

## **Legislation on soil remediation in the Flemish Region of Belgium**

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### **1. Introduction**

China is preparing for legislation on soil contamination and cleanup. Belgium has already acquired wide experience with the issue of soil remediation, and this maybe of interest for countries where this kind of legislation is still lacking. Although the institutional, legal and socio-economic context in China is quit different from that in Belgium, some of the solutions found in Belgium maybe a source of inspiration for those in charge of preparing a soil remediation legislation in China.

The three regions – environmental policy in Belgium is indeed largely a matter of the three regions – in Belgium each have their own legislation in the area of soil remediation. The oldest legislation, where most experience has been acquired, is that of the Flemish Region. In this paper we will discuss the main aspects of this legislation.

The soil remediation legislation for the Flemish Region of Belgium was prepared by the Interuniversity Commission for the Revision of Environmental Law in the Flemish Region – the so-called “Bocken Commission”. – to witch I was a Member. This Commission studied the problem in detail. The initial proposal<sup>1</sup> was based, on the one hand, on the practical experience already acquired by the Public Waste Agency for the Flemish Region with some cases of soil sanitation, especially illegal waste dumps and deserted polluted industrial sites, and, on the other hand, on the legislations already set up in different parts of the world. A particular source of inspiration were the so-called “Interim Soil Cleanup Law” and “Soil Cleanup Law” of The Netherlands, the US CERCLA and SARA Legislation, the New Jersey Environmental Cleanup Act and some other State Legislations of different States of the U.S., like Pennsylvania, Connecticut , Iowa, Missouri, Illinois and California.

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<sup>1</sup> H. BOCKEN, D. RYCKBOST, S. DELODDERE, “Titel 2. Bodemsanering” in INTERUNIVERSITAIRE COMMISSIE TOT HERZIENING VAN HET MILIEURECHT IN HET VLAAMSE GEWESR, *Voorontwerp Decreet Milieubeleid*, Die Keure, Brugge, 1995, 1076-1184. An English version was published in H. BOCKEN /D. RYCKBOST, *Codification of Environmental Law: draft decree on environmental Policy*, Den Haag, Kluwer Law International, 1996, XXVIII, 248 p

During the legislative process the Commission Proposal was amended slightly by Flemish Government and Flemish Parliament. The Decree<sup>2</sup> on Soil Remediation (hereinafter referred to as the 1995 Soil Remediation Decree)<sup>3</sup> sets out to establish a legal framework to allow decisions to be taken systematically in the area of soil remediation, to ensure prefinancing of the remediation and to recover the costs thereof. In order to achieve this, the decree regulates the identification and registration of contaminated soils, the remediation obligation and liability that differs according to whether the soil pollution is new or historical pollution, and special arrangements for the transfer of land and the closure of establishments. The 1995 Soil Remediation Decree was worked out in more detail by an Order of the Flemish Government of 5 March 1996 establishing the Flemish Regulations concerning Soil Remediation (hereinafter referred to as VLAREBO)<sup>4</sup>.

After ten years of application, the legislation was evaluated, and this resulted in the adoption of a New Decree on Soil Sanitation and Soil Protection by the Flemish Parliament in 2006<sup>5</sup> (hereinafter referred to as the 2006 Soil Decree). This New Decree builds largely further on the former Decree, but contains in some aspects more sophisticated solutions. A New Executive Order to implement the 2006 Soil Decree is under preparation and the new legislation will, as is expected, enter into force on January 1st 2008.

We will mainly discuss in this paper the 1995 Soil Sanitation Decree, but indicate also in which respect the 2006 Soil Decree departs from the actual legislative situation.

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<sup>2</sup> A Decree is an Act of the Regional Parliament.

<sup>3</sup> *B.S.* 29 April 1995, err. *B.S.* 3 October 1995, repeatedly amended; an English version of this Decree can be found on the following website [http://www.emis.vito.be/wet\\_ENG\\_navigator/bo.htm](http://www.emis.vito.be/wet_ENG_navigator/bo.htm); see on the 1995 Soil Remediation Decree: D. RYCKBOST, "Het Decreet van 22 februari 1995 betreffende de bodemsanering", *T.M.R.* 1995, 178-205; K. DEKETELAERE (ed), *Het Decreet betreffende de Bodemsanering*, LeuVeM, Milieurechtstandpunten no. 7, Bruges, Die Keure, 1995, 252 p; D. RYCKBOST and S. DELODDERE, *Bodemsanering in Vlaanderen*, Antwerp, Kluwer Rechtswetenschappen België, 1997, 330 p.; see on the amendment of the Soil Remediation Decree by the Decree of 26 May 1998: D. RYCKBOST, "Bijsturing van het Decreet betreffende de bodemsanering", *T.M.R.* 1998, 334-352; see on the amendment of the Soil Remediation Decree by the Decree of 18 May 2001: D. DEVOS, 'Wijzigingen aan het bodemsaneringsdecreet: de sanering van sites, kort maar krachtig', *T.M.R.* 2001, (366), 369.

<sup>4</sup> Order of the Flemish Government of 5 March 1996 establishing the Flemish Regulations concerning Soil Remediation (VLAREBO), *B.S.* 27 March 1996, repeatedly amended. An English version of this Order can be found on the following website: [http://www.emis.vito.be/wet\\_ENG\\_navigator/vlarebo.htm](http://www.emis.vito.be/wet_ENG_navigator/vlarebo.htm); the important appendixes can be found on the following website: [http://www.emis.vito.be/wet\\_ENG\\_navigator/vlarebo-appendix.htm](http://www.emis.vito.be/wet_ENG_navigator/vlarebo-appendix.htm)

<sup>5</sup> Decree of 27 October 2006 concerning soil remediation and soil protection, *B.S.*, 22 January 2007, err. *B.S.*, 20 February 2007. An English version of this Decree can be found on: <http://www.ovam.be/jahia/Jahia/pid/976?lang=en>

## 2. Key concepts

The 1995 Soil Remediation Decree defines *soil contamination* as the presence – as a result of human activities – of substances or organisms on and in the soil or the buildings and structures erected on it<sup>6</sup>, that adversely affect or may affect the quality of the soil either directly or indirectly<sup>7</sup>.

By *soil* is meant the solid constituents of the earth, including the groundwater and other components and organisms that form part of it or live therein<sup>8</sup>. This also includes the *underwater soil*<sup>9</sup> or *water bottom*.

