EU4GREEN

SYSTEMATIC APPROACH FOR A REGISTER OF CONTAMINATED SITES IN WB6

GUIDANCE 2

WP1-12 Depollution Soil: Inventory of contaminated sites

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ABBREVIATIONS

ALB	Albania
BIH	Bosnia and Herzegovina
EEA	European Environment Agency
EIONET	European Environment Information and Observation Network
EPA	Environmental Protection Agency
EU	European Union
GAWB	Green Agenda for the Western Balkans
IED	Industrial Emission Directive
IPA III	Instrument for Pre-accession Assistance III period 2021-2027
IPPC	Integrated Pollution Prevention and Control
MKD	North Macedonia
MNE	Montenegro
PCB	Polychlorinated biphenyl
REAWG	Regional Expert Advisory Working Group on Soil within the
RRD SWG	Regional Rural Development Standing Working Group in South-Eastern Europe
SRB	Serbia
WB	Western Balkans
WB6	Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia
WP	Work package
XXK	Kosovo*[1]

[1] * This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo* declaration of independence.

1. EXECUTIVE SUMMARY

Local contamination of environmental media is, in most cases, caused by point sources such as industrial activities, mining and landfills. Soil, air, groundwater and surface water as well as ecosystems and food in the vicinity of industrial zones or mining areas and waste dumps can be affected by contamination. This Guidance document contains practical recommendations for a process and criteria for establishing a systematic register of (potentially) contaminated sites.

A tiered and stepwise approach is crucial within contaminated site management. Such a systematic approach will ensure that limited resources are allocated to the most high-risk sites. One of the first essential steps includes the identification of potentially contaminating activities[2] and a first identification of known sites (kick-off phase), which was discussed in a first workshop in 2023 and illustrated in the first "Guidance for identification of key soil polluting activities and contaminated sites in WB6"[3].

A next important step includes the **systematic approach to establish a register** of sites where contaminating activities have taken place. This process will lead to the next steps within the contaminated sites management system with the aim of filtering out those sites that might pose an unacceptable or significant risk to human health and the environment: ranging from a preliminary risk assessment and potential prioritization to decision-making for further investigation and risk management measures, as well as reflection on funding mechanisms.

Within the EU4Green work package WP1-12 "Inventory of contaminated sites", a second workshop was held on 7 and 8 October 2024 in Skopje, North Macedonia, where registration and inventory systems, national surveys as well as emerging contaminants relevant for contaminated sites were introduced and discussed.

Following this, the current second Guidance document regarding a systematic approach for a more comprehensive and systematic register has been prepared. Thus, this Guidance focuses on main pillars of the Green Agenda for the Western Balkans – monitoring and reporting. Register on (potentially) contaminated sites open the door to combat land degradation and soil pollution while restoring degraded land, offering co-benefits also for solving other key environmental issues such as water pollution and biodiversity loss, thus working towards reaching climate adaption objectives.

[2] Generally, in this guidance, the term contamination is for both contamination/pollution as synonyms, since the forthcoming EU Soil Monitoring and Resilience Directive only uses the term contamination (e.g. soil contamination; potentially contaminating activities & contaminated site; indicative list of contaminants).

[3] https://eu4green.eu/library/

2. INTRODUCTION

In the Western Balkan economies, different approaches and legal frameworks exist or are currently in preparation regarding soil (Annex 5.1). However, all WB6 have rather similar priorities, objectives and measures in their strategic documents related to agriculture and environmental protection: one of the main soil degradation processes in Western Balkan includes soil contamination.

Next to industrial activities and mining, inadequate waste management is still an important source of local soil contamination. Besides that, also diffuse soil contamination is one of the specific threats to soils in WB, which is the topic within the EU4Green WP 1-11: Monitoring of diffuse soil pollution.

The overall challenges for the regional process regarding soil contamination were summarized among others as: inadequate soil monitoring, underemphasized soil policy, insufficient alignment with the EU Soil Strategy for 2030, low awareness and low capacity as well as poor knowledge of costs and benefits of sustainable soil management practices. This leads to the need for resource allocation, policy emphasis, regulatory frameworks, technical guidelines and capacity building.

