

Ministerial Decree establishing the standard procedure for the exploratory and descriptive soil investigation under the Soil Decree of 27 October 2006

Legal bases

This Decree is based on:

- the Soil Decree of 27 October 2006, Article 44(2), as amended by the Decree of 8 December 2017;
- the VLAREBO Decree of 14 December 2007, Article 7.

Procedural requirements

The following procedural requirement has been met:

- Having regard to the proposal for a standard procedure for the exploratory and descriptive soil investigation by OVAM of 9 December 2024.

Legal context

This Ministerial Decree is in line with the following regulations:

- the Ministerial Decree of 27 April 2020 establishing standard procedures under the Soil Decree of 27 October 2006.

THE FLEMISH MINISTER OF ENVIRONMENT AND AGRICULTURE DECREES:

Chapter 1. Establishing the standard procedure

Article 1. The standard procedure for exploratory and descriptive soil testing is set out in the Annex to this Decree.

Chapter 2. Repeal provision

Article 2. Article 3 and Annex 3 of the Ministerial Decree of 27 April 2020 laying down standard procedures under the Soil Decree of 27 October 2006 are repealed.

Chapter 3. Transitory provisions

Article 3. Orientation and descriptive soil investigations for which the report is submitted to the OVAM before 1 February 2025, and which the OVAM assesses

after 31 January 2025 shall be assessed in accordance with the standard procedure in force at the time when the report of the orientation and descriptive soil investigation was submitted to the OVAM.

Article 4. Orientation and descriptive soil investigations for which the report is submitted to OVAM in the period from 1 February 2025 to 30 April 2025 shall comply with:

- 1° the standard procedure for the exploratory and descriptive soil investigation, laid down in Annex 3 to the Ministerial Decree of 27 April 2020; or
- 2° the standard procedure for the exploratory and descriptive soil investigation, laid down in the Annex, annexed to this Ministerial Decree.

Chapter 4. Entry into force of the provision.

Article 5. This Decree shall enter into force on 01 February 2025.

Brussels, ... (date).

The Flemish Minister for Environment and Agriculture,

Jo BROUNS

Annex. Standard procedure for the exploratory and descriptive soil investigation

Sole article. The standard procedure for the exploratory and descriptive soil investigation referred to in Article 1 of the Ministerial Decree of (date MB) establishing the standard procedure for the exploratory and descriptive soil investigation under the Soil Decree of 27 October 2006 is established as follows:

STANDARD PROCEDURE FOR PRELIMINARY AND DESCRIPTIVE SOIL INVESTIGATION

CONTENTS

Part 1: Introduction

1 Framework

- 1.1 Synopsis
- 1.2 Purpose of the exploratory and descriptive soil investigation
- 1.3 Your tasks and responsibilities
- 1.4 Qualitative, independent and objective implementation: incompatibility – management measures
 - 1.4.1 Incompatibility
 - 1.4.2 Management measures
- 1.5 Application conditions
- 1.6 The site investigation

Part 2: Implementation

2 Administrative data

- 2.1 Protection of personal information
- 2.2 Identification of the grounds examined
- 2.3 Assigning labels

3 Preliminary study and situational sketch

4 Sampling and research strategy

5 Interpretation and evaluation

6 Assessment and conclusion

Part 3: Reporting and data transfer

7 Reporting and data transfer – general

8 The Digital Report

- 8.1 Generalities
 - 8.1.1 Title of the digital report
- 8.2 The various PDF files
 - 8.2.1 PDF – administrative data
 - 8.2.2 PDF – non-technical summary
 - 8.2.3 PDF report
 - 8.2.4 PDF – map
 - 8.2.5 PDF - Annex

8.2.6 PDF – summary of soil

8.2.7 PDF – important information

9 The digital alphanumeric data

9.1 Structure of the digital alphanumeric data

9.2 Legally binding information

9.2.1 Part of exploratory soil investigation

9.2.2 Part of descriptive soil investigation

9.3 Technical and substantive requirements

9.3.1 Technical requirements

9.3.2 Substantive requirements

10 Digital spatial data

10.1 General technical information

10.1.1 Shape file

10.1.2 Projection

10.1.3 Accuracy

10.1.4 Topology

10.2 Technical and substantive requirements for soil contamination

10.3 Technical and substantive requirements for the recommendations for use

Part 4: Annexes

10.4 Annex 1: glossary

10.5 Annex 2: Labels

Part 1: Introduction

1 FRAMEWORK

1.1 SYNOPSIS

This standard procedure is a manual for conducting an exploratory and descriptive soil investigation and preparing and submitting a report thereof as referred to in Article 44(2) of the Soil Decree.

An exploratory and descriptive soil investigation shall be conducted, and its report shall be drawn up under the supervision of a Type 2 soil remediation expert. This standard procedure is addressed to the soil remediation expert and is therefore written accordingly.

This standard procedure uses the following symbols as a reading guide ¹:

- **Binding elements** (↑) are always mentioned in the approach and demonstrably appear in the report.
- You can deviate from the **guiding elements** (↗) with justification. You will include the substantiated and plausible justification in the report.
- You can deviate from the **advisory elements** (↘), with justification. You should not mention the deviation and the justification in the report.
- **Additional clarification** (↓).

Codes of good practice and other technical-scientific information are available as support. Consult www.ovam.vlaanderen.be for further information.

An explanation of the terms used in this standard procedure can be found in Annex 1.

This standard procedure describes the steps to be followed in carrying out the soil investigation (part 2), and in reporting and data transmission (part 3).

