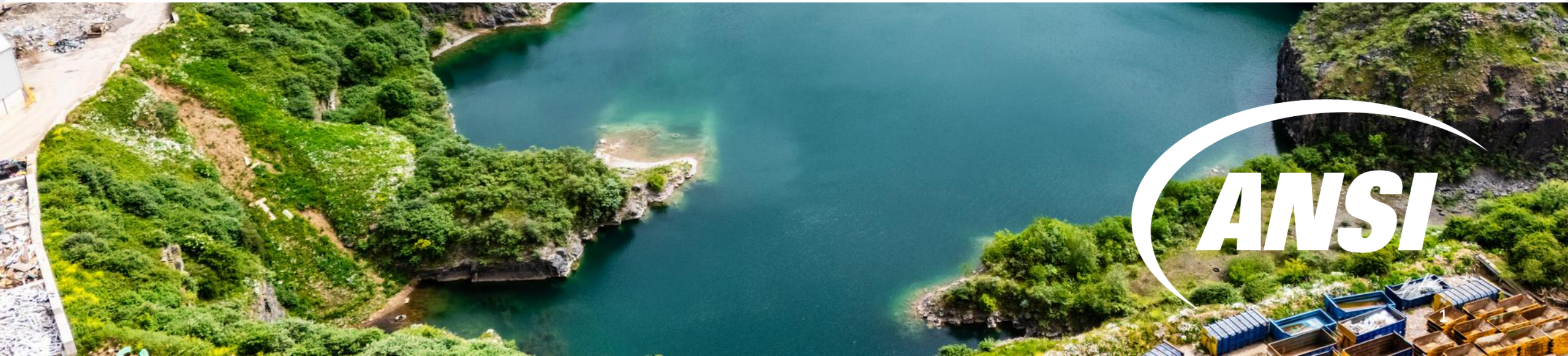




ISO TC 82/SC 7 Sustainable Mining and Mine Closure

Megan Barnhart, Senior Advisor for International Trade and Standards
U.S. Department of Energy (DoE)



ISO TC 82/ SC 7 Scope

MISSION OF ISO/TC 82/SC 7

To develop International Standards and complementary documents, which when applied, will prevent and mitigate long term mining impacts and create environmental and socio-economic value through the mine closure and reclamation management process.

Scope: Standardization of environmental, social and governance aspects of mining to:

- minimize the negative impacts from mining through its life cycle and transition to post-mining land use,
- take action to combat climate change and its impacts,
- develop sustainable benefits and opportunities for local and regional communities,
- respect community cultural connections to places,
- adopt a long-term view that ensures inter-generational equity,
- embrace opportunities for innovation by adopting the principles of the circular economy,
- enhance transparency of mining practices.

Excluded from scope:

- Occupational health and safety aspects related to workplace activities, covered by ISO/TC 283
- Risk management guidance, provided in ISO 31000
- Industrial wastewater treatment and reuse, covered by ISO/TC 282/SC4
- Machinery

