0,5%
Potassium oxide	0,5%
Other	1%

On more than one percent of what our problems are, because they are located in the harmful substances. Indeed, there are those in the presence of heavy metals stiffly that are harmful to your health (although not in%, but can be measured in thousandths%, even separately, their joint effect) is much **more dangerous!**

One of the most convincing examples, it has long been known that the strength of the Ajkas mine devote much of the dross residue (of which the walls of the reservoirs / 10 and 1 to 10 /a / to have been built). Also more distantly to the same radiation level significantly below the allowable radiation health value, but it is very high (compared to normal background radiation) and typically a waste uranium (oxide) due to the content.



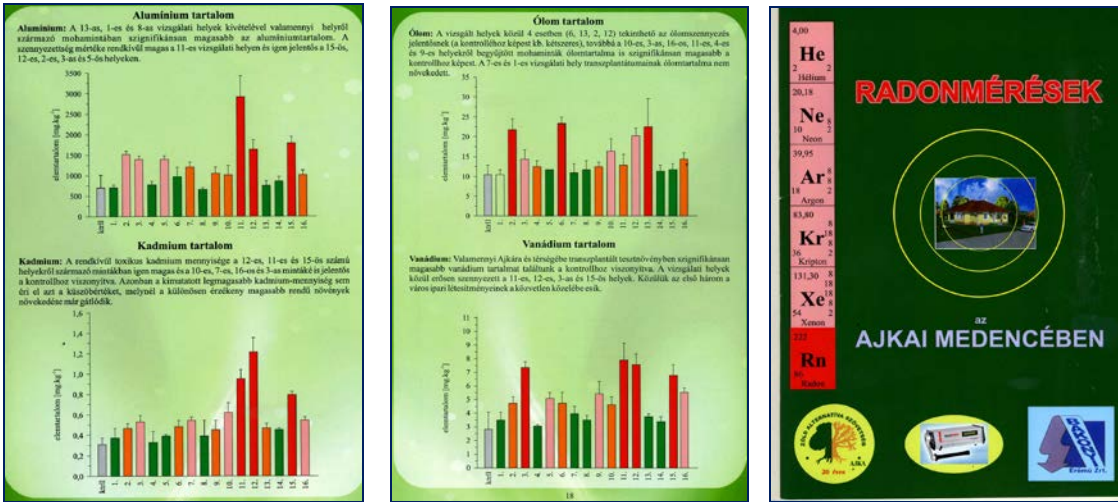
But it has not been observed with caution (because you still did not know the effects of depleted uranium munitions in the Gulf syndrome) that the uranium radiation is not a health matter how dangerous heavy metals. This is still subject to research, but it looks to be 2-30% over the ten-thousandth of a solution or inhaled in the form of a strong health effects.



The radioactive waste, and studies have been made for this. You can read about it at: a „Fizikai Szemle 1997/8. 244.o. - Dezső Zoltán, Papp Zoltán, Daróczy Sándor: Hőerőművi eredetű radioaktív szennyezés és lakossági sugárterhelés Ajkán” című munkájában. <http://www.kfki.hu/fszemle/archivum/fsz9708/laksug.html>