The exact number of sites where contamination took or takes place is impossible to estimate in the Western Balkan. Some economies have made preliminary estimates, investigations and remediation on certain sites have been undertaken. But aggregated data for the region are not available.

However, progress is forthcoming: e.g. Serbia and North Macedonia have established a preliminary, non-comprehensive inventory of (potentially) contaminated sites. This information was mainly gained within specific (international) projects or campaigns. In BIH, mapping of contaminated sites has started in April 2025 and is ongoing. Montenegro has implemented the "Comprehensive Environmentally Sound Management of PCBs" project[4], furthermore World Bank-supported remediation projects of Environmental Hot Spots. Other economies are aware of one or the other site (prone to) posing a risk, but this information might not be readily available due to different reasons (located at different ministries, administrations, regional or private level). Thus, within the historical context of shared challenges and experiences regarding soil contamination a soil network for WB6 to collaborate and exchange knowledge is of great benefit.

To support the reporting needs, the identification of sites can be done using a phased approach. In a kick-off phase, the identification of (potentially) high risk sites can be conducted via readily available data and information to establish a preliminary inventory. In the longer term, a systematic registration can be developed to identify more comprehensively (potentially) seriously contaminated sites and define and establish a more exhaustive, dynamic register (see Fig. 1).

[4] https://www.undp.org/montenegro/projects/comprehensive-environmentally-sound-management-pcbs?utm_source=chatgpt.com

- **Kick-off phase:** collecting known sites with a potential or perceived risk for human health and the environment and defining key contaminating activities (see Guidance 1)
- **Second phase:** creating a **concept for a systematic collection/campaign, while defining a structure for an exhaustive register;** developing a management strategy/fund raising for known sites

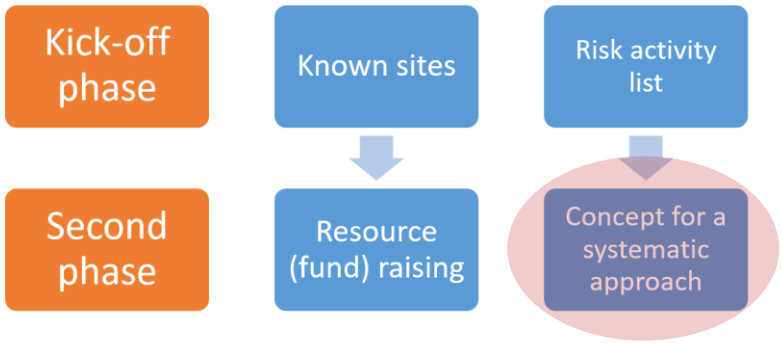

Fig. 1: From potential contaminating activities to a systematic methodology

For a more comprehensive and improved register of (potentially) contaminated sites, a concept for a systematic collection/campaign would be the next step, while defining a structure for such an exhaustive register.

Within the work package WP 1-12 "Inventory of contaminated sites", local soil contamination management steps are being discussed and guidance developed. This activity started during a first workshop on 16 October 2023 within EU4Green dealing with existing contaminated site management systems and methods for identification of contaminated sites and of key contaminating activities. As a result, a first Guidance for "Identification of (potentially) contaminated sites and key soil contaminating activities"[5] was developed to allow for the establishment of an (initial) inventory and in the longer run a more comprehensive register. This was discussed during a second workshop from 7 to 8 October 2024 in Skopje, North Macedonia, where registration systems and national surveys as well as emerging contaminants relevant for contaminated sites were introduced.

The first Guidance document provides an overview on approaches for the identification of key potentially contaminating activities and key contaminants from industrial, mining, and landfill activities known to contribute significantly to soil contamination. Furthermore, it focuses on utilizing readily available data to compile a preliminary inventory of known (potentially) contaminated sites.