## 3. Identification and registration of contaminated soils

The 1995 Soil Remediation Decree organizes the identification of soil contamination by:

a) obliging so-called ‘high-risk activities or establishments’<sup>10</sup> to carry out an exploratory soil examination *prior to a transfer of land, closure of the establishment or discontinuation of the activity or on a periodical basis*<sup>11</sup>;

b) authorizing the Flemish Public Waste Agency (hereinafter referred to as OVAM) to carry out an *ex officio* exploratory soil examination<sup>12</sup>.

An exploratory soil examination comprises a limited historical investigation and the taking of a limited number of soil samples. The purpose is to determine whether there are serious indications for the presence of soil pollution on specific pieces of land<sup>13</sup>. We can find the same approach in the 2006 Soil Decree.

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<sup>6</sup> E.g. old contaminated factory buildings.

<sup>7</sup> Art. 2(2), 1995 Soil Remediation Decree. The same Definition can be found in art. 2 (4) of the 2006 Soil Decree.

<sup>8</sup> Art. 2(1), 1995 Soil Remediation Decree; the same definition can be found in art 2 (1) of the 2006 Soil Decree.

<sup>9</sup> D. RYCKBOST and S. DELODDERE, *o.c.*, 16.

<sup>10</sup> These are establishments and activities that may cause soil pollution, listed in Annex 1 to the VLAREBO.

<sup>11</sup> VLAREBO specifies the high-risk establishments or activities which are obliged at their own expense to carry out an exploratory soil examination *within a specific period* and thereafter *at regular intervals*. There are three categories: Class A: by 31 December 2003 and thereafter every 20 years; Class B: by 31 December 2001 and thereafter every 10 years; Class C: by 31 December 1999 and thereafter every 5 years.

<sup>12</sup> Art. 3(6), 1995 Soil Remediation Decree.

<sup>13</sup> Art. 3(4), 1995 Soil Remediation Decree.

All information relating to soil pollution is recorded in a *contaminated soils register*<sup>14</sup> that is kept by the OVAM. Under the 2006 Soil Decree, this register will be transformed into a broader *Land Information Register*<sup>15</sup>.

#### **4. Distinction between new, historical and mixed soil pollution**

What is significant, specifically in connection with the remediation obligation and liability, is the distinction that is made in the 1995 Soil Remediation Decree between new and historical soil pollution. The same approach is laid down in the 2006 Soil Decree.

##### **a) New soil pollution**

New soil pollution is pollution *that originated after the entry into force of the 1995 Soil Remediation Decree* (i.e. after 29 October 1995)<sup>16</sup>. The 1995 Soil Remediation Decree is considerably stricter for new soil pollution than for historical soil pollution. The same is true for the 2006 Soil Decree.

New soil pollution must be remediated if the soil pollution *exceeds the soil remediation standards* set out in Annex 4 to the VLAREBO<sup>17</sup>. For the moment there are 5 different sets of remediation standards for soils, depending on the land use function of the soil. The remediation standards are the strictest for “green” forms of land use (e.g. nature and woodland) and the most tolerant for industrial uses of land (e.g. industrial area, area for waste disposal). However for ground waters there is a uniform remediation standard. The 2006 Soil Decree specifies that these soil remediation standards shall correspond to a level of soil contamination which entails a considerable risk of harmful effects for man or the environment, taking into account the characteristics of the soil and the functions it fulfils<sup>18</sup>. This is an *autonomous remediation obligation*: the polluter must not wait to remediate the polluted soil until he has been called upon to do so by the OVAM<sup>19</sup>.

The 1995 Soil Remediation Decree imposes the remediation obligation on the person who is in

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<sup>14</sup> In practice, the OVAM enters the land in the contaminated soils register if the results of the exploratory soil examination show that for one or several parameters the levels exceed 80% of the soil remediation standard for the parameters within land use type II.

<sup>15</sup> Art. 5, 2006 Soil Decree.

<sup>16</sup> Art. 2(4), 1995 Soil Remediation Decree; Art. 2 (7), 2006 Soil Decree.

<sup>17</sup> Art. 7(2), 1995 Soil Remediation Decree

<sup>18</sup> Art. 9 (1), 2006 Soil Decree.

<sup>19</sup> Court of Ghent, 5 September 2001, *T.M.R.*, 2002, 342-347.

actual control of the land where the pollution occurred. This person can be designated in a simple manner and would also be in the best position to direct the remediation operation and to limit as much as possible the inconvenience caused by the remediation. The person obliged to remediate prefinances the cost of the soil remediation, but can recover these costs from the polluter, i.e. the person responsible for the pollution, when he is not itself the polluter.

In practice, the remediation obligation lies with:

- the *operator*, if on the land where the pollution originated an establishment is located for which an environmental licence or notification is required;
- in the other cases, the *proprietor* of the piece of land where the pollution originated, *as long as* the proprietor has not shown that another person for his own account is in actual control of this piece of land;
- if the proprietor can prove that another person for his own account is in actual control of the land: the *person who for his own account is in actual control of the land*<sup>20</sup>.

However, the 1995 Soil Remediation Decree does provide for an exemption from the remediation obligation for the so-called ‘innocent owner’<sup>21</sup>, who must furnish proof that he meets all of the following conditions cumulatively:

- (1) he has not caused the pollution himself;
- (2) when he became proprietor or operator or acquired actual control of the land, he was not or could not be assumed to have been aware of the pollution<sup>22</sup> ;
- (3) since 1 January 1993, no ‘high-risk establishment or activity’ was located on the land or carried out there<sup>23</sup>.

The OVAM may proceed to ex-officio soil remediation if the proprietor or user of the polluted land is not obliged to carry out the remediation<sup>24</sup>. The OVAM may also take action ex officio if the person obliged to remediate fails to carry out the soil remediation or to take other measures, or does not take sufficient action, and fails to act upon demands by the OVAM to fulfil his obligations within a specified period of time.

The 2006 Soil Decree provides for a similar “three steps” designation method. In the first place, if on the land where the soil contamination originated installations are present that need an environmental licence or notification, the *operator* of that installation will be obliged to remediate. In case there is no operator, or if the operator has been released from the obligation because he has not caused the soil contamination himself or the soil contamination originated before the time he became the owner of the land, the *user of the land* where the soil contamination originated will be obligated to remediate. Finally, in case there is no operator or

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<sup>20</sup> Art. 10(1), 1995 Soil Remediation Decree

<sup>21</sup> It should be noted that although the so-called ‘innocent owner’ is exempt from the remediation obligation, he is *nevertheless liable* for the amount of the costs required to prevent the soil pollution from spreading further or from constituting an immediate hazard (see Art. 26, 1995 Soil Remediation Decree).

