

ENVIRONMENTAL DISASTERS IN THE WESTERN REPUBLICS OF THE COMMONWEALTH OF INDEPENDENT STATES

Renate Rybizki

In the Commonwealth of Independent States (CIS), there are about 300 regions where at the moment there are acute dangers to human life due to environmental pollution. These areas comprise about four million square kilometers, which corresponds to twenty percent of the former U.S.S.R. Boris Kochurov, a researcher at the Geographical Institute of the Academy of Sciences in Moscow, estimates that already every third citizen of the CIS lives in an "ecologically critical region."

In the overcrowded regions, where heavy industry is concentrated, people inhale industrial exhaust gases and drink polluted water. The health of the millions of inhabitants of such big cities as Moscow and St. Petersburg, as well as the cities of the Donets Basin, the Urals, Azerbaijan and Krivoy Rog in Ukraine is directly threatened.

But the catastrophe not only concerns the industrial areas. The fifth edition of the document, "The Most Critical Ecological Situations in the CIS," shows forty-seven sites of underground nuclear testing and twenty underground atomic waste disposal sites. The Russian atomic scientist, Andrei Solotkov, maintained that for years the U.S.S.R. probably sank the atomic waste from the reactors of scrapped Soviet atomic submarines and ice-breakers in the Kara Sea, west of Murmansk. According to KGB documents, from 1964 to 1986, 17,000 containers were thrown into the sea. The disposal, however, was not undertaken according to international rules for putting radioactive materials into a 'coffin' or a coat of concrete, by bitumenizing, or by vitrification. The



PHOTO: ©DAVID BLUMENFELD

Fig. 1: A Chernobyl victim; girl from Soligors being treated for a brain tumor.

containers that were used consist of corrodable metal, so one day radiation will leak out. A large portion of the atomic waste consists of worn out combustible rods. If they were to come into contact with sea water, a further contamination of areas of north European seas will have to be reckoned with. Since the Soviet Union used the west coast of Novaya Zemlya as a testing ground for fissionable material, this region is potentially one of the most dangerous in the world.¹

Until now, two areas were listed under the rubric "Regions of Catastrophe:" the surroundings of Chernobyl and the area around the Aral Sea (chemical contamination mixed with faulty irrigation). A resettlement of the inhabitants from these areas of catastrophe to "ecologically clean" regions, however, is something Kochurov considers plainly not possible because of the number of people involved. Due to the Chernobyl catastrophe on 26 April 1986, an area of

Renate Rybizki is a research fellow at the Berlin Institute for Comparative Social Research.

Translation from German by Sheila Embleton, Department of Languages, Literatures & Linguistics, York University, Toronto.

over 10 000 square kilometers was contaminated with radioactive materials. Here lie 640 towns with 230,000 inhabitants. According to publications of the Kiev Health Ministry, of the roughly 120,000 people living in Ukraine who directly took part in the clean-up work at Chernobyl alone, more than one thousand have died from effects suffered from that work. It is said that fatalities actually number from

installations on Russian soil represents a potential danger. Each year about 700 explosions take place in gas and oil pipelines, which results in the waste of many millions of tons of fuel, often up to twenty percent of the whole gas and petroleum production of the country. This is above all because of the emigration of highly qualified researchers and the dearth of spare parts. Appraisals from Bonn estimate the

soiling of the fresh water" must be faced. Most rivers are heavily to very heavily polluted; a few bodies of water, for example Lake Ladoga near St. Petersburg, have already lost their meaning as resources.

The ecosystem of the White Sea has been destroyed. Huge ice-breakers cut through the lairs of seals. This happens exactly when the animals have brought forth their young onto the ice. Thousands of seals have been annihilated.

There is the danger that under the conditions of economic independence the Republics will conclude agreements with foreign firms, that at first sight appear advantageous, but from ecological points of view are intolerable. Thus the resolution of the European Community Cabinet Council, that includes a prohibition on ecological dumpings and the export of unclean technologies, is welcomed. It also appears necessary to translate into action two especially important measures: the introduction of fines for the pollution of natural resources as well as fees for their use. It is hoped that such measures raise environmental consciousness.

If not, in the CIS, as a result of the ecological issue, a social bomb ticks, which will make the large refugee movements produced by interethnic rivalries seem miniscule in comparison. ■

Notes

1. The London Convention of 1972 fixes the categories of radioactive materials that are allowed to be sunk in the ocean. The Soviet Union subscribed to that agreement four years later. In 1983 the decision was taken to suspend the sinking of radioactive material for two years. In 1985 this moratorium was prolonged for an indefinite time. The stipulations of the convention did not hold for ships, that according to common law enjoy immunity. Those are, according to the Foreign Ministry, the ships of the navy.

References

This article is based on material in *Die Welt*, 21 February 1992, 27 February 1992, 26 March 1992; *Moscow News*, December 1991; and *Berliner Zeitung*, 30 January 1992, 27 February 1992, 25 March 1992.

"The whole shore region of the Black Sea is classified as an ecological crisis region: effluent water from nuclear power stations, oil sludge from refineries, the heavy metal cargo of the Danube and nuclear waste buried by the military have brought the whole ecosystem here to the brink of collapse."

seven to ten thousand. According to municipal officials in Murmansk, 120 cases of leukemia in children were ascertained and attributed to the effects of atomic radiation. Nevertheless the director of the agency for atomic protection in Murmansk, Alexander Mikhailov, disputed such a connection.

Alexei Yablokov, adviser to the President of Russia, says the following about the problem of the North: the peculiarity of this region is that the majority of the population lives there only temporarily and should not be troubled by the environmental situation. There, completely monstrous installations have come into being, for example the Norilsk enterprise and the Nordnickel enterprise on the Kola Peninsula. And recently diamond deposits have been discovered in the Archangelsk area. This area must be saved, as long as it is still not too late, otherwise the profit exploited from the diamonds will be minimal in comparison to the ecological damage caused.

According to the words of the Russian Minister for Civil Defence, Sergei Shoigu, each of the about 400 atomic plants and atomic research

technical repair needs of all nuclear power plants of Soviet design to be at least twelve to fourteen billion Deutschmarks.

Today eighteen further regions of the CIS are classified as "very critical;" here international limits for air, water and soil pollution are far exceeded. In the zones where intensive agriculture is carried out, for example in the North Caucasus, around Lake Baikal (annually the destruction of Lake Baikal strides forward, with more than 100 million cubic meters of polluted run-off water) and in the Moldavian region in the Southwest of the CIS, the ground- and drinking-water are ruined by the massive application of pesticides and fertilizers, the humus largely destroyed and the forests diminished.

The whole shore region of the Black Sea is classified as an ecological crisis region: effluent water from nuclear power stations, oil sludge from refineries, the heavy metal cargo of the Danube and nuclear waste buried by the military have brought the whole ecosystem here to the brink of collapse. In an area of about 370 000 square kilometers, "an impoverishment and