

MINING REGULATION OF THE NETHERLANDS

of 1ST JANUARY 2003 (updated up to 1st September 2018)

(UNOFFICIAL TRANSLATION PREPARED FOR DORHOUT ADVOCATEN AT GRONINGEN BY J.L. DEN DULK)

Notes for guidance:

1. The attached translation aims to assist professionals that are not familiar with the Netherlands language to provide access to the contents of the Mining Regulation in general; it should be emphasized that the details of many subjects covered by the Mining Legislation in general are - or are still to be - laid down e.g. in ministerial decrees and orders in council that may not have been translated (yet);
2. Neither the author nor Dorhout Advocaten N.V. can - in spite of efforts to provide a translation that is as closely as possible a reflection of the original text of the Mining Regulation in the Netherlands language - accept any responsibility and/or liability for incorrections in and/or interpretations based on this translation;
3. The names and the titles of certain Netherlands governmental institutions, of various related acts, decrees and regulations have not been translated. The quite detailed parts of Appendices 4 (anchoring areas) and 5 (restricted areas) to the Mining Regulation have not been incorporated. Reference is made to the official publication of the Mining Regulation (on: nlog.nl).

I am very grateful to Margriet van Peursen (NOGEPa) for the careful editing of this document.



Joost den Dulk

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Please advise any inconsistencies etc you may perceive to: jldendulk@gmail.com

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MINING REGULATION

Regulation of the Staatssecretaris of Economic Affairs of 16 December 2002/nr WJZ 02063603 regulating the implementation of the Mijnbouwbesluit

The Staatssecretaris of Economic Affairs

Having regard to the Agreement for Cooperation in the fighting of pollution of the North Sea by oil and other harmful substances concluded in Bonn on 13 September 1983 (Collection of treaties and conventions 1983, 159; latest collection of treaties and conventions 1990, 100) and the Articles 9.3, 11.4, 11.5, 14, 32, 40.6, 63.4, 122, 123.2 of the Mijnbouwwet and Articles 4.4, 7.1, 12.2, 17.1, 18.1, 19.1, 20.1, 23.2, 29, 44.1, 45.1, 51.5, 51.6, 52.6, 52.8, 53.3, 66.1, 73, 77, 80.2, 80.4, 81.3, 82.4, 83.1, 83.3, 93.3, 114 and 144 of the Mijnbouwbesluit;

Decides:

CHAPTER 1. GENERAL PROVISIONS, LICENSES AND EXEMPTIONS AND OTHER STIPULATIONS

§ 1.1 General stipulations

Article 1.1.1

In this regulation the following shall mean:

- a. Decree: Mijnbouwbesluit;
- b. Minister: Minister van Economische Zaken;
- c. DIN: the norm issued by the Deutsche Institut für Normalisierung;
- d. NEN: standard issued by the Stichting Nederlands Normalisatie Instituut;
- e. Hydraulic unit: an hydraulically connected compartment of pores where pressure transmission can be measured with technical means and that is delimited by flow barriers such as interruptions, salt caverns, lithological delimitations or by conically shaped extensions or faults
- f. Directive nr. 2009/31/EG: directive nr. 2009/31/EG of the European Parliament and the Council of 23 April 2009 concerning the geological storage of carbon dioxide and to amend Directive 85/337/EEG of the Council, the Directives 2000/60/EG, 2001/80/EG, 2004/35/EG, 2006/12/EG and 2008/1/EG and ordinance (EG) nr. 1013/2006 (PbEG L 140) of the European Parliament en the Council.
- g. ETRS89 system: European Terrestrial Reference System 1989 as meant in Attachment II under 1.2 of Directive (EC) nr 1089/2010 of the Commission of 23 November 2010 for the implementation of Guideline 2007/2/EG of the European Parliament and the Council concerning the interoperability of collections of data of spacial information and of services with respect to spacial information (PbEU 2010, L323);
- h. EC-Directive registration, evaluation and authorization of chemical substances; Directive (EC) nr 1907/2006 of the European Parliament and the Council of 18 December 2006 on the registration and assessment of and the authorization and restrictions with respect to chemical substances (REACH), for the establishment of a European Agency for chemical substances, incorporating amendment of the Guideline 1999/45/EG and withdrawal of Directive (EC) nr 793/93 of the Council and Directive (EC) nr 93/105/EC 1488/94 of the Commission and the Guideline 76/769/EC of the

