

# Draft decision on strengthening mine tailings safety in the UNECE region and beyond

Updated version:  
ECE/CP.TEIA/2020/L.1

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# Reasons to act

## Risk analysis

- Numerous past TMF accidents and the experiences from UNECE activities give **reason for more attention to the subject of mine tailings safety**
- The **likelihood of TMF failures is much higher than the likelihood of big “loss of containment” events** in other technical areas
  - Mine tailings storage – safety is no accident (UNEP report): all TMF accidents could have been prevented, and are often related to Human & Financial resources

## Role of the Convention

- Relationship between the Industrial Accidents Convention and tailing management facilities (TMFs) as potentially hazardous activities was clarified in 2014

## Current tools

- **Safety guidelines and a checklist methodology** were developed (session 2)



# Conference of the Parties to the Industrial Accidents Convention

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- A draft decision on *strengthening mine tailings safety in the UNECE region and beyond* is presented for adoption at CoP-11 (7-9 Dec 2020)
- TMFs can be hazardous activities (clarified by the Convention in 2014)
- With the decision we move away from managing disasters to managing risks
- A first ever decision on mine tailings safety
- The decision contains reasons for action and action points for Parties to the Convention
- ...but other countries are invited to join the action!

# Documents

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- 1. Updated draft decision on strengthening mine tailings safety in the UNECE region and beyond (ECE/CP.TEIA/2020/L.1)**
  
- 2. Background document on mine tailings safety in the UNECE region and beyond (ECE/CP.TEIA/2020/2)**

Available here: <https://www.unece.org/index.php?id=53220> under 'Official documents'

 <b>Economic and Social Council</b>	<p>United Nations <span style="float: right;">ECE/CP.TEIA/2020/L.1</span></p> <p>Distr.: Limited 20 November 2020</p> <p>Original: English</p> <hr/> <p><b>Economic Commission for Europe</b> Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents</p> <p><b>Eleventh meeting</b> Geneva, 7–9 December 2020 Item 3 of the provisional agenda <b>Decision on strengthening mine tailings safety in the United Nations Economic Commission for Europe region and beyond</b></p> <p><b>Updated draft decision on strengthening mine tailings safety in the United Nations Economic Commission for Europe region and beyond</b></p> <p>Submitted by the Bureau of the Conference of the Parties</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Summary</b></p> <p>At its forty-second meeting (Oslo, 26 and 27 September 2019), the Bureau of the Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention) agreed to organize a seminar on mine tailings safety, to be held at the eleventh meeting of the Conference of the Parties, and established a small group to carry out the necessary preparations.* The group, supported by the United Nations Economic Commission for Europe (ECE) secretariat, prepared draft decision, which was subsequently approved by the Bureau at its forty-third meeting (Geneva (online), 16 and 17 June 2020).</p> <p>The updated draft decision contained in the present document is based on the original draft (ECE/CP.TEIA/2020/3). The present document includes comments received from the European Union, in accordance with the advance circulation procedure provided in the draft operating procedures (updated version contained in ECE/CP.TEIA/2020/L.5 based on the original draft ECE/CP.TEIA/2020/11). The Conference of the Parties is invited to adopt this decision.</p> <p>Further information on the context and actions presented in the present updated draft decision is available in the background document for the online seminar on mine tailings safety in the ECE region and beyond (ECE/CP.TEIA/2020/2) taking place on 1 December 2020.</p> </div> <p>* See CP.TEIA/2019/B.3/Minutes, para. 55, available at <a href="http://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/Bureau_Oslo/Bureau-42_Minutes_as_agreed_with_the_Chair_and_Bureau_final_clean.pdf">http://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/Bureau_Oslo/Bureau-42_Minutes_as_agreed_with_the_Chair_and_Bureau_final_clean.pdf</a></p>
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## Need for action

- Past accidents and expected future accidents and impacts
- Helping the mining sector to be ready for the future, supporting the energy transition while improving safety and preventing future disasters

## The Industrial Accidents Convention's role

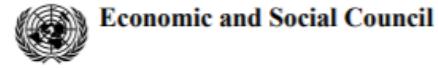
- Synergies with Sendai Framework, SDGs, UNEA Sustainable Infrastructure & Mineral Resource Governance and other international initiatives
- Relevance for countries in the UNECE region
- Tools and instruments as a basis (Safety guidelines and methodology)
- Prevention of, preparedness and response to industrial accidents through transboundary cooperation
- Long-term strategy defines regional hotspots

## Responding to trends and outlooks

- Demand for resources, climate change, population growth and community development

