THE REAL FACE OF THE KANGAROO

A fact-finding tour to the
AURUL S.A. gold mining enterprise
in Baia Mare, Romania,
and along the Lapus-Somes-Tisza river system
in Romania and Hungary

GREENPEACE

March 2000

Since last year, 120 men, 115 of them from the region and 5 Australians, can be seen working in Baia Mare at the AURUL gold mine wearing dark green suits with a golden Kangaroo on the front. This is the logo of the AURUL company whose name went around the world after one of the biggest river disasters in Europe, in February 2000.

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After the major cyanide spill which killed virtually all life in Hungary's second largest river, the Tisza, Greenpeace sent an international crew to the place of origin of the spill in Romania to witness and document the situation through interviews with local people, and photography and video. The survey was supported by local Romanian NGOs.

The team also bore witness to the impact on the Hungarian Tisza region and conducted interviews with regional authorities.

The fact-finding journey took place between 21 and 27 February, 2000.

MAIN OBSERVATIONS

Our principal observations and findings are as follows:

AURUL has not only killed life in the Tisza river system but has also left damage in Romania and is still causing imminent risks:

- Toxic sludge is still covering fields next to the broken basin which caused the spill and alongside the "Cascada" or "Mill Canal" which discharges into the Lapus river.
- Groundwater and at least 10 drinking water wells are polluted by cyanide.

When the snow melts, another wave of pollution can be expected from toxics which are now stabilised by frost, and stored in the snow layers.

Inhabitants of the neighbouring villages and the region of Baia Mare are alarmed as they face the risks of present danger and of possible future spills. The recent catastrophe was not the first spill from AURUL. Having observed the death of wildlife and livestock, they fear for their own, and their children's, health and safety.

Soil along the pipe systems is constantly being polluted. Uncertainty about the range and relevance of the impacts prevails and makes it hard for people to plan their lives and agricultural activities.

Along the Lapus-Somes-Tisza rivers no bird life was observed, not even wagtails or crows on the river banks. During the same week, on, for instance, the Danube near Budapest, flocks of gulls, cormorants, herons and greylag and white-fronted geese could be seen.

Regional authorities in Romania seem to be hindered by national authorities from speaking frankly about the problems.

AURUL

1. Gold mining in the region is an industry which has been happening for over 2,500 years. The Romanian state company REMIN has run the mine for decades, causing permanent, gradual pollution of the river systems but without major accidents. The cyanide process has been used in gold mining since the 1960s.

   ESMERALDA EXPLORATIONS Ltd., from Perth, Australia, resumed gold mining activities under an Australian-Romanian joint venture 'AURUL' (Romanian: gold) in April 1999, re-exploiting old waste tips with a concentration of less than 1 gram per tonne of gold from the REMIN mining activities of the past.

   (Details in Mining Journal of Romania on www.esmeralda.com.au/3_com/main3c3.html)

Since then the situation has been worse than ever before and has led to one of the most severe cases of river pollution ever experienced in Europe.

2. Numerous incidents since Summer 1999 have demonstrated that AURUL is not able to control the situation and obviously has a structural problem. The pipe system leading from the factory to the tailings basin and back to the factory is unsafe, resulting in repeated spills. The dam surrounding the basin is not strong enough and is built out of soil and sand instead of stronger materials. A second, safeguard, dam does not exist.

3. The local population in Romania is victimised by AURUL, and poorly informed by authorities. Impacts from breathing air and drinking water, resulting in health problems, crop losses and spoils, loss of cattle and wildlife have been reported since Spring 1999.

CONCLUSION:

There is no possibility of improving the situation whilst the cyanide process is applied. This process must be stopped if damage is to be avoided in the future.

The President of the environmental organisation Eco-Carpatica, Isidor Sefciuc, stated to Greenpeace that the organisation "sees no option to remediate the situation by procedural changes but opts for a closure of all gold mining activities in Baia Mare... "It was a mistake to have allowed ESMERALDA Ltd. to do this business, it would have been nice to use these old basins for further exploitation but not at this price."

AURUL must clean up their premises and the surrounding area, and must pay compensation for the damage caused in Romania, Hungary and Serbia.