- Council and the Guideline 91/155/EC, 93/67/EC, 93/105/EC and 2000/21 of the Commission (PbEU 2007, L 136);
- i. EC-Directive categorization, labelling and packaging of substances and mixtures 2008 concerning the Directive (EC) nr 1272/2008 of the European Parliament and the Council of 16 December concerning the categorization, labeling and packaging of substances and mixtures for amendment and withdrawal of the Guideline 67/548/EC and 1999/45/EC and for amendment of Directive (EC) nr 1907/2006 (PbEU L 353);
 - j. biocides Directive: Directive (EC) nr 528/2012 of the European Parliament and the Council of 22 May 2012 concerning the marketing and use of biocides (PbEU 2012, L 167).
 - k. raw data: collection of data that were obtained in a reconnaissance survey, including the signal data, navigation data, and related positioning and navigation data;
 - l. initial processing: processing of raw data including velocity data or equivalent data for a regular format in relation to image and position in, amongst others, the format of a migrated seismic profile for the carrying out of analyses and interpretations;
 - m. reprocessing: a processing of a first processing or a processing of raw data after a first processing with other algorithms or with another accent, such as another target depth than in the first processing;
 - n. stimulation: the stimulation of a reservoir.

Article 1.1.2

Where in this Mijnbouwregeling products have to comply with a certain norm or requirement, products shall be deemed to be equivalent that comply with norms or requirements set in another member state of the European Union or in a state that is a party to the Agreement on the European Economic Zone and that warrant at least an equivalent level.

§ 1.2 Licences and exemptions

Article 1.2.1

1. Applications for licences, exemptions or other decisions by or by virtue of the Mijnbouwwet and requests for amendment thereof shall be submitted to the Minister, unless otherwise stipulated in this Chapter. The application can be submitted in an electronic manner as meant in Article 2:15 of the Algemene wet bestuursrecht.
2. The documents forming part of the application will be marked by or on behalf of the applicant to form part of the application.
3. If the applicant has submitted data previously, or if data have already come into the possession of the Minister in another manner, then reference can be made to those data, unless these data have changed.
4. At the request of the Minister, as a supplement to the data mentioned in this Chapter, also other data shall be submitted or made available for review, if such is relevant for the assessment of the application.

Article 1.2.2

1. If by virtue of this Chapter a location, trajectory or area has to be reported in an application, this will be expressed in:
 - a. the system of co-ordinates of the Rijksdriehoekmeting, if the location, trajectory or area is present on the landward side of the line laid down in the Appendix to the Mijnbouwwet; and

- b. geographical co-ordinates, calculated in accordance with the ETRS89 system, if the location, trajectory or area is present on the seaward side of the line laid down in the Appendix to the Mijnbouwwet.
- 2. In respect of an area its surface will be mentioned, expressed in square kilometres.
- 3. A location or trajectory shall, with reference to its co-ordinates, be indicated on a map.
- 4. The location of an area shall, with reference to the co-ordinates of its angular points, be indicated on a map.
- 5. The maps referred to in Articles 1.2.2.3 and 1.2.2.4 shall be submitted in four-fold and shall be drawn on a scale of 1: 50.000.
- 6. Articles 1.2.2.1 up to and including 1.2.2.5 do not apply to cases as mentioned in Articles 1.3.2 and 1.3.3.2.