1.2 PURPOSE OF THE EXPLORATORY AND DESCRIPTIVE SOIL INVESTIGATION

↑ In the **exploratory soil investigation section**, it is determined whether there is clear evidence of soil contamination. You collect all the data so that you can express your opinion on the need for a descriptive soil investigation.

¹ The reading guide is only relevant if the element is applicable. Example: the performance of an SGEI is of course not binding if there is no historical pollution above the soil remediation standard in the solid part of the earth or groundwater. This should therefore not be demonstrably present in the report.

↑ In the **descriptive soil investigation section**, the severity of soil contamination is determined. You collect the data in order to make a statement about:

- The location and extent of the contamination. You map the pollution horizontally and vertically to the level of the guideline value. You determine which soils are contaminated. You calculate the volume of the contamination and the theoretical pollution load.
- A current or potential risk. You perform a risk assessment for the contamination based on the conceptual site model.
- The need for soil remediation. You examine the nature of the contamination and check whether the associated remediation criterion has been exceeded.
- The priority of soil remediation.
- The need for safety and precautionary measures pending soil remediation works.
- The need for usage advice.

The standard procedures for exploratory and descriptive soil investigations further describe the implementation of this objective.

↑ If the same information is requested in the standard procedures for exploratory and descriptive soil research, then one standard procedure may be stricter than the other. You then apply the guidelines of the strictest standard procedure, both for the execution of the soil investigation and for the reporting.

1.3 YOUR TASKS AND RESPONSIBILITIES

↓ It is your task and responsibility to follow the provisions of the Soil Decree, VLAREBO, VLAREL and CMA, this standard procedure, and the various codes of good practice during the conduct of the exploratory and descriptive soil research and when drawing up the report. You are responsible for the tasks in-house and for the outsourced tasks.

Seek assistance from external experts if you determine that the complexity of the assignment exceeds your resources and capacities as a soil remediation expert.

This standard procedure does not affect the obligations you have as a soil remediation expert on the basis of other legal regulations.

1.4 QUALITATIVE, INDEPENDENT AND OBJECTIVE IMPLEMENTATION: INCOMPATIBILITY – MANAGEMENT MEASURES

1.4.1 Incompatibility

Legal basis: Article 53/5(1) of the VLAREL

↑ In the first instance, you will have to assess for yourself whether you are able to carry out a specific assignment qualitatively, objectively and independently. This assessment will be carried out in accordance with the method laid down in this standard procedure. It is important that each staff member involved in providing the service, or the expert themselves when it comes to a natural person, is aware of the preconditions for the objective and independent execution.

- ↓ There is a presumption of incompatibility for the soil remediation expert in the following cases:
- The client or the contractor of the soil remediation works, or a person exercising a managerial role at the client or the contractor of the soil remediation works, is the soil remediation expert himself or a board member, director or manager of the soil remediation expert.
 - The client or the contractor of the soil remediation works, or a person exercising a managerial role at the client or the contractor of the soil remediation works, is a blood relative or relative by marriage of the soil remediation expert, or a board member, director or manager of the soil remediation expert, in the direct line up to and including the second degree and in the collateral line up to and including the third degree.
 - The client or the contractor of the soil remediation works is a shareholder or belongs to a group of shareholders of the soil remediation expert who (jointly) directly holds a participation of more than 5 % of the voting shares of the soil remediation expert.
 - The total turnover for the client or associated companies is, on an annual basis, more than 50 % of the turnover of the soil remediation expert.
 - The client or the contractor of the soil remediation works is a direct or indirect creditor of the soil remediation expert for more than 35 % of the total debts of the soil remediation expert.

↓ This list is non-exhaustive, and is therefore without prejudice to the intended response of the soil remediation expert to objective and independent implementation. You must verify in each specific case whether you are in a state of incompatibility. If the soil remediation expert is not in a situation from the list, this does not mean that there can be no concrete case of incompatibility.

1.4.2 Management measures



↑ If, in a specific case, you consider that you are in a situation of incompatibility, you can only carry out the assignment if you take proactive management measures. These management measures will ensure

Legal basis: Article 53/5(2) of the VLAREL independent and objective performance of the contract.

Which management measures

↑ In case of incompatibility, checks are carried out by another soil remediation expert. If there is incompatibility due to blood or affinity, you will ensure internal separation of roles.

Procedure

↑ You are required to describe the management measure in the report. You also include the report of the inspection by another soil remediation expert. The report must therefore contain an explanation and assessment of the management measure implemented.

1.5 APPLICATION CONDITIONS

1.1 investigation?

When can you draw up an exploratory and descriptive soil

- All soil contamination with further measures from the preliminary soil investigation section is examined in the descriptive soil investigation section. AND

Of course, the obligation to carry out the descriptive soil investigation must lie with the contracting authority. In the following situations, you may deviate from the conditions of application:

- In the Preliminary Soil Investigation section, you demonstrate that soil contamination has occurred on soil(s) other than those examined in the Preliminary Soil Investigation section. This soil contamination should not be investigated in the descriptive soil investigation section.
- For past soil contamination, the client was already exempted from the obligation to carry out the descriptive soil investigation. You should not examine this contamination in the descriptive soil study section. You clearly refer to that exemption from the obligation to remediate in the report.

1.6 THE SITE INVESTIGATION

A site investigation is conducted on grounds that are included in a site.

One **site** consists of one location or a cluster of two or more locations within a municipality. One **location** is one cadastral plot or a group of contiguous cadastral plots.

The site investigation only examines the historical activity for which the site is recorded. Other activities are not investigated.

The site investigation consists of an exploratory soil investigation and, if necessary, a descriptive soil investigation.