BACKGROUND

Baia Mare - the Big Mine - is a traditional mining, ore processing and metallurgical centre with currently 150,000 inhabitants. A lead producer and also chemical industries play an important part in the economy and politics of the Maramures district in the far North West of Romania of which Baia Mare is the capital. These industries have left their toxic traces in humans and the environment.

The average life expectancy in Baia Mare is 12 years below the Romanian average.

(*Source: Joszef Szaniszlo, vice-mayor of Baia Mare in: Hungarian weekly Heti Vilaggazdasag 19-02-00*).

The mortality rate in children is alarmingly high. A 25-year old mother, Domnita Covacs, reports the death of her 4-year old daughter of a lung disease which her 3 remaining children are also suffering from.

Before the construction of one smoke stack 350 metres tall, the whole town lived in a cloud of dust. In former times, any time the ”conducator” Nicolae Ceausescu was due to visit the town, ore processing industries were halted days before he arrived.

(*Source: Stefan Petrenau, a driver from Baia Mare, quoted in: MTI-Online (Hungarian News Agency), Dossier ”CIANSZENNYEZÖDES” <Cyanide Pollution>, March 2000*)

Environment and river systems in the region have accumulated toxic heavy metals and other persistent organic pollutants (POPs) for centuries and decades.

ROMANIA'S NEW GOLD RUSH

In addition to ESMERALDA, in the late 1990s numerous other globally operating gold mining companies acquired gold (and silver) exploration licences and extraction concessions. Usually in joint ventures with former state-owned Romanian companies, they are attempting to revive the suspended activities of their new partners on a new organisational and technological basis, or to re-exploit their wastes - such as ESMERALDA / AURUL.

Most activities and plans focus on the western Carpathians, more precisely the Muntii Apusani, the Muntii Metaliferi ("metal-bearing mountains") and Rosia Montana ("red mountain") around the towns of Deva and Alba Iulia. Companies involved include the Canadian GABRIEL RESOURCES with its joint venture EURO GOLD / MINVEST.

EURO GOLD believes it has discovered the largest European gold deposit in Rosia Montana: 100-150 millions tonnes of ore with a gold content of 1.9g/t (and 10g/t silver). This would amount to more than 200 tonnes of gold.

The US-owned GOLD DISCOVERY COMPANY (GDC) is currently operating at seven locations in Maramures and in the Eastern Carpathians.

The British company SAMAX EXPLORATION has sought tenders.

The British owned ROMANIAN MINING AND EXPLORATION (RME) company has signed service contracts with the world leader, RIO TINTO.

MINERA ANDES (Vancouver) has purchased two sites in the eastern Carpathians.

The Australian Broken Hill Proprietories Company Ltd. (BHP) has secured a title over a large deposit which is 50 km to the south-west of Deva.

(*Sources: Gerry Johnstone: Going for Gold, in: www.investromania.ro/magazine/ last_issue/ 14gold.html and Gabriel Nitulescu: Romanian gold rush in: http://www. investromania.ro/business/articole/5goana.html*)

UKRAINE

In Ukraine, similar developments are emerging but information is not as easily accessible as locations of sites are still a state secret.

(*Source: Jerome Simpson: Gold and Diamonds in Ukraine.*)

One known site, the Muzhievskoye gold mine situated upstream of the source of the Tisza, may pose a threat to the first stretch of the river which is as yet unpolluted.

THE GOLD MINING PROCESS

In the region of Baia Mare, gold mining has been a tradition for more than 2,500 years. Non-ferrous metals mining is never a 'clean' process as all precious metals in the earth are accompanied by a series of other, toxic, heavy metals like lead, cadmium, copper, zinc, and arsenic. During the 1960s, the Romanian state-owned company REMIN introduced the extremely toxic and hazardous 'cyanide leaching' process by which small concentrations of gold or other precious metals are leached out of the ore/soil matrix, using a cyanide solution. At the end of its useful life, the solution is 20mg/l strong and is neutralised by sodium hypochloride down to 4 mg/l cyanide. This product

is released intentionally into the 'mill canal' that flows into the Lapus/Somes (Hungarian: Szamos)/Tisza system.

