

Regulation of the Minister for Housing, Spatial Planning and the Environment and the State Secretary for Transport, Public Works and Water Management of .. 2009, no. DGM/K&K 2009, amending the Soil Quality Regulation

The Minister for Housing, Spatial Planning and the Environment and the State Secretary for Transport, Public Works and Water Management,  
Acting in agreement with the Minister for Agriculture, Nature and Food Quality;

Having regard to Articles 1, 25, 26, paragraphs 1 and 2, 28, paragraphs 1, 2 and 4, 30, paragraph 1, 31, paragraphs 2 and 3, 34, paragraphs 1 and 3, 37, paragraph 2, 38, paragraphs 1, 3, 4 and 5, 39, 40, paragraph 1, 41, 47, 55, paragraphs 2 and 3, 57, paragraph 1, 60, paragraph 1, 63, paragraphs 1, 2 and 3, and 64, paragraphs 1 and 2 of the Soil Quality Decree;

Decree:

## **Article I**

### **A**

Article 3.9.2 shall be amended as follows:

1. In paragraph 3, after “plastic film” shall be inserted: with a layer thickness of at least 0.5 mm and a tolerance on this thickness of 5 %.
2. In paragraph 7, subparagraph a shall be amended to read:
  - a. a permeable covering layer on the seal, which consists of a layer of sand with a thickness of at least 0.25 metres and a permeability coefficient of  $1.4 \times 10^{-4}$  m/s, or a drainage provision or system equivalent to this.

### **B**

Article 4.2.2 shall be amended as follows:

1. In paragraph 2, the last sentence shall be deleted.
2. Paragraph 6 shall be amended to read:
  6. The earth or dredging sludge shall exceed the maximum values for emission defined in Tables 1 and 2 of Annex B, if, for one or more substances, the measured emission of a representative sample is higher than the applicable maximum value(s).
3. A paragraph 7 shall be added, reading:
  7. In establishing whether the limits defined in this Article have been exceeded, the rules in Annex G, section IV shall be applied.

### **C**

A paragraph 4 shall be added to Article 4.3.3, reading:

4. Contrary to paragraph 1, sub b, samples which are situated under a surfacing layer or a deep soil layer may be taken according to VKB protocol 1001.

### **D**

Article 4.3.4, paragraph 5, shall be amended to read:

5. In relation to the performance of soil testing as referred to in paragraphs 1 and 3, testing of the quality of the ground water and the quality of the earth of the receiving soil, which is situated at 0.5 metres and deeper under the surface, may be omitted.

E

Annex B shall be amended as follows:

1. Table 1 shall be amended as follows:

a. After “chlordan (sum)”, “a-endosulphan”, “heptachlor” and “heptachlor epoxide (sum)”, the values given in the column “Maximum values for industrial soil function class” shall be replaced with: 0.1.

b. After “acrylonitrile” and “formaldehyde”, the values given in the column “Background values”, in the column “Maximum values for residential soil function class” and in the column “Maximum values for industrial soil function class” shall be replaced with: 0.1.

2. The remark below Table 1 shall be amended to read:

For establishing that the limits have been exceeded, and the handling of report limits and determination limits, Annex G, section IV is applicable.

3. Table 2 shall be amended as follows:

a. After “chlordan (sum)”, “a-endosulphan”, “heptachlor” and “heptachlor epoxide (sum)”, the values given in the column “Maximum values for industrial soil function class” shall be replaced with: 0.1.

b. After “acrylonitrile” and “formaldehyde”, the values given in the column “Background values” and in the column “Maximum values for industrial soil function class” shall be replaced with: 0.1.

4. The remark below Table 2 shall be amended to read:

For establishing that the limits have been exceeded, and the handling of report limits and determination limits, Annex G, section IV is applicable.

F

Annex C shall be amended as follows:

1. Category 2 in the column “Certification and accreditation guidelines” shall be amended as follows:

a. “BRL 0203 Cantilevered system floors of pre-manufactured heavy concrete, version of 02-02-2006” shall be replaced by: BRL 0203 Cantilevered system floors of pre-manufactured heavy concrete, version of 01-06-2006, with amending sheet dated 22-06-2008.

b. “BRL 1010 Ceramic tiles, version of 18-05-2000, with amending sheet dated 18-03-2004” shall be replaced with: BRL 1010 Ceramic tiles, version of 07-08-2008.

c. “BRL 1104 Industrial flooring boards made of structural concrete, version of 03-06-2008” shall be replaced with: BRL 1104 Industrial flooring boards made of structural concrete, version of 10-11-2008.

