

# Benefits and opportunities of setting up an Inter-Institutional Working Groups on Tailings Safety and the Prevention of Accidental Water Pollution

---

Talaibek Makeev, expert,  
Water Initiatives Center

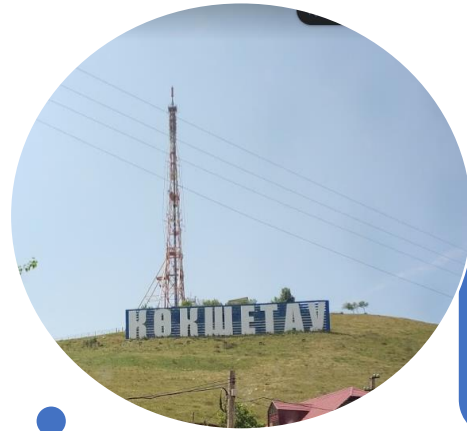
# UNECE experience

The Water Convention and the UNECE Industrial Accidents Convention have been cooperating since 1998 on the prevention of accidental water pollution through their Joint Expert Group on Water and Industrial Accidents (JGE).

The JEG has developed important guidance materials and documents, in particular Safety guidelines and good practices for Tailings Management Facilities, and supports countries in applying this guidelines along with the accompanying checklist methodology.

The UNECE is implementing development assistance projects, including the project to strengthen the safety of mining operations, in particular tailings management facilities (TMFs), in Tajikistan and Central Asia, which aims to apply the Safety guidelines and good practices for tailings management facilities with the checklist methodology developed by the JEG.

# Example of Kazakhstan



Continuation of an assistance to Kazakhstan within the framework of a project on supporting countries of Central Asia in strengthening the safety of mine tailings (2020-2021):

Development of ToRs and assistance in the creation of the IIWG in Kazakhstan with the involvement of the Water Initiatives Center



Pilot project to strengthen the safety of mining operations , in particular tailings management facilities (TMFs), in Kazakhstan and beyond in Central Asia (2017-2019).

- Recommendation on the establishment of an interinstitutional working group on Tailings Safety and the Prevention of Accidental Water Pollution At the project launch workshop-October 2018;
- Preparation of a ranked list of hazards and a map of tailing dumps in Kazakhstan, including those that can cause transboundary water pollution-spring 2019;
- Training on tailing dumps in Kokshetau with practical exercises on the checklist methodology-June 2019;
- A sub-regional workshop to present the project results, lessons learned and experience to the Central Asian countries - November 20-21, 2019, where the interest in the IIWG was once again confirmed by the responsible state bodies of the Republic of Kazakhstan.



# IIWG in Kazakhstan

---

It is recognized as necessary to improve inter institutional coordination and cooperation to prevent accidental water pollution from industrial operations and tailings management facilities (TMFs) with possible transboundary impacts.

---

Created on the basis of a joint order of the Ministry of Ecology, Geology and Natural Resources (MEGNR) and the Ministry of Emergency Situations (MES) of the Republic of Kazakhstan

---


With the participation of other interested departments, research institutions, operator enterprises, NGOs, and local authorities

---

The chairmanship of the IIWG rotates between the MEGNR and the MES every six months. The presiding party prepares the next meeting of the IIWG and coordinates the substantive work included in the agenda of the meeting. At the end of the regular meeting, the chairmanship is transferred to the partner party.

---

The primary responsibility of the IIWG is to review issues and develop recommendations for coordinated joint efforts to prevent accidental water pollution and transboundary impacts within river basins, as well as to improve the resilience of tailings management, including to the risks associated with climate change and extreme weather events.





# **Opportunities for Tajikistan**

# Need:

In the Republic of Tajikistan, the problem of tailings dumps and dumps of radioactive and toxic waste inherited from the Soviet era is still very urgent, requiring urgent measures for rehabilitation and systematic management, reducing the impact on public health and the environment. For these purposes, the National Concept of the Republic of Tajikistan for the rehabilitation of tailings dumps for waste processing of uranium ores for 2014-2024 has been adopted. The responsible state body for the implementation of the Concept is the Ministry of Industry and New Technologies together with the Academy of Sciences of the Republic of Tajikistan.

In recent years, the mining industry has been actively developing. Foreign direct investment is actively attracted to the industry. The share of the industry in the gross output of industrial enterprises of the republic is already 25.7% (2020). At the same time, given the mountainous terrain of the country and the locations of mining operations, they are highly susceptible, first of all, to mudflow hazards arising from heavy rains, with the likelihood of subsequent contamination of surface waters, including the risk of transboundary pollution.



