



DI1.1.2 Deliverable- Remote imaging report

Date: June 26, 2018



SUBJECT: I1.1.2 Deliverable - Remote imaging report (Based on the operating plan of OVAM)

☒ report
 ☐ information
 ☐ consideration
 ☐ decision

To: ... **From:** ULiège

I1.1.2 Remote imaging report (Based on the operating plan of OVAM)

The Meerhout landfill site is located in the province of Antwerp, Flanders Region, Belgium. The site is triangular shaped. The W-E extension is 380 m and the N-S extension is 360 m. The site area is 7.5 Ha and the total perimeter is 1250 m long. This include the container park facility, partially located on the older dumping zone.

The more recent aerial view of the site is presented at Figure 1. This photograph has been acquired in wintertime, in February 2017. No major changes occurred on the site between this last view and our visit of the site on October 13th, 2017.



Figure 1: The Meerhout landfill site: aerial view of February 2017

The site is subdivided in different zones that correspond to the historical successive extensions of the site (see deliverable I1.1.1) (Figure 2). The waste disposal activity started in 1962 in the most N-W zone of the site. Then, the site successively extended westward (1982, 1983 and 1986). In 1989, the landfill extended southward. Then, the storage capacity was increased by increasing the thickness of the disposal facility. The total thickness of waste is 4-5 m in the older zone (1962-1982), 10 m in the 1982-1983 zones and 20 m at other places, so that the original division of the site and successive extensions zones are still recognizable today.