The Regional Expert Advisory Working Group on Soil (REAWG) within the Regional Rural Development Standing Working Group in South-Eastern Europe (RRD SWG) has established the Western Balkan Soil Partnership in 2021. Within the REAWG, in 2024 Western Balkan economies have reported the number of contaminated sites[6] in the national inventories which can be seen as a kick-off phase:

[5] https://eu4green.eu/library/
[6] https://seerural.org/wp-content/uploads/2024/12/THE-STATE-OF-SOIL-POLLUTION-IN-THE-WESTERN-BALKANS.pdf

Table 1: Number of contaminated sites in the Western Balkan[7]

Country	Number of identified contaminated sites	The year when information was provided
Albania	35	2024
Bosnia and Herzegovina	16	2020-2022
Kosovo*	33	2024
Montenegro	3	2024
North Macedonia	11	2024
Serbia	30	2024
Total	127	

*This designation is without prejudice to positions on the status and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Additionally, the preparation of National and Regional Reports on Soil Contamination has been started which will summarize possibly existing legal frameworks, thresholds, monitoring and reporting, identification of (potentially) contaminated sites, inventories, risk assessment and strategic goals.

Moreover, the EEA IPA III soil project towards a "National survey of potentially polluted and polluted sites" aims to support Western Balkan economies/ territories to improve their baseline of potentially contaminated sites and its current contaminated sites' management, as well as to improve the knowledge base and reporting of the respective EEA indicator "Progress in the management of contaminated sites". Within this IPA III project it is foreseen to set up a survey for collecting and exchanging more accurate information about local soil contamination in the economies.

For the second phase within the WP 1-12, a second Guidance document is developed for a comprehensive way to identify contaminated sites by a methodically review carried out on historical (and – if decided – active) contaminating activities and (potentially) contaminated sites.

A systematic register helps to establish scenarios, under which further investigations of a site may be necessary due to past or current activities at or near a site. At the same time, this step will assist in screening out sites that do not pose or from which no potential unacceptable risk to human health and/or the environment is expected. It serves to provide:

[7] Data source:
Albania: Programi Kombëtar i Monitorimit të Mjedisit 2024 (National Programme of Environmental Monitoring), National Agency of Environment, Ministry of Environment and Tourism Nr. 6708/2 Prot. 2023.
Bosnia and Herzegovina – Federation Bosnia and Herzegovina: Models of protection and remediation of soil contaminated with heavy metals in industrial areas of the Federation of Bosnia and Herzegovina project, Environmental Protection Fund of the Federation of Bosnia and Herzegovina, Sarajevo 2020.
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North Macedonia: State Statistical Office of the Republic of Macedonia, Environmental Statistics, 2013. ISBN 978-608-227-132-3; Ministry of Environment and Physical Planning.
Montenegro: Environmental Protection Agency of Montenegro. Montenegro is currently actively working on developing an inventory of contaminated sites.
Republic of Serbia: Serbian Environmental Protection Agency.

- an overview of the extent of the problem within regions, industries and the economies
- a basis for further decisions and priorities regarding (continued) investigation and remediation
- a basis for assessments of the need for restrictions on land use.

3. SYSTEMATIC REGISTER OF (POTENTIALLY) CONTAMINATED SITES AND (OLD) LANDFILLS

Starting to work systematically from a comprehensive list of key contaminating activities, a thorough clarification of definitions, assessment criteria, content of a register (from administrative data to site specific information) and responsibilities is necessary to start collecting information (see the first Guidance[8]).

The focus should be laid on the identification of high-risk sites. These are sites or areas that pose or might pose significant and/or unacceptable risks to human health, the environment or ecosystems. The most critical sites can be selected for further investigation and management steps according to their estimated risk. Following the source-pathway-receptor paradigm, criteria for including sites in a systematic register could be based on:

- Contaminants of concern (properties): e.g. sites operating with heavy metals, persistent organic pollutants, and other contaminants of concern should be considered high priority (see first Guidance). Possible available preliminary investigation results might be a trigger to include a site in a register.
- Environmental impact potential: according to size, used/stored and/or produced volumes, operation time etc.
- Proximity to sensitive receptors: sites near residential areas or critical infrastructure like (drinking) water resources should be given immediate attention.
- Land use and ecological (natural resource) value
- Historical Industrial Zones: regions with a long history of industrial or mining activities could be systematically reviewed for legacy contamination.