Current Members & Observers

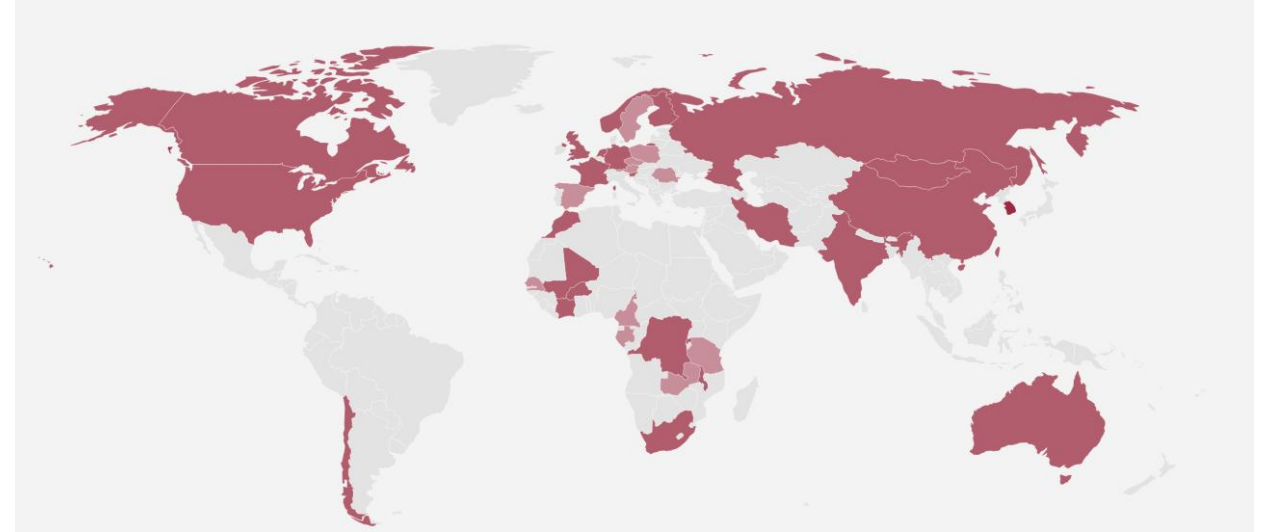
Participating Members (25):

- Australia
- Burkina Faso
- Canada
- Chile
- China
- Congo, The Democratic Republic of the
- Côte d'Ivoire
- Finland
- France
- Germany
- India
- Iran, Islamic Republic of
- Korea, Republic of
- Malawi
- Mali
- Mongolia
- Morocco
- Netherlands
- Norway
- Russian Federation
- Rwanda
- Slovenia

- South Africa
- United Kingdom
- United States

Observing Members:

- Austria
- Cameroon
- Czech Republic
- Gabon
- Poland
- Romania
- Senegal
- Spain
- Sweden
- Tanzania, Republic of
- Zambia



Liaisons:

- Environmental Coalition on Standards (ECOS)
- European Federation of Geologists (EFG)
- International Council on Mining and Metals (ICMM)
- Initiative for Responsible Mining Assurance (IRMA)
- United Nations Industrial Development Organizations (UNIDO)

ISO TC 82/ SC 7 Structure

TC 82: Mining

Creation date: 1955

Secretariat: [SA](#) (Australia- recently voted, prior was Germany)

TC 82 SC/ 7 : Sustainable Mining and Mine Closure

Creation date: 2013- Mine Closure and Reclamation Management (2023 scope change to include Sustainable Mining)

Secretariat: [KATS](#) (Korea)

Committee Manager: [Dr Dukmin Kim](#)

Chairperson (until end 2028): Mrs Tania Laurencon (Australia)

ISO Technical Programme Manager [TPM]: [Mme Mercè Ferrés Hernández](#)

ISO Editorial Manager [EM]: [M Vincenzo Bazzucchi](#)



ISO/ TC 82 - MINING



ISO/TC 82/SC 7- SUSTAINABLE MINING AND MINE CLOSURE

TF 3

Revision of the Strategic Plan



TF 5

Maintenance of tailings storage facilities



TF 7

Mine wastewater monitoring and assessment



WG 4

Social aspects



WG 5

Underground mine tailings backfill



WG 6

Value of discarded natural materials in mining



ISO/TC 82/SC 7 Published Standards (5)

[ISO 20305:2026](#)

Mine closure and reclamation — Vocabulary

[ISO 21795-1:2021](#)

Mine closure and reclamation planning — Part 1: Requirements

[ISO 21795-2:2021](#)

Mine closure and reclamation planning — Part 2: Guidance

[ISO 24419-1:2023](#)

Mine closure and reclamation – Managing mining legacies — Part 1: Requirements and recommendations

[ISO/TR 24419-2:2023](#)

Mine closure and reclamation – Managing mining legacies — Part 2: Case studies and bibliography



WG 4: Social Aspects

- [ISO/AWI 8238](#)
- Status: A committee draft has been registered/ and committee level consultation started
- U.S. expert participation
- Attended the meeting 4/16

Scope

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- develop sustainable benefits and opportunities for local and regional communities,
- respect community cultural connections to places,
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- Machinery.