Two out of the three big basins near the Baia Mare enterprise are the result of past REMIN activities. These basins are comparatively sturdy and appropriate for the meteorological conditions in the region which consist of heavy rains, and frost and snow in winter.

Basin 3 however, 90 ha. large and lined with polyethylene film, was built quickly in 1998 by Australian engineers.

(*Source: Heti Vilaggazdasag 19-02-00*)

They ignored local factors such as weather conditions, and the experienced knowledge of their new Romanian colleagues, and used light materials such as soil with a high proportion of sand.

(*Source: Ilie Mihut, living in Bozinta Mare, the only deputy of his village in the district assembly in Tautii Magherus, he is working for farmers claiming compensation for damages from AURUL; Mihut was employed by REMIN for decades, Nepszabadsag online, 09-02-00; Greenpeace photos and video footage*)

Thus, the dam was not high enough in the first place and also not stable enough. Gold leaching activities started on April 8, 1999.

The Australian process practised in basin 3 is confined to re-exploiting secondary material (previously exploited by REMIN) with an ore concentration of less than 1g/t, using a very strong cyanide solution (between 1 and 2 kg/t). This concentration is acutely lethal to living creatures and should never be used in open systems. However, the dam was constructed in such a way that it ignored the high risks involved.

(*Source: the engineering is described at length in: "Baia Mare Tailings Treatment Project", www.esmeralda.com.au/2_act/main2a.html, undated, but after August 1999, pp 4-6*)

The groundwater was to be protected, during routine operations, by a plastic lining, but this was not designed to deal with emergencies. No plan to protect surface water during and after a spill ever existed. For these reasons, Romanian authorities only gave the operation permit for AURUL on a preliminary basis and with an order to improve conditions. This permit was withdrawn after the accident and AURUL stopped operations. Authorities are now demanding a complete emergency response plan including precautionary measures.

(*Source: Istvan Padar, head of the "German-Romanian Water Commission", according to: MTI-Online Dossier "CIANSZENNYEZÖDES" of March 2000*)

A secondary dam is lacking. Pumping out the basin after heavy rains was not planned, nor were remediation measures for weaknesses of the dam construction itself.

Romanian journalists are currently investigating whether the authorities were negligent in their duty to enforce regulations, or whether bribery played a role in non-compliance.

Only now, after the major spill, does the Romanian Ministry of Construction intend to demand that AURUL reconstructs the tailings basin for safety reasons. Other Romanian authorities state that 'at any time another catastrophe is possible' because safety measures are incomplete.
(*Source: Hungarian weekly newspaper 'Hetek/mti' 26-02-00*)

NEW SITUATION SINCE AURUL BEGAN ...

Since summer 1999, numerous citizens from the village of Zazar have stated that, for the first time, "a sweet and breathtaking smell comes and goes in waves during low pressure weather periods". The authorities had told them that this was "ozone".

Agricultural products like vegetables, fruit and milk are difficult to sell in the market place since last summer. Customers say, "you are from Zazar (or Bozinta Mare). Everything from there is polluted."

Migrating waterfowl such as geese and ducks die immediately after touching the water of the basin.

Single Incidents:

Altogether 6-7 accidents have been reported, among them 4 pipe breaks, 1 at the pipe from the factory to the basin, and 3 at the pipe back from the basin to the factory carrying 'pure water' in May, September and December 99.

The May spill is described by Esmeralda as follows: "In May a fissure of the decant return water pipeline occurred due to an hydraulic shock generated by the sudden closure of an automatic valve. A minor amount of water was released, most of which was contained within lease boundaries, with a small runoff to a neighbouring field... Keen interest was shown by Ecological societies & the public and some political groups used the forums to gain publicity with the media reports being hostile towards the process. Despite this hostile environment the Permitting process has progressed satisfactorily with most permits required from Regulation Authorities ..."

(*Source: "Baia Mare Tailings Treatment Project", www.esmeralda.com.au/2_act/main2a.html, undated, but after August 1999, page 3f*)

Skin rashes followed, e.g. a 9-year old girl from Zazar developed a rash after playing near the basin. Doctors said that it 'comes from the air', related to the May 99 spill.
A man harvesting maize next to the basin fainted during the September incident.
5 cows died, 2 after being found blinded, on September 27/28-99, "after they drank cyanide contaminated water from a broken pipe", owners reported.