A reporting system of data relevant for the register as well as clarifying responsibilities needs to be established. Collecting data and information could be done involving e.g. municipal governments, county administration, local operators, community reporting and public engagement mechanisms. The collected data should be verified and documented in

[8] https://eu4green.eu/library/

accordance with a predefined content and the data transferred to a central database, preferable within a GIS-based system.

The identification methodology is primarily based on a study of different information sources with verification comprising of both a desk study element, and in some cases a site inspection / visit. Such site inspections can be carried out in cases where insufficient information is available from the desk study and helps to complete the content of the register.

In order to reduce costs and efforts, it is important to decrease the level of uncertainty in the data as much as possible at the identification and verification stages, so that only sites with a likelihood of being significantly contaminated or are likely to pose a significant risk are considered for the next step (e.g. preliminary risk assessment).

By what means such registers are realised, greatly depends on the financial situation, political dedication and capacities. Often, systematic registers are carried out with state financing in the form of national inventories (e.g. Austria). However, also regional inventories under the direction of provinces, municipal governments or county administrative boards exist (e.g. Italy, Germany).

To produce uniform results, a similar method within an economy should be applied when collecting the information, regardless of the initiating organisation. Uniformity is especially important if the results form the basis for further decisions (e.g. preliminary risk assessment to evaluate if a significant or unacceptable risk is expected).

A systematic approach establishes hypotheses concerning the contaminants that can be expected to occur at a site, their distribution and the way humans and the environment can be exposed. This does not mean that a site is already contaminated when included in the register. Those hypotheses are verified or rejected in another step – e.g. within (further) investigation.

A systematic register allows within a subsequent preliminary risk assessment the identification of sites which are **likely to pose**

- significant contamination
- significant / unacceptable risk to human health, the environment and / or ecosystems.

This process leads to the next steps within the contaminated sites management: ranging from prioritization e.g. through a preliminary risk assessment to decision-making for further investigation and risk management measures, as well as reflection on funding mechanisms.

3.1. Identification of (potentially) contaminated industrial/ commercial/mining sites

The registration of these sites should be performed, where an industrial / commercial / mining activity can be related to at least one of the potential soils contaminating activities

agreed beforehand (see the first Guidance[9]). Depending on the industrial branch / sector, it is usually not foreseen to record small trades or enterprises. The focus should be laid on large enterprises (see also general possible criteria like estimated duration, volumes, stored/handled quantities in the first Guidance). This distinction should be determined beforehand.

The (historical) review could include the following sources of information e.g.:

- Industrial and commercial compasses, business associations, trade unions
- Inventories of industrial branches
- Patent and Registration Offices
- Fire department records
- Files at municipal governments, county administrations and other information sources
- National Heritage Boards
- Telephone directories
- Chamber of Commerce documents
- Aerial photographs
- Historic industry publications
- Environment inspection reports
    - IED / IPPC monitoring sites

Additional written sources of information can be collected: e.g. national library, the provincial, municipal or community archives as well as universities. The sources of information shall be documented and the information content of each source described.

Other public authorities, armed forces, mining associations, business organisations, large fire brigades etc. may also operate inventories which could be used for feeding the register with information.

The following information could be collected for each site (see also Annex I), if available:

- Location (coordinates, address, cadastral parcel(s))
- Industrial / commercial sector / branch
    - Contaminants (used, stored and/or produced volumes, or estimates to allow/support a transparent qualitative or semi-quantitative classification system)
- Enterprise size
- Operating period
- Current use
- Surrounding (land use, receptors, buildings, protected area etc.)

[9] https://eu4green.eu/library/

Optionally, on-site inspection / site visit can be included, also possible in a next step, as an important part and requires careful planning. The purpose of the visit is e.g. to complete insufficient information, interview operational personnel, and to inspect the facility and its surroundings.