# TMF – Zeravshan Gold Mine

---

# Background:

The world experience of recent decades shows that accidents at tailings dumps can often lead to long-term contamination of water and soil, damage to biota and have negative consequences for human health. Breakouts can lead to uncontrolled discharges and releases of hazardous substances contained in tailing dumps. The negative impact of such incidents on humans and the environment and the severe transboundary consequences have been demonstrated by recent accidents in the countries of the UNECE region. The largest accidents occurred at the tailings dam in Baia Mare, Romania (2000), at the aluminum sludge tailings dam in Kolontar, Hungary (2010), and at the tailings dam of the Talvivaara Mining Company in Finland (2012).

[Safety guidelines and good practices for tailings management facilities](#) and [corresponding methodology](#) will contribute to the identification of dysfunctional tailings storage facilities and, as a result, improve their management. The exchange of experiences and lessons learned will also optimize the design, construction and management of tailing dumps in the future, improve cooperation and strengthen preparedness for industrial accidents, reducing risks for all participants of the "One Belt, One Road" initiative. This initiative involves at least 16 countries in the UNECE region that are Parties to the Industrial Accidents Convention or beneficiaries of the Assistance and Cooperation Programme, including Central Asian countries.

The establishment of the Interinstitutional Working Group on Tailings Safety and the Prevention of Accidental Water Pollution (IIWG) in the Republic of Tajikistan will strengthen interdepartmental coordination and cooperation between state bodies responsible for the development of the mining industry, ensuring industrial safety and reducing the risks of natural and man - made disasters and water resources management, enterprises-operators in the mining industry in the prevention of unintentional water pollution, including the risk of transboundary impacts.



## **Goal**

- The purpose of the creation of Interinstitutional Working Group on Tailings Safety and the Prevention of Accidental Water Pollution (IIWG) in the Republic is to improve interdepartmental coordination of responsible state bodies, local authorities, mining enterprises, representatives of local communities in the Republic of Tajikistan to improve the safety of tailing dumps and prevent unintentional pollution of water resources, with an impact on public health, the environment

# Expected benefits for RT:

- ❖ The IIWG will contribute to the implementation of the National Strategy for Disaster Risk Reduction until 2030 and other commitments under the UN Sendai Framework for Disaster Risk Reduction.
- ❖ Improved institutional mechanisms for cooperation between authorities at the national and local levels, as well as between authorities and industry representatives in Tajikistan, with the achievement of:
  - Improved safety of tailings storage facilities and sound management of chemicals in Tajikistan.
  - A high level of awareness of the basic data and acquired skills for the implementation of a comprehensive monitoring program for hot spots, in particular tailings, including in Istiqlol, Taboshar, Gafurov, etc. to prevent environmental impacts.
  - Increased efficiency of state regulation of environmental risks for the population and employees of enterprises, especially in the context of tailings management.
  - Reducing the risks of accidental water pollution from tailings dumps, including those with transboundary impacts, and subsequently ensuring high quality of water resources.
  - Trained and educated personnel on the norms and rules of compliance with international standards for the safety of tailing dumps as part of training at local facilities in the spring of 2019.
- ❖ Implementation of the recommendations of the 3rd Environmental Performance Review (EPR) in Tajikistan, in particular (a) strengthen its own approach to managing the risks of hazardous tailings, including through improved national coordination and joint national inspections (recommendation 15.3), and (b) strengthen the capacity to accede to the UNECE Industrial Accidents Convention and the UNECE Water Convention (recommendations 6.6 and 15.5).
- ❖ Ensuring compliance with international standards, such as compliance with [UNECE Safety guidelines and good practices for tailings management facilities](#).
- ❖ A positive impact on the company's operations by adapting international standards (compliance with the UNECE Safety Guidelines), which can, in turn, have a positive impact on the company's reputation and increase the potential to attract foreign investment, if necessary.

# Institutional forms and options for creation:

## Option 1:

Memorandum of Understanding between:

- Ministry of Energy and Water Resources of the RT
- Ministry of Industry and New Technologies of the RT
- Committee on Emergency Situations and Civil Defense under the Government of the RT,
- Committee on Environmental Protection under the Government of the RT,
- Service for State Supervision of the Safe Conduct of Work in Industry and Mining Supervision under the Government of the RT,
- Academy of Science RT
- and other interested parties

## Option 2:

As an interdepartmental expert group for the National Platform of the Republic of Tajikistan for Disaster Risk Reduction in Emergency Situations and Civil Defense

## Option 3:

As an interagency expert group for the Rapid Assessment and Coordination Group in Emergency Situations (REACT) with the participation of UN institutions and other donors

## Option 4:

As an interdepartmental expert group for the Coordinating Council of the National Dialogue on Water Policy in the field of IWRM

# Main elements of the terms of reference:

- Preamble/justification
- Goal
- Structure and composition of the MWG
- Description of the roles and responsibilities of stakeholders
- Procedure for the management and maintenance of the work of the working group and the conduct of its meetings
- Procedure for making decisions/recommendations and their implementation



Thank you for attention!