

Water and Land Remediation

Marco Falconi (ISPRA)

Water & Land Expert Team

IMPEL Open Day - 29 January 2025



Funded by the
European Union

WLR: Water and Land Remediation



- Relevant international network are involved in the project



WLR: Water and Land Remediation



Why it is needed

- This project aim to speed up the process, focusing to the remediation phase that is often the bottleneck, promoting in situ and on-site technologies

Outcomes

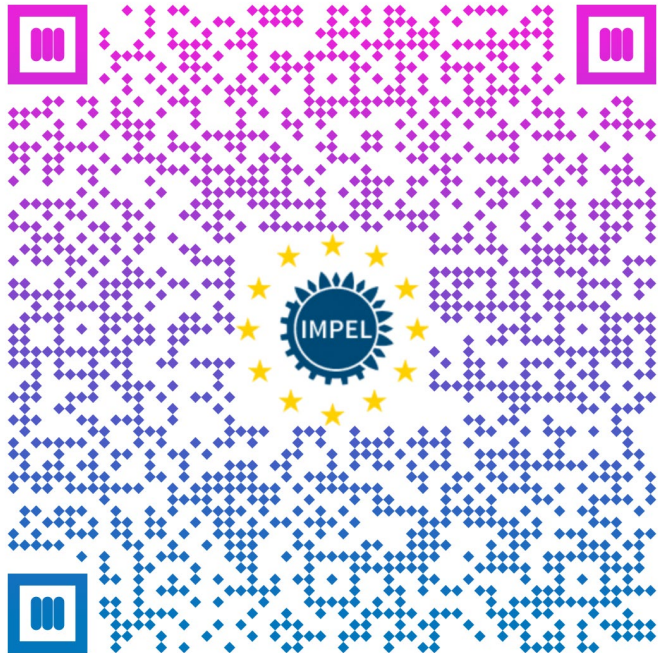
- Support/exchange technical experience required to make progress with the Remediation phase in Europe
- Two technologies and two reports per year. Each report (35-50 pages) has an Annex with several case studies
- 2021 IN SITU CHEMICAL OXIDATION - SOIL VAPOR EXTRACTION
- 2022 MULTI PHASE EXTRACTION - SOIL WASHING
- 2023-2024 THERMAL DESORPTION - PHYTOREMEDIATION
- 2024-2025 BIOPILE - IN SITU CHEMICAL REDUCTION
- 2025-2026 **to be decided in the project team**
- 2026-2027 **to be decided in the project team**



WLR: Water and Land Remediation



- Final documents on **SVE** and **ISCO** published in IMPEL website, available in many languages, **MPE** and **SW** in EN soon available the translations



In Situ Chemical Oxidation (ISCO) report (EN)



Έκθεση για την επιτόπια χημική οξείδωση (ETΧΟ), Τελική έκθεση (GR)



Ossidazione chimica in situ (ISCO) report (IT)



In situ chemische oxidatie (ISCO) (NL)



Utlenianie Chemiczne In Situ - raport (PL)



Raport privind Oxidarea Chimică in-situ (ISCO). (RO)



In Situ Kemična Oksidacija (In Situ Chemical Oxidation - ISCO) poročilo (SI)



In situ chemická oxidácia (ISCO), Záverečná správa (SK)



Yerinde Kimyasal Oksidasyon Raporu (TR)



Rapport sur l'oxydation chimique in situ (OCIS) (FR)



WLR: Water and Land Remediation



Recent reports

Documents on Phytoremediation and In situ Thermal Desorption are now ready, will be published on the IMPEL website around the end of February 2025, after the approval of the IMPEL General Assembly



Preparation of next reports

We are going to develop documents on Biopiles and In Situ Chemical Reduction with a deadline of May 2025.

VOLUNTEERS NEEDED!!!



WLR: Water and Land Remediation



Landfarming



Electrokinetic Extraction



Immobilization techniques



Incineration



Composting



Air Sparging



Monitored Natural Attenuation



Permeable Reactive Barriers



Groundwater Circulation Wells



Constructed Wetlands



TABLE OF CONTENTS

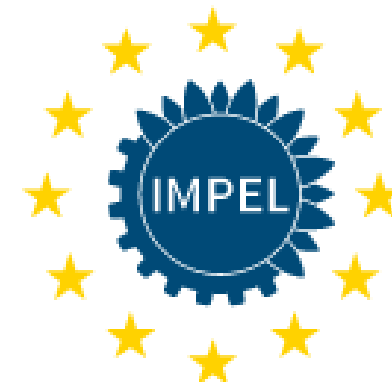
Context	3
Introduction	5
1. Your contact details	9
2. Site background	10
3. Pilot-scale application in field	14
4. Full-scale application	19
5. Enhancements to SVE/AS	24
6. Post treatment and/or Long Term Monitoring	26
7. Additional information	27
Glossary of Terms	31

WLR: Water and Land Remediation



Dissemination

- IMPEL documents **are not mandatory/legally binding** but nevertheless important references
- Final products will be disseminated by a number of national and regional authorities
- Presentation in conferences is welcomed by all collaborating networks. All authors from IMPEL, Nicole, CommonForum, EIONET will be entitled to publish it in their website



Contact information:

- ✓ **For joining this project:** If you work for an IMPEL member organisation and would like to join the project or receive further information, **please contact the National Coordinator of your country and the Project Manager at marco.falconi@impel.eu**
- ✓ **For becoming a member of IMPEL:** If you are from an Environmental Authority or association of authorities that is based in a member state of the EU, a candidate country or another country applying Community law and would be interested in becoming a member of IMPEL, **please contact IMPEL Secretariat at info@impel.eu** for more information.
- ✓ **For all other interested parties:** please check out our new website for further information! **www.impel.eu**



Funded by the
European Union