You perform the fieldwork for the site investigation at the site level, which means you do not have to conduct an investigation on every cadastral plot. You extrapolate the results of the fieldwork performed to all cadastral plots, unless there is a separate source on one or more plots.

You include all locations in the site in a single site investigation (thus no separate site investigation per location).

You prepare the site investigation in accordance with the guidelines of this standard procedure. In the site investigation report, you describe the overarching issues and a general summary. You include as an annex to the site investigation for each location a sheet with the most important information for the landowners. The fiche is a summary of:

- administrative data;
- historical activities;
- site visit;
- sampling strategy and, if necessary, the research strategy;
- pollution situation;
- a conclusion for:
 - each cadastral plot in the site;
 - any cadastral plot that was additionally examined, if applicable.

Part 2: Implementation

2 ADMINISTRATIVE DATA

↑ You collect all the data to fill in the administrative part of the report (see Chapter 8).

2.1 PROTECTION OF PERSONAL INFORMATION

↑ The report may only contain personal information for natural persons in the section with administrative data. This is after all the only part of the report that will not be freely accessible.


↑ In the administrative part of the report, you assign a unique 'letter code' to the natural persons. In the rest of the report, you refer to this letter code. In this way, the personal information remains protected.

2.2 IDENTIFICATION OF THE GROUNDS EXAMINED

↑ You collect information on all the grounds examined. You follow the guidelines of the standard procedures for exploratory and descriptive soil investigation.

The soils examined can be found in the exploratory soil investigation (OBO) part, the descriptive soil investigation (BBO) part, or in both parts.

For example:

Plot A	Plot B T1 	Plot C
Ground under investigation	OBO part or BBO part?	Possible statements
Plot A	OBO	O or P sentence
Plot B	OBO and BBO	P or Q sentence
Plot C	BBO (dissemination plot)	U or W sentence

2.3 ASSIGNING LABELS

↑ Each report of exploratory and descriptive soil research receives at least one label. ↓ More information on the labels and their definitions can be found in Annex 2.

3 PRELIMINARY STUDY AND SITUATIONAL SKETCH

You will conduct a preliminary study and a situational sketch in accordance with the guidelines of the standard procedures for exploratory and descriptive soil research.

4 SAMPLING AND RESEARCH STRATEGY

For the exploratory soil investigation section, draw up the sampling strategy in accordance with the guidelines of the standard procedure for exploratory soil investigation.

For the descriptive soil investigation part, you draw up the research strategy in accordance with the guidelines of the standard procedure for descriptive soil investigation.

5 INTERPRETATION AND EVALUATION

You follow the guidelines of the standard procedures for exploratory and descriptive soil research.

You make a clear distinction between the exploratory part and the descriptive part of soil research.

6 ASSESSMENT AND CONCLUSION

You follow the guidelines of the standard procedures for exploratory and descriptive soil research.

In the soil investigation section, you assess the need for a descriptive soil investigation for each contamination and for each cadastral plot. In the descriptive soil investigation section, you will examine the need for soil remediation.

You make a clear distinction between the decision for the exploratory part and the descriptive part of soil investigation.

Part 3: Reporting and data transfer

7 REPORTING AND DATA TRANSFER – GENERAL

↑ The report of the exploratory and descriptive soil investigation shall consist of:

- the digital report in a PDF file;
- the alphanumeric data in an XML file;
- the spatial data in a shape file, if contamination is present in the soil descriptive study section.

↑ You provide this information to OVAM via the e-desk for soil remediation experts. More information about the operation of the e-desk can be found at www.ovam.vlaanderen.be.

↓ The report of the exploratory and descriptive soil investigation has only been submitted to OVAM if the report appears in the list of 'Forwarded assignments for which the assessment has not yet been completed'.

↓ The e-desk is made available by OVAM for the provision of digital data. The OVAM is under no circumstances responsible for the loss of data due to the use of the e-desk, or the e-desk temporarily non-functioning.

8 THE DIGITAL REPORT

8.1 GENERALITIES

8.1.1 Title of the digital report

↑ You use the following standard title: 'Preliminary and descriptive soil investigation: street, number, and municipality of the investigation site'.

↑ For a change to the exploratory and descriptive soil investigation, precede the standard title with 'modified'.

8.1.2 Compilation of the digital report

↑ You divide the digital report into several PDF files:

- one PDF – administrative data;
- one PDF – non-technical summary;
- one PDF – report (you can split the file if it is too large to upload);
- one PDF – summary per soil;
- one or more PDF – map;
- one or more PDF – annex.

↓ You can supplement the digital report with a PDF – important information.

↑ If you add a PDF file to the e-desk, select the appropriate document type.

↑ Technical requirements for the PDF files:

- Each file must be a text PDF. This means that the PDF file can be printed and the content can be selected and copied. It must not be possible to select and copy the contents of the map material and the attachments.
- The report file includes an interactive table of contents with hyperlinks, allowing for quick navigation through the file.

8.2 THE VARIOUS PDF FILES

You follow the guidelines of the standard procedures for exploratory and descriptive soil investigation for all PDF files.

8.2.1 PDF – administrative data

↑ You compile the personal information in a table in the PDF file 'PDF – administrative data'.

8.2.2 PDF – non-technical summary

↑ You concisely summarise the soil investigation in the PDF file 'PDF – non-technical summary'.

