

HISTORICAL STUDY

The methodology used by SPAQuE











Introduction

The methodology used to conduct the historical study relies fundamentally on the exploitation of all known and available sources to establish a documentary record, both on the history and on the administrative status of a site. It is put together on the basis of documents that make it possible to trace back the gradual deployment of the infrastructures and activities housed on the site in the past.

The main advantages of this methodology are:

- it establishes the boundaries of the site for the purpose of the historical study;
- it proposes a description for each cadastral parcel, and for the surrounding area;
- it determines the administrative status;
- it identifies and locates all potential pollution sources, based on an inventory of successive activities, thanks to the critical exploitation of documents, oral testimonials and in situ observations.

The historical study of a site sets out to:

- ultimately offer a detailed overview of the evolution of the occupation of the site and of the successive activities it has housed;
- allow the delimitation of potential pollution sources in order to directly target the locations of the soil and water samples to be performed.

As such, the historical study makes it possible to:

- perform higher quality soil and water tests;
- indicate the probable locations of walls, cisterns, pits, etc. and therefore, to shed light on the possible nature of the subsoils with which the operators in charge of the work on-site will have contact.



Objectives of the historical study

The historical study of a site should make it possible to answer the following questions :

- What is its physical location?
- What is its administrative status?
- · What are the successive or simultaneous activities it has housed?
- Can all the PPS (Potential Pollution Sources) be identified?
- Can all the PPS be located?



Stages necessary to draw up a historical study

The methodology followed to conduct the historical study consists of five successive stages:

- 1. The identification of the company names and of the nature of the activities implemented within the site;
- 2. The description of the site and its surroundings, from its time as virgin land, before any human intervention until the time of the historical study;
- 3. A commented chronological listing of the events related to the site and related to its activities, its infrastructures and their transformations, its developments and any accidents that have taken place there;
- 4. A briefing note on the technologies related to the identified infrastructures and activities;
- 5. Conclusions and the establishment of the overall inventory table of potential pollution sources (IPPS), as provided in the orientation study.



Identification of the social reasons and nature of the activities:

- Companies names: the identification of the companies names sets out to surmise the archives to be exploited later and to a lesser extent to presuppose the activities implemented within the site;
- Nature of the activities: the identification of the nature of the activities implemented within the site is intended to define the processes, infrastructures, materials and products used.

In a more detailed manner, in order to achieve the following objectives, the answers will have to be sought in the list of possible sources below:

Objectives	Possible Sources
Obtain technical data, plans, iconographic documents (especially photographic), testimonials, etc.	Archives Printed documents Historical cadastral documents Media materials Oral testimonials Cartographic material (in the absence of more relevant documents) Photographic-cartographic documents (in the absence of more relevant documents) Iconographic documents (in the absence of more relevant documents)

Description of the site and its surroundings:

• Physical description of the site at the time of the historical study

The description of the site and its surroundings at the time of the historical study, consists of its geophysical description and that of its immediate surroundings. To detect the maximum potential pollution sources that may influence the quality of soil and water within the site boundaries, the activities in the area surrounding the site should be researched and taken into account.

• Physical description of the site prior to any activity

The description of the physical location of the site and its surroundings prior to any activity shows it at the time when it was virgin land, free of any human intervention.

· Administrative status of the site

The description of the site's administrative status presents its regulatory status at the time of historical study. The cadastral information collected in these circumstances make it possible to seek from their owner(s) permission to access the various plots that make up the site and to have some rrecent and reliable maps.





Commented chronological statements of the events related to the site:

· Statement on the period from its time as virgin land prior to any occupation until the end of the main activity

The commented chronological statement of events related to the site from its time as virgin land before any occupation until the end of the principal activity consists of a critical identification of the facts relating to any activities, installations, works and infrastructure transformations (buildings, machines, communication roads, etc.), topographic changes (excavations, fillings of depressions, etc.) as well as any accidents or war damage that occurred there.

The authenticity of these facts is determined by applying to the different sources the conventional methods of historical criticism. If their authenticity cannot be formally established, their likelihood is evaluated with the same methods.