When people in Zazar near Baia Mare who live next to leaking pipe systems demanded that the authorities should look into drinking water quality, the authorities sent AURUL scientists to analyse samples. Afterwards, AURUL tried to charge families over US$ 250 for the costs of the analyses.

Incidents at other locations:

In recent years, Romanian authorities have become increasingly aware of the hazard risks that the use of cyanide in Romanian gold mines pose. According to reports on file with the Environment Committee of the Romanian Parliament since 1998, and statements made by responsible officials (Romica Tomescu, Octavien Patrascu), 40-60 regions in Romania are at extreme risk, exhibiting massive limit value transgressions, accidents and disaster hazards. Under the applicable law, these operations would have to be closed down.

Top of the list are the gold mines and the associated ore processing operations in Baia Mare, Zlatna, Abrud and Brad.

(*Source: Tibori Szabo Zoltan in Nepszabadsag, 23-02-00*)

Probably due to the "New Gold Rush" (see above), several accidents involving fish mortalities and threats to drinking water supplies have already happened over the last two years.

Zlatna

On 8 February, 1998, sulphur oxides from the ”Ampelum” precious metals processing works near Zlatna (”goldy”) had polluted 43 ha of soils. In the district of Feher alone, rivers totalling a length of 193 kms were completely destroyed. In the river Ompoly flowing into the Mures near Gyulafehervar all fish and micro-organisms died.

(*Source: Tibori Szabo Zoltan in Nepszabadsag, 23.02.00; the two daily Romanian newspapers Adevarul and Romania Libera, both based in Bucharest, 31-12-99*)

Brad

In May 1998, large quantities of water and sludge containing cyanide and heavy metals were released from the gold mine near Brad into the Crisul Alb river. "Old piping" was the explanation given. Romanian authorities admitted that the effluent had contained heavy metals, but did not admit to cyanide. The river flows under the name of Feher Körös into the Theiss near Csongrad in Hungary.

(*Source: Tibori Szabo Zoltan in Nepszabadsag, 23-02-00; the two daily newspapers Adevarul and Romania Libera also mention "a release of acid-containing effluent from another mine belonging to the Abrud mining company", 31-12-99*)

Baia de Aries

On 28 December 1999, several thousand cubic metres of water and sludge containing cyanide and heavy metals were released from the Baia de Aries gold mine into the Aries river. Cyanide concentrations in the river ranged from 0.55 to 0.72 mg/l (55 and, respectively, 70 times more than permitted). All of the remaining, already sparse, fish population died. The drinking water supply of the town of Turda was disrupted. Initially, the authorities suppressed this information.

(*Sources: see above*)

The Aries river flows into the Mures, and the Mures (Hungarian: Mures) into the Tisza near Szeged in Hungary.

For operations in Zlatna, the Canadian company GABRIEL RESOURCES together with its joint-venture companies EURO GOLD and DEVA GOLD received assurances from the Romanian government of an exploration licence from November 1998 onwards.

THE BIG ACCIDENT

After heavy rains, the top of the dam broke on January 30 at 10.20 p.m. over a length of 25 metres and released an estimated amount of 100,000 m^3 of waste water within 11 hours. The dam was built by AURUL during 1998/9. After analysing the situation, Hungarian authorities have calculated that a total of 120 tonnes of cyanide was spilt along a 45.4 km section of the Szamos (Romanian: Somes) river. The water/sludge wave moved with immense force along dust roads, through the village of Bozinta Mare, and across fields into the river system of the Lapus, Somes, Tisza and Danube which flows into the Black Sea. It took 70 workers and several bulldozers 51 hours to repair the breach.

An AURUL patrol jeep was seized by the wave and turned over during the night of 30/31 January. Production foreman Les Thomas struggled his way out of the mud with the help of local farmers. He was able to avoid swallowing the poison but was severely injured. The man was first sent to a hospital in Baia Mare, then transferred to an unnamed guest house in the countryside and hidden away from the public. He then disappeared and AURUL hesitated to reveal his identity and whereabouts. AURUL said on March 6 that Thomas would be back from Australia "next week".

