

SPEECH
**on “Ecological disaster area in Kalush: current status and further mitigation
of the consequences”**

mini-hearing of European Parliament
(June 29, 2010, Brussels, Belgium)

Dear Members of the Parliament, dear participants, dear colleagues!

On behalf of the Ministry of Ukraine for Emergencies and Affairs of Population protection from the consequences of Chornobyl Catastrophe let me express my gratitude for the invitation and for the opportunity to inform you about the status of ecological situation in Kalush Town, Ivano-Frankivsk oblast, Ukraine. As a result of industrial activity in this area, the significant territories and underground waters happened to be threatened by contamination with highly-mineralized brines and hazardous chemical wastes (Hexachlorobenzene).

In Kalush Town and Kalush region there occurred an ecological disaster, which combined several threat factors: surface subsidence over the mine fields and sinkholes, salinization of surface and underground waters, burial of hazardous industrial wastes as well as possible disruption of several tailings dams. These threats will probably force the resettlement of a majority of population or even the whole population to safer palaces.

This problem poses a significant danger not only for Ukraine, but also for the neighboring countries, especially Moldova, because the contamination of Dnister River with highly-mineralized brines may cause the national-level or even European-level ecological disaster.

The current situation in Kalush does not present the global threat like Chernobyl, but it is a major concern for local populations and symptomatic of a larger trend of previous negligence of environmental considerations in Ukraine's industrialized past, that endangers the life of people today. The combination of these factors has forced Ukraine to apply for international assistance.

The Kalush problem has a 40-year old history.

There was built a factory for exploiting the deposits of potassium salt and for production of potassium magnesia (sulfate potassium fertilizers) and kainite (double salt of potassium and magnesium) in Kalush Town, Ivano-Frankivsk oblast, Ukraine, in 1967. The projected capacity of the factory was 499.2 thousand tons of potassium magnesia per year. The total area of the State Enterprise “Kaliynyi Zavod” was 1063.5 hectares.

The factory has 3 mines, located in the vicinity to Kalush Town, a Dombrovskiy mine pit, 2 tailings dams and a mining waste dump, which negatively influences the environment and which are the ecologically hazardous facilities.

Currently, these facilities are potentially hazardous and may cause the subsidence of ground, sinkholes, landslides, water and ground contamination. The peculiar danger of the situation is that there are more than 1300 living houses of

five villages in the territory of the mine fields of the exhausted mine pits. Salinization of the water laden level, which reached about 900 hectares, is very close to Kalush Town water supply point.

The sudden termination of operations without any proper decommissioning measures, even of temporary kind, has affected greatly the current state of the dams and open-cast mine, and resulted in overall worsening of ecological situation in the area.

Under open mining of potassium ore, there were compiled salt-bearing clays in the pit. Influenced by precipitations the salts dissolve, the area of underground waters contamination is over 150 hectares and it is expanding towards Dnister River.

The tailing dams of the factory are filled with wastes of complex processing and reached the amount of 25mln cubic meters. During intensive precipitations it is possible that the brines may move through the tailing dam №2, which shall cause salinization of nearby grounds, underground waters, and external water sources and eventually lead to ecological disaster of European scale.

There are about 7 mln cubic meters of high concentration brines stored in Dombrovskiyi pit, and this amount is growing yearly. It is quite a real threat of pit flooding, which may cause brine expansion to water laden level and to the tributary of Dnister River, which is a water source for many cities of Ukraine and Moldova.

Moreover, during 1973-1998 in Kalush Town in the territory of previous Kalush Chemical and Metallurgy Facility there worked a line of production of carbon tetrachloride and tetrachloroethylene.

During the production process, which included the direct chlorine treatment of industrial carbon raw material (mostly methane), there were produced solid wastes (resinous woods), which constitute the first level danger, reached the amount of 540 tons/year and contain over 90% of hexachlorobenzene.

Hexachlorobenzene is a resistant pollutant. This means that the substance disintegrates slowly and is compiled in a food chain. Hexachlorobenzene is considered to be a potential cause of cancer disease. Its oncogenecity for animals and high toxicity for living organisms in water was proved.

The design documents of the carbon tetrachloride and tetrachloroethylene production envisaged two options to dispose the hexachlorobenzene. These were burning and dumping. As far as the physical and chemical properties of these substances did not correspond to technical requirements of the burning process, the disposal was not conducted.

As a result of that, the hexachlorobenzene wastes were compiled in the dumping area for solid toxic waste in the area of 5.15 hectares. The dumping area started functioning in 1973. The last burial of waste was conducted in August 2000.

Loss of integrity of buried highly-toxic waste of hexachlorobenzene causes pollution of air, grounds, and water laden levels in Limnytsia River basin that falls into Dnister River.

To provide a relief operation and eliminate the consequences of ecological disaster in Kalush Town, the President of Ukraine signed the Decree "On

proclaiming the areas of Kalush Town and Kropyvnyk Village and Sivka-Kaluska of Kalush District of Ivanj-Frankivsk Oblast as an area of disaster” on February 10, 2010.