8.2.3 PDF report

↑ You must include at least the following chapters in the PDF file 'PDF – report':

- Declaration and signature;
- 1 Introduction, in which you include at least the following information:
 - the soils examined and their address;
 - the reason for the investigation;
 - the version of the standard procedure used for exploratory and descriptive soil testing;
 - for an amended soil investigation:
 - a summary of the requested additions;
- preliminary study and situational sketch;
- determination of the sampling strategy (for the exploratory soil investigation part) determination of the research strategy (for the descriptive soil investigation part);
- results of field and laboratory tests;
- evaluation of the data collected;
- risk assessment (for the descriptive soil investigation part);
- Summary decision and conclusion.

8.2.3.1 Chapter 'Declaration and signature'

↑ In each report, the following **statement** is included:

The soil remediation expert declares:

- whereas this report has been conducted in accordance with the standard procedure for exploratory and descriptive soil investigation;
- that the binding, guiding and relevant advisory elements have been included in the report and that he considers that the elements not mentioned in the report do not apply either;
- that they are not incompatible for the performance of this contract or that he or she has taken management measures in the event of a situation of incompatibility;
- that this report is representative of the contamination status of the study site;
- that the content of the report corresponds to the digital data;
- that the following information – submitted to OVAM in the XML file – is legally binding:
 - administrative data;
 - nature and severity at the level of the cadastral plot;
 - users and operators if different from the cadaster;
 - First soil investigation on the cadastral plot: nature and severity of the contamination.

↑ Each report shall include the names of the persons who contributed to the report.

↑ Each report is **signed** by the persons who contributed to the report. The signature shall be carried out in accordance with Table 1.

↑ Signing can only be done by the persons who have authorised the use of their digital signature. Signature 'on behalf' is not permitted.

Capacity	Name and signature ²	Date
The person who possesses the individual power of signature (VLAREL Article 53/4(1) (2))		
The Quality Manager at the soil remediation expert for this soil investigation		
The person who can legally represent the soil remediation expert towards third parties		

table 1: table for signature

If you suspect that you are in a situation of **incompatibility**, please describe the management measure taken.

² The signature may be executed by one or more persons.

8.2.4 PDF – map

↑ You bundle the map material of the report in the PDF file 'PDF – map'.

8.2.5 PDF - annex

↑ You bundle the annexes of the report in the PDF file 'PDF – annex'.

8.2.6 PDF – summary of soil

↑ You summarise the contamination (for the descriptive soil investigation part) and the contamination status per soil in the PDF file 'PDF – summary per soil'.

8.2.7 PDF – important information

↘ You compile other important information in the PDF file 'PDF – important information', if you consider that information relevant.

9 THE DIGITAL ALPHANUMERIC DATA

↑ You bundle the digital alphanumeric data into an XML file.

The xml file can only be supplied in the Mistral2 format. This format has been adapted to the e-portal.

9.1 STRUCTURE OF THE DIGITAL ALPHANUMERIC DATA

↓ There are three types of digital alphanumeric data:

- administrative data of the report;
- results of the analysis;
- drilling descriptions.

The XML file bundles these three types into one file. The XML file must contain at least the administrative data in order to be uploaded to the e-desk.

The analysis results and drilling descriptions can be stored in separate files. In the e-desk you can integrate these files into the Mistral2-xml via the profile name. The files must therefore contain the correct profile name.

9.2 LEGALLY BINDING INFORMATION

9.2.1 Part of exploratory soil investigation

↑ The following information in the XML file is legally binding for the preliminary soil investigation section:

Administrative data (*)	
Assignment type Title Report date Assignment address: Additional research information: Capacity of 'Client': Designation 'Author': Labels	Street and number (or description) Postal code, municipality, sub-municipality Background Name Street and number Postal code, municipality, sub-municipality Name Street and number Postal code, municipality, sub-municipality
Nature and severity at cadastral plot level – Locations tab (*)	
Users/operators Asbestos: Judgment:	Current users and operators that you learn from a source other than the land register Asbestos debris layer Historicity Classification
For the first soil investigation on the cadastral plot: nature and severity of the contamination – Contaminants tab (*)	
List of contaminants Detail – General: Detail – Statement for this contract: Detail – Description: Parameters:	Reference Name Medium Nature % Classification Source/Location Parameters
(*) Based on the field names in the e-portal.	

9.2.2 Part of descriptive soil investigation

↑ The following information in the XML file is legally binding for the descriptive soil investigation section:

Administrative data (*)	
Assignment type Title Report date Assignment address: Additional research information: Capacity of 'Client': Designation 'Author': Labels	Street and number (or description) Postal code, municipality, sub-municipality Phased Name Street and number Postal code, municipality, sub-municipality Name Street and number Postal code, municipality, sub-municipality
Nature and severity at cadastral plot level – Locations tab (*)	
Users/operators Judgment:	Current users and operators that you learn from a source other than the land register Historicity Classification
(*) Based on the field names in the e-portal.	

9.3 TECHNICAL AND SUBSTANTIVE REQUIREMENTS

9.3.1 Technical requirements

↑ The xml file must be 'valid'. This means that the file must comply with the XSD schemas. An XSD schema is a template that the XML file must technically adhere to.

The XML file must meet a number of criteria to be 'valid'. The main criteria:

- All the elements are in the right place.
- All mandatory elements have a value.
- Each value meets the definition for that element (text, number, date, or a value from a list).

The XSD schema for the XML file containing the administrative data has been published in the e-portal.

The technical specifications for the XML file containing the analysis results can be found at www.ovam.vlaanderen.be

Database Ondergrond Vlaanderen (DOV) and OVAM published a joint format for the XML file. The XSD schema for the exchange of drilling descriptions can be found at www.ovam.vlaanderen.be. General drilling data and

coded lithology are mandatory. Environmental data are mandatory if these measurements have been carried out. Other data are optional.