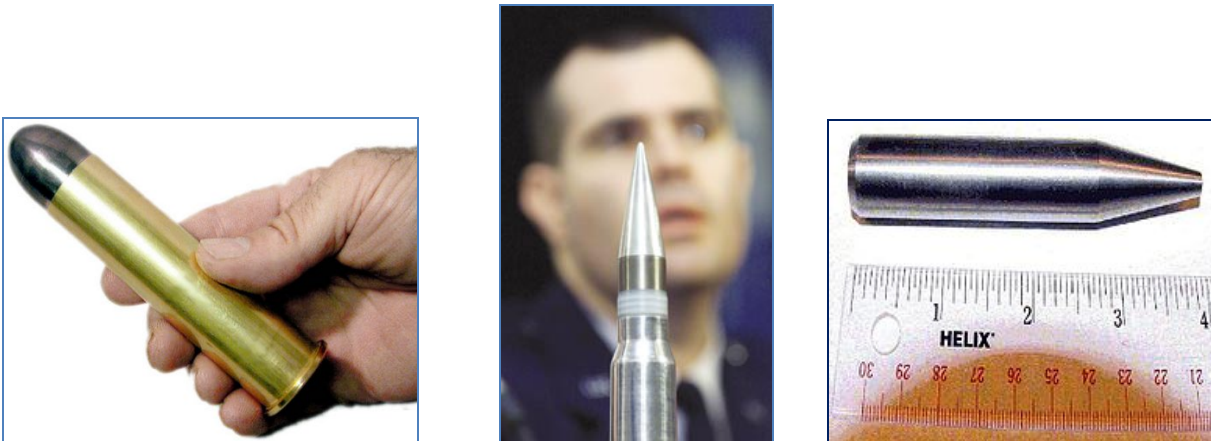
However, these studies are only about the public health risks of exposure , but it is far from being the most dangerous,

especially since been discovered uranium and uranium toxicity seen the light! In that period, at the end of the 90s, it was very fashionable to radiation effects. In particular, called radon, radioactive noble gases has been studied because it emits a lot of gas from the earth, and it's very well-sealed homes stagnate accumulate.



So it is motivated by the Ajka of coal and slag of the investigation and therefore the exposure of the test, the measured concentration of **radioactivity** was measured in outdusting and does not extend to a full health inspection! The test will be found that substances called radiation is much higher than the normal (background) radiation, but does not pose a health risk, which I can not agree. In fact, the (radio) activity sources are heavy metals, more particularly oxides and salts thereof, which are themselves carcinogenic and highly toxic substances. Many among them, which is not transmitted (ex, the decay of the final product made of lead), it is highly toxic!

The problem seems even better when you consider that where uranidok (the products of radioactive decay of uranium) are **there for at least a hundred times as many non-radiating** (ie the referenced literature is not detected!) Uranium (U235) is! (And you did not receive radiation, but also in dangerous carcinogens and toxic heavy metals!) This is a good example of a non-radioactive uranium, which made it a "depleted uranium, DU" special armor-piercing projectiles.



The point is that as a by-product of the uranium enrichment occurring **NON-RADIOACTIVE** uranium is not high because of high kinetic energy density of the tank's armor can be shot, and, moreover, when it breaks, explosively ignites and burns changes till uranium oxide like **snowflakes**. This is connected to the "Gulf Syndrome" and "Kosovo syndrome", a mysterious disease initially with symptoms predominantly in the nervous system. These include memory loss, concentration and attention disorders, insomnia, depression, fatigue, and headache. In addition, may cause confusion, dizziness, erectile difficulties, muscle pain, muscle weakness, needles sensation, diarrhea, skin rash, cough, and chest pain.



The Gulf Syndrome essence that the soldiers who took delight of a death of a tank in very early cancers were severe. At the beginning of the radioactivity was suspected, and did not understand a thing, since this material is not radioactive! We have discovered that the explosion occurred, but otherwise non-radioactive, fine uranium oxide dust that is very highly toxic and carcinogenic! They also found that all other URANIDNAK or just transuranium, REGARDLESS of radioactive radiation is such an extreme toxic and carcinogenic.