<sup>22</sup> The person who took over the operation of the establishment or of the activity located on the land concerned, or who acquired the ownership or the actual control of the land from an affiliated company that was aware or could be assumed to be aware of the pollution, is assumed to have been aware of the pollution (Art. 10(3), 1995 Soil Remediation Decree).

<sup>23</sup> Art. 10(2), 1995 Soil Remediation Decree

<sup>24</sup> Art. 10(2), last paragraph, 1995 Soil Remediation Decree; Art. 45(2), 1995 Soil Remediation Decree

user, or if the operator and the user have been released from the obligation<sup>25</sup>, the *owner of the land* where the soil contamination originated shall remediate the soil contamination<sup>26</sup>.

In the case of new soil contamination, soil remediation shall be aimed at achieving the target values for the soil quality. If, due to the nature of the soil contamination or the characteristics of the contaminated land, it proves impossible to achieve the target values for soil quality by using the *best available techniques not entailing excessive costs*, the soil remediation shall be at least be aimed at obtaining a better soil quality than that specified by the applicable soil remediation standards. If the land, in the framework of a provisional draft of a land-use plan, is assigned a use to which stricter soil remediation standards apply, the stricter soil remediation standards shall be taken as the remediation objective. If it is not possible to obtain the aforementioned soil quality by using the best available techniques not entailing excessive costs, restrictions with respect to the use of the land may be imposed if necessary. The selection of the best available techniques not entailing excessive costs is independent of the financial capacity of the person who is under the obligation to carry out the remediation<sup>27</sup>.

The person obliged to remediate, who is responsible for prefinancing the soil remediation, is not necessarily the person who caused the soil pollution. Where this is the case, he may recover the costs incurred from the person who is liable for them<sup>28</sup>. The 1995 Soil Remediation Decree institutes *strict liability* at the expense of *whoever caused soil pollution by an emission*<sup>29</sup>. Where the emission originates from an establishment for which an environmental licence or notification is required, the *operator* of this establishment is liable<sup>30</sup>.

This liability is limited to the *costs incurred for the soil remediation*. The liability of the so-called ‘innocent owner’ is limited to the amount of the costs required to prevent the soil pollution from spreading further or from constituting an immediate hazard<sup>31</sup>.

A similar approach is followed in the 2006 Soil Decree<sup>32</sup>. As (pre-) financing the soil remediation is concerned, the Decree introduces a “financial sustainability settlement”. According to Article 14 the person who is obliged to remediate but has insufficient resources

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<sup>25</sup> The owner shall not be obliged to remediate if he can argue that he complies with the following conditions in a cumulative manner: 1° he has not caused the soil contamination himself; 2° the soil contamination originated before the time he became the owner of the land; 3° he was not aware and was not supposed to be aware of the soil contamination at the moment he became the owner of the land; 4° since 1 January 1993 no high-risk installation has been present on the land.

<sup>26</sup> Art. 11, 2006 Soil Decree.

<sup>27</sup> Art. 19, 2006 Soil Decree.

<sup>28</sup> Art. 11, first sentence, 1995 Soil Remediation Decree

<sup>29</sup> Art. 25(1), 1995 Soil Remediation Decree. As long as it has not yet been established who of the parties approached by the proprietor is responsible for the pollution, there is no reason to oblige them to make an advance payment for an expert investigation: Ghent, 6 February 2002, *T.M.R.*, 2002, 268-270.

<sup>30</sup> Art. 25(2), 1995 Soil Remediation Decree

<sup>31</sup> Art. 26, 1995 Soil Remediation Decree

<sup>32</sup> Articles 16-18, 2006 Soil Decree.

to (pre-)finance the soil remediation, may submit a motivated application for a financial sustainability settlement to the Flemish Government. The aim of the financial sustainability settlement is to spread the financing burden over time<sup>33</sup>. There is also a possibility of co-financing, under conditions that still have to be specified by the Flemish Government<sup>34</sup>.

## **b) Historical soil pollution**

Historical soil pollution is pollution that *originated before the entry into force of the 1995 Soil Remediation Decree* (i.e. before 29 October 1995)<sup>35</sup>. The rules for historical soil pollution are far more relaxed.

The principle with historical soil pollution is that remediation only needs to be carried out if the soil pollution constitutes a '*serious hazard*'<sup>36</sup>. By serious hazard is meant: (1) soil pollution where contact occurs or may occur between the polluting substances or organisms and humans, plants or animals and where this contact is certain or likely to have harmful consequences for the health of humans, plants or animals, or (2) soil pollution that may adversely affect groundwater abstraction. In the assessment of the seriousness of the threat from soil pollution, account is taken of the soil characteristics, the nature and concentration of the substances or organisms concerned, the possibility of dispersion of those substances or organisms, the purpose served by the soil, and the risk of humans, plants or animals and groundwater abstraction points being exposed<sup>37</sup>.

For the purpose of actually establishing the remediation obligation, the priorities are set on the basis of a *list* drawn up by the Flemish Government *of historically contaminated soils where soil remediation must be carried out*<sup>38</sup>.

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<sup>33</sup> Art. 14, 2006 Soil Decree.

<sup>34</sup> Art. 15, 2006 Soil Decree.

<sup>35</sup> Art. 2(5), 1995 Soil Remediation Decree; Art. 2(7) 2006 Soil Decree.

<sup>36</sup> Art. 30, 1995 Soil Remediation Decree; Art. 2(5), 2006 Soil Decree defines the similar concept of "severe soil contamination" as follows: "soil contamination which constitutes or may constitute a risk of adversely affecting man or the environment. When evaluating the severity of the soil contamination, the following factors shall be taken into account: a) the characteristics, functions, uses and properties of the soil; b) de nature and concentration of the contaminating factors; c) the possibility of dispersion of the contaminating factors."

<sup>37</sup> Art. 2(3), 1995 Soil Remediation Decree. In practice, the OVAM uses its own frame of reference for assessing whether or not there is a serious hazard (Beoordelingskader bodemsanering tekent zich af, *Milieu en Bedrijf*, Newsletter, no. 13, 27 June 1996, Diegem, CED-Samson, Kluwer Editorial). This working method, however, was not considered adequate by the Council of State. According to the Council of State, it does not suffice that it is established in an abstract manner on the basis of an exploratory soil examination and the use of an 'objective frame of reference' that there are serious indications that the pollution constitutes a serious hazard. Only after an individual specific examination has been carried out in accordance with the criteria imposed in Article 2(3) of the 1995 Soil Remediation Decree can it be established that the pollution effectively constitutes a serious hazard (Council of State, no. 73.647, 14 May 1998).