9.3.2 Substantive requirements

↑ Mandatory fields are always filled in. Non-mandatory fields will be filled in if information is available for the specific assignment for which the report is being prepared.

In a field, a reference such as 'see report/PDF' is not correct.

10 DIGITAL SPATIAL DATA

↑ The digital spatial data is bundled into a shape file and sent in a zip file. You use a separate zip file for contaminants and usage recommendations, with the respective file name 'GIS – contamination file' and 'GIS – usage advice file'.

The digital spatial data are only needed for the descriptive soil investigation part and not for the exploratory soil investigation section.

10.1 GENERAL TECHNICAL INFORMATION

↑ The structure used by the OVAM for the exchange of digital spatial data can be found at www.ovam.vlaanderen.be

10.1.1 Shape file

↑ The shape files must technically comply with the guidelines of this document: www.esri.com/library/whitepapers/pdfs/shapefile.pdf.

A shape file always consists of three subfiles:

- Name.shp (with the spatial information);
- Name.shx (the index list);
- Name.dbf (the attribute list, in a DBaseIV-compatible format).

A shape file can store data of one geometric type. Point, line, and area data are thus grouped into separate shape files.

The name of the attribute fields in the shape file may consist of a maximum of 10 letters. Longer names are not possible.

↑ The following chapters list the mandatory data fields. You can also add your own data fields, but these are not included in the OVAM database.

10.1.2 Projection

↑ The data is placed within the Lambert72 projection and coordinate system. The projection has the following characteristics:

Ellipsoid (International Ellipsoid of Hayford 1924)	
Ellipsoid parameters	
Belgian datum72 to WGS 84	
<i>Da</i>	- 251 m
<i>Df</i>	- 0.000014192702
Date	
7-parameter transformation	
Belgian datum72 to WGS 84	
<i>Dx</i>	- 99.059 m
<i>DY</i>	53.322 m
<i>DZ</i>	- 112.486 m
<i>Rot X</i>	- 0.419'
<i>Rot Y</i>	0.830
<i>Rot Z</i>	- 1.885'
<i>K</i>	0.999999
Projection parameters (Type: Conical Lambert with two standard parallels)	
Projection parameters	
Origin width	90° 00' 00" NOTE:
Central meridian	4° 22' 02,95200" OL
Southern intersecting parallel	51° 10' 00,00204" NOTE:
Northern intersecting parallel	49° 50' 00,00204" NOTE:
False origin in y	5400088.438 m
False origin in x	150000.013 m

Source: National Geographic Institute

10.1.3 Accuracy

↑ The spatial objects are placed in the Belgian coordinate system with an accuracy of one metre. This accuracy can be verified by placing the data relative to general reference layers, such as orthophotos or a digital topographic map.

10.1.4 Topology

↑ The files are topographically correct. An automatic check does not detect any topographical errors.

10.2 TECHNICAL AND SUBSTANTIVE REQUIREMENTS FOR SOIL CONTAMINATION

↑ The digital spatial data of the contamination are mandatory for all soil contaminations subject to investigation that are included in the descriptive soil investigation section.

↑ For each pollutant, provide the following contours, if applicable:

- core: the zone with the core of the pollution;
- pure: the pure product zone (only relevant for the medium 'drift or sink layer');
- standard: the zone in which the soil remediation standard is exceeded (relevant only for the medium 'fixed part of the earth' or 'groundwater');
- guide value: the zone in which the guide value is exceeded (relevant only for the medium 'fixed part of the earth' or 'groundwater').

↑ You create the outlines for the contaminants. If the assignment area has already been examined before, you can request the digital data from the OVAM and you can continue to work on this.

↑ If you create contours yourself, the shape file must have the following structure:

Field name	Data type	Mandatory?	Description
Contamination	Long integer	Yes	Contamination reference (= the code of the contamination in the digital report)
Type	Text: 1	Yes	The code corresponding to: K: core P: pure N: norm R: reference value
Description	Text: 50	No	Free text field (example: number of the tank where the pollution has occurred)

↑ The file name for the shape file is 'Verontreinigen.shp'.

↑ The file contains only surfaces. Points and lines are not allowed. The contours may be full discs. The contours must therefore not be cut out and may overlap.

↑ Substantive requirements:

- There is at least one contour for each pollution classified as 'further action'.
- There is at least one contour for each pollution classified as 'no further action' if:
 - the contamination was mapped using delineating boreholes or piezometers;
 - the pollution is not point source pollution;
 - the fields 'area', 'volume', 'pollutant load' and 'upper and lower limit' are filled in with a value that is not '0'.
- If several contours have been drawn for a contamination, the 'guide value' contour must include the other contours.
- The 'pure product' or 'core' contour must always lie entirely within the 'standard' contour.
- For contamination with medium 'drift or zinc layer', there must be a contour 'pure product'.
- For contamination with a medium other than 'drift or zinc layer', there should be no contour 'pure product'.

10.3 TECHNICAL AND SUBSTANTIVE REQUIREMENTS FOR THE RECOMMENDATIONS FOR USE

↑ The digital spatial data of the recommendations for use are mandatory for all recommendations for use assigned in the descriptive soil investigation section.

↑ Usage advice is linked to contaminants in the e-portal. Each usage advice is given a reference in the e-desk as a reference to the GIS contour of this usage advice. You enter this reference in the 'Reference' field of the shape file.

↓ If multiple usage recommendations can be described by the same contour, they can refer to one contour by using the same reference.

↓ If the area in which usage recommendations apply for multiple contaminants is the same, they can refer to one contour. You can therefore use a contour for multiple usage recommendations for multiple contaminants.

