

ENVIRONMENTAL IMPACT PRODUCED BY ECOLOGICAL ACCIDENT FROM THE TAILING POND OF NOVĂȚ STREAM (BAIA BORȘA ZONE – NW ROMANIA)

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General setting

Baia Borșa Mining Exploitation – proprietor of the Novăț Pond – belongs to National Company REMIN S.A. Baia Mare (state capital society) that is working on the exploitation and mineral processing of the non-ferrous ore deposits. The Novăț Tailing Pond is a “valley type” waste flotation dump, placed between slopes of the Novăț stream, a left tributary of the Vaser River. There are two access routes from Baia Borșa: a country road, with a length of 13 km, hard to pass in winter and an underground gallery, with a length of 8 km.

Causes and accident evolution

The causes of the accident are: Increase in the water level, due to abundant rains and thawing of snow; flood of pumping station which transports the clean water from the pond to the Processing Plant of Baia Borșa (09.03.2000, 10:10 pm).

In spite of all the preventive measures of E.M. Baia Borșa S.A. (the stop of Processing Plant, 09.03.2000, 11:00 am), on 10.03.2000, 10:30 am, the dam downstream of the pond was broken. Polluted water and tailings were let out through this breach contaminating the rivers Novăț, Vaser, Vișeu and Tisa with heavy metals. The size of the breach rapidly increased to 40 m in length and 18 m in height. The entire mass of overflowed material was 70 000 m³ of water and 40 000 m³ of gangue (but approximately 20 000 m³ were hold back by the downstream dams).



Emergency measures

After the accident – until 15.03.2000, 06:00 pm – the next actions were undertaken: Sampling and analysis of the water from the rivers Vaser, Vișeu and Tisa; cleaning of snow and mud (of landslides) from access routes to the tailing pond; restoration of the pumping station; pumping clean water from Novăț Pond temporarily to Colbu Pond; controlled evacuation of the water through pipes leading to tumbling bay; construction of a supplementary dam to stop the breach advance; reconstruction of the dam upstream of the eroded zone.