

# Subregional Workshop on strengthening mine tailings safety in Central Asia

## Session 2

**UNECE guidance and methodologies for improving tailings safety  
within and beyond the UNECE region: experiences and lessons learned  
from their application in Central Asia**

**The application of the TMF methodology  
in Kazakhstan and Tajikistan – background,  
milestones and key achievements**

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# Departments - territorial divisions of the Committee

## Department Tasks :

- 1) participation in the formation and implementation of state policy in regulated areas;
- 2) prevention of the harmful effects of hazardous production factors arising from accidents, incidents at hazardous production facilities;
- 3) ensuring state control and supervision in regulated areas.

In the Republic of Kazakhstan there are only 17 territorial divisions of the Committee for Industrial Development and Industrial Safety.

# Industrial Safety Oversight

**Clause 1 of Article 137 of the Entrepreneurial Code of the Republic of Kazakhstan**

## **Forms of control and supervision**

**Control and supervision of the activities of subjects (objects) of control and supervision are carried out in the form of:**

- 1) checks;**
- 2) preventive control and supervision.**

**Clause 3 of Article 143 of the Entrepreneurial Code of the Republic of Kazakhstan**

## **Check sheets**

**Verification and preventive control and supervision with a visit to the subject (object) of control and supervision shall be subject only to the requirements established in the checklists.**

**The checklist in the field of state supervision in the field of industrial safety in relation to tailings and slurry farms of hazardous production facilities contains 291 requirements.**

# Methodology for enhancing tailings safety

The tailing hazard assessment method is primarily intended for quick preliminary assessment of the Hazard Index.

The tailings hazard index is calculated by summing up the main characteristics and parameters of the tailings:

- capacity;
- toxicity;
- tailing dump management;
- location;
- a dam.

# Tailings of Kostanay region

ИОХ_Емк	ИОХ_Токс	ИОХ_Управл	ИОХ_Место		ИОХ_Дамба			ИОХ_Возр	ИОХ	Рейтинг опасности/риска хвостохранилища
			ИОХ_Сейсм	ИОХ_Навод	ИОХ_FoS	ИОХ_МатДамбы	ИОХ_ШирДамбы			
6,87	2,00	1,00	0,00	0,00	2,00	1,00	0,00	0,00	12,9	2
7,49	0,00	1,00	0,00	0,00		1,00	1,00	1,00	11,5	3
5,92	0,00	1,00	0,00	0,00		0,00	1,00	1,00	8,9	4
8,58	0,00	1,00	0,00	0,00	1,00	2,00	1,00	1,00	14,6	1

- 1) SSGPO JSC: 1st, 2nd and 3rd tailing compartments;
- 2) Varvarinskoye JSC: tailing pond of a gold recovery and concentration plant;
- 3) Lisakov branch of Orken LLP: the main tailing pond of the gravitational magnetic enrichment factory
- 4) Lisakovsky branch of Orken LLP: emergency tailing dump.

# **Application of the methodology for tailings in Kazakhstan**

**The tailings safety methodology includes the following elements:**

- 1) Method for assessing the tailings hazard hazard index;**
- 2) Tailings Checklist**
  - questionnaire,**
  - evaluation matrix**
  - catalog of events.**

**A visit to the tailings of the Republic of Kazakhstan is only possible during the inspection period.**

**In accordance with the Entrepreneurial Code of the Republic of Kazakhstan, only the requirements established in the checklists are subject to verification.**

**The checklist is currently not applicable to the tailings of the Republic of Kazakhstan.**

**Thanks for your attention!**