↓ If the assignment area has already been examined before, you can request the digital data from the OVAM and you can continue to work on this.

↑ If you create contours yourself, the shape file must have the following structure:

Field name	Data type	Mandatory?	Description
Reference	Long integer	Yes	GIS reference (= the reference of the usage advice in the e-portal)
Description	Text: 50	Yes	GA code

↑ The file name for the shape file is 'Gebruiksadviezen.shp'.

↑ The file contains only surfaces. Points and lines are not allowed. The contours may be full discs. The contours must therefore not be cut out and may overlap.

↑ Substantive requirements:

- For each contamination with recommendations for use, each recommendation for use is represented by a contour.
- A contour must be present for each use recommendation with a unique reference. The contour must have the same reference.

Part 4: Annexes

10.4 ANNEX 1: GLOSSARY

Achilles healthcare system	The care system for on-site soil remediation works or risk management measures drawn up by OVAM. It covers the aspects of safety, health, and the environment within the framework of the Soil Decree.
Anthropogenic disturbance of soil	Human intervention that alters the natural composition of the soil. This specifically refers to: <ul style="list-style-type: none"> - replenishment of natural depressions or excavation pits; - the application of waste on or in the natural soil; - the application of soil.
BATNEEC principle	(Best Available Technology Not Entailing Excessive Costs) The best available technical solutions that have been successfully applied in practice and whose cost is not unreasonable in relation to the result to be achieved in terms of protecting human health and the environment. This is independent of the financial capacity of the person on whom the remediation obligation rests.
BAT (see also BATNEEC)	Most effective and state-of-the-art stage in the development of activities and methods of operation, demonstrating the practical use of special techniques to form, in principle, the basis for emission limit values, with the aim of preventing emissions and impacts on the environment as a whole or, where that is not possible, of generally reducing them: <ul style="list-style-type: none"> - 'techniques': both the techniques used and the manner in which the installation is designed, constructed, maintained, operated and decommissioned; - 'available': developed on such a scale that, taking into account the techniques, costs, and benefits, they can be applied in an economically and technically feasible manner in the industrial context, irrespective of whether those techniques are applied or produced in the territory of the Flemish Region, provided that they are accessible to the operator on reasonable terms; - 'best': the most effective in achieving a high overall level of protection of the environment as a whole.
Sampling strategy/research strategy	Methodology that records the locations and depth of the samples to be taken in the context of a soil investigation.
Source	A soil volume (including underground containers or waste) characterised by greatly increased concentrations or pure product, from which the contamination spreads.
Source plot	Land where soil contamination occurred: land where an emission occurs or has occurred that has directly or indirectly contaminated the soil.
DABM	Decree of 5 April 1995 laying down general provisions on environmental

	policy.
DIW	Decree on Integrated Water Policy
floating flayer	Pure product that occurs at the groundwater level (at the level of the groundwater table and the capillary fringe) and gives rise to a pure product level.
E-portal	The internet application that the OVAM wishes to use to exchange information with the soil remediation expert.
Operator	Operator as referred to in the Environmental Permit Decree. The natural or legal person operating a classified establishment or on whose behalf it is operated.
Freatic groundwater	Water below the groundwater level in a relatively well-permeable layer and above a first poorly permeable or impermeable layer.
User	Natural or legal person who holds a right in rem or a personal right on land, with the exception of the owner. Association of co-owners within the framework of property covered by the compulsory co-ownership system referred to in Article 3.84 of the Civil Code;';
Instructions for use	A set of information on the use of land if pollution is present that exceeds the guide value (in the case of pollution in the solid part of the earth) or the soil remediation standard (in the case of groundwater pollution). The purpose of user advice is to inform the parties concerned about the points of attention, consequences, risks, and any measures to be taken as a result of the presence of (residual) contamination on the ground.
Mixed predominantly new	Mixed soil contamination, most of which occurred after 28 October 1995.
Mixed predominantly historical	Mixed soil contamination, most of which occurred before 29 October 1995.
Guide substance	Substance that best characterises the contamination, taking into account its toxicity and dispersion.
Earthmoving:	Rules for the use of excavated soil, as set out in Chapter XIII of the VLAREBO.
Hotspot	Term used in the context of the sampling strategy for landfills: zone where visual inspection or the preliminary study shows that there is a high probability of contamination, such as dying vegetation, overflow of leachate water, cracks in the covering film, etc.
Cadastral plot	Land for which the FPS Finance assigned a plot number.
Core	The zone with the highest concentrations of pollution (in the solid part of the earth, groundwater or as a pure product)
Methodology for clear identification of serious soil contamination	Methodology for determining when a descriptive soil investigation is required for historical contamination.
Methodology for clear	Methodology for determining when a descriptive soil investigation or a