Addresses 5 themes

Stakeholder Participation

Impacts and opportunities

Community identity as tied to places (culture, livelihoods, value)

Transition (Communities, workforce, landuse, economics)

Resourcing for resilience (liabilities for environmental harm and social transitions)



WG 5: Underground Mine Tailings Backfill

- [ISO/AWI 25603](#) Underground mine tailings backfill guidance
- Status: Preparatory Stage/ Actively meeting – working draft comment period initiated
- 3 U.S. Experts Registered
- Met May 17 in Beijing, U.S. experts attended both in-person and virtual

3 Primary Objectives:

Standardized methods and procedures for the operation and management of underground mine tailings backfill

Tool for enterprises and regulatory authorities

backfill system design
method selection
operational management
cost estimation
environmental audits

Support the sustainable use of tailings through underground backfilling



WG 6: Value of Discarded Natural Materials in Mining

- [ISO/AWI 25412](#) Finding Value in Mine Waste
- Status: Preparatory Stage/ Actively meeting – working draft
- Next Meeting: Met on April 28th
- Building out U.S. expert participation
- The EU/ CEN voted into Vienna agreement

Stated Purpose

Standardized method for characterizing and determining economic value of mine waste material

Understanding of potential secondary resources for reuse or recovery throughout mining operations

Aligning the management of these materials with circular economy principles

Evaluation of value in materials with environmental liability – contribute to a lifecycle approach in management of abandoned sites

TC 82/ SC 7 Task Forces

Elaborating New Ideas for Standardization

TF 3: Revision of the Strategic Plan



- U.S. expert participant / ANSI, DOE
- Progress Pending TC82 Mining to update its strategic plan

TF 5: Maintenance of Tailings Storage Facilities



- No U.S. expert participation

TF 7: Mine Wastewater Monitoring and Assessment



- No U.S. experts registered

Liaison Status

Liaison Committees to ISO/TC 82/SC 7

ISO/TC 108	Mechanical vibration, shock and condition monitoring
ISO/TC 147/SC 2	Physical, chemical and biochemical methods
ISO/TC 190	Soil quality
ISO/TC 282	Water reuse
ISO/TC 333	Lithium

Liaison Committees from ISO/TC 82/SC 7

ISO/TC 147/SC 2	Physical, chemical and biochemical methods
ISO/TC 147/SC 6	Sampling (general methods)
ISO/TC 190	Soil quality
ISO/TC 207/SC 1	Environmental management systems
ISO/TC 282	Water reuse
ISO/TC 282/SC 4	Industrial water reuse
ISO/TC 298	Rare earth
ISO/TC 323	Circular economy
ISO/TC 333	Lithium

Internal liaisons between ISO committees

Liaisons between ISO committees ensure that common interests are being addressed by the correct committee and that the right experts are involved in standards development.

Internal liaisons are established to:

- Share information and expertise between committees.
- Facilitate stakeholder engagement in ISO's standards development process.
- Ensure consensus is reached by incorporating relevant perspectives from other technical bodies.

Related Item in ISO/TC 308 – Critical Mineral/ Copper Chain of Custody

- ISO/TC 308 Proposal – Traceability of copper
- U.S. stakeholders from U.S. TAG to ISO/TC 82/SC 7 didn't support
- Wrote letters to U.S. TAG to ISO/TC 308 with justification to disapprove
- Wrote letters to ISO/TC 82/SC 7 members that are also members of ISO/TC 308. TAG members also shared letter with their networks.
- Proposal not approved, but AHG5 formed to study topic.
- Call for leadership for AHG5 (2 candidates received) and now the committee is selecting between the two via ballot closing May 13

Additional Items & Next Steps

- Next Meeting of TC 82/ SC7 likely to be in early fall / location TBD
- Continued need to build U.S. participation across TC 82/ SC 7 workstreams
- U.S. TAG meets quarterly/ additional focused briefings and reviews

Contact Information to Join U.S. TAG

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