§ 1.3 Exploration, production and storage licences

Article 1.3.1

- 1. The applicant shall in the application for an exploration licence as meant in Article 6 of the Mijnbouwwet mention:
 - a. the period that the licence is applied for,
 - b. the area applied for in the licence, and
 - c. whether the application concerns the exploration for minerals, with a reference to which mineral the application applies, the exploration for terrestrial heat or the exploration for a CO₂ storage complex.
- 2. The applicant shall further submit with his application:
 - a. the data as detailed in Appendix 1 to this Mijnbouwregeling;
 - b. if the application concerns hydrocarbons, also the data as detailed in Appendix 2 to this Mijnbouwregeling;
 - c. a programme in which the reconnaissance and exploration activities the applicant intends to carry out are described, the pertaining time schedule and the techniques that will be used thereby;
 - d. a geological report, detailing at least:
 - 1° a report on the exploratory surveys used for the support of the application and other geological data, the interpretation of these data and the risk analysis used thereby;
 - 2° a description of the local and regional geology;
 - 3° if it concerns a licence for hydrocarbons: a description of the expected volume of hydrocarbons present per each possible reservoir;
 - e. other data used by the applicant for the support of the application.
- 3. If the application is submitted by several applicants jointly, the data as meant in Articles 1.3.1.2.a and 1.3.1.2.b shall be submitted in respect of each applicant separately. Furthermore it will be indicated under which conditions the cooperation between the applicants will take place.

Article 1.3.2

- 1. In an application for an exploration licence for hydrocarbons for an area on the seaward side of the line laid down in the Appendix to the Mijnbouwwet, reference shall be made for which area, consisting of one or more blocks as indicated on the map attached to this Mijnbouwregeling as Appendix 3, the licence is applied for. The relevant block numbers as set out on the map shall be mentioned.
- 2. If the application concerns a block, part of which is already covered by an exploration licence, then the application shall only apply to that part of the block that is not yet covered by a licence. Article 1.3.2.1 similarly applies.

Article 1.3.3

1. The applicant shall in an application for a production licence as meant in Article 6 of the Mijnbouwwet submit the data as meant in Articles 1.3.1.1 and 1.3.1.2.a and 1.3.1.2.b. Article 1.3.1.3 similarly applies.
2. If the application for a production licence for hydrocarbons concerns an area on the seaward side of the line, laid down in the Appendix to the Mijnbouwwet, Article 1.3.2 similarly applies.
3. If the application concerns a production licence for hydrocarbons, the applicant shall in addition to the data meant in Article 1.3.3.1 provide:
 - a. an estimate of the expected volume and composition of the hydrocarbons present and the uncertainty analysis used thereby;
 - b. structure maps of the topside of the reservoir layers in which the presence of hydrocarbons has been proven or is expected;
 - c. other data on which the estimates referred to in Article 1.3.3.3.a have been based;
 - d. a description of the research methods that led to the data referred to in Articles 1.3.3.3.a and 1.3.3.3.b, and
 - e. a multi-annual plan in which the production activities to be performed and the techniques used thereby are described, including, within the scope of the production the necessary treatment of the minerals produced and the transportation thereof up to the point where the minerals are transferred to another person.
4. The multi-annual plan shall also include an indication of the estimates, based on the probable period of production, of:
 - 1° the annual production;
 - 2° the investments per annum and
 - 3° the operating cost per annum;
5. If the application concerns a production licence for terrestrial heat, then Articles 1.3.3.3 and 1.3.3.4 similarly apply.
6. If the application concerns a production licence for minerals other than hydrocarbons, then the applicant shall, in addition to the data as meant in Article 1.3.3.1, also submit:
 - a. an indication of the expected volume of minerals the applicant wants to produce and the composition of the minerals to be produced;
 - b. a description of the structure of the layer of minerals from which the applicant wants to produce and the position of the layer of minerals relative to other layers of the subsurface;
 - c. a description of the research methods that led to the data as meant in Articles 1.3.3.6.a and 1.3.3.6.b;
 - d. a programme in conformity with the programme as meant in Articles 1.3.3.3.e and 1.3.3.4.