identification of serious waterbed contamination	delineation phase in a water bottom investigation is required for water bottom contamination.
Environmental damage	Environmental damage is damage as referred to in Article 15.1.1, 1° of Title XV of the Decree General Provisions of Environmental Policy (DABM) of 5 April 1995, being damage which: <ol style="list-style-type: none"> 1 is caused by an emission, event or incident that occurred after 30 April 2007; 2 is by an establishment or installation listed in Annex IV of the DABM; 3 and which exceeds the soil remediation standard.
Nature Decree	Decree of 21 October 1997 on nature conservation and the natural environment.
Non-standard parameter	Parameter for which no soil remediation standard is included in the VLAREBO.
Bank	Strip from the top of the embankment and further inland over an arbitrarily defined width.
Non-navigable watercourses	Watercourses not included in the Royal Decree of 5 October 1992, from their point of origin or classification. This means: <ul style="list-style-type: none"> - These watercourses are not classified as navigable watercourses (Royal Decree of 5 October 1992). - The point of origin or classification is the point at which they have a sub-basin of more than 100 ha (Non-navigable Watercourses Act). - Unnavigable watercourses are classified into 1st, 2nd and 3rd categories, as well as unclassified unnavigable watercourses.
Research site:	Location to which the soil investigation relates. The research location is a spatially contiguous whole.
Research strategy	See 'Sampling strategy'.
Surface water (DIW)	Inland waters, with the exception of groundwater.
Surface water body (DIW)	Distinct surface water, such as a lake, waiting basin, reservoir, stream, river, canal, transitional water, or a part of a stream, river, canal or transitional water.
Origin	Event or activity that is the basis of soil contamination, such as spillage, a leaking tank, dumping, ...
Potential pollution source	Any activity or storage that may cause or have caused soil contamination in accordance with the Soil Decree: <ul style="list-style-type: none"> - risk establishments or activities included in the list referred to in Article 6 of the Soil Decree; - activities or installations from the VLAREM I classification list which relate to the storage, transport or reservoirs of liquid products (including pipelines and sewers) and which may cause soil contamination; - the use of waste for a functional hardening on top of an existing soil, where the waste is clearly distinguishable from the soil material;

	<ul style="list-style-type: none"> - locations where an incident has occurred; - operationally linked discharge points (including discharge points outside the research site); - locations where contamination is detected during the site visit; - etc.
Pure product	<p>A liquid, hydrophobic contaminant, mobile or not, that occurs in the soil as a separate (non-aqueous) phase (Non-Aqueous Phase Liquid – NAPL). The pure product is mobile (under the influence of gravity or capillary forces) if the retention capacity of the soil is exceeded. Another name for this is free product. Pure product that is present in the soil pores at levels below the soil retention capacity and is therefore immobile is called residual pure product. A synonym for pure product with a specific gravity less than 1 is also called LNAPL (Light Non-Aqueous Phase Liquid). If the specific gravity is greater than 1, it is called a DNAPL (Dense Non-Aqueous Phase Liquid).</p>
Residual pollution	<p>Content of contaminants or organisms on or in the soil or buildings, which is found in the soil or buildings after a soil investigation or after the completion of remediation works and which exceeds the guide value for the solid part of the earth or the soil remediation standard for groundwater, but for which no further investigation or measures are necessary in the current circumstances.</p>

Target value	Soil quality guideline: - Value below which the soil can perform all its functions without any restriction being imposed. This protects the soil quality for future generations.
SAP	Standard analysis package for the solid part of the earth and groundwater.
Sediment	A mixture of fine inorganic and organic particles that has settled from the water column and forms a layer on the bottom.
Site investigation	Soil investigations carried out on a site to map the soil contamination or potential soil contamination arising from the soil-polluting activity for which the site has been identified and to determine its severity. The site investigation meets the objectives of an exploratory and descriptive soil investigation for the soil-polluting activity for which the site has been established.
Special Protection Area	The areas designated by the Flemish Government in accordance with Chapter V, Section 3bis of the Nature Decree.
Closure of a (risk) establishment	Cessation of all activities or all substantial activities of a (risk) establishment.
Stable end state	Stable soil quality in accordance with the intended remediation objectives achieved after the active soil remediation works.
Landfill	Deliberately dispose of waste on or in the soil (with the exception of buildings) irrespective of the nature, duration, and size of the deposited material, and where the waste is not intended to be removed or treated in the short term. Short term means 1 year for the disposal of waste and 3 years for the treatment of waste (source: emis-website, VITO).
Dump	Place where landfilling is or has been carried out, with an area greater than 2.5 ares.
Target value	Soil quality target value: - Content of contaminants or organisms on or in the soil, which is found as a normal background in uncontaminated soils with similar soil characteristics.
Remediation value	Content of contaminants or organisms on or in the soil or structure, which is to be achieved by the soil remediation works.
Trigger value	The trigger value for further research aims to make an initial distinction between water bottoms where there are very unlikely to be ecological risks caused by the pollution present and the water bottoms where ecological risks may be caused.
Solid part of the water bed	This is the naturally occurring consolidated part of the bed of a body of surface water, specific to the region where the body of surface water is located.
VCOR	Codified Decrees of the Flemish Spatial Planning Codex

Safety coordinator	Coordinator for health and safety as referred to in the Royal Decree of 25 January 2001 on temporary or mobile construction sites. The Royal Decree distinguishes between a design co-ordinator (for the design phase of a project) and an execution co-ordinator (for the execution of the works).
VEN areas	Areas belonging to the Flemish Ecological Network demarcated pursuant to Chapter V, Section 1 of the Nature Decree.
Suspicious soil layer	Soil layer in which the highest concentrations of pollutants are expected based on sensory observations, the soil structure, the location and depth of the possible source of contamination, the properties of the suspect substance(s),...
Suspicious substance	<p>Substance for which, on the basis of the preliminary study, it can be deduced that it may cause soil contamination at the site under investigation. A suspected substance is related to a potential source of contamination that may or could have given rise to soil contamination at a research site.</p> <p>Substance for which concentrations were found in a previous soil investigation that give rise to further measures and that can be related to the activities that are being or have been carried out on the site (including fill soils)</p>
Suspect zone	Place with potential sources of pollution or place where pollution has already been identified.
Pollution source	Cause of the pollution leading to soil contamination.
Dissemination plot	Soil to which pollutants or organisms have spread or where soil contamination has harmful effects.
Voluntary soil remediation	Soil remediation carried out by a remediation volunteer.
Water bottom (DIW)	The bed of a surface water body that is always or for a large part of the year under water.

