

Name of Project: Management of mining waste, phase II (MIW II)	
ToR Reference No.: 2022-VI/06	
Version: <input type="checkbox"/> Draft <input type="checkbox"/> Final <input checked="" type="checkbox"/> Adopted	Date: 31-Dec-21
TERMS OF REFERENCE FOR WORK UNDER THE AUSPICES OF IMPEL	

1. Work type and title

1.1 Identify which Expert Team this needs to go to for initial consideration	
Industry and air	<input type="checkbox"/>
Waste and TFS	<input type="checkbox"/>
Water and land	<input checked="" type="checkbox"/>
Nature protection	<input type="checkbox"/>
Cross-cutting tools and approaches	<input type="checkbox"/>
1.2 Type of work you need funding for	
Exchange visits	<input checked="" type="checkbox"/>
Peer reviews (e.g. IRI)	<input type="checkbox"/>
Conference	<input type="checkbox"/>
Development of tools/guidance	<input type="checkbox"/>
Comparison studies	<input checked="" type="checkbox"/>
Assessing legislation (checklist)	<input checked="" type="checkbox"/>
Other, (please describe):	<input checked="" type="checkbox"/>
Technical workshop/trainings/pilot project	
1.3 Full name of work	
Management of mining waste, phase II	
1.4 Abbreviated name of work or project	
MIW phase II	

2. Outline business case (why this piece of work?)

2.1 Name the legislative driver(s) where they exist
<ul style="list-style-type: none"> - Mine Waste Directive (2006/21/EC). - Water framework Directive (2000/60/EC). - Commission Staff Working Document "Environmental Assurance – scope concept and need for EU actions" (January 2018) European Commission "Development of a guidance document on best practices in the Extractive Waste Management Plans Circular Economy Action" (January 2019)

- Study supporting the elaboration of guidance on best practices in the extractive waste management plans – Final report (September 2019)

2.2 Link to IMPEL MASP priority work areas

- | | |
|---|-------------------------------------|
| 1. Assist members to implement new legislation. | <input checked="" type="checkbox"/> |
| 2. Build capacity in member organisations through the IMPEL Review Initiatives. | <input type="checkbox"/> |
| 3. Work on 'problem areas' of implementation identified by IMPEL and the European Commission. | <input checked="" type="checkbox"/> |
| 4. Other, (please specify): | <input type="checkbox"/> |

2.3 Why is this work needed?

Mining activity has always been a source of raw materials for man but at the same time has generated many environmental problems. Huge quantities of extractive waste, often abandoned, are sources of pollution and areas of geotechnical and hydrogeological instability. Nowadays, after numerous accidents involving mining activities (Val di Stava, Prestavel, Italy 1985, Baia Borsa and Baia Mare, Romania 2000, Aznalcollar, Spain 1998 and many others), the European Commission adopted the Directive 2006/21/EC on the management of waste from extractive industries (known as Mining Waste Directives), amending Directive 2004/35/EC.

This Directive provides for measures, procedures and guidance to prevent or reduce as far as possible any adverse effects on the environment, in particular water, air, soil, fauna and flora and landscape, and any resultant risks to human health, brought about as a result of the management of waste from the extractive industries in order to better manage the problem. Subsequently, each Member State shall ensure that the mining companies design a waste management plan for the minimisation, treatment, recovery and disposal of extractive waste, taking into account the principle of sustainable development. The plan objectives are aimed to:

- prevent or reduce waste production and its harmfulness,
- encourage the recovery of extractive waste by means of recycling, reusing or reclaiming such waste, where this is environmentally sound in accordance with existing environmental standards at Community level and with the requirements of this Directive where relevant,
- ensure short and long-term safe disposal of the extractive waste, in particular by considering, during the design phase, their management during the operation and after closure.

The Directive is aimed at the management of waste generated by the active mining industries; the attention to the management of waste from closed activities, disposed of in ponds or heaps now closed or abandoned, is limited to two articles: art. 20, which provide for the inventory of storage structures that represent or could pose a risk to human health or the environment (A), and art. 21 that encourages the exchange of information between Member States.

Also, in all this important topic, there is a big problem: sometimes Member States consider and manage differently mining wastes, so that first it could be necessary find common address lines on "what are" and "how manage" extractive waste.

This project proposal aims to compare the transposition of the Directive by Member States in order to evaluate common guidelines for better management of extractive waste, also in agreement with the exploratory opinion of the European Economic and Social Committee (EESC), which recommends to Member States to promote initiatives for the exploitation and use of "new fields" of raw materials, such as extractive waste.

2.4 Desired outcome of the work

IMPEL members will be more aware of the importance of proper mining waste management, also in view of their conversion/recovery according to the European concept of the circular economy. A research among IMPEL members will provide innovative information on local cases/mining waste management /recovery studies, the waste uses and, of course, operational cost estimates and prospects for the future. Such information, which is not yet collected and harmonized within the EU, will help to identify/evaluate better the management of mining waste at Community level. The survey will contribute to the development of a Community assessment of the identification of waste management techniques and their intrinsic potential, including in reference to the critical raw materials listed in *The European Critical Raw Materials review* (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0474>).

Mineral Waste Management Techniques and Demand of new raw materials are constantly evolving, therefore they are leading to further yearly insights, according to the needs/demands of the near future in this field: disposal as waste or secondary raw material?

2.5 Does this project link to any previous or current IMPEL projects?

The project represents the "phase 2" of the previous Management of Mining Waste (MIW), of which it represents the natural continuation in implementation of the directive on extraction waste (2006/21 / CE). This topic is considered a priority by the European Commission, which also provides for the preparation of technical guidelines for the inspection of extractive waste facilities.

3. Structure of the proposed activity

3.1 Describe the activities of the proposal

- Establish project team and initial video-conferences in order to discuss the project plan
- Involving IMPEL members through a survey questionnaire, whose answers will be shared and debated
- Progress updates (by email, video-conferences with the partners) and site visit
- Meeting for sharing first results and agree key cross-cutting challenge
- Workshop for sharing the achieved results, transferability to other Member States and future needs/opportunities
- A training or a pilot project to investigate the practical aspect of the project (not limiting it to the regulatory aspects) at an institution or research center of a project partner
- Presentation of final report at IMPEL meeting

3.2 Describe the products of the proposal

- A final report about mining waste management assessment on the basis of the different experiences of the project partners with proposals for their recycle/reuse



- Creating a community to continue dialogue and strengthening the knowledge on this constantly evolving topic, in particular on the essential raw material field
- A final document that considers the entire life of extractive activities (mines and quarries) from opening to closure and post-closure and which contemplates the recovery of waste produced and defaced territories.