<sup>38</sup> Art. 30(2), 1995 Soil Remediation Decree

Finally, the remediation obligation is established once the operator, proprietor or user of land included in the list of historically contaminated soils to be remediated has actually been *ordered* by the OVAM to carry out the soil remediation<sup>39</sup>.

The person obliged to remediate is the same as the person designated in the case of new soil pollution<sup>40</sup>. However, exemption from the remediation obligation for the so-called ‘innocent owner’ is broader in the case of historical soil pollution<sup>41</sup>. For historical soil pollution, the person obliged to remediate only has to meet the following two conditions in order to be regarded as ‘innocent owner’<sup>42</sup>:

- he has not caused the pollution himself;
- at the time when he became the proprietor or user of the piece of land, he was not or could not be assumed to have been aware of the pollution.

Furthermore, the person obliged to remediate who has acquired historically polluted land before 1 January 1993 – although he was aware or should have been aware of the pollution – is not obliged to proceed to remediation if he is able to prove that he has not caused this pollution and that since acquiring the land concerned he has not used it for professional or industrial purposes<sup>43</sup>.

The *strict liability under the Soil Remediation Decree* does not apply for the costs incurred for the remediation of historical soil pollution. If the person obliged to remediate did not cause the pollution himself, he may try to recover the costs incurred in accordance with the liability rules that applied before the effective date of the 1995 Soil Remediation Decree, i.e. the rules of fault liability or the other legal objective liability rules<sup>44</sup>.

In the case of historical soil pollution, too, the liability of the so-called ‘innocent owner’ is limited: the liability he may incur on the basis of rules applicable prior to the Soil Remediation Decree that establish liability on the basis of the mere ownership or control of the land (e.g. Art. 1384, par. 1, Civil Code) is limited to the amount of the costs required to prevent the soil pollution from spreading further or from constituting an immediate hazard<sup>45</sup>.

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<sup>39</sup> Art. 31(1), 1995 Soil Remediation Decree

<sup>40</sup> See Art. 31(1), 1995 Soil Remediation Decree, where reference is made to Art. 10(1), 1995 Soil Remediation Decree

<sup>41</sup> It should be noted here, too, that although the so-called ‘innocent owner’ is exempt from the remediation obligation, he is *nevertheless liable* for the amount of the costs required to prevent the soil pollution from spreading further or from constituting an immediate hazard (see Art. 32(2), 1995 Soil Remediation Decree).

<sup>42</sup> Art. 31(2), 1995 Soil Remediation Decree

<sup>43</sup> See Art. 31(3), 1995 Soil Remediation Decree

<sup>44</sup> Art. 32(1), 1995 Soil Remediation Decree

<sup>45</sup> Art. 32(2), 1995 Soil Remediation Decree



Largely the same approach is followed by the 2006 Soil Decree<sup>46</sup>, but with some nuances. The remediation objective has been changed. In cases of historical soil contamination, soil remediation shall be aimed at avoiding the soil quality effectively or potentially constituting a risk of adversely affecting man or the environment by using the best available techniques not entailing excessive costs. If the land, in the framework of a provisional draft of a land-use plan, is assigned a different use, soil remediation shall be aimed at avoiding the soil quality effectively or potentially constituting a risk of adversely affecting man or the environment within this future use. If it is not possible to obtain this soil quality by using the best available techniques not entailing excessive costs, land use or town planning restrictions may be imposed if necessary.

### c) Mixed soil pollution

Mixed soil pollution is pollution that *originated partially before and partially after the entry into force of the Soil Remediation Decree* (i.e. partially before and partially after 29 October 1995)<sup>47</sup>.

In the case of mixed soil pollution, *to the extent that it is possible to distinguish between the two types of soil pollution*, the respective provisions for each type of soil pollution must be applied. If it is not possible to distinguish between the two types of soil pollution, the (stricter) rules that apply for the *new soil pollution* must be applied<sup>48</sup>. In the latter case, the 2006 Soil Decree, provides for a different – already criticized - system: if, in the case of mixed soil contamination on a piece of land, no distinction can be made between new soil contamination and historical soil contamination, a division will be made, as accurately as possible, of the soil contamination into a part which in all reasonableness can be considered new soil contamination and a part which in all reasonableness can be considered historical soil contamination. On the basis of a motivated proposal from the soil remediation expert in his soil investigation report, OVAM shall decide on the actual division. The part considered as new soil contamination shall be treated in accordance with the provisions which are applicable for new soil contamination and the part considered as historical soil contamination in accordance with the provisions which are applicable for historical soil contamination. If it proves impossible to carry out a separate descriptive soil investigation or separate soil remediation for each part of the soil contamination by using the best available techniques not entailing excessive costs, only the provisions which apply to the largest part of the soil contamination shall apply<sup>49</sup>.

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<sup>46</sup> Artt. 19- 25, 2006 Soil Decree.

<sup>47</sup> Art. 2(6), 1995 Soil Remediation Decree, Court of Ghent, 16 January 2002, *T.M.R.*, 2002, 348-353

<sup>48</sup> Art. 34, 1995 Soil Remediation Decree

<sup>49</sup> Art. 27, 2006 Soil Decree.

## 5. Remediation of soil pollution from gas oil tanks

Article 54 of the 1995 Soil Remediation Decree (<sup>50</sup>) provides that, as from 1 October 2003, any natural or legal person who in the Flemish Region makes gas oil or heating oil available for consumption must become affiliated to an organization that is accredited by the Flemish Minister for the Environment and that has the purpose of cleaning up any form of pollution that originates at the consumer as a result of the marketing of gas oil for heating.

This provision is worked out in more detail in an Environmental Covenant (<sup>51</sup>). Under this Covenant, the sector concerned undertakes to set up a Fund in the form of a non-profit association. This Fund, which is financed by the users of gas oil, will contribute towards the cost of remediating soil pollution caused by leaking tanks. To this end, the Fund should (i) set up a hotline for the benefit of operators of unsealed tanks, as well as for the benefit of proprietors or actual users of land holding unsealed tanks, (ii) compile a register of all unsealed tanks, (iii) contribute towards the cost of remediating the soil pollution caused by leaking tanks, insofar as the remediation is carried out in accordance with the BAT principle and the costs are limited to the damage that exceeds the amount covered by the insurance policy of the operator, proprietor or actual user, up to a maximum of €250,000 per claim<sup>52</sup>, (iv) provide information to the operators, actual users and/or proprietors of polluted sites about the conditions of contribution by the Fund, and (v) provide for a retrospective effect. In addition, the Fund has a preventive task.

