

UNECE Seminar on the occasion of the 25th anniversary of the Sandoz-Accident

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1986: Sandoz-Accident

**Fire at a storage facility for chemicals/pesticides without any
Fire Water Retention System**



→ 30-40 tons of highly toxic pesticides flowed into the river



→ causing the death of the aquatic ecosystem 700 km downstream (e.g. eels)

UNECE Seminar on the occasion of the 25th anniversary of the Sandoz-Accident

Location and Date: Bonn, 8/9 November 2011

Auspices: Industrial Accident- &
Water-Convention

Participants: 75, from 25 UNECE countries

OBJECTIVES

- (a) Where do we stand with our efforts in the area of prevention of accidental water pollution within the UNECE region?
- (b) Where are still deficits in prevention of accidental water pollution?
- (c) What can be the way forward to address these deficiencies?

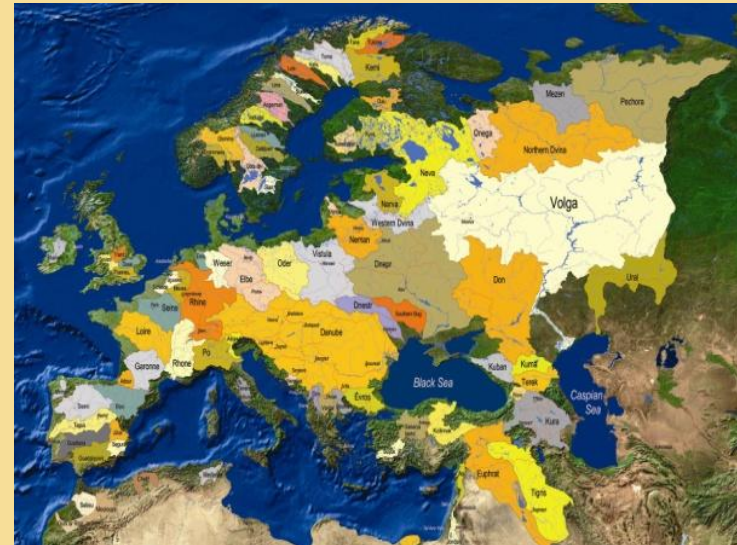


Scope

Day 1:

Key note lectures concerning the progress achieved and existing deficits in international watercourses

- Rhine River Basin
- Danube River Basin
- Chu Talas River Basin
- Amur River Basin



→ Panel discussions to assess the deficiencies

Scope

Day 2:

Specific thematic presentations

- Criteria and philosophy for setting the thresholds value for water pollution
- Flow time modeling: presentation on the ALAMO model used at the Elbe River
- Early warning systems: on-line monitoring and alert systems
- Differences in the Eastern and Western approach to risk management

→ **Panel discussion to assess the way forward**

Results

→ 6 Major Challenges were identified:

1. Risk coming from transport means
2. New sources of risk
3. Communication technologies and information to the public
4. Risk of complacency in maintaining high level of safety
5. Inventory of risk sources, including abandoned sites
6. Enforcement of procedures and safety standards

→ Conclusions and Recommendations for the Bodies of the Convention

Risk coming from Transport Means

→ Conclusion:

The transport of hazardous goods by ships, but also by other means of transportation (i.e. railway, pipelines), poses a high risk potential for water pollution.



Tanker
Germany, 2011

Railway
Lviv, 2007

Pipeline
Dalian, 2008

Risk coming from shipping

Recommendation:

The Joint Expert Group on Water and Industrial Accidents Should be tasked by the Bureaux, in cooperation with the Section of the Transport of Dangerous Goods of the UNECE Transport Division, with carrying out a relevant study and preparing a set of recommendations.



New sources of Risk

→ Conclusion:

There had been a number of accidents coming from industrial installations which are not clearly under the scope of the UNECE Industrial Accidents Convention, such as the Tailing Management Facilities.



Red Sludge Spill, 2010



Baia Mare, 2000

New sources of risk

Recommendation:

The Working Group on Development should clarify the scope of the Convention.

A checklist for Tailing Management Facilities should be considered helping to implement the UNECE Guidelines for Tailing Management Facilities



Red Sludge Spill, 2010

Maintaining Safety

→ Conclusion:

After the Sandoz accident the primary attention was given to chemical storage plants for which fire water retention strategies were elaborated and implemented.



→ However severe accidents happened in the mean time with fire at storage and processing plants endangering whole River Catchments, demonstrating the implemented calculation models are not sufficient!

Maintaining Safety

Recommendation:

The Joint Expert Group on Water and Industrial Accidents should be tasked by the Bureaux with the elaboration of a catalogue of preventive measures, with special attention to fire waters retention strategies.



Kinzig, 2005

Thank You for your Attention