d. “BRL 1511/2 Channel-shaped roofing systems. Specific provisions for roofing systems on the basis of reinforced roof channels with a top layer made of SBS-modified bitumen, version

of 1-9-2004, with amending sheet dated 22-12-2005” shall be replaced with: BRL 1511/2 Channel-shaped roofing systems and roof channels part 2: Specific provisions for reinforced roof channels based on (modified) bitumen, version of 1-9-2005, with amending sheet dated 15-09-2008.

e. “BRL 1511/3 Channel-shaped roofing systems. Specific provisions for roofing systems on the basis of reinforced roof channels with a top layer made of APP-modified bitumen, version of 25-10-2005” shall be replaced with: BRL 1511/3 Channel-shaped roofing systems and roof channels part 3: Specific provisions for reinforced roof channels based on reinforced plastic/bitumen compounds, version of 22-12-2005, with amending sheet dated 15-09-2008.

f. “BRL 1712 Hollow piles made of steel fibre concrete, version of 01-03-2002, with amending sheet dated 30-01-2006” shall be replaced with: BRL 1712 Hollow piles made of steel fibre concrete, version of 10-11-2008.

g. “BRL 1721 Concrete pile caps, version of 01-01-2003, with amending sheet dated 30-01-2006” shall be replaced with: BRL 1721 Concrete pile caps, version of 10-11-2008.

h. “BRL 2352 Concrete piles, version of 15-03-2002, with amending sheet dated 12-01-2006” shall be replaced with: BRL 2352 Concrete piles, version of 10-11-2008.

i. “BRL 2360 Road brick, version of 01-08-2005, with amending sheet dated 30-05-2006” shall be replaced with: BRL 2360 Road brick, version of 15-08-2008.

j. “BRL 2368 Non-structural concrete products, version of 07-07-2003, with amending sheet dated 30-1-2006” shall be replaced with: BRL 2368 Non-structural concrete products, version of 07-07-2003, with amending sheet dated 26-06-2008.

k. “BRL 2811 Ferrocement products, version of 1-9-2004, with amending sheet dated 7-2-2006” shall be replaced with: BRL 2811 Ferrocement products, version of 1-9-2004, with amending sheet dated 26-06-2006.

l. “BRL 2813 Structural components made of concrete, version of 15-05-2000, with amending sheet dated 30-06-2003” shall be replaced with: BRL 2813 Structural components made of concrete, version of 01-06-2006, with amending sheet dated 26-06-2006.

m. “BRL 2817 Cement-bound spacers, version of 01-01-2002, with amending sheet dated 30-01-2006” shall be replaced with: BRL 2817 Cement-bonded spacers, version of 01-01-2002, with amending sheet dated 26-06-2008.

n. “BRL 4101/9 Part 9: Flat fibre cement panels for outer wall cladding, version of 1-6-2005” shall be replaced with: BRL 4101/9 Part 9: Flat fibre cement panels for outer wall cladding, version of 01-07-2006, with amending sheet dated 22-07-2008.

o. “BRL 5076 Components made of polymer concrete in contact with rainwater, ground water and surface water (provisionally rejected), version of 03-06-2008” shall be deleted.

p. “BRL 52230 Ceramic tubes for drainage, version of 16-09-2003” shall be replaced with: BRL 52230 Ceramic pipes for drainage, version of 22-10-2008.

q. “BRL 5252 Concrete grease traps and sludge collecting pits, version of 13-06-2008” shall be replaced with: BRL 5252 Concrete grease traps and sludge collecting pits, version of 29-09-2005, with amending sheet dated 13-06-2008.

r. “BRL 9205 Culvert components made of reinforced concrete, version of 01-07-1995, with amending sheet dated 31-01-2006” shall be replaced with: BRL 9205 Culvert components made of reinforced concrete, version of 01-07-1995, with amending sheet dated 26-06-2008.

s. “BRL 9327 Environmental hygiene quality of bituminous sealing materials for use in water-resistance and water sealing systems, version of 25-03-2008” shall be replaced with: BRL 9327 Environmental hygiene quality of bituminous sealing materials for use in water-resistant and water sealing systems, version of 15-09-2008.

2. Category 3 in the column “Certification and accreditation guidelines” shall be amended to read:

NEN-EN-ISO/IEC 17025

AP 04-A, Accreditation programme for inspection of consignments of earth, building materials and granular waste, Section: General, version 5, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 4.