The firms affiliated with the Fund that have the status of official stockist pay a contribution per litre of coloured and marked gas oil made available for consumption. These amounts are always stated on the invoice.

## 6. Remediation of soil pollution from service stations

A cooperation agreement was concluded between the Federal State and the regions for the implementation and financing of the soil remediation of service stations<sup>53</sup>. The Interregional Soil Remediation Commission<sup>54</sup> authorizes, under the conditions that are set by it, the

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<sup>50</sup> Added by Art. 17, Decree of 27 June 2003, *B.S.* 12 September 2003.

<sup>51</sup> Environmental Covenant of 14 February 2003 amending the current environmental covenant for gas oil tanks for heating buildings, *B.S.* 31 March 2003.

<sup>52</sup> Nevertheless, the Fund reserves the right, if the pollution originated after the expiry of a period of 36 months following the signature of the amending covenant, to contribute towards the remediation costs only up to an amount that does not exceed the limit to be set by common consent between the sector and the Region.

<sup>53</sup> Act of 26 August 2003 ratifying the Cooperation Agreement between the Federal State, the Flemish Region, the Walloon Region and the Brussels-Capital Region for the implementation and financing of the soil remediation of service stations, concluded in Brussels on 13 December 2002, *B.S.* 29 September 2003; Decree of 18 July 2003, *B.S.* 19 August 2003.

<sup>54</sup> See Articles 18-21 of the Cooperation Agreement.

establishment of a Fund charged, in case of closure, in the name and on behalf of the operator, actual user or proprietor, with implementing and financing the soil remediation of the polluted site or land in question and, in case of continued operation of the service station, offering advice and assuming the administrative supervision and inspection of the soil remediation of the polluted site or land in question, as well as paying back part of the relevant soil remediation costs<sup>55</sup>.

The Fund is financed by a compulsory contribution, payable by the firms liable for excise duty, in the amount of €0.0052 per litre of petrol for motor vehicles and €0.0032 per litre of diesel for road vehicles<sup>56</sup>. The contribution may be increased under certain conditions<sup>57</sup>. This contribution is settled through the Programme agreement regulating the sale of petroleum products<sup>58</sup>.

Each year, the Fund draws up a remediation programme and submits it for approval to the Interregional Soil Remediation Committee<sup>59</sup>.

The actual financial contribution from the Fund is limited to the soil remediation of sites or land polluted by service stations. The following do not qualify for financial contribution from the Fund: 1° remediation costs for soil pollution caused by an event that occurred after the application for financial contribution; 2° remediation costs for soil pollution not caused by the operation of the service station.

The following do qualify for financial contribution from the Fund: 1° the operator, proprietor or actual user who under the Soil Remediation Decree is obliged to remediate or in the case of remediation by way of transitional measure is or was obliged to remediate; 2° if under the Soil Remediation Decree there is no operator, proprietor or actual user who is obliged to remediate or in the case of remediation by way of transitional measure is or was obliged to remediate, the operator, proprietor or actual user who is willing to remediate, on the understanding that the proprietor who is willing to remediate only qualifies for the financial contribution if there is no operator and the actual user who is willing to remediate only qualifies for the financial contribution if there is no proprietor who is willing to remediate<sup>60</sup>.

The operator, actual user or proprietor who wishes to exercise his right to a financial contribution from the Fund in case of *closure* has, on pain of nullity, a period of 12 months from the date of publication in the official journal of the accreditation of the Fund in which to file an application by registered letter with acknowledgement of receipt<sup>61</sup>.

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<sup>55</sup> B.I.B.C. of 3 March 2004 accrediting the non-profit association BOFAS, J. Bordetlaan 166, B1, 1140 Brussels.

<sup>56</sup> This obligation comes into force on the date of publication of the bylaws of the accredited Fund in the *Belgisch Staatsblad* (Art. 30(2), Cooperation Agreement).

<sup>57</sup> Art. 6, Cooperation Agreement

<sup>58</sup> Violations of this obligation are punishable by the penalties of Article 27 of the Cooperation Agreement.

<sup>59</sup> See Articles 22-26 for the provisions concerning the supervision of the Fund, the suspension and withdrawal of the accreditation, and the administrative fines.

<sup>60</sup> Art. 12, Cooperation Agreement

<sup>61</sup> See Art. 13, Cooperation Agreement, for the conditions of this financial contribution. Art. 14 specifies the information that must be provided.

If the operation of the service station is continued or renewed, the actual contribution from the Fund for the remediation of the polluted site or land, whether or not by way of transitional measure, is in all cases limited to a maximum amount of €62,000 (€37,200 for the remediation of the soil and €37,200 for the remediation of the groundwater, except where the remediation of a surface layer involves extra costs). The operator has, on pain of nullity, a period of 24 months from the date of publication in the official journal of the accreditation of the Fund in which to file an application by registered letter with acknowledgement of receipt<sup>62</sup>.

## 7. Transfer of land

With a view to the protection of prospective acquirers of polluted land, the 1995 Soil Remediation Decree sets forth specific rules for the transfer of land<sup>63</sup>. These rules differ according to whether such transfer agreements concern the transfer of all pieces of land or the transfer of so-called ‘high-risk land’. In addition, there are also specific rules that apply in case of expropriation. Basically the same rules will apply under the 2006 Soil Decree, with two nuances. Firstly, the transfer of some personal rights of use, like leasing and letting of houses, buildings and farm land, will not longer be quailed as “transfer of land” and will thus fall out of the scope of the transfer-regime. Secondly, some particular rules were introduced for the transfer of flats in buildings in co-property on high-risk land.

### a) Rules applicable to agreements for the transfer of all pieces of land

Before an *agreement* is concluded *for the transfer of land*, the transferor must apply for a soil certificate with the OVAM and must inform the acquiring party of the contents thereof. This notification obligation applies for the transfer of all land (both high-risk land and safe land), though only for the purposes of an agreement for the transfer of land. The soil certificate is issued one or two months<sup>64</sup> after the admissible application<sup>65</sup>. The private deed in which the

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<sup>62</sup> See Art. 16, Cooperation Agreement. Art. 17 specifies the information that must be provided.