3.2. Identification of (potentially) contaminated landfills

As a first step, the analysis of historical aerial photographs can be undertaken to localise (old) landfills[10]. In addition to the data from other sources as well as surveys from municipalities and the possible inspection of selected (potentially) contaminated sites, a data set can be created for each (old) landfill as well as digital polygons for all relevant dupm sites.

The survey could include the following sources of information:

- Historical and current aerial photographs
- Existing inventories of (old) landfills
- Files at municipal governments, county administrations and other sources
- Environment inspection reports
- Interviews at municipalities/communities
- On-site Inspection of selected sites

The following information could be collected for each landfill, if known:

- Location (coordinates, address)
- Boundary (cadastral parcel(s))
- Depth and volume of the landfill
- Landfilling period
- Type of landfill (commercial, industrial, mining etc.)
- Surrounding (land use, receptors, buildings, protected areas etc.)

A detailed list of the information to be collected is presented in the annex of the first Guidance. The collected information can be documented in the prepared database.

[10] See also the terms 'legally non-confirming landfills' and "abandoned or illegal waste dumps" in connection with the definitions within the EU Taxonomy Regulation.

4. OUTLOOK

This Guidance gives an overview on how to establish a systematic approach for a register of (potentially) contaminated sites. It can initiate the discussion of the creation of a database and support the introduction of a systematic register of sites where contaminating activities took are or taking place.

This Guidance builds the basis for the next step of WP 1-12: preliminary risk assessment of registered sites, resuming in a third workshop in June 2025. Having a clear understanding of soil contaminating activities and building registers of (potentially) significantly contaminated sites are indispensable for further management steps (see Fig. 2).

Fig. 2: Stepwise approach: from potential contaminating activities over a systematic methodology to a register and management measures

If the capacities and financial situation in the economies allow, the preparation of a first concept for a more methodical review on historical (and active) contaminating activities and (potentially) contaminated sites can be discussed. A systematic approach creates a more exhaustive database and dynamic (public) register. In a next step, such a register would enable to filter out those sites, where an unacceptable risk or an unacceptable contamination is expected and on which sites (further) investigation is needed.

5. ANNEX

5.1. Legal framework for contaminated sites management in the Western Balkans

The following table within the report "The State of Soil Pollution in the Western Balkans 2024" [11] gives an overview of the existing legal frameworks for identification, registration, investigation, assessment, and remediation of contaminated sites in the Western Balkans.

Table 2: Legal framework for identification, registration, investigation, assessment, and remediation of contaminated sites in the Western Balkans[12]

CONTAMINATED SITES MANAGEMENT STEPS	DESCRIPTION	ALB	BiH FBiH	BiH RS	KOS*	MNE	MKD	SRB
SITE IDENTIFICATION AND CHARACTERIZATION	Identify potentially contaminated sites based on past and present land use.							
SITE IDENTIFICATION	A systematic approach involves conducting a nationwide review of historical and current land use to create an initial list of potentially contaminated sites, which can then be prioritized for further documentation and investigation.	✓	✓	✓	✓	✓	✓	✓
INVENTORY DEVELOPMENT	National inventories cover contamination from ongoing and historical polluting activities. Inventories serve as a living database, allowing newly discovered contaminated sites to be added and sites proven to be uncontaminated or fully remediated to be removed or reclassified as remediated or not contaminated while remaining in the database.	✓					✓	✓
SITE CHARACTERIZATION	Characterization of the extent and severity of contamination risks associated with each site.	✓					✓	✓

[11] https://seerural.org/wp-content/uploads/2024/12/THE-STATE-OF-SOIL-POLLUTION-IN-THE-WESTERN-BALKANS.pdf
[12] https://seerural.org/wp-content/uploads/2024/12/THE-STATE-OF-SOIL-POLLUTION-IN-THE-WESTERN-BALKANS.pdf