# The Conference of the Parties responds to:

United Nations



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## Economic Commission for Europe

Conference of the Parties to the Convention on the  
Transboundary Effects of Industrial Accidents

**Eleventh meeting**  
Geneva, 7–9 December 2020  
Item 3 of the provisional agenda  
Decision on strengthening mine tailings safety in the  
United Nations Economic Commission for Europe  
region and beyond

### Updated draft decision on strengthening mine tailings safety in the United Nations Economic Commission for Europe region and beyond

Submitted by the Bureau of the Conference of the Parties

#### Summary

At its forty-second meeting (Oslo, 26 and 27 September 2019), the Bureau of the Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention) agreed to organize a seminar on mine tailings safety, to be held at the eleventh meeting of the Conference of the Parties, and established a small group to carry out the necessary preparations.<sup>1</sup> The group, supported by the United Nations Economic Commission for Europe (ECE) secretariat, prepared draft decision, which was subsequently approved by the Bureau at its forty-third meeting (Geneva (online), 16 and 17 June 2020).

The updated draft decision contained in the present document is based on the original draft (ECE/CP.TEIA/2020/3). The present document includes comments received from the European Union, in accordance with the advance circulation procedure provided in the draft operating procedures (updated version contained in ECE/CP.TEIA/2020/1.5 based on the original draft ECE/CP.TEIA/2020/1). The Conference of the Parties is invited to adopt this decision.

Further information on the context and actions presented in the present updated draft decision is available in the background document for the online seminar on mine tailings safety in the ECE region and beyond (ECE/CP.TEIA/2020/2) taking place on 1 December 2020.

<sup>1</sup> See CP.TEIA/2019/B.3/Minutes, para. 55, available at [http://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/Bureau\\_Oslo/Bureau\\_42\\_Minutes\\_as\\_agreed\\_with\\_the\\_Chair\\_and\\_Bureau\\_final\\_clean.pdf](http://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/Bureau_Oslo/Bureau_42_Minutes_as_agreed_with_the_Chair_and_Bureau_final_clean.pdf)



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#### *The Conference of the Parties,*

*Alarmed by the increasing frequency of serious tailings dam failures over recent decades, causing deaths and the destruction of families, homes, infrastructure, ecosystems and the environment,*

*Increasingly aware of the far-reaching and potentially transboundary nature of accidental water pollution caused by tailings dam failure, both within and beyond the United Nations Economic Commission for Europe (ECE) region, making tailings dam failures a matter not only of national but also of regional concern, calling for joint prevention and management approaches,*

*Concerned by the observation that the majority of tailings dam failures can be attributed to a limited number of human factors, notably a lack of management continuity and inadequate resources for maintenance and management of tailings management facilities,*

*Conscious of the economic importance of the mining sector and its role in the transition to low-carbon energy production and storage technologies, and the interconnection of sustainably deployed infrastructure, mining safety, human well-being and the environment,*

*Conscious also of the projected increase in global demand for mineral extraction and mining activities in and beyond the ECE region, which will, among other things, result in an increase in hazardous waste stored in mine tailings, requiring more reliable and resilient tailings design, management and land-use planning,*

*Noting with concern the elevated risk of accidents from mine tailings as a result of an increase in the frequency and intensity of climate-related extreme weather events (such as high energy storms, wind gusts, heavy precipitation and extreme temperatures), and slow-onset climate events<sup>2</sup> (such as rising sea levels, thawing of permafrost, land degradation and retreating glaciers), while also noting a lack of awareness in the mining sector concerning these phenomena,*

*Emphasizing the need for full awareness of disaster risk linked to mine tailings operations and the consequences of tailings dam failures, as well as the need for communities, tailings management operators and competent authorities to take strengthened disaster resilience and disaster risk reduction measures to mitigate such risks, and for the involvement of all concerned stakeholders in respective decision-making on mine tailings safety,*

*Appreciating synergies between the strengthened implementation of the Convention on the Transboundary Effects of Industrial Accidents, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the Sustainable Development Goals of the 2030 Agenda for Sustainable Development; and recognizing the linkages with the objectives for adaptation to climate change under the Paris Agreement,*

*Recognizing the importance of establishing a high level of tailings safety in the ECE region by addressing regional hotspots, in line with the implementation of the Convention's Long-Term Strategy until 2030,<sup>3</sup>*

*Recalling the endorsement of the Safety guidelines and good practices for tailings management facilities,<sup>4</sup> which were developed by the Joint Expert Group on Water and Industrial Accidents further to the evaluation of the Working Group on Development – at its fourth meeting (Geneva, 28 and 29 April 2014)<sup>5</sup> – that the Convention's provisions also apply to tailings management facilities,*