<sup>63</sup> For an explanation of the transfer rules under the 1995 Soil Remediation Decree, see S. DELODDERE, “Kanttekeningen bij het begrip ‘overdracht van gronden’ zoals gedefinieerd in het decreet van 22 februari 1995 betreffende de bodemsanering”, *T.M.R.* 1996, 80; C. DE WULF, “Het Bodemsaneringsdecreet en de notariële praktijk”, *T. Not.* 1996, 327-435; C. DE WULF, “De overdracht van gronden onder een opschortende voorwaarde en andere formules. Bedenkingen bij de interpretatie van artikel 36, § 1, Bodemsaneringsdecreet”, *T. Not.* 1996, 612-634; I. LIETAER, “Het decreet van 26 mei 1998 houdende wijziging van het bodemsaneringsdecreet”, *W. Akte* 1998, 146-149; D. RYCKBOST, “Bijsturing van het Decreet betreffende de Bodemsanering”, *T.M.R.* 1998, 334-352.

<sup>64</sup> If the application does not concern ‘high-risk land’, the certificate will be issued at the latest *one month* after the admissible application. If the application does concern ‘high-risk’ land, the certificate will be issued at the latest *two months* after the admissible application (Art. 36(1), 1995 Soil Remediation Decree; Art. 29, VLAREBO).

<sup>65</sup> Art. 36(1), 1995 Soil Remediation Decree

transfer of land is laid down must include the content of the soil certificate<sup>66</sup>. The 2006 Soil Decree confirms largely this approach.

## **b) Rules applicable to the transfer of so-called ‘high-risk land’<sup>67</sup>**

Land on which so-called ‘high-risk establishments or activities’<sup>68</sup> are or were located or carried out – so-called ‘high-risk land’ – can only be transferred if an *exploratory soil examination* has been carried out first<sup>69</sup>. This obligation applies for all transfers within the meaning of the 1995 Soil Remediation Decree, i.e. not only for transfers taking place by agreement. To find out whether or not a piece of land is ‘high-risk land’, the so-called ‘municipal inventory’ may be consulted<sup>70</sup>.

The exploratory soil examination is carried out on the initiative and at the expense of the transferor, under the direction of a soil remediation expert. The transferor advises the OVAM of his intention to proceed to the transfer. With this notification he is to include a report on the results of the exploratory soil examination<sup>71</sup>.

Within sixty days of being notified of the transfer, the OVAM demands the transferor to carry out a *descriptive soil examination* if – on the basis of an exploratory soil examination or of the information in the contaminated soils register – the OVAM is of the opinion that there are serious indications that *the land is affected by new soil pollution* which exceeds or threatens to exceed soil remediation standards, or that *the land is affected by historical soil pollution* which constitutes a serious hazard<sup>72</sup>. If it appears from this descriptive soil

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<sup>66</sup> Art. 36(2), 1995 Soil Remediation Decree

<sup>67</sup> These rules also apply in case of closure of the ‘high-risk establishment’ or discontinuation of the ‘high-risk’ activity. The operator must notify the OVAM of his intention to close the establishment or discontinue the activity, along with the report on the exploratory soil examination (Art. 44, 1995 Soil Remediation Decree).

<sup>68</sup> These are establishments and activities that are liable to cause soil pollution, listed in Annex 1 to the VLAREBO.

<sup>69</sup> Art. 37(1), 1995 Soil Remediation Decree. The Constitutional Court considered that Articles 37(1), 38(2) and 39(2) of the 1995 Soil Remediation Decree do not violate Articles 39 and 134 of the Constitution or Art. 6(1), II, 1°, of the BWHI insofar as they subject the transfer of land by the lessor or the lessee to certain conditions (Constitutional Court, no. 61/2004, 31 March 2004, *T.M.R.*, 2004, 321-322, with note by L. KERKSTOEL, “Overdrachtsregeling uit Bodemsaneringsdecreet doorstaat bevoegdheidstoets”).

<sup>70</sup> As from 25 July 2000, each municipality is obliged to draw up an inventory of the pieces of land located in its territory of which it appears that for the purposes of the Decree a high-risk establishment is or was located there or a high-risk activity is or was carried out there (see in this connection Art. 37(4, 5 and 6), 1995 Soil Remediation Decree). This municipal inventory has a purely informative function.

<sup>71</sup> Art. 37(2) and (3), 1995 Soil Remediation Decree

<sup>72</sup> Art. 38(1) and Art. 39(1), 1995 Soil Remediation Decree

examination that the soil remediation standards have been exceeded (in the case of new pollution) or that the soil pollution constitutes a serious hazard (in the case of historical pollution), the transfer may not take place until the transferor has formulated a *soil remediation project*, has undertaken vis-à-vis the OVAM to carry out the soil remediation operations and has provided financial guarantees<sup>73</sup>.

The transferor is not obliged to comply with the demand to carry out a descriptive soil examination if he is able to show that he is *either* the ‘innocent owner’<sup>74</sup>, *or* that he is not obliged to carry out the remediation in accordance with Article 10(1) of the 1995 Soil Remediation Decree.

The above-mentioned obligations of the transferor may, with the transferor’s permission, be fulfilled by the *acquiring party*<sup>75</sup>. The acquiring party or the OVAM may demand the nullification of transfers that were effected in violation of the above-mentioned provisions<sup>76</sup>.

The 2006 Soil Decree confirms this approach, subject to some minor technical adaptations<sup>77</sup>. The New Decree provides now also for the possibility to apply in certain cases a risk management approach. Risk management is the management of the risks related to soil contamination by: a) drawing up a risk management plan; b) implementing risk management measures; c) drawing up follow-up reports. This approach<sup>78</sup> allows to postpone the effective remediation of the soil to a moment in the future that is more appropriate for the person who is obliged to remediate, e.g. when he plans to renew his installations. Meanwhile risk management measures must be taken.

## 8. The soil remediation

According to the definition of soil remediation in Article 2(12) of the 1995 Soil Remediation Decree, the first stage in the remediation process is the *descriptive soil examination*. A descriptive soil examination is carried out to establish the severity of the soil pollution. The purpose of this is to describe the nature, quantity, concentration and origin of the polluting substances or organisms, the possibility of dispersion of these substances or organisms and the hazard of exposure to them for humans, plants, animals, groundwater and surface water, as well as a prognosis of the spontaneous evolution of the contaminated soil<sup>79</sup>.

According to the definition of soil remediation in Article 2(12) of the 1995 Soil Remediation Decree, the second stage in the soil remediation process is the *soil remediation project*. A soil

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<sup>73</sup> Art. 38(2) and Art. 39(2), 1995 Soil Remediation Decree.