In response to the given Decree, the Decision of the Government of Ukraine adopted a Program – a list of immediate (first priority) works to eliminate the consequences of disaster and provide measures to prevent the trans-border expansion of ecological disaster in the territory of Kalush Town, Kropyvnyk Village and Sivka Kaluska Village of Kalush District. The Program also envisages the content of works, responsible parties, timeline for implementation and the cost estimate.

The organization of activity for central and local governmental bodies to provide the measures stated in the given Program is laid upon the Ministry of Emergencies and the Ministry of Environment and the Ivano-Frankivsk Oblast State Administration.

According to the plan of actions and the list of expenditures related to elimination of ecological disaster in the territory of Kalush Town, it is planned to provide conservation to Dombrovskiy pit with a recultivation of external tailings № 1, № 4 and tailing pits № 1, № 2, construction of a wall in the ground, and disposal of 8514 tons of hexachlorobenzene waste in the area of Dombrovskiy pit conservation.

According to Ukrainian obligations which are based on Stockholm Convention on Persistent Organic Pollutants, Ukraine must provide measures to get rid of substances that fall under Convention requirements until 2028. The first step in this direction was the development of the National Plan to implement the Stockholm Convention on Persistent Organic Pollutants in Ukraine.

The priorities of actions of the Plan include a measure of “disposing of 11.000 tons of hexachlorobenzene with the use of adopted and economically feasible technologies, and to provide the final shut down of the mentioned production facility”. The only way to solve the problem under current conditions is transportation of pesticides beyond Ukraine for their safe disposal in the specialized facilities in Germany, Poland, Sweden, France, Switzerland, England, etc. Ukraine has started to perform these works.

At the cost of the State Fund for environment protection during 2007-2009 there were transported from Ukraine 1059.683 tons of pesticides to be disposed in Germany; 1090.002 tons to Poland, about 600 tons to Sweden.

Under condition of decent financing the problem of disposal of pesticides may be solved during 5-6 years, but Ukraine does not have sufficient available financial resources to solve these problems immediately.

Having received the International Assistance Request from Ukraine, the EU Technical Assessment Mission and UN representatives visited Kalush Town on 4-5 March 2010. They prepared their recommendations to solve the problematic issues in the Kalush industrial area.

Having assessed the results of the conducted works, especially the assessment of condition of Dombrovskiy pit and tailing dams, condition of toxic

waste dumping, issues of population resettlement and civil emergency planning, readiness of command and control authorities, civil protection units, there was a decision taken that their quality satisfies the European standards.

The UN and EU Technical Assessment Mission determined the mentioned below issues as those that require immediate response from the governmental bodies of Ukraine:

- Salinization of ground and open water sources and thus the threat for potable water source.
- Necessity for sticking to the project safety levels in the tailing dams, because they are the main measure for risk reduction.
- Flow of Dombrovskiyi pit to Sivka River is considered to be highly potential and may bring to very serious consequences unless prevented.
- Spreading of hexachlorobenzene from dumping area to Sapogiv River and further down current.

The independent scientific analysis of the taken ground samples proved the spreading of hexachlorobenzene into environment in the dumping area. The concentration of hexachlorobenzene in the water in the territory of toxic waste dumping area corresponds to the standards adopted in Ukraine. Hexachlorobenzene is very toxic in water sources and is a persistent pollutant. That is why the long-term threats from its spreading are so high.

In general, the previous recommendations of the experts correspond to the proposals of MOE. These are immediate measures: reinforcement of Northern part of Dombrovskiyi pit, filling in of sinkholes and disposal of toxic waste.

It is necessary to mention that the current situation in Kalush Town and the adjacent territories is a result of definite processes of many years. The main cause of many problems of nowadays, including threat of tailing dams destruction and underground water salinization, may be followed up to the level of decisive project mistakes, undertaken at the stage of putting the mines, pits and dams in operation and the absence of adequate maintenance of these facilities. Sudden termination of their functioning without necessary measures of decommissioning, even temporary ones, affected the condition of dams and pit, and thus resulted in overall deterioration of the ecological situation.

It is a priority problem for Ukraine and it is under personal control of the President of Ukraine.

As far as the mentioned problem is very complex and requires substantial material and technological resources, namely: new technologies on disposal of remnants of chemical waste. It shall be a very complicated problem for Ukraine to solve.

First of all, Ukraine would be grateful to the EU for financial assistance for partial reimbursement of costs, which are currently spent by Ukraine for transportation and disposal of hexachlorobenzene in European states.

The decision proposed by Ukraine (transportation of hexachlorobenzene and its disposal beyond Ukraine), is an optimal decision having in mind short and mid-

term perspective. Speaking about the long-term perspective, Ukraine is interested in construction of a chemical waste, pesticides and other organic pollutants disposal facility in its own territory with the support of EU. This shall provide an opportunity to solve this issue fully in Ukraine and, maybe, in the region.

Taking into account all mentioned above, Ukraine is very interested in close cooperation with European Commission and other EU institutions with the aim to combine efforts to prevent ecological disaster in Kalush Town.

To conclude my presentation, let me focus that Ukraine considers the decision of the given problem on the basis of systematic and close cooperation and support from EU.

Thank you for attention!