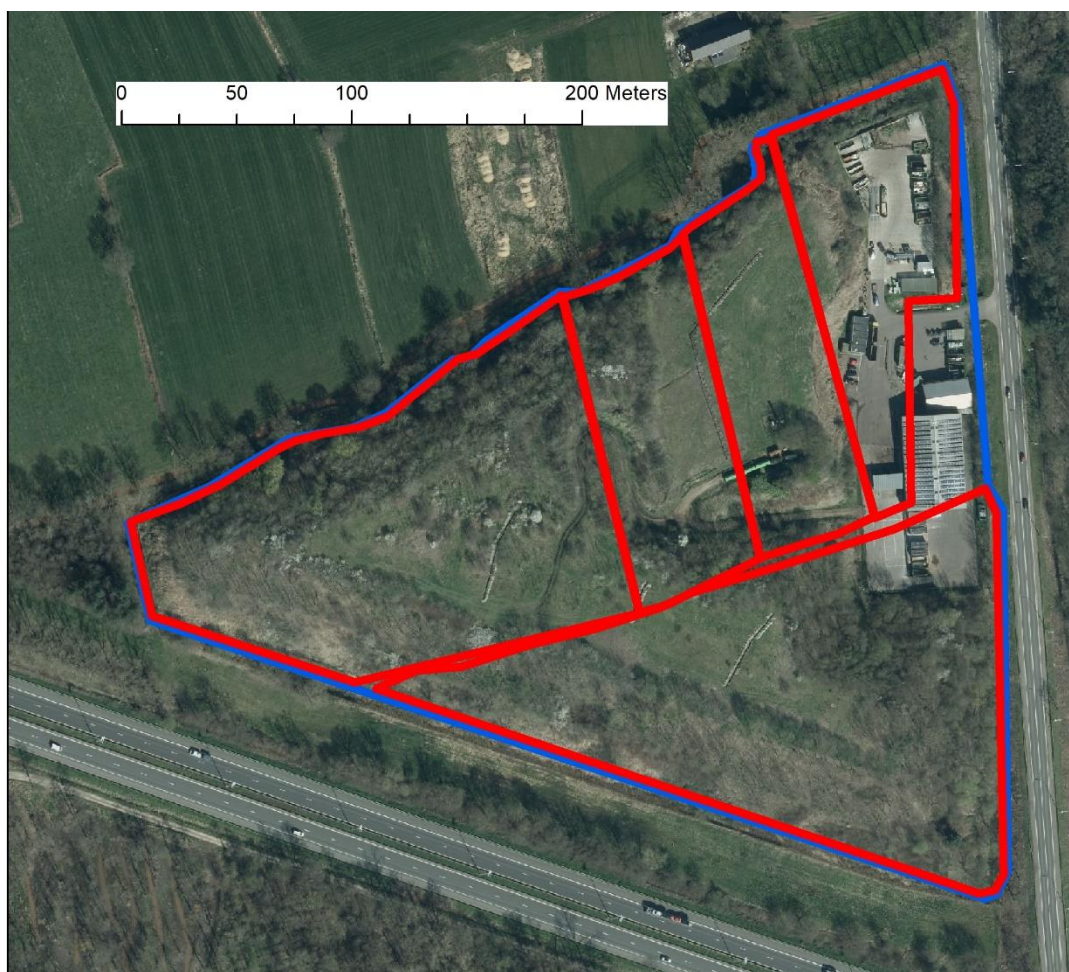


Figure 2: Extension of the site from 1962 to 1999

As the waste disposal activity took place between 1962 and 1999, few aerial images are available on the Flemish Webserver (most images were acquired after 2000). On the aerial view from 1971, the disposal activity took place only on the most N-W zone of the site (Figure 3a). In 1987-1988, the zones initiated in 1982 and 1983 are filled with 10 m of waste. The western deposition zone is still being filled (Figure 3b). Unfortunately, we have no aerial view from the nineties. The next image available is from the early 2000s (2000-2003?; Figure 3c). On this image, the waste disposal activity is finished and the site is free of vegetation. Since then, aerial views of the site were acquired more frequently. However, they offer only little additional information. The site in 2008-2011 is presented at Figure 3d. At that time, trees were planted on the site.