CONTAMINATED SITES MANAGEMENT STEPS	DESCRIPTION	ALB	BiH FBiH	BiH RS	KOS*	MNE	MKD	SRB
HUMAN HEALTH AND ENVIRONMENTAL RISK ASSESSMENTS	Assess site-specific risks to human health and the environment to inform decision making.							
(a) Identification and characterization of the scope of contamination	Key factors influencing the assessment include the extent of contamination, proximity to human populations, depth to groundwater, and closeness to surface water or sensitive habitats, with the scope tailored to the specific needs of each site.						✓	✓
(b) Analysis of the hazard level and toxicity	Analyzing hazard levels and toxicity on contaminated sites, involves evaluating the risks posed by contaminants to human health and the environment.						✓	✓
(c) Analysis of exposure	The goal is to estimate the rate of contact between the identified contaminants and humans or the environment. The analysis is based on a description of actual and possible exposure scenarios, as well as characterization of the nature and extent of the contamination.						✓	✓
(d) Analysis of risks	The results of the previous stages are combined to objectively estimate the probability of adverse effects on the protected elements under the specific conditions of the site.						✓	✓
OPTIONS FOR MANAGING THE RISKS POSED BY CONTAMINATED SITES	Development of a remedial action plan to address site-specific risks.							
SITE MANAGEMENT	In highly populated areas, land is a very precious and scarce resource. An unutilized contaminated or restored site may attract people for the purposes of housing, farming or both. Parties may wish to restrict the use of the site and impose spatial planning rules in accordance with the risk present on the site.							✓
SITE REMEDIATION	Remediation includes actions taken to remove, control, contain or reduce contaminants or exposure pathways. The goal of remediation is to render a site acceptable and safe for its current use and also to maximize potential future uses.						✓	✓
EVALUATION OF BENEFITS AND COSTS	Each site will involve direct and indirect costs and benefits of identifying, assessing, managing and/or remediating contaminated sites, as well as non-monetized costs and benefits. These factors, along with the availability of funding and the number of sites that may exist nationally, will be the key inputs for national priority setting.						✓	

5.2. Proposal for an EU Directive on Soil Monitoring

5.2.1. Register and Content of a register

In **Article 16** on *Register* within the proposed Soil Monitoring Law (version 23 May 2025) it is stated that (1) Member States shall … draw up a **register of contaminated sites and potentially contaminated sites** as established according to this Chapter. (3) Member States shall manage or supervise the register and ensure that it is **regularly reviewed and updated**. (4) Member States shall make public, free of charge, the register and information... The register shall be made available in the form of an online georeferenced spatial database.

In **Annex VII** (version 23 May 2025) a proposal is included on the **content of a register of potentially contaminated sites and contaminated sites**. The design and presentation of the data in the register shall enable the public to track progress in the management of potentially contaminated sites and contaminated sites. The register shall contain and present the following information at site level for the known potentially contaminated sites, contaminated sites, contaminated sites requiring further action, and contaminated sites where action was taken or is being taken:

(a) coordinates, address or cadastral parcel(s) of the site in accordance with Directives (EU) 2019/1024 and 2007/2/EC;
(b) year of inclusion in the register;
(c) contaminating or potentially contaminating activities that have taken or are taking place on the site;
(d) management status of the site;
(e) conclusion on the presence or absence, type and risk of the contamination (or residual contamination after remediation) where information on those elements is already available from the soil investigations and risk assessment referred to in Art. 14 + 15;
(f) Required next actions and management steps referred to in Articles 14 and 15.

The register may also contain the following information at site level for the known potentially contaminated sites, contaminated sites, contaminated sites requiring further action, and contaminated sites where action was taken or is being taken, where available:

(a) information on environmental permits issued for the site, including the start and end year of the activity;
(b) current and planned land use;
    - results of soil investigation and remediation reports such as concentrations and contours of the contamination, conceptual site model, risk assessment methodology, techniques used or planned, effectiveness + cost estimates of risk reduction measures.
(c) timeline of next actions and management steps.

