

### About the UNECE Industrial Accidents and Water Convention

and their Guidelines and Good Practices for the Operational Safety of Tailings and the Online Toolkit and Training for Strengthening Mine Tailings Safety

First meeting of the Working Group on Tailings Safety and Prevention of

Accidental Water Pollution in Kazakhstan

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#### **UNECE Water Convention**

## UNECE Industrial Accidents Convention

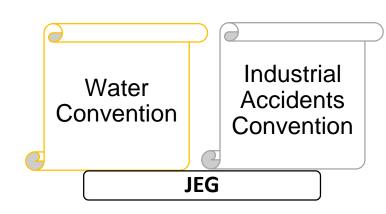
- Adopted in 1992, entered into force in 1996
- Since March 1, 2016, it is open for accession by all UN Member States, 46 Member States as of today
- Objective: to protect and ensure the quantity, quality and sustainable use of transboundary water resources by promoting cooperation
- The Convention is based on three main principles:
  - ✓ Principle of Prevention
  - ✓ Principle of reasonable and equitable use
  - ✓ Principle of cooperation
- Shared Goal: Resource Sustainability

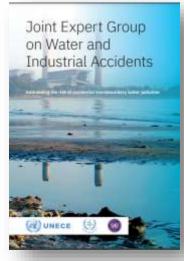
- Adopted in 1992 году, entered into force in 2000
- 41 Parties in the UNECE region, including the EU and 25 member countries
- Designed to protect people and the environment from industrial accidents by preventing, preparing for and responding to accidents
- Accidents regulated by the Convention:
  - ✓ associated with hazardous activities (production, use, storage, handling or disposal of hazardous substances)
  - ✓ capable of causing transboundary impact
- Covers NATECH (Technological Events Driven by Natural Hazards)

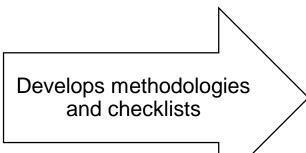
# Joint ad hoc Expert Group on Water and Industrial Accidents and Its Methodology

#### **Joint Expert Group:**

- Founded in 1998
- Focused on Preventing Accidental Water Pollution and its Consequences
- Combining Integrated Water Resources
   Management with Industrial Safety



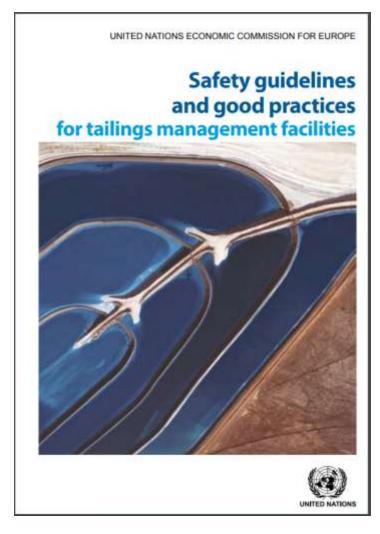




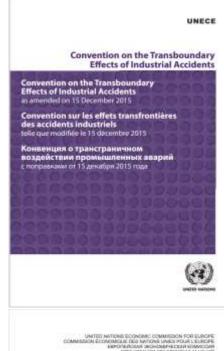




#### UNECE Safety Guidelines and Good Practices for TMFs



- Designed to limit the number of tailings accidents and their severity for human health and the environment
- Contains safety principles and recommendations for:
  - ✓ Governments,
  - ✓ the competent authorities,
  - ✓ and tailings operators
- Cover technical and organizational aspects related to:
  - Preparation for construction and with construction
  - Operation and management
  - **Object Inspection**
  - Identification, evaluation and management of abandoned sites
  - Planning for emergencies
- Jointly developed and endorsed by the governing bodies of the **UNECE Industrial Accidents and Water Conventions**