Article 1.3.3a

The applicant shall together with the application for an exploration or production licence for hydrocarbons submit for the assessment of the technical and financial possibilities the available information concerning the safety and environmental performance of the applicant, amongst others with respect to serious accidents, to the extent applicable to the activities for which the licence is applied for.

Article 1.3.4

1. The applicant shall in an application for a storage licence as meant in Article 25 of the Mijnbouwwet, submit data about:
 - a. for what period the licence is applied for;
 - b. the area applied for in the licence, and
 - c. the substances to which the application refers.
2. Articles 1.3.1.2.a, 1.3.1.2.b and 1.3.1.3 similarly apply.
3. The applicant shall further submit with his application:
 - a. a programme in which the storage activities to be performed are described, and the techniques used thereby;
 - b. a map of the subsurface in which the storage takes place;
 - c. a description of risks to safety, and
 - c. the possibility of production of hydrocarbon reservoirs or terrestrial heat in the area.

Article 1.3.4a

1. The applicant shall in an application for a licence for the permanent storage of CO₂, without prejudice to Article 1.3.4, also submit:
 - a. a characterisation and assessment of the potential storage complex also covering the sealing layer and the surrounding area, including the hydraulically connected areas, drawn up and explained on the basis of Attachment I of the Directive nr 2009/31/EG;
 - b. the intended location of the injection facilities;
 - c. the total volume of substances that will be stored, expressed in kiloton;
 - d. a description of the separate components of the substances that will be stored and their position in the total volume of substances that will be stored, and
 - e. the data on which the intended maximum allowable velocity and pressure at injection of CO₂ and the intended maximum allowable pressure of the stored CO₂ are based.
2. The application shall incorporate the draft of a risk management plan as meant in Article 29c of the Mijnbouwbesluit.
3. The application shall incorporate the draft of a plan for the taking of corrective measures as meant in Article 29d of the Decree.
4. The application shall incorporate the draft of a monitoring plan as meant in Article 29f of the Mjnbouwbesluit that complies with Attachment II.1 of the Directive nr. 2009/31/EG. The draft shall reflect:
 - a. the comparison of the actual and modelled behaviour of the CO₂ and the other stored substances and the formation water in the reservoir;
 - b. the detection of significant irregularities;
 - c. the detection of CO₂ and other substances;
 - d. the detection of significant negative effects for the surrounding environment and in particular for drinking water, the inhabitants in the vicinity and the users of the biosphere in the proximity;
 - e. the evaluation of the effectiveness of possible corrective measures taken as meant in Article 1.3.4a.3;
 - f. the updating of the safety and integrity assessment of the storage complex in the short and long term, including an assessment of the question whether the stored CO₂ is completely and permanently shut in.
5. The application shall incorporate the draft of a closing plan as meant in Article 29g of the Mijnbouwbesluit.
6. The application shall incorporate:

- a. the data required for the estimates as meant in Article 29j.2 of the Mijnbouwbesluit, together with adequate numerical details and explanation and possible form of security that will be provided;
- b. the draft of a plan for the prevention or limitation of soil movement if the reservoir for the permanent storage of CO₂ is located on the landward side of the line as laid down in the Appendix to the Mijnbouwwet;
- c. information that demonstrates that professional and technical development and training of the operator and of all personnel has been arranged for prior to, during and after cessation of the injection of CO₂.

Article 1.3.4b

The licence holder shall with an application for withdrawal of a licence for the permanent storage of CO₂ provide to the Minister:

- a. a report that demonstrates that:
 1. the stored CO₂ will be completely and permanently shut in,
 2. the actual behaviour of the injected CO₂ is in conformity with the modelled behaviour,
 3. there are no detectable leaks,
 4. the storage location develops to a situation of long term stability, and
- b. an updated version of the documents as meant in Articles 29c, 29d, 29f and 29g of the Decree.