*Welcoming the recent developments and initiatives at the international level to strengthen mine tailings safety that also have an impact on ECE countries, such as the adoption in 2019 of United Nations Environment Assembly resolutions L.6 on sustainable infrastructure<sup>6</sup> and L.23 on mineral resource governance,<sup>7</sup>*

*Noting with concern the challenge that countries face, in particular those of Eastern and South-Eastern Europe, the Caucasus and Central Asia, concerning inter-institutional coordination, coherent policymaking and adequate disaster risk governance among competent authorities within and across countries to develop a holistic approach towards managing tailings facilities and preventing related accidents,*

*Committed to preventing mine tailings accidents and their disastrous effects on human lives, the environment, infrastructure, regional security and economic development, and to enhancing transboundary cooperation to that effect,*

[\(EN\)](https://www.unece.org/fileadmin/DA_M/env/documents/2020/TEIA/COP_1/Official_docs/L1E.pdf)

[\(FR\)](https://www.unece.org/fileadmin/DA_M/env/documents/2020/TEIA/COP_1/Official_docs/L1F.pdf)

[\(RU\)](https://www.unece.org/fileadmin/DA_M/env/documents/2020/TEIA/COP_1/Official_docs/L1R.pdf)

<sup>1</sup> Slow-onset climate events are defined in the United Nations Framework Convention on Climate Change technical paper on slow onset events (FCCC/TP/2012/7). The paper indicates a need to integrate disaster risk reduction, adaptation to climate change and sustainable development efforts to address the impacts of slow-onset climate events.

<sup>2</sup> See ECE/CP.TEIA/38/Add.1.

<sup>3</sup> United Nations publication, [ECE/CP.TEIA/26](https://www.un.org/development/desa/disaster/sendai-framework-for-disaster-risk-reduction.html).

<sup>4</sup> See ECE/CP.TEIA/WG.1/2014/3, para. 23; and the definition of industrial accidents under the Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of

# The Conference of the Parties responds to:

- frequency of serious tailings dam failures over recent decades
- far-reaching and potentially transboundary nature of accidental water pollution caused by tailings dam failure
- calling for joint prevention and management approaches
- a limited number of human causes, notably a lack of management continuity and inadequate resources
- economic importance of the mining sector and its role in the transition to low-carbon economy
- projected increase in global demand for mineral extraction and mining activities in and beyond the ECE region
- increase in the frequency and intensity of climate-related extreme weather events
- communities, tailings management operators and competent authorities: disaster resilience and disaster risk reduction measures
- synergies Industrial Accidents Convention, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the Sustainable Development and the Paris Agreement (adaptation)
- Convention's Long-Term Strategy until 2030 (hot spots)
- Safety guidelines and good practices for tailings management facilities
- United Nations Environment Assembly resolutions L.6 on sustainable infrastructure and L.23 on mineral resource governance
- challenge for countries in Eastern and South-Eastern Europe, the Caucasus and Central Asia, managing tailings facilities and preventing related accidents
- preventing mine tailings accidents and their disastrous effects on human lives, the environment, infrastructure, regional security and economic development, and to enhancing transboundary cooperation to that effect.

## Enhanced implementation

- Of Safety guidelines and the checklist methodology
- By facilitating implementation in ‘hotspot’ countries

## Improving regulatory frameworks and institutional capacity

- By reviewing legislation and establish links between relevant ministries within and across countries

## Information sharing and (transboundary) risk management

- Through identification and reporting

## Responding to trends and outlooks such increase in extreme weather events

- Starting with Natech risks

## Resources and available funding

- Especially for hotspot areas

## Future actions aligned with international organizations beyond UNECE

- United Nations Environment Assembly

# The Conference of the Parties takes action:



1. *Takes note* of the conclusions and recommendations of the online seminar on mine tailings safety in the ECE region and beyond which took place on 1 December 2020;

2. *Recommends* that ECE countries that extract mineral resources use the Safety guidelines and good practices for tailings management facilities and the Methodology for improving TMF safety<sup>7</sup> developed under the Convention's auspices to identify, map and improve the safe management of tailings management facilities, including of those bearing transboundary risks, with a view to achieving their harmonized application in the ECE region; and invites countries beyond the region to do the same;

3. *Urges* Parties to the Convention to facilitate the application of the above-mentioned Safety guidelines and Methodology and other good practices in the ECE region through capacity development, technology and knowledge transfer and the sharing of experiences, lessons learned and good practices, and invites other countries to join in these efforts;