Proposal for a Directive of the European Parliament and of the Council on

5.2.2. Identification

In Article 12 on *Risk-based and stepwise approach* within the proposed Soil Monitoring Law (version 23 May 2025), it is stated that (2) Member States shall establish a risk-based and stepwise approach for the following:

(a) the **identification of potentially contaminated sites** in accordance with Article 13;
(b) the investigation of potentially contaminated sites in accordance with Article 14;
(c) the site-specific risk assessment and management of contaminated sites in accordance with Article 15.

In **Article 13** on *Identification of potentially contaminated sites* (version 23 May 2025), it is stated that (1) Member States shall **systematically** identify the potentially contaminated sites. (3) Member States shall ensure that the potentially contaminated sites existent before or at the date of entry into force of this Directive are **identified and duly recorded** in the register referred to in Article 16…

Annex VI includes a more general chapter on phases and principles for site-specific risk assessment.

Proposal for a Directive of the European Parliament and of the Council on

5.3. Italian national database for contaminated sites

In 2020, Italy created the national database for contaminated sites MOSAICO, consisting of a database, a web application for data loading and control and WEB GIS applications for data visualization with different levels of access and functionality.

One of the aims was to define a nationally shared structure for the data on contaminated sites. The contents and the structure of the basic data of the Register were defined by ISPRA (Italian Institute for Environmental Protection and Research) in collaboration with the Regions and the Regional Agencies for Environmental Protection (ARPA).

It contains: the list of sites subject to environmental remediation and restoration as well as the interventions carried out on the sites themselves; the identification of the subjects responsible for the remediation; the public bodies that the Region intends to use in the event of non-compliance by the obliged parties, for the purposes of ex officio enforcement.

In 2023, the online consultation section was made available on the MOSAICO website. Starting from 2025, consultation (WMS) and download (WFS) services, defined according to international standards (OGC), are accessible in the ISPRA Metadata Catalogue.

Furthermore, Contaminated Sites of national interest (SIN), for the purpose of remediation, are identified in relation to the characteristics of the site, the quantities and hazardousness of pollutants present, the importance of the impact on the surrounding environment in terms of health and ecological risk, as well as damage to cultural and environmental assets. For these sites, the administrative competence on the remediation procedures lies with the Ministry of the Environment and Energy Security - MASE.

5.4. Austrian national database for contaminated sites

Austria has a register on “historical activities” (industrial sites and landfills), where soil contamination might have taken place before 1 July 1989. Specific lists of data and information which should be gathered, from general data to more specific information, have been developed to feed the register of historical sites with soil contaminating activities that occurred before 1989. Two separate forms are available: one for historical landfills and one for historical industrial/commercial sites. The collection of these sites is coordinated by the Austrian Ministry of Environment with the provinces identifying and reporting these “historical activities”. All these sites and landfills are registered in a central, GIS-connected database, administrated by the Environment Agency Austria.

A preliminary assessment and / or investigation makes those sites available for public access within an online database at the “Contaminated Sites Portal” which are:

- historical landfills and historical sites where, according to an initial assessment, significant contamination or a significant risk is to be expected,
- historical landfills and historical sites that have undergone an assessment and contaminated sites

5.5. French public databases

In France, two public databases identify potentially contaminated and known contaminated sites:

- BASOL (Base des sols pollués), is a list of (potentially) polluted sites and soils requiring preventive or remedial action by the public authorities and
- BASIAS (Base nationale recensant les sites industriels, abandonnés ou en activité, susceptibles d'engendrer une pollution de l'environnement), which lists former or current industrial or service sites which are likely to be contaminated.

5.6. The Netherlands Real Estate Register

In the Netherlands, most of the (potentially) contaminated sites can be found in www.bodemloket.nl. The Cadaster has a Real Estate Register www.kadaster.nl, in which the investigated sites are listed with using restriction for the soil, the duty to remediate urgent contamination and the aftercare is registered (not free of charge). Next to that there is a Basic Register for the Subsurface where also other subsurface data (groundwater data, cables, ATES) are available.

5.7. Further national database for contaminated sites

Additional useful links to key contaminating activities, register contents and criteria for the identification of (potentially) risk sites, possible criteria for including sites in an inventory as well as an industrial branch list and landfills are provided in the first Guidance.

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