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Final Workshop - Project on improving hazard and crisis management in the Danube Delta
Bucarest, 20/21 October 2015
Hazard and Crisis management in the Danube Delta

Safety Guidelines and Good Industry Practices for Oil Terminals
UNECE Technical Assistance Project
RISKMANAGEMENT AT THE DANUBE DELTA

Deep Water Horizon

Danube Delta
Danube Delta Project

Project to jointly work on:

I. Hazard management
   (prevention of industrial accidents, identification of hazardous industry)

II. Crisis management
   (response to accidents, warning systems)
Phase I – Hazard management

In the first phase the project aims at:

- getting an overview to hazardous activities in the Danube Delta

→ Accidental Risk Site (ARS) Inventory
Hazard Management

→ ARS Inventory
   Danube Delta

→ Highest Risk:
   3 Oil Terminals

-> drafting safety guidelines for oil terminals (to be used by the whole UNECE region)
Safety Guidelines and Good Industry Practices for Oil Terminals

Worked out by an International Expert Group:

• Frank Candreva (Det Norske Veritas Germanischer Lloyd, DNV GL, Oil and Gas, Belgium)

• Richard Gowland (European Process and Safety Centre, United Kingdom)

• Alexey Isakov (GCE Group, Russian Federation)

• Eddy De Rademaeker (European Federation of Chemical Engineering, Belgium)

• Andy Roberts (United Kingdom Petroleum Industry Association, UKPIA)
Safety Guidelines and Good Industry Practices for Oil Terminals

Content:

- Introduction
- Objective and Scope
- Definitions

Part 1 – Principles and General Recommendations
Part 2 – Technical and Organizational Safety Aspects
Part 3 – Sources and Further Reading
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Safety Guidelines for Oil Terminals

Part 1
Principles & General Recommendations

→ UNECE-Parties
→ Competent Authorities
→ Operators
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Safety Guidelines for Oil Terminals

Part 2
Technical and Organizational Safety Aspects

1. Design & Planning

2. Procurement, Construction and Asset Integrity Management

3. Operations

4. Closure & Decommissioning
Safety Measures

Basic Safety Measures
- WFD (Art.11; 3 I)
- Lessons Learnt (i.e. „Buncefield-Report“)

Safety Measures
- WFD (Art. 11, 2)
- SEVESO- III (Lower Tier)
- IED (BRef)

Special Safety Requirements
- SEVESO- III (Upper Tier)
1. Design and Planning

1.1. Environmental baseline and impact assessment

1.2. Facility siting, layout and land use planning

1.3. Safe design

1.4. Hazard management

1.5. Emergency planning
2. Procurement, Construction and Asset Integrity Management

2.1 Quality assurance during construction and commissioning

2.2. Asset Integrity and Reliability

2.3. Hazard management during construction and commissioning

2.4. Managing the lifetime of ageing assets
3. Operations

3.1. Process Safety in operations
3.2. Leadership and Safety Culture
3.3. Governance System
3.4. Operating procedures and safe work practices
3.5. Management of Change
3.6. Good Industry Practices (GIP) for transport and storage of hazardous materials
3.7. Management of abnormal situations
3.8. Records Management
3.9. Audits and Management Reviews
3.10. Learning from experience
3.11. Maintaining the integrity and reliability of assets
3.12. Hazard Management during operations
3.13. Emergency Preparedness and Response
4. CLOSURE AND DECOMMISSIONING

4.1. Temporary closure ("preservation")

4.2. Final Decommissioning
   4.2.1. Obligations of the oil terminal operator prior to decommissioning
   4.2.2. Obligations of the oil terminal operator during decommissioning
   4.2.3. Obligations of the oil terminal operator after decommissioning

4.3. Hazard Management during Decommissioning
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Safety Guidelines for Oil Terminals

Discussion and Commenting by
- Int. Organisations, NGOs, Stakeholders
  (March 2014)
- UNECE Bureau (June 2014)
- UNECE Member States
  (Aug. 2014)
The Conference of the Parties took note of the safety guidelines and good industry practices and invited their use by Parties to the Convention and other countries in the ECE region.

The Conference requested the secretariat, in cooperation with the Bureau, to raise awareness about the safety guidelines among Parties to the Convention and other countries in the ECE region.
Thank You for Attention

→ The Safety Guidelines should be the basic Standard for Oil Terminals in the whole UNECE Region