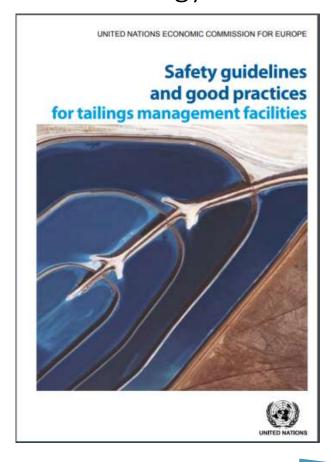






## UNECE Safety Guidelines and Good Practices for TMFs and Related Methodology





## Hazard/risk index assessment method for tailings (HRI / TRI)

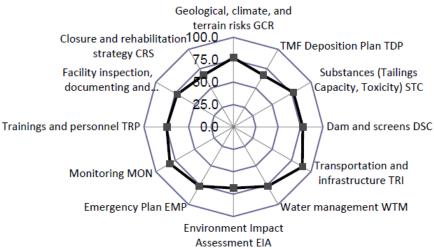
- Ranking of tailings according to their degree of danger and risk
- Required basic data (volume, toxicity...)

## Tailings Checklist

- Questionnaire
- Tailings safety assessment matrix
- Measure catalog



Updated in 2020



### UNECE Online Workshop and Decision to Strengthen Tailings Safety



- Held on December 1, 2020 with the support of Germany
- 43 countries, 115 participants, 37 organizations
- Preparedness and response are important, but prevention is key
- Tailings safety is a regional issue, not just a national one

<u>Decision on Enhancing the Safety of Tailings</u> – actions adopted at the Eleventh Conference of the Parties (December 2020), agreed by the Parties and recommended to other countries:

- Use the UNECE Safety Guidelines and Good Practices for TMFs and Related Methodology to achieve harmonized application
- Improve inter-ministerial and stakeholder coordination at the national and cross-border levels
- Review tailings legislation and policy in line with international best practice, such as safety guidelines, and work to establish a good practice standard
- Step up efforts to improve tailings safety and accident prevention in the face of more extreme weather events driven by climate change
- Preparation of an indicative document for further actions in connection with UNEA 5.2

### Online Toolkit and Training for Strengthening Mine Tailings Safety

### Online Toolkit and Training for Strengthening Mine Tailings Safety

#### Overview

Industrial accidents at tailings management facilities (TMFs) have led to environmental catastrophes with devastating effects on humans and the environment within and across countries. Major industrial accidents in the UNECE region and beyond have motivated countries to develop and implement tools under the UNECE Convention on the Transboundary Effects of Industrial Accidents to strengthen mine tailings safety and to prevent such accidents in the future.



This online toolkit assists countries in strengthening TMF safety and management practices. It serves as a hub for anyone wishing to learn about the importance of and work

and tools on mine tailings safety under the Convention. At the same time, it provides online training for countries, without physically meeting, to improve their knowledge about the impacts and challenges of mine tailings and to apply existing guidelines, including UNECE's tools, to improve tailings safety. Through the drop-down menus below, this online toolkit and training includes four sections: background information on mine tailings safety; a 3-step practical training for countries to enhance safe management practices; a summary of UNECE's mine tailings work and partners; and further reading on key reports and references.

Improving the management and safety of mine tailings increases countries' understanding and governance of disaster risks, including through inter-institutional and cross-sectoral cooperation. As such, the work contributes to accomplishing the objectives of Agenda 2030, with its Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction. It also strengthens mineral resource governance, sustainable infrastructure and disaster resilience, both within and across countries.

Background information - A call for an urgent action

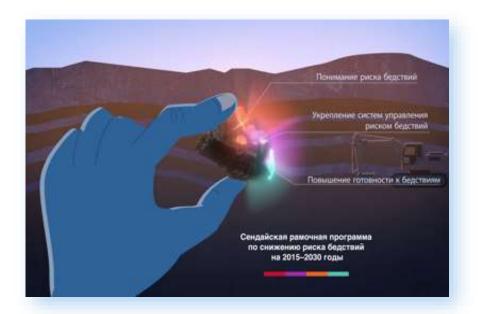
Practical training (3 steps)

**UNECE's mine tailings work and partners** 

Further reading - Key reports and references on mine tailings safety

- Practical training → 3-step approach
- Available at:
- https://unece.org/environment-policy/industrialaccidents/online-toolkit-and-training-strengthening-minetailings

## Includes tailings safety training video (ENG, RUS)



## Thank you for attention!

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