(*Source: Hungarian Ministry of Environment: Elözetes Ertekeles (Preliminary Evaluation), 23-02-00, http://www.ktm.hu; Inhabitants of Bozinta and Zazar, Isidor Sefciuc, president of "Eco-Carpatica", a regional NGO and "Der STERN", Hamburg, Feb 24, 2000*)

On January 28, when the water table in the basin was rising visibly, Phil(lipp) J. Evers, AURUL's executive director, failed to take obviously necessary measures such as:

- pumping the water off; and/or
- reinforcing the dam;
- alerting the general public, technical organisations, army units etc. to ask for rescue measures.

He thus ignored the international disaster he was causing.

Instead, on that same day , January 28, while he saw the water table rising in basin 3, he announced to his company ESMERALDA in Perth, Australia, that he would quit his job. Brett Montgomery, ESMERALDA's chief manager, told him to stay for four more weeks.

When the Greenpeace team arrived at Baia Mare locals told us that Evers was just preparing to leave the country.

... AND THE CONSEQUENCES

This event led to the death of virtually all life in the 'mill canal' next to basin 3, the Lapus/Somes (Samosz) and Tisza rivers over a length of 525 km in Hungary plus 150 km from the Hungarian/Yugoslavian border to the Danube in Serbia. The toxic wave moved along the river at a speed of 3 to 4 km/h. Each day that the wave passed locations in Hungary, the laboratory of the Upper Tisza Regional Environmental Inspectorate, the leading scientific institution the country in this field, based in Nyiregyhaza, found all micro-organisms absent in the river Szamos (Somes) and the upper section of the Tisza.

(*Source: Dr. Erdelics Barnabacs, head advisor, and Sandor Szöke, director of the Inspectorate in a conversation with Greenpeace Feb. 25, 2000*).

Fortunately, no injuries to humans have been reported so far from Hungary. This is due to admirably well coordinated measures in Hungary to cut off all drinking water supplies along the Tisza river and to supply fresh water from other regions in plastic bags and tank cars. The reason for this was an early warning from the Romanian regional authority at 6.20 a.m. on January 31, ten hours after the dam broke.

Almost all of the fish in the Tisza died. An estimated 15% (200 tonnes) of the total stock in the Hungarian part of the Tisza - including huge catfish, sturgeons and carp, were pulled out of the river. Altogether, 38 species were identified. They were at first disposed of as hazardous wastes but then authorities decided to keep them refrigerated.

200 tonnes (another 15% of estimated stock) are estimated to have floated to Serbia. The rest are believed to have sunk to the river bed. Rotting carcasses will cause an additional problem, especially with rising temperatures in spring, by polluting the river and spoiling drinking water supplies.

(*Source: Environment Minister Pepo Pal in the daily newspaper Kelet Magyarhorszag 26-02-00*)

Altogether, 62 fish species are known to inhabit the Tisza river. Twenty of them are endangered and protected species, several among them are endemic.

(*Source: MTI-Online: Dossier "Cianszennyezödes" of March 2000, http://www.mti.hu*)

Wildlife and fish eating birds as well as livestock have suffered and were still absent in places Greenpeace visited on February 22 and 25. All otters and beavers in the river are said to have been killed. Dead gulls, black cormorants, mute swans, foxes, roe deer, pheasants, pigeons and hares were found. In late February, dead donkeys and horses were pulled out of the river. At least two white-tailed eagles were found, one dead and one paralysed, in the Hortobagy National Park area which is part of the Tisza river system. The eagles had been reintroduced to the park in an expensive, time and labour consuming programme over the last 15 years.

Repeated river pollution cases around the globe have proven that aquatic systems can regenerate life within several years. But experts doubt that the former quality of the food chain can be fully re-established. Future life in the rivers will be poorer than in the past, endemic species can be extirpated from the area and lost forever.

AND YET ANOTHER SPILL

On February 6, 2000, 1500 m^3 of waste water with a cyanide concentration of 7mg/l (i.e. 10.5 litres) from a basin belonging to the REMIN company next to Bozinta Mare (Hungarian: Nagybozinta) reached the Lapus river. The reason was a malfunction of a neutralisation device and careless handling. The Romanian authority evaluated this as a "minor incident" and the company was fined Lei 16 million (US$ 900).