Article 1.3.5

1. An exploration licence for hydrocarbons for an area on the seaward side of the line laid down in the Appendix to the Mijnbouwwet can only be granted for an area consisting of one or more blocks indicated on the map attached to this Mijnbouwregeling as Appendix 3.
2. If for a part of a block an exploration or production licence for hydrocarbons held by another person already applies, then an exploration or production licence as meant in Article 1.3.5.1 may cover or also cover that part of the block to which no exploration or production licence applies.
3. If in a part of a block a reservoir is present for which a storage licence held by another person already applies, then an exploration or production licence as meant in Article 1.3.5.1 can cover or also cover that part of the block for which no storage licence applies.

Article 1.3.6

The area as meant in Article 11.3 of the Mijnbouwwet for which an exploration or production licence for hydrocarbons will be granted shall, insofar this is compatible with efficient and systematic exploration for and production of hydrocarbons and is on the basis of the find justifiable from a geological point of view, be in conformity with the submitted application.

Article 1.3.7

1. A decision on an application for an exploration or production licence for hydrocarbons shall take into account the Articles 1.3.8 up to and including 1.3.11.
2. In deviation of Article 1.3.7.1, only the Articles 1.3.8 up to and including 1.3.10 shall apply to a decision on an application for a production licence on the basis of Article 10.1 of the Mijnbouwwet.
3. Articles 1.3.8 up to and including 1.3.10 similarly apply to a decision with respect to consent to a transfer of an exploration or production licence for hydrocarbons.

Article 1.3.8

1. An exploration or production licence for hydrocarbons will be refused if the technical possibilities of the applicant are not sufficient for a sound performance of the exploration or production in the area for which the licence is applied for.
2. The assessment of the technical possibilities of the applicant will in any event include:
 - a. the geological and mining technology knowledge of the applicant;
 - b. the experience of the applicant in exploration and production and the manner in which these activities have been performed by him;
 - c. the technical possibilities of the legal persons of which the applicant is a subsidiary or that belong to a group to which the applicant belongs, to the extent it is shown that these technical possibilities will or will become available to the applicant.
3. If the application is submitted by several applicants jointly, the assessment as referred to in Article 1.3.8.2 shall use the data in respect of each of them separately, or, to the extent this is brought about by the nature of the data, with respect to them jointly. Furthermore the manner in which they will cooperate will be taken into account.

Article 1.3.9

1. An exploration or production licence for hydrocarbons will be refused, if the financial possibilities of the applicant are not sufficient for a proper performance of the exploration or the production in the area for which a licence is applied for and for the discharge of the obligations brought about thereby.
2. The assessment of the financial capabilities of the applicant shall in any event include:
 - a. the financial means available to the applicant;
 - b. the manner in which the applicant intends to finance the exploration or the production;
 - c. the financial possibilities of the legal persons of which the applicant is a subsidiary or that belong to a group to which the applicant belongs, to the extent these financial possibilities will or will become available to the applicant.
3. Article 1.3.8.3 similarly applies.

Article 1.3.10

1. An exploration or production licence for hydrocarbons will be refused if the manner in which the applicant intends to perform the exploration or production in the area, for which the licence is applied for, insufficiently warrants the interest of efficient and systematic exploration and production.
2. The assessment of the manner in which the applicant intends to perform the exploration or the production may involve:
 - a. the extent to which the programme as meant in Articles 1.3.1.2.c, 1.3.3.3.e and 1.3.3.4 contributes to efficient and systematic exploration and production;
 - b. the geological support of the programme as meant in Article 1.3.10.2.a;
 - c. the implementation in practice of the programme as meant in Article 1.3.10.2.a;
 - d. the efficiency in the management of the operations and the sense of responsibility demonstrated earlier by the applicant.
3. Article 1.3.8.3 similarly applies.

Article 1.3.11

1. In the event that the application of the Articles 1.3.8 up to and including 1.3.10 does not lead to a refusal of the exploration or production licence and by one or more other

- persons in conformity with Article 15.3 of the Mijnbouwwet an application has been submitted for