AP 04-V, Accreditation programme for inspection of consignments of earth, building materials and granular waste, section Sample pre-treatment, version 6, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 5.

AP 04-SG, Accreditation programme for inspection of consignments of earth, building materials and granular waste, section Earth composition, version 8, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 7.

AP 04-SB, Accreditation programme for inspection of consignments of earth, building materials and granular waste, section Composition of building materials (not being earth or waste), version 5, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 4.

AP 04-U, Accreditation programme for inspection of consignments of earth, building materials and granular waste, section Leaching investigation, version 5, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 4.

AP 04-E, Accreditation programme for inspection of consignments of earth, building materials and granular waste, section Analysis of eluates, version 5, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 4.

3. Category 4 in the column “Certification and accreditation guidelines” shall be amended to read:

NEN-EN-ISO/IEC 17025

AS 3000, Accreditation scheme for Laboratory analyses for earth, water bottom and ground water investigation, version 3, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply version 2, laid down on 26 September 2006.

4. Category 4 in the Column “Subsections” shall be amended to read:

SIKB protocol 3001, Preservation methods and preservation timescales for environmental samples, version 2.0, laid down on 18 January 2007.

SIKB earth protocols 3010 to 3090 inclusive, Laboratory analyses for earth, water bottom and ground water investigation, version 4, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply versions 3 of these protocols, laid down on 26 September 2006.

SIKB ground water protocols 3110 to 3190 inclusive, Laboratory analyses for earth, water bottom and ground water investigation, version 3, laid down on 1 October 2008. Until 1 October 2009 it is permitted to apply versions 2 of these protocols, laid down on 27 September 2007.

SIKB water bottom protocols 3210 to 3290 inclusive, Laboratory analyses for earth, water bottom and ground water investigation, version 1, laid down on 25 June 2008.

Transitional regulations for SIKB protocols 3210, 3220, 3230, 3240, 3250, 3260 and 3270, Laboratory analyses for earth, ground water and water bottom investigation, version 3, dated 16 April 2008.

5. In category 5, in the column “Subsections”, “SIKB protocol 7511, Sand separation, maturation and land farming of dredging sludge, version 2.0, laid down on 28 September 2005” shall be replaced with: SIKB protocol 7511, Land farming, dewatering, maturation and sand separation of dredging spoil, version 3.0, laid down on 1 October 2008.

6. In category 12, in the column “Subsections”, after the description of “VKB protocol 2003” shall be inserted:

VKB protocol 2006, Mechanical drilling, version 1, laid down on 25 June 2008 (the obligation to work in conformity with this protocol shall enter into force on 1 July 2010).

## G

Annex G shall be amended as follows:

1. The title of the Annex shall be amended to read:

Annex G associated with Articles 4.2.1 and 4.2.2.

2. After the title of the Annex shall be deleted: Formulae for soil type correction.

3. In section I, “in Annex A to the Circular on target values and intervention values for soil decontamination” shall be replaced with: in Annex 1 to the Circular on soil decontamination 2006, as amended on 1 October 2008.

4. In section II, under the heading “PAHs”, “Between 10 % and 29 % organic matter content” shall be replaced with: Between 10 % and 30 % organic matter content.

5. In section III, below the formula for soil type correction, the definition of % organic matter content shall be replaced with: measured percentage of organic matter in the soil, earth or dredging sludge to be assessed. The organic matter content for salt dredging spoil may also be calculated from the percentage of carbon x 1.724.

6. In section III under table 5 shall be inserted: The minimum and maximum values as included in Tables 4 and 5 should not be used in the calculation of the msPAF for the assessment of dredging spoil, which in conformity with Article 35, item f, of the Decree, is spread over the adjoining land.

7. After section III, a section shall be added, reading:

IV. Rules to establish whether the limits referred to in Article 4.2.2 have been exceeded

The Background values and Maximum values may be lower than the required reporting limit in AS3000 or the required detection limit in AP04. This means that these values are stricter than the level at which dependable measurements can (routinely) be made. The laboratories must at least comply with the required reporting limit in AS3000 or the detection limit in AP04. The imposition of a stricter reporting limit or detection limit respectively is also possible, provided this is established in accordance with AS3000 or AP04 respectively. For a result < required AS3000 reporting limit or < required AP04 detection limit, the assessor may assume that the quality of the earth, dredging spoil, soil, or soil under surface water complies with the applicable limits. If a laboratory indicates a value < an increased reporting limit (one that is above the required AS3000 reporting limit or the required AP04 detection limit), then that increased reporting limit should be multiplied by 0.7. The value thus obtained must then be compared against the applicable limits. Such an increased reporting limit may occur in the analysis of a very heavily contaminated sample, or a sample of an anomalous composition.