<sup>74</sup> The transferor who has been given notice must show that he meets the conditions set forth in Art. 10(2) and Art. 31(2) and (3), 1995 Soil Remediation Decree.

<sup>75</sup> Art. 40(1), 1995 Soil Remediation Decree.

<sup>76</sup> Art. 40(2), 1995 Soil Remediation Decree.

<sup>77</sup> Artt. 29-46, 2006 Soil Decree.

<sup>78</sup> Artt. 83-89, 2006 Soil Decree.

<sup>79</sup> Art. 12(1), 1995 Soil Remediation Decree.

remediation project sets down the way in which the soil remediation is to be carried out<sup>80</sup>. It is established and carried out under the direction of a soil remediation expert<sup>81</sup>.

According to the definition of soil remediation in Article 2(12) of the 1995 Soil Remediation Decree, the third stage in the soil remediation process is that of the *soil remediation operations*. These, too, are carried out under the direction of a soil remediation expert<sup>82</sup>.

In principle, soil remediation is aimed at achieving the *background values* for soil quality as laid down in Annex 6 to the VLAREBO. These values correspond to the level of polluting substances or organisms on or in the soil that is found as normal background level on and in non-contaminated soils with comparable soil characteristics<sup>83</sup>.

If because of the nature of the soil pollution or the characteristics of the contaminated soils it proves impossible to achieve the background values for soil quality through measures *according to the best available techniques and not entailing excessive costs*<sup>84</sup>, the soil remediation must at least be aimed at obtaining a better soil quality than that specified by the applicable soil remediation standards or, if even that is not possible, at preventing the soil quality from constituting a serious hazard<sup>85</sup>.

Should it prove impossible to achieve the prescribed soil quality through measures according to the best available techniques and not entailing excessive costs, then – if necessary – restrictions on use or other precautionary measures may be imposed<sup>86</sup>.

As described before, under the 2006 Soil Decree, the remediation objective will be different in cases of new contaminations and in cases of historical contaminations. The New Decree provides also for more flexibility in the soil sanitation procedures, in allowing to combine e.g. the stage of the descriptive soil examination and the soil remediation project or to apply a simplified procedure in cases of limited contaminations<sup>87</sup> or in cases of an accident<sup>88</sup>

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<sup>80</sup> Art. 15(1), 1995 Soil Remediation Decree

<sup>81</sup> Art. 15(2), 1995 Soil Remediation Decree

<sup>82</sup> Art. 19(1), 1995 Soil Remediation Decree. See also: “Milieubeleidsvereenkomst betreffende de invoering van een milieuzorgsysteem in het kader van bodemsaneringswerken”, *B.S.*, 1 July 2004.

<sup>83</sup> Art. 8(1), 1995 Soil Remediation Decree

<sup>84</sup> Measures according to the best available techniques and not entailing excessive costs are defined in Art. 2(15) of the 1995 Soil Remediation Decree as the best available technical solutions that have been applied successfully in practice and of which the cost price is not unreasonable in view of the results to be achieved in terms of the protection of man and environment – irrespective of the financial resources of the party required to carry out the remediation.

<sup>85</sup> Art. 8(2), 1995 Soil Remediation Decree

<sup>86</sup> Art. 8(3), 1995 Soil Remediation Decree

<sup>87</sup> Art. 56, 2006 Soil Decree.

<sup>88</sup> Art. 74-82, 2006 Soil Decree.

## 9. Restrictions on use and precautionary measures

If the Flemish Government is of the opinion that the soil pollution precludes the use of the contaminated soils in accordance with their land-use type – according to the area development plans or otherwise (e.g. use for certain crops) -, it may impose any appropriate *restrictions on use* as recommended by the OVAM, after consultation with the proprietor and the user of the contaminated soils.

If the OVAM is of the opinion that *other precautionary measures* are required than *restrictions on use* to protect man and the environment against the dangers of soil pollution in anticipation of the soil remediation operations (e.g. putting up warning notices or fences), it may impose appropriate precautionary measures after consultation with the proprietor and the user of the contaminated soils.

The restrictions on use or precautionary measures apply for a specific term. They are to be adapted or lifted after the soil remediation has been carried out or when they are no longer required.

Interested parties may request the Flemish Government to alter or lift the restrictions on use or the precautionary measures by means of a substantiated petition.

Orders involving the imposition, adaptation or lifting of restrictions on use or precautionary measures are to be recorded in the mortgage registers<sup>89</sup>.

## 10. Monitoring, injunctions, penalties<sup>90</sup>

### a) Monitoring

The OVAM supervises the soil remediation operations and, in general, the observance of the provisions of this decree and its implementing decisions<sup>91</sup>.

After the completion of the soil remediation operations a *final evaluative assessment* is carried out by a recognised soil remediation expert. In this assessment, the results of the soil remediation operations are recorded. On the basis of the results of this assessment, the OVAM issues a statement in which the results of the soil remediation operations are recorded<sup>92</sup>.

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<sup>89</sup> Art. 5, 1995 Soil Remediation Decree; K. VANLEDE, “Eigendomsbeperkende maatregelen in het kader van het bodemsaneringsdecreet”, in K. DEKETELAERE (ed.), *Het decreet betreffende de Bodemsanering*, LeuVeM, Milieurechtstandpunten no. 7, Bruges, Die Keure, 1995, 82-96.

<sup>90</sup> See M. FAURE, “De handhaving van het bodemsaneringsdecreet via toezicht, dwangmaatregelen en strafsancities”, in K. DEKETELAERE (ed.), *Het decreet betreffende de Bodemsanering*, LeuVeM, Milieurechtstandpunten no. 7, Bruges, Die Keure, 1995, 215-252; M. DEKETELAERE, “De gewijzigde Vlaamse bodemsaneringswetgeving: een stand van zaken”, in K. DEKETELAERE and M. DEKETELAERE (eds.), *Jaarboek milieurecht 1998*, LeuVeM, Milieurechtstandpunten no. 13, Bruges, Die Keure, 1999, 283-286.

<sup>91</sup> Art. 21(1), 1995 Soil Remediation Decree

<sup>92</sup> Art. 21(3), 1995 Soil Remediation Decree



## **b) Injunctions**

The OVAM is authorized to instruct proprietors and users of land where an exploratory or descriptive soil examination or where soil remediation operations or other measures provided for in this decree must be carried out, to allow persons appointed by the OVAM access to this land in order for these persons to perform the required tasks on site. In the performance of their duties the OVAM officials can call upon the assistance of the police services<sup>93</sup>. These persons may gain access to parts or appurtenances of residences only with the prior written authorization from the presiding judge of the court of first instance<sup>94</sup>.