• Statement on the period subsequent to that of the principal activity

The commented chronological statement of events occurring after the period of the principal activity consists of a critical inventory of known facts, whether consecutive to or independent, of the abandonment of this activity.

The authenticity of these facts is determined by applying to the different sources the conventional methods of historical criticism. If their authenticity cannot be formally established, their likelihood is evaluated with the same methods.

In practice, this statement is established as late as the availability and credibility of known sources allow.

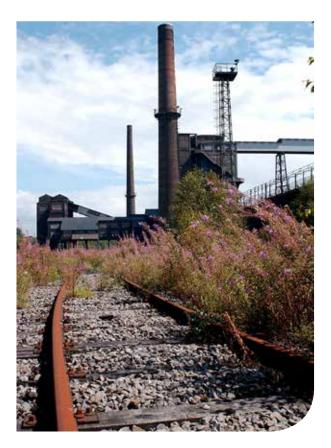
Briefing notes:

The briefing note lists and describes the various technologies necessary for the practice of the activities.

It includes a survey and a description of the technical areas and infrastructures required for manufacture or operation, the tools and/or machinery used (including those necessary for obtaining the driving force), the raw materials used, the materials and inputs of substances stored, of finished, semi-finished and intermediate products as well as waste generated and their disposal.

The authenticity of the information contained in the briefing note is determined by applying to the sources the conventional methods of historical criticism. If authenticity cannot be formally established, their likelihood is evaluated with the same methods.







Conclusions and establishment of the overall inventory table of PPS:

Conclusions

The conclusions first sum up the key information needed for soil investigations within the boundaries or in the immediate vicinity.

These summarise:

- the historical limits of the principal activity that affected all or part of the land covered by the study;
- all the activities that have taken place since the first proven human occupation of the site until as late as the availability and credibility of sources known make it possible to determine it;
- the PPS identified and localised with certainty;
- the PPS resulting from geomorphological changes (foundation fill, backfilling, aerial deposits or other relief changes);
- PPS resulting from accidents, war damage and other unintended harm;
- the possible nature of the soil and subsoil.

The conclusions then make a distinction between the PPS whose location is presumed (presence not observable visually but determinable according to the documentary value of the source(s) that provide the information and difficult to localise topographically with any real precision). The conclusions finally list the PPS that have not been located but that are characteristic of the nature of the site studied and whose existence can be predicted on the basis of experience or comparisons with similar sites and contemporary activities.

• Global inventory stable of PPS

The information and observations derived from the historical study make it possible to complete the sections of the global inventory table of potential pollution sources, listed below. It should be noted that the headings « Presumed impact », « Presumed pollutants » and « Significance of the potential impact » will be completed later by the expert in charge of the orientation study.



Inventory table of potential pollution sources (PPS)

Names of the source	Names of Localisa- Cadastral the source tion parcel	Cadastral parcel	บ็	Characteristic of the source	of the source	ø	Presu	Presumed impact	Ţ.	Presumed	Presumed pollutants	Coating	Significance of the potential impact
			Presumed surface occupied by the source (m²)	Presumed Presumed surface volume occupied by the source the source (m²) (m²)	Aerial / under- ground	Nature of the product(s)	Nature On the On the on the of the ground ground under-product(s) (0-1 m-ns) (>1 m-ns) water	On the ground (>1 m-ns)	On the under- ground water	From the original site	Following the deterio- ration		
				•			•						



Report of the historical study

· Report title and structure

The title of the report must contain the words « historical study », the name and address of the site and the date of finalisation of the report.

- The report includes ten parts:
- Part 1 Identification of the companies names
- Part 2 Identification of the nature of the activities
- Part 3 Physical description of the site at the time of the historical study
- Part 4 Physical description of the site prior to any activity
- Part 5 Administrative status of the site
- Part 6 Statement on the period from its time as virgin land prior to occupation until the end of the principal activity
- Part 7 Statement on the period subsequent to that of the principal activity
- Part 8 Briefing note on the various technologies required to perform the activities
- Part 9 Conclusions
- Part 10 Plans









Boulevard d'Avroy, 38/1 4000 Liège - Belgique Tél. +32 (0)4 220 94 11 Fax : +32 (0)4 221 40 43 www.spaque.be