If the laboratory reports a measured content (without < symbol), this content must be assessed against the applicable limits, even if this content is lower than the required AS3000 reporting limit or the required AP04 detection limit.

In calculating a sum value, the arithmetic average and a percentile value, the results for the individual components must be < required AS3000 reporting limit or < required AP04 detection limit multiplied by 0.7.

If all individual values contributing to the calculated value have the result < required AS3000 reporting limit or < required AP04 detection limit, the assessor may assume that the quality of the earth, dredging spoil, soil or soil under surface water complies with the applicable Background values or Maximum values.

If one or more individual components have the result < an increased reporting limit, or there are one or more measured contents (without < symbol), then the calculated value must be tested against the applicable Background values or Maximum values. This rule also applies if the measured contents are lower than the required AS3000 reporting limit or the required AP04 detection limit.

H

Annex L shall be amended as follows:

1. In the Table, in the column “Component”, shall be added after “Acrylonitrile” and “Formaldehyde”:<sup>3</sup>

2. Under the Table, after footnote 2, a footnote shall be added, reading:

<sup>3</sup> The determination limits for acrylonitrile and formaldehyde are equal to or greater than the limits for these substances. The Background values and Maximum values in Annex B are bounded at the level of the indicative intervention value.

## **Article II**

This Regulation shall enter into force from 1 April 2009.

This Regulation shall be published together with the Explanatory Memorandum in the Government Gazette.

The Hague,

The Minister for Housing, Spatial Planning and the Environment

The State Secretary for Transport, Public Works and Water Management,

## **EXPLANATORY MEMORANDUM**

### Section A

These amendments concern clarifications in order to prevent as far as possible interpretational differences about the provisions to be implemented. It has recently become apparent that much discussion is taking place about this between the users and the competent authority.

The minimum thickness of 0.5 mm is based on technical investigation from which it is apparent that plastic film of this thickness is equivalent as protection to a diffusion-resistant layer of bitumen emulsion at a quantity of 4 kg/m<sup>2</sup>. In this investigation it was also demonstrated that 0.5 mm film is sufficiently proof against “punch-through”. If thinner films, which are not proof against “punch-through”, were used, additional protection would be necessary, for example in the form of a geo-textile (non-woven).

The permitted deviation of 5% in the thickness of the plastic film to be used is to do with the tolerance in the film production process. Based on the new paragraph 3 of Article 3.9.2 it is permitted to use film, which complies with the 5% tolerance in the manufacturing process, with a thickness of 0.475 mm.

In Article 3.9.2, paragraph 7, it is stipulated that a drainage provision must be installed on the insulation provision. Because no requirements are imposed on the insulation provision, the competent authority does not know how this must be assessed. In order to make an assessment by the competent authority possible, the amendment to paragraph 7 stipulates the inclusion of a minimum requirement on the drainage provision. This minimum requirement may be departed from if the equivalence of another provision or system, such as a drainage mat or drainage system, can be demonstrated.

The permeability of the covering layer is based on the generally accepted minimum requirement for this in the CROW standard for drainage sand. The layer thickness of 0.25 m is sufficient, according to experts, to prevent the “clogging up” of the drainage layer by physical contamination, and to achieve a lifetime of 100 years.

### Section B

The declaration of applicability of the rules in paragraphs 4 and 5 of Article 4.2.2, on the distribution of dredging spoil in salt surface water, leads to an unintentional tightening up in comparison with the salt dredging test as it was previously implemented under the Building Materials (Soil and Surface Waters Protection) Decree (BMD). Moreover, the rules in paragraphs 4 and 5 are not relevant to this activity. By deleting the last sentence from Article 4.2.2, paragraph 2, this disparity is rectified.

With the amendment of Article 4.2.2, paragraph 6, the rule which applied under the BMD regime is returned to for determination of when the maximum limits are exceeded. It was never the intention to allow this rule to lapse. Paragraph 6 also concerned an insufficiency. When a consignment of earth or dredging spoil exceeds the maximum values for emission, for one or more substances, leaching investigation via a column test on at least one representative sample is necessary.

It is stipulated with the new paragraph 7 that in establishing whether the limits have been exceeded, the rules in Annex G, section IV should be applied. For an explanation of that part of Annex G, see below under section H. At the same time, reference is made to Annex G, section IV, in the remarks under Tables 1 and 2 in Annex B.

