



Public Panel Event

Transboundary Water Pollution – Who is Accountable?

Press Release

Pollution of Transboundary Water Bodies – Who foots the Bill?

On 30th September 2004, at the Swiss Federal Institute of Technology, ETH Zurich, representatives from science, insurance, politics, NGOs and industry met to discuss the issue «Transboundary Water Pollution – Who is Accountable?». With the examples of the Baia Mare and Schweizerhalle disasters, environmental, economical and political dimensions of transboundary accidents were examined. The discussion also covered the current situation and trends concerning prevention, liability and insurance. The event is part of the «International Water Management Course, IWMC», which EAWAG is conducting jointly with Swiss Re.

Toxic substances are still reaching water bodies in the aftermath of accidents. The Rumanian Baia Mare goldmine dam failure and the Sandoz depot fire in Schweizerhalle are just two well-known cases. In 2000, waste water containing cyanide and heavy metals escaped from Baia Mare and was carried into the Somez, Theiss and Danube Rivers. In 1986, in Schweizerhalle, a chemical mix flowed with the fire-extinguishing water into the Rhine River. The consequences for both water systems were catastrophic: flora and fauna suffered enormous damage, including the deaths of thousands of tonnes of fish. For a long period afterwards, water could not be extracted for drinking. Baia Mare and Schweizerhalle are only two examples from many. And just recently, at the start of September 2004, a faulty pipe caused yet another heavy metal pollution incident of the Theiss, again from a Rumanian goldmine, this time at Baia Borsa. The Ukrainian authorities banned the extraction of water from the river and nearby fountains, and forbid the sale and consumption of fish.

Liability for Damages – Across the Border

The financial damages resulting from Baia Mare for the fishing industry, tourism and administration, cost Hungary around 200 million francs at the time. Hungary is losing hope of ever receiving compensation for these damages. Rumania contests any responsibility for damages beyond its national borders, and the operator of the goldmine has avoided responsibility by placing the company in bankruptcy. Nevertheless, these and similar events have given impetus to international moves which seek to redress this inadequacy in legal regulation of such incidents. In May 2003, in Kiev, the UNO formulated an international liability agreement for transboundary damagesⁱ and in April 2004 the European Union (EU) issued a directiveⁱⁱ concerning environmental liability for the prevention and remediation of environmental damage.

ⁱ Protocol governing the liability and compensation for damages resulting from transboundary effects of industrial accidents on water bodies that cross national boundaries, Kiev, 21 May 2003

ⁱⁱ Directive 2004/35/EG of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage

Podium Discussion at the Swiss Federal Institute of Technology (ETH) Zurich

On Thursday, 30 September 2004, at the Swiss Federal Institute of Technology (ETH) Zurich, Steven Eisenreich (EU), Ger Bergkamp (IUCN), Niall Watson (WWF), Richard Gamma (SCGI), Jürg Busenhardt (Swiss Re) and Bernhard Wehrli (EAWAG), chaired by Reto Brennwald, discussed liability, insurance and guarantees for transboundary water pollution. Along with the negative impacts on the environment, such accidents entail horrendous financial consequences. Although injury to humans and damage to property are largely covered by existing mandatory insurance, this is not the case with environmental damage. The EU directive is designed to cover this gap. Based on the Polluter Pays Principle, any and all who through their activities cause damage to the environment shall be held accountable for the full financial costs of remediation. In addition, all those whose activities present a potential hazard to the environment are required to take all preventive measures necessary to minimize these risks, and to meet the associated costs. The definition of «environmental damage» used in the directive is oriented to the future, whereby not only the water body and ground as they exist are considered, but also their ecological potential and the biological diversity. And this is where the challenge lies: since the insurers do not have the necessary statistical information concerning damage frequency and severity, they are not in the position to calculate risk-proportional premiums. As a consequence, environmental damage as defined in the EU directive is in fact uninsurable today. European insurance companies are therefore challenged to work with industry, competent authorities and re-insurers to develop solutions by 2010 which cover environmental liabilities. Until then the EU Commission will investigate other options for financial security, such as bank guarantees and financial pools, and amend and extend the directive, on the basis of its findings, through appropriate provisions for a mandatory financial security.

The Situation in Switzerland

The Schweizerhalle fire incident triggered a major investigation in Switzerland, which led to the passing of the Hazardous Incident Ordinance in 1991. The aim of the ordinance is to protect the human population and the environment from the effects of serious accidents. A central principle of the ordinance is prevention by means of verified own responsibility. Owners of installations are obliged by law to implement measures to minimize risks using best available technology not entailing excessive costs. A competent authority verifies whether these are suitable and sufficient. In addition, the regulations in the Swiss Environmental Protection Act (Art. 59) empower the authorities to level charges for environmental damage directly on the polluter. Hence, the implementation of the EU directive should not induce any significant changes in Switzerland in terms of meeting the costs. However, since the directive also requires guarantees of financial coverage of the costs, the consequences for the Swiss insurance industry cannot be overlooked.

International Water Management Course

The podium discussion was held as part of the «International Water Management Course, IWMC» run by EAWAG and Swiss Re. The IWMC was initiated in 2003 as a contribution to solving global water problems. The aim of the course is the teaching of sustainability-oriented methods for the problem-solving and decision-making process in water management. EAWAG is contributing its scientific knowledge and practical problem-solving techniques, while Swiss Re is

adding its expertise in risk management. In addition, the course is supported as «A Sharing Solutions initiative by Swiss Re - towards a sustainable future». Along with the specialists from EAWAG and Swiss Re, international experts were invited. The course has been designed for managers and consultants from institutions who are involved in decision-making processes in the water sector. This includes management, environment and development organizations, utilities, waste disposal firms and consultancies. This year's IWMC was held from 28 September till 1 October 2004 at the Swiss Re Centre for Global Dialogue in Rüslikon. 17 people from 9 different countries attended. The countries represented were: Bangladesh, Eritrea, the Philippines, Jordan, Israel, India, Vietnam, Nepal and Switzerland. The main focus was on «River Management» particularly dealing with river revitalisation and dam construction.

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Organizing institutions

EAWAG

The Swiss Federal Institute for Environmental Science and Technology is an autonomous research institution under the domain of the Swiss Federal Institute of Technology. As an international competence centre for water, it conducts basic and applied research.

Swiss Re

Swiss Re is one of the world's leading re-insurers and the world's largest life and health re-insurer. The company operates through more than 70 offices in over 30 countries. Swiss Re has been in the reinsurance business since its foundation in Zurich, Switzerland, in 1863. Through its three business groups Property & Casualty, Life & Health and Financial Services, Swiss Re offers a wide variety of products to manage capital and risk. Traditional reinsurance products, including a broad range of property and casualty as well as life and health covers and related services, are complemented by insurance-based corporate finance solutions and supplementary services for comprehensive risk management. Swiss Re is rated "AA" by Standard & Poor's, "Aa2" by Moody's and "A+" by A.M. Best.