The proprietor and the user of the land are to be informed of the soil remediation operations by the person who is to carry out these soil remediation operations at least sixty days beforehand by registered letter with recorded delivery. At least eight days before the soil remediation operations, a sworn surveyor is to draw up a site description of the location where the remediation work will be performed. Eight days beforehand, the proprietor and the user are invited by registered letter with recorded delivery to attend the drawing up of this site description. They may have any remarks or observations recorded in the official report of the site description<sup>95</sup>.

## **c) Penalties**

Shall be punished by imprisonment of between one month and five years and/or a fine of between 100 and 10,000,000 euros (increased with the legal surcharge: x 5.5): 1° the person who fails to meet the obligation to carry out an exploratory or descriptive soil examination; 2° the person who fails to meet the obligation to carry out the soil remediation imposed by, or by virtue of, the Soil Remediation Decree; 3° the person who fails to observe the imposed restrictions on use, precautions and safety measures; 4° the person who impedes the supervision and monitoring established by, or by virtue of, the Soil Remediation Decree; 5° the person who fails to act upon any injunctions imposed.

## **11. Conclusion**

We can generally say that the legislation on soil remediation is currently well-established in the Flemish Region of Belgium and is generally well accepted. Although in certain individual cases the law may have far-reaching (financial) consequences and certain parts of the

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<sup>93</sup> Art. 22(1), 1995 Soil Remediation Decree

<sup>94</sup> Art. 22(3), 1995 Soil Remediation Decree

<sup>95</sup> Art. 22(4) and (5), 1995 Soil Remediation Decree. See also H. KEERSMAEKERS, "Milieuhandhaving. Vaststelling van inbreuken en dwangmaatregelen onder het Bodemsaneringsdecreet", *NjW*, 2003, 1210-1217.

regulations come in for criticism, the basic principles are no longer really called into question. The 2006 Soil Decree will take away some of the grounds for criticism.

An important new instrument could be in the future the establishment of so-called *soil remediation organisations*, a type of sectoral organisation inspired on the earlier presented BOFAS (see point 6 above). The 2006 Soil Decree provides now for a general legal framework for that type of organisations. A soil remediation organisation is a legal person whose mission is to prevent and manage soil contamination, as well as guide and stimulate the remediation of soil contamination which has resulted from some risk activities. A soil remediation organisation can be accredited by the Flemish Government on the condition that it was co-founded by one or more organisations that jointly represent at least 60% of all natural persons or legal persons carrying out the activity for which the soil remediation organisation was founded. The Flemish Government shall determine the procedure for the accreditation of soil remediation organisations. It shall also determine the conditions for the use of the accreditation and it may lay down additional conditions for accreditation<sup>96</sup>. An accredited soil remediation organisation has at least the following tasks with regard to the soil contamination resulting from the activity for which it was founded: 1° drawing up a sectoral contamination prevention and contamination management plan in; 2° stimulating and optimising investigation and remediation concepts; 3° giving advice regarding prevention, management, soil investigations and soil remediation of soil contamination, as well as regarding the preparation and follow-up of preventive measures, to the persons who, for the compliance with their obligations contract the accredited soil remediation organisation<sup>97</sup>. The person, who is under the obligation to remediate soil contamination which is the result of an activity for which the accredited soil remediation organisation was founded, may, at least for the historical soil contamination resulting from that activity, transfer the obligation to carry out a descriptive soil investigation or soil remediation to that accredited soil remediation organisation, on the condition that he concludes an agreement with that soil remediation organisation, according to the conditions laid down by the Flemish Government. As a consequence of the said agreement, the obligation of the descriptive soil investigation or soil remediation of the contaminated soil as contained in the agreement shall pass on to the accredited soil remediation organisation. If the agreement is terminated, the obligation of the descriptive soil investigation or soil remediation shall return. The accredited soil remediation organisation shall carry out the remediations for which it is responsible in compliance with the terms contained in the remediation schedule which shall be presented to OVAM for approval on a yearly basis. The said remediation schedule shall contain at least the list and priority of all descriptive soil investigations and soil remediations for which the accredited soil remediation organisation has acquired an obligation<sup>98</sup>. The Flemish Government may grant subsidies to an accredited soil remediation organisation for the partial financing of the tasks related to historical soil contamination or soil contamination which is to be regarded as historical, caused by the activity for which the accredited soil remediation organisation was founded. In cases of mixed soil contamination, the subsidy granted to the accredited soil remediation organisation may only be used for the partial financing of the tasks related to the share of the soil contamination which can be regarded as historical<sup>99</sup>.

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<sup>96</sup> Art. 95, 2006 Soil Decree.

<sup>97</sup> Art. 96, 2006 Soil Decree.

<sup>98</sup> Art. 97, 2006 Soil Decree.

<sup>99</sup> Art. 98, 2006 Soil Decree.

Furthermore, the Flemish Soil Sanitation Legislation produces significant results in terms of the effective remediation of polluted land. The number of soil remediation operations is expected to increase substantially once the financing mechanisms for the remediation of soil pollution from private heating oil tanks and service stations become fully operational.

The total number of high-risk sites in Flanders is estimated at more than 76,000. By the end of 2002, 22% of these were examined for contamination on the basis of an exploratory soil examination. This yielded 13,305 sites that are known to be contaminated. Of those sites, 25% are polluted with heavy metals, 17% with mineral oil and 16% with PACs. For nearly half of these sites (6,528), the soil remediation procedure has to be continued. For 3,752 or 58% of the sites, the first stage of the soil remediation procedure has been completed with the performance of a descriptive soil examination. Between 1996 and 2002, it turned out that a soil remediation project had to be formulated for 1,795 sites. A certificate of conformity was issued for such a soil remediation project for 1,109 sites at a total cost of 443 million euros. 603 remediation operations were actually started up and 135 remediation operations were completed. These results appear to meet the planned objective of having at least 23% of the remediation operations of sites with historical soil pollution started up by 2007. The total remediation cost is estimated at 7 billion euros<sup>100</sup>. The Soil Remediation Fund for Service Stations (BOFAS) announced that the sites of 1,150 former service stations in Belgium will be remediated.

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<sup>100</sup> V. DRIES et al., “Kwaliteit bodem: 2.20a verontreiniging” in M. VAN STEERTEGEM (ed.), *MIRA-T 2003. Milieu- en natuurrapport Vlaanderen: thema's*, Leuven, LannooCampus, 2003, 335-342.