(*Source: MTI-Online: Dossier "Cianszennyezödes" of March 2000, http://www.mti.hu*)

BACK IN ROMANIA ...

Families in the villages of Bozinta Mare have been ordered by authorities not to use their drinking water wells. Ten families were supplied with freshwater plastic tanks to feed cattle and bottles were delivered for personal use. The visiting Greenpeace crew was received by villagers holding up dead fish in plastic bags. Fish are traditionally used for testing the water quality in many private wells.

But authorities had only tested wells where fish tests were carried out and fish were found dead. This procedure caused irritation and conflict even among the community.

Children vomited for three days after the toxic wave had moved through their villages.

The day after the spill, frogs left their winter refuges and died on the street. Dogs eating dead frogs stopped barking and moving for a day.

Villagers (names on file with Greenpeace) in Zazar also produced two samples of suspected cyanide contaminated water which had run off the AURUL pipe system in September and December, 1999. They had not dared to have these samples analysed

in Romania. The samples had been kept at the farms and were semi-frozen when handed over to Greenpeace. Analysis carried out in Hungary in the laboratory of the Upper Tisza Regional Environmental Inspectorate, the leading scientific institution the country in this field, based in Nyiregyhaza on February 25 showed a cyanide content in the water of 110.00 (September spill) and 137.5 mg/l (December) respectively.

(*Source: Analysis report No. 188-20/200, on file with Greenpeace*)

The US EPA limit value for cyanide in fresh water is 0.005 mg/l.

The limit value for cyanide in fresh water in Hungary is 0.01 mg/l, the intervention value is 0.1 mg/l.

If concentrations of cyanide in the Tisza river exceed these limits, Hungarian authorities stop the use of the river for drinking water.

The original waste water in the ruptured basin had a concentration of 405 mg/l of cyanide.

The highest concentration of cyanide in the Szamos (Romanian: Somes) river on February 1 at 8.30 a.m. was 32.6 mg/l causing the enormous number of fish and other animals to die.

(*Source: Hungarian Ministry of the Environment: Elözetes Ertekeles (Preliminary Evaluation) 23-02-00, http://www.ktm.hu*)

POLITICAL REACTIONS

The Hungarian government has started legal cases in Australia and at a court in Baia Mare to secure compensation for losses and damages from Aurul.

In the relevant bilateral and multilateral interstate agreements there is no liability clause. Relevant multilateral agreements are from Bern (1979), Szeged (1986) Espoo (1991), Helsinki (1992) and Lugano (1993, not yet legally binding). Bilateral agreements between Hungary and Romania were concluded in Bucharest (1986, 1997) and Temesvar (1996). The Bucharest agreement of 1997 has not yet been ratified by Romania.

(*Source: Heti Vilaggazdasag 19-02-00*)

Hungary is also planning court proceedings in Australia. The Australian legal expert Adam Bisits, of Hungarian origin, has stated that, had a similar accident happened in Australia, the responsible person or collective management would have to face 7 years of prison and be sentenced to pay up to US$ 1 million.

(*Source: Hungarian daily newspaper 'Nepszabadsag', 26-02-00, p.7*)

The Romanian Ministry of Construction intends to demand that AURUL reconstructs the tailings basin for safety reasons. Other Romanian authorities have stated that “any time another catastrophe is possible" because safety measures are incomplete.

(*Source: Hungarian weekly newspaper 'Hetek/mti' 26.2.00*)

Hungarian Environment Minister Pepo Pal demanded from his Romanian counterpart, Secretary of State, Anton Vlad, to not re-issue an operation permit to AURUL as long as the enterprise is not in a position to guarantee that a new cyanide catastrophe can be avoided.

(*Source: MTI-Online: Dossier "Cianszennyezödes" of March 2000, http://www.mti.hu*)

A Romanian public prosecutor has started criminal investigations against AURUL and started by interviewing the workers.

However, the Environment Minister of Romania and the Bucharest Foreign Office have started to play down the extent of the disaster and are supporting AURUL / ESMERALDA in order to fend off demands for compensation. Both Romanian politicians and gold mining managers claim that only a small amount of toxic substances were spilt and a connection between the spill and the destruction of life in Hungary cannot be established.