10.5 ANNEX 2: LABELS

Each report of exploratory and descriptive soil investigation receives at least one label (see chapter 2.3). You can choose from the following labels:

- **Asbestos:** soil contamination with asbestos.
- **Atmospheric deposition:** If you decide that atmospheric deposition testing is appropriate, assign the atmospheric deposition label.
- **Brownfield:** a brownfield is a set of neglected or underutilised land that has been degraded in such a way that it can only be used or reused through structural measures.
- **Dry cleaning/laundry:** all active and former companies that chemically clean textiles, as well as all industrial or commercial activities using VOCs in an installation for cleaning clothes, upholstery, and similar consumer goods, with the exception of manual stain removal in the textile and clothing industry.
- **Drug-related:** on the premises, there are indications of the abandonment of drug waste or associated chemicals, or there are indications of (illegal) production of drugs, such as a drug lab.
- **Garage and bodywork:** all active and former garage and bodywork companies and related companies that carry out construction, repair, and maintenance work on motor vehicles in the broadest sense, including cars, motorcycles, trucks, vans, agricultural machinery, buses and their respective trailers.
- **Gasworks:** the label is awarded to all former 'gas sites'. The gas sites can be divided into three categories: genuine gas works (heading 16.1), gas holders (storage of gas) and sites where gas production or storage was carried out as a secondary activity (example: a textile factory with gas production).
- **Agriculture and horticulture:** all active and former holdings that are part of agriculture (arable, livestock, and mixed farms) and horticulture (vegetable, ornamental, and fruit cultivation).
- **Compulsory co-ownership:** properties with more than one owner and falling under Article 3.84 of the Civil Code or Article 577-2 of the Civil Code. In the properties, there are common and private parts.
 - Example: Classic apartment buildings.
 - Possible example: shopping centres, business centres, residential care centres, garage complexes, etc. with multiple owners, where it is clearly defined who owns which part (example: unit 5 of the business centre belongs to owner X, the parking is shared).
 - There is no forced co-ownership if, for example, three children have inherited a home and thus become co-owners or a residential care centre with one owner.
- **Owned by local authorities:** the source plot is owned by a municipality, intermunicipal association, autonomous municipal company, intermunicipal cooperation, public social welfare centre (OCMW), province or provincial development company (POM). Parts of a public domain as a distribution plot are not included.
- **Owned by the Flemish Government:** The source plot is the property of the Flemish government as included in the guide to the standard procedure for preliminary soil investigation.
- **Private individual:** (client and/or) owner is private a private individual.
- **PFAS:** The label is assigned to all studies in which PFAS is considered a suspect parameter.
- **Promaz CSC:** the contractor has completed remediation and possesses a final declaration.
- **Promaz CSO:** contractor to rehabilitate and soil investigation is yet to be initiated.

- **Promaz CSW:** contractor is carrying out the remediation and the works have already started.
 - **Promaz PSO:** Promaz is cleaning up and is still fully operational.
 - **Promaz PSW:** Promaz remediates. The remediation works were started by the contractor, but Promaz takes over.
 - **Industrial Emissions Directive:** an S-installation is located on the site.
 - **School:** institution where education is provided: kindergarten, primary and secondary schools, music schools, boarding schools, and the Student Guidance Centres (CLB).
 - **Fuel oil tank for heating:** current or former tank for **heating** with fuel oil/mazout (regardless of tank volume) which is the cause of the damage case or notification of soil contamination.
 - For this fossil fuel, there are various popular names: mazout, fuel oil, or heating oil. There are different types of heating oil on the Belgian market:
 - Gas oil with the official name Heating oil. 'Type B domestic heating oil', with low sulphur content.
 - Gas oil with the official name Gasolie-Diesel (heating purposes). 'Type A domestic heating oil', with very low sulphur content.
 - Mazout with additives (source: Informmazout).
- You assign this label to the assignment types Notification of damage, Identification of damage, Notification of soil contamination, Other screening, Source determination, Screening Promaz and to the subsequent assignments (Descriptive soil investigation, Soil remediation project and Final evaluation investigation or Evaluation report after damage). In an exploratory soil investigation, you only assign the label if you identified contamination at the level of the tank that requires further action. In an exploratory and descriptive soil investigation, you assign the label if you identified a contamination at the level of the tank in the exploratory soil investigation phase that requires further measures.
- **Landfill:** sites where authorised or unauthorised disposal has occurred or is occurring: inter alia, headings 2.3.6, 2.3.7, 2.3.11, 2.3.8.d1, 2.3.10 and sub-headings.
 - **Petrol station:** all active and former public fuel distribution installations for motor vehicles, being an installation for the filling of fuel tanks of motor vehicles with liquid fuels intended for the supply of their engines.
 - **University:** all higher education institutions: universities, colleges, and evening schools (not affiliated with schools).
 - **Transport – goods and persons:** all active and former companies responsible for the provision of passenger and goods transport for their own account (or for the account of third parties), using their own facilities for repairing and supplying their own means of transport.
 - **Water bottom:** bed of a body of surface water that is always or for a large part of the year submerged.
 - **Water abstraction area:** located in a water abstraction area or protection zone.
 - **Not applicable:** none of the above labels apply to this assignment.

Having regard to be annexed to the Ministerial Decree of (date MB) establishing the standard procedure for the exploratory and descriptive soil investigation under the Soil Decree of 27 October 2006.

Brussels, (date of MD)

The Flemish Minister for Environment and Agriculture,

Jo BROUNS