### Section C

Under the BMD regime, a non-standard sampling strategy could be applied for samples which were situated under a surfacing layer or a deep soil layer. By mistake, this exception was not included in the Soil Quality Regulation. With the additional paragraph 4, this deficiency is rectified. In making use of this sample-taking strategy, no certainty factor is stipulated for the assessment of the results against the application rules.

### Section D

When using earth and dredging spoil, only the quality of the soil layer situated in the existing contact zone is relevant. The quality of the soil underneath (subsoil), which is not normally disturbed by activities such as ploughing, turning over, and raking, is not relevant. For the existing contact zone, a standard thickness of 0.5 m is employed, in the context of NEN 5740:2007. The subsoil is thus situated at a depth 0.5 m and more under the surface. This Regulation links to this standard in NEN 5740:2007.

### Section E

It has become apparent in practice that the standards for the organochloride pesticides (OCPs) chlordane, alpha-endosulphan, heptachlor and heptachlor epoxide lead to problems in re-use of soil and dredging spoil. The Maximum values for industrial soil function class for these substances were stipulated at the level of the Background value. After analysis of the problem, the conclusion was reached that the standard definition for these substances was not correctly translated from the Building Materials Decree to the Soil Quality Regulation. Moreover, it became apparent that the Maximum values for industrial soil function for these substances were not in proportion to the Maximum values for industrial soil function for the other OCPs listed in Tables 1 and 2. It was thus decided to set the Maximum values for industrial soil function for the four OCPs at 0.1 mg/kg dry material (for ordinary soil).

With respect to the alteration of the values for acrylonitrile and formaldehyde, it should be noted that modification is necessary due to the link-up with the Circular on soil decontamination 2006, as amended on 1 October 2008. It is undesirable to have different values for the same substances in this Circular and the Soil Quality Regulation.

### Section F

New versions of various BRLs (assessment guidelines) and protocols have come out. With these amendments to Annex C, reference is made to the most recent versions.

### Section G

Modification to the title of the Annex is necessary due to the addition of Section IV to Annex G.

With the amendment to Section 3, reference is now made to the correct Circular.

The amendments implemented by means of section 4 to 6 inclusive concern rectification of a number of deficiencies in Annex G. It was apparent that rules which already existed under the Building Materials (Soil and Surface Waters Protection) Decree were not properly adopted in the Soil Quality Regulation. For practical implementation, these deficiencies led to confusion. Moreover, the assessment programmes did not connect with the text of the Regulation. msPAF is a risk-oriented assessment to determine whether dredging spoil may or may not be distributed. In place of testing on quantities, the risks of the effect of a group of substances on the eco-system are estimated (Multi Substance Potentially Affected Fraction). In practice, the modified text is already worked to, so that these amendments have no consequences here.



The inclusion of a new section in Annex G (section 7) is necessary because it has become apparent in practice that the assessment rules for analysis results, in which the required AS3000 reporting limit or AP04 detection limit exceeds a value (particularly the background values), lead to problems in the re-use of soil and dredging spoil. This situation occurs in situations including the testing for polychlorobiphenyls (PCBs) and organochloride pesticides (OCPs) which have been included since 1 July 2008 in a number of standard substance packages for investigating soil on land and under water in regional waters, and for the inspection of soil and dredging spoil from regional waters, or for the investigation of the water bottom in national waters and the inspection of dredging spoil in national waters. Through the current assessment rules, in some situations, totally non-suspect and unstressed soil and water bottoms are classified as quality class Residential, Industry, class A or B. For this situation an amendment to the assessment rules has taken place.

#### Section H

This addition to Annex L is intended to clarify the stipulated determination limits.

#### **Effects**

These amendments concern only rectification of deficiencies and impose no new or different obligations on companies. Neither are any alterations implemented to existing obligations. This Regulation therefore has no effects on commerce. This Regulation does not have any consequences for the extent of administrative burdens either. For these reasons, this Regulation was not submitted to the Advisory Board on Administrative Burdens (Actal) for assessment.

Moreover, the amendments have no effects for the environment. For the implementability and enforceability there are positive consequences, because this Regulation becomes clearer on a number of points.

#### **Notification**

The draft Regulation was notified to the Commission of the European Communities on (PM date) (notification number ...), pursuant to Article 8, paragraph 1 of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services (OJ L 217). Reactions/No reactions (PM) to this draft Regulation have been received.

The Minister for Housing,  
Spatial Planning and the Environment,

The State Secretary for Transport, Public Works and Water Management,