4. *Calls on* Parties to the Convention to improve inter-institutional and stakeholder coordination at the national and local levels and across borders, while increasing transparency for communities and other stakeholders on how these risks are taken into account; and invites other ECE member countries to do the same;

5. *Urges* Parties to the Convention to review their legislation and policies on mine tailings storage and management against international good practices such as the Safety guidelines, and to work towards setting a standard for good practices for tailings management facilities, while ensuring their implementation at the national level and facilitating broader cooperation; and invites other ECE member States to do the same;

6. *Calls on* beneficiary countries of the Convention's Assistance and Cooperation Programme to use the tools under the Strategic Approach, notably the self-assessments and action plans, to signal needs and to request support in overcoming capacity constraints;

7. *Calls on* Parties to the Convention to make available funds to support the implementation of capacity-building activities in countries of Eastern and South-Eastern Europe, the Caucasus and Central Asia;

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8. *Reminds* Parties to the Convention that the identification and notification of hazardous activities shall comprise mine tailings facilities<sup>8</sup> and requests them to report on these as part of their national implementation reports;

9. *Encourages* countries to make information available, to the extent feasible, on location-specific tailings management hazards and risk, to competent authorities, operators of tailings management facilities and communities;

10. *Requests* Parties to the Convention to increase their efforts to strengthen tailings safety and prevent failures, in view of the elevated risk of such accidents posed by the increasing frequency and severity of extreme weather events as a result of climate change; and invites other countries to do the same;

11. *Requests* the Bureau of the Convention to prepare, on the basis of the discussions held at the seminar on mine tailings safety that has taken place on 1 December 2020, an orientation paper for consideration at the twelfth meeting of the Conference of Parties, containing proposals for further actions under the Convention in the field of mine tailings safety, taking into account the activities of other international organizations (e.g. the United Nations Environment Assembly).

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Industrial Accidents on Transboundary Waters to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes and to the 1992 Convention on the Transboundary Effects of Industrial Accidents, which also makes explicit mention of tailing dams (ECE/MR.WAT/11). Available at [http://www.unece.org/fileadmin/DAM/env/civil-liability/documents/protocol\\_e.pdf](http://www.unece.org/fileadmin/DAM/env/civil-liability/documents/protocol_e.pdf).

<sup>5</sup> See UNEP/EA.4/L.6.

<sup>6</sup> See UNEP/EA.4/L.23.

<sup>7</sup> Available at <http://www.unece.org/environmental-policy/conventions/industrial-accidents/publications.html>.

<sup>8</sup> This refers to those mine tailings facilities that fall under the definition of a "hazardous activity" provided in article 1 (b) of the Convention.

# The Conference of the Parties takes action:



1. Take note of the conclusions and recommendations of the [online seminar](#) on mine tailings safety in the ECE region and beyond (this seminar)
2. Use the [Safety guidelines](#) and good practices for tailings management facilities and the Methodology for improving TMF safety
3. [Facilitate the application](#) of the abovementioned Safety guidelines and Methodology and other good practices
4. Improve inter-institutional and stakeholder [coordination](#) at the national and local levels and across borders, and increase transparency
5. Review [legislation and policies](#) on mine tailings storage and management against international good practices such as the Safety guidelines; work towards setting a standard for good practices for tailings management facilities
6. Use the tools available: the [self-assessments and action plans](#), to signal needs and to request support in overcoming capacity constraints
7. Make available [funds](#) to support the capacity-building activities in countries of Eastern and South-Eastern Europe, the Caucasus and Central Asia
8. Identification and notification of hazardous activities shall comprise mine tailings facilities (as far as under the scope of the Convention) - [report](#) on these as part of their national implementation reports
9. Make information available, on [location-specific](#) tailings management hazards and risk, to competent authorities, operators of tailings management facilities and communities
10. Increase efforts to strengthen tailings safety and [prevent](#) failures, in view of the elevated risk of such accidents posed by the increasing frequency and severity of [extreme weather](#) events as a result of climate change.
11. *Prepare an orientation paper for consideration at the twelfth meeting of the Conference of Parties, containing proposals for [further actions](#) under the Convention in the field of mine tailings safety, taking into account the activities of other [international organizations](#) (e.g. the United Nations Environment Assembly)*

- How can we implement the actions listed in the decision?
  - How can the actions mentioned today support the uptake of the proposals in the decision?
  - Which additional actions may be needed in the future?
- 



Thank you!