Berlin, 8/9 June 2005



Gerhard Winkelmann-Oei Umweltbundesamt, Dessau

Federal Environmental Agency

Dessau, Germany

Dept.: Hazard Prevention and Safety of Installations

WORKSHOP ON THE PREVENTION OF WATER POLLUTION

Berlin, 8/9 June 2005



History

1996	OECD Workshop on Pipelines, Oslo
1997	EU Workshop on the Risk of Hazardous Accidents due to Pipeline Failures, Berlin
1998	UNECE Workshop on the prevention of industrial accidents and limitation of their impact on transboundary waters, Berlin
1999	UNECE Seminar on the prevention of industrial accidents and limitation of their impact on transboundary waters, Hamburg
2003	OECD Guiding Principles for Pipelines

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Background

1999	UNECE Seminar on the prevention of industrial accidents and limitation of their impact on transboundary waters,
	Hamburg

2000 **UNECE** 1. CoP, Brussels

2004 UNECE 3. CoP, Budapest

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UNECE-SEMINAR

ON THE PREVENTION OF INDUSTRIAL ACCIDENTS AND LIMITATION OF THEIR IMPACT ON TRANSBOUNDARY WATERS (Hamburg, Germany, 4-6 October 1999)

"The seminar noted that exploration, exploitation and the transport of oil …have the potential for severe impacts on transboundary waters in the case of an accident."

"Therefore, in future, activities in this fields should be undertaken to examine these hazards and possible safety measures to protect transboundary waters."

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1. CoP: UNECE "Industrial Accident"-Convention Decision 2000/5 on the prevention of accidental water pollution

"Drawing up safety guidelines/best practices concerning installations or activities for which they are not available so far, such as: ..., pipelines..., to be used by UNECE member countries and/or joint bodies"

→ Mandated to the Joint Expert Group (JEG)

Berlin, 8/9 June 2005



Joint Expert Group

The **Joint Expert Group**, at its fifth meeting in Budapest on 26 October 2004, recommended organizing two workshops,

- 1. on the prevention of water pollution and
- 2. on the prevention of accidental releases into the air due to pipeline accidents.

The joint expert group established an open-ended **Steering Group** to prepare the workshops and assist in drawing up the guidelines/good practices for pipelines.

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2004 UNECE 3. CoP, Budapest

The approach of the joint expert group was fully supported by the Conference of the Parties to the Industrial Accidents Convention at its third meeting in Budapest on 27-30 October 2004 (ECE/CP.TEIA/12) as well as by the of the Working Group on Integrated Water Resources Management at its first meeting in Geneva on 15 December 2004 (MP.WAT/WG.1/2004/2).

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APC-Workplan **UNECE** "Water" - Convention "Industrial Accident" - Convention **Joint Expert Group** Recommendations/Guidelines **Water- and Industrial Accident- Related Steering Group** Draft Safety Guidelines/Good Practices for Pipelines 1. Workshop 2. Workshop **Oil-Pipelines Gas-Pipelines** Berlin, Germany Netherlands 8/9 June 2005 March 2006

Berlin, 8/9 June 2005



Steering Group - Members

Ms C. Kühl	Federal Institute for Materials Research and Testing	Germany
Ms E. Okandan	Middle East University, Petroleum Research Centre	Turkey
Mr T. Kozulko	State Nuclear Regulatory Committee	Ukraine
Mr P. Danihelka	University of Ostrava	Czech Republic
Mr W. Reinhard	Member of the National Pipeline Committee	Germany
Mr B. Weenink	Ministry of the Environment	Netherlands
Mr G. Winkelmann	Federal Environmental Agency	Germany
Mr S. Ludwiczac	"Industrial Accident"-Convention	UNECE-Secretariat
Mr R. Enderlein	"Water"-Convention	UNECE-Secretariat

Berlin, 8/9 June 2005







Steering Group

Discussion paper

"Safety Guidelines/Good Practices for Pipelines"

Berlin, 8/9 June 2005



Content

- I. Principles
- A. General
- B. Specific
- II. Recommendations
- A. UNECE-Parties
- **B.** Competent Authorities
- C. Operators



ANNEX

Technical and Organizational Aspects

- Design and Construction
- II. Pipeline Management System
- III. Emergency Planning
- IV. Inspection





I. Design and Construction

- A. Materials
- B. Calculation
- C. Piggability
- D. Corrosion Protection
- E. Fire and Explosion
- F. Safety Equipment
- G. Height of Covering
- H. Marking
- Performance and Test of Construction



II. Pipeline Management System

- Organisation
- Identification and Evaluation of possible Transboundary Hazards
- Operational Control
- Management of Change
- Planning of Emergencies
- Monitoring Performance
- Audit and Review



III. Emergency Planning

A. Internal Emergency Planning

B. External Emergency Planning

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IV. Inspection

- Pipelines should be inspected and maintained regularly.
- Only reliable trained staff may carry out maintenance work.
- Inspections are to cover in particular the proper functioning of the equipment important for pipeline safety, the proper condition and tightness of the pipeline.



Discussion Paper

Tobics which are NOT tackled i.e.:

- I. Land Use Planning
- II. Risk-Assessment
- **III.** Information Policy
- → 2. Workshop, March 2006, Netherlands

Berlin, 8/9 June 2005



Outlook

2005/6 Steering Group/Joint Expert Group:

Guidelines on Pipeline Safety

03/2006 UNECE-WS on Pipeline Safety (Gas),

Netherlands

4. UNECE-CoP: Adoption of the Guidelines