The General Secretary of the Romanian Ministry for the Environment, Georghe Lasea, stated that, according to the findings of Romanian experts, "the death of the fish in the Tisza river is definitely not caused by cyanide".

(*Source: Gazeta de Nord-Vest, Feb. 25,00, p.12*)

The most insidious accusations come from Prof. Marcian Bleahu, an elected senator in the Romanian parliament leading a small group of conservative 'greens'. He said "I can see only dead carps which are probably from a fish farm and presented to the media by Hungarian authorities". Bleahu was Romania's Environment Minister in the early 1990s and had to resign over his massive personal involvement in toxic waste trafficking projects from Western countries to Romania which were exposed by Greenpeace.

(*Source: dozens of media reports in Romania and around the globe during 1992, and "ROMANIA: THE TOXIC ASSAULT - (Toxic) Waste Imports 1986–92. A Greenpeace Report", Nov. 1992, 100 pages, by Andreas Bernstorff et. al., Hamburg and Amsterdam, Nov. 1992*)

Romanian sources have also suspected sodium hypochloride as a cause of the death of fish and other animals, and have thus denied their responsibility. In fact, hypochloride is being used for the neutralisation of cyanide in the AURUL basins AURUL.

The Hungarian national authorities, on the other hand, have been blamed by the political opposition in the country for not having applied this or a different substance (ferrous sulphate) to neutralise the cyanide poisoning. Instead, the Upper Tisza Regional Environmental Inspectorate, along with the Environment Ministry in Budapest, held the view that "the river is not a test tube". No additional toxic chemicals were added to the waters and the prevailing attitude is that "the river system can only be healed by its own sources" with some support from outside.

Hungarian Prime Minister Viktor Orban, referring to experts, noted that ferrous sulphate treatment would have made sense only at the origin of the disaster, in Romania.

(*Source: Interview with Magyar Radio, 15-02-00*)

In addition, the Under State Secretary in the Hungarian Environment Ministry, Janos Borbely, explained that, considering temperature and current conditions in the river Tisza a total of 400 tonnes of ferrous sulphate in solid form, but formulated in 10,000

different solutions would have been necessary in order to neutralise the cyanides - an impracticable undertaking.

(*Source: MTI-Online Dossier "CIANSZENNYEZÖDES" of March 2000*)

Other rumours spreading through the Romanian media accuse foreign forces such as Serbia and Hungary and the US TV company CNN of organising a conspiracy against the country.

(*Sources include: e.g. the well known Romanian author Dinescu in Frankfurter Allgemeine Zeitung, Feb. 18, 2000*)

In addition, unnamed Hungarian companies are being accused of having used the spill as a chance to release toxic waste into the Tisza. These accusations are being supported by statements that fish are not dying in the Lapus and Somes rivers on the Romanian side of the border.

The absence of fish mortalities, however, can easily be explained by the fact that almost no fish have been observed in these river areas for decades. The reason being that the partner company of ESMERALDA, the Romanian state owned enterprise REMIN, has used an 'open system' of cyanide gold ore processing since the 1960s, intentionally releasing small but continuous doses of toxic substances into the river (see above).

For a better understanding of the aggressive stance adopted by Romanian politicians on the international level one should take note of the fact that Remin is selling its annual gold production of 1.6 tonnes of gold and 9 tonnes of silver exclusively to the Romanian National Bank in Bucharest.

(*Source: 'Hetek /MTI' 26.2.00*)

On the other hand, it has to be stressed that, below the level of international argument, Romanian local authorities reliably informed their Hungarian neighbours about the spill, thus enabling Hungary to react quickly and avoid harm to humans by poisoned drinking water (see above).

AURUL TO CARRY ON ?

Date: 29-02-00

Perth (dpa) - The controversial Australian mining company Esmeralda Explorations plans to continue operations in Eastern Europe despite the cyanide disaster in its gold mines in Romania. At a meeting of the eight main shareholders of the company on Tuesday, the decision was taken to invest a further two million Australian dollars (US$ 1.2m) into exploitation of deposits in the Aurul mine in north-west Romania.

(*Source: German Press Agency (dpa); 29-02-00*)