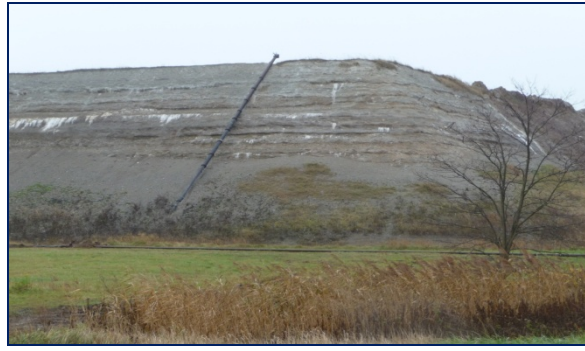
We also know that the generation of radioactive uranium slag weathering have been put forth. The uranium content of uranium is only 0.7 to 0.8% of the radioactivity, the other 99% of uranium is not more! (This is why so much importance to the country's uranium enrichment technology, see Fig. Iran). Therefore, wherever there is a significant radioactive uranium, in the gray mud. However, the barrier material and slag forming power is , there is one hundred times more non-radioactive, toxic but just as uranium (compound), too. And this is only the uranium and other heavy metals are not even mentioned.

The gray clay dust from the wind takes you to the top part of the reservoir, on the other hand, only the air is reclaimed through the damwalls into the air.

Yes, the gray sludge and outlined power plant waste is a "hazardous" category are listed, so the gray sludge reservoir assemblies no bottom insulation, diaphragm walls, or other security is not, therefore, share the slag heaps diffusion release of toxic heavy metals and contaminated leachate free to get drinking water, or may be transferred to cultivated plants, garden vegetables, valuable regional karst water pool as well!

Therefore, simply because of the uranium content in the region may develop in the Gulf syndrome suggestive diseases. These new diseases in the carcinogenic effects have been assumed, and the press is primarily expose it, but it is much more typical of renal diseases, also as a channel cell damage and kidney damage. It is also typical of the chronic fatigue, muscle and intestinal disorders, skin disorders as well.

Re-emphasize that we observed is that with such a well measured radioactivity is radioactive material, such as coal ash in Transdanubia, is not there at least a hundred times as much radiation, but other highly toxic and carcinogenic heavy metals are present! Moreover, it is a burning cinder FACTORY, so-called metals are present in the oxide form, the body can easily recordable manner.



After the tailings from the slag was built, and the outer walls of the keep dusting of the dry weather, the way is also easy and very dusty mud was easy to be washed and the radioactivity, but this is a wrong interpretation, and since the situation is no better, but more severe.



In dry weather time and time again the dusting is happening through the cracked and damaged dams as well. This is coupled with the uncleanable red mud dusting(ex.a bushes from the bottom), the remains of those from the tailings, which due to their size teeth microscopic dust (PM10 and very high respectively. PM2, 0 - [less than 2.5 microns, life-threatening](#) - fraction) are particularly dangerous. The red-and-gray mud PM10 and dustability a huge risk, but it's dusting of PM2, which is excreted by the lungs or cardiovascular disease and cancer! Problem is that since PM2, 5 or excreted by the body in a smooth and urine laboratory tests show no abnormalities.

[Ajka, Devcser, Kolontar many areas of people with cancer, and that the Ajka of the power plant burned coal ash dusting associated. The Transdanubian brown coal ash content is indeed very high, 40% by weight around, and this clay is very heavily loaded extremely toxic and carcinogenic heavy metals](#) (as well as the Gyöngyösorosz mine and tailings pond of run-off, which correctly showed that the Toka creek through how infected your area and caused massive cancer, completely similar to the case here, but the source of pollution in the waste outdusting).

The current health hazards mapping and study of the health status of the population living in the region in this direction professionally, special investigation is still an important need to be! [The people living here are strong indicators of radioactivity gray mud adjacent to the carcinogenic and toxic heavy metal load, non-isolated ponds located 50 million tons of gray sludge lips while spend all their days.](#) However, the gray sludge dams and reservoirs in their material and are the same as in construction X catastrophically destroyed the dam's reservoir!



For these reasons, the people who live here full right to be concerned and worried about their health.

Therefore, it would be worthwhile to examine these aspects of the inhabitants of the region of Kolontar and Ajka! Necessary for a well-equipped and well-trained personnel favored the establishment of health centers, screening, treatment and research purposes as well!



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