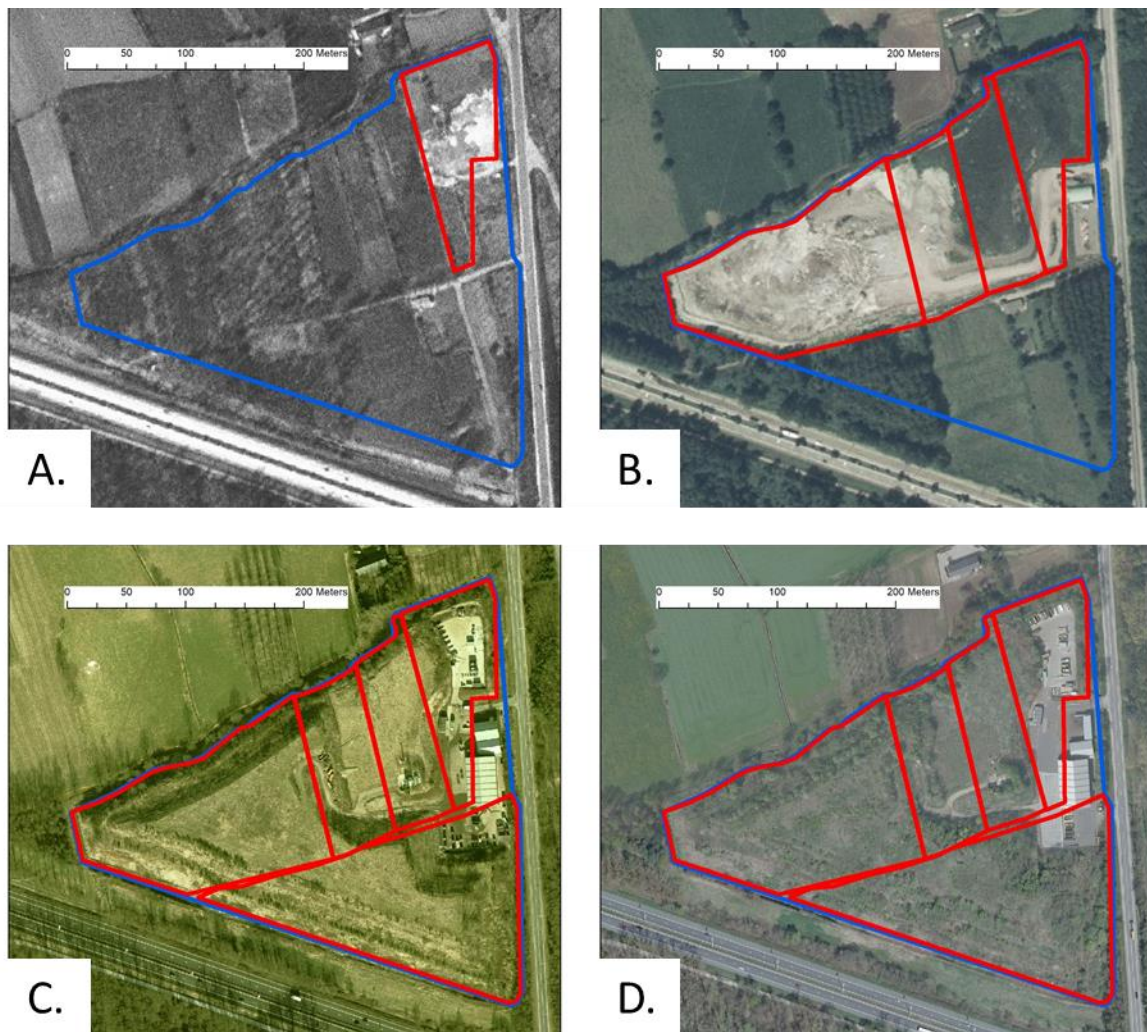


Figure 3: Evolution of the Meerhout site extension: A. 1971; B. 1987-1988?; C. 2000-2003?; D. 2008-2011?

The elevation of the site is now 20 m above the initial topographic level, except in the oldest areas (the area without membrane and the area with the thin agricultural plastic film).

- 4m of waste in the older zone (no membrane)
- 10m of waste in the 1983 zone (thin membrane)
- 20m of waste in the newer zones (>1986; thick membrane)

The digital elevation model is presented at Figure 4a, and a cross-section at Figure 4c.

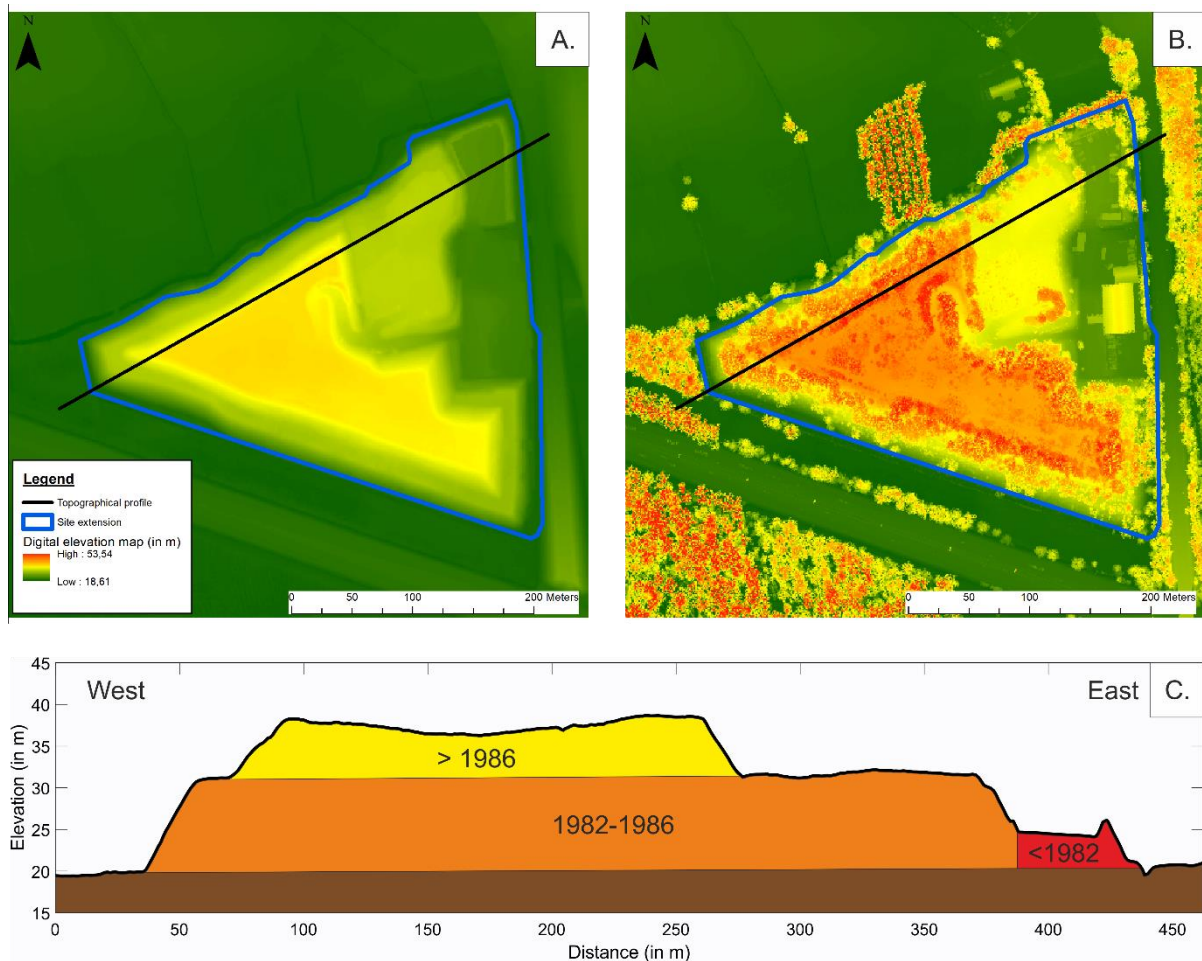


Figure 4: The Meerhout landfill present topography: a. DEM soil elevation; b. DEM top of vegetation; c. cross-section

The site vegetation can be visualized at Figure 4b. Photos were also taken during the site visit on October 13th, 2017 (Figure5).

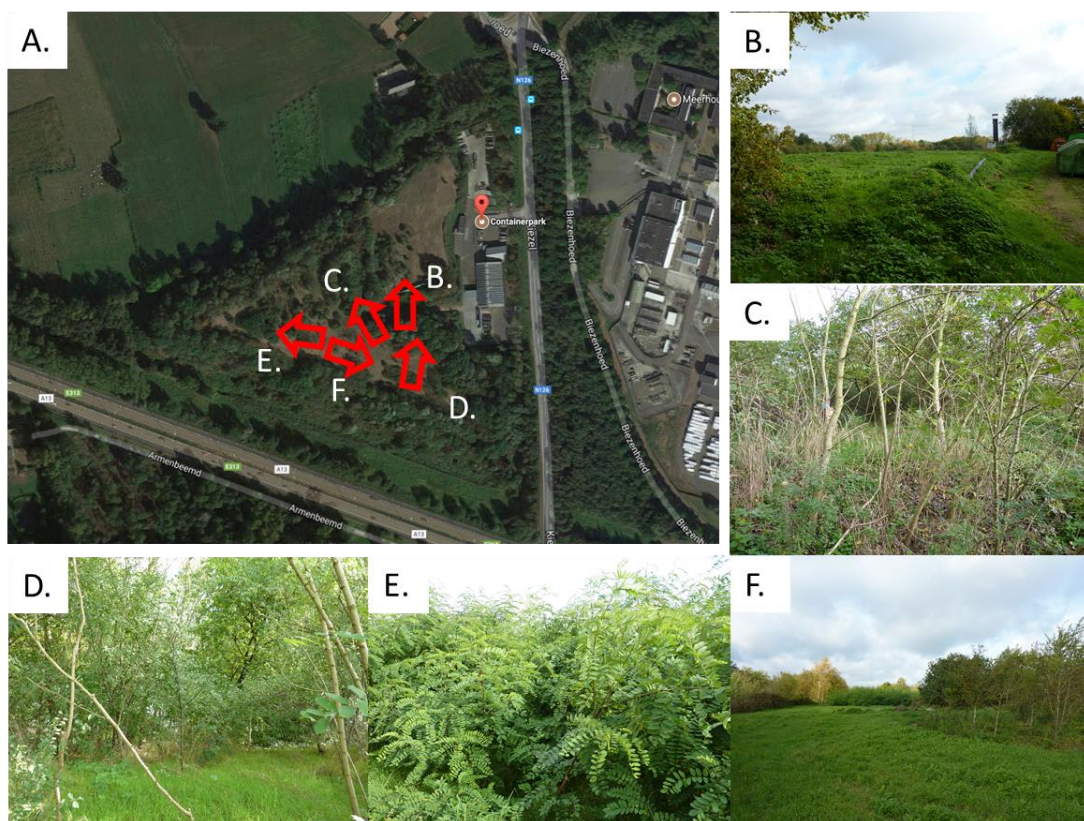


Figure 5: Photos of Meerhout landfill (13/10/2017): a. aerial view and photos location; b. to f. photos

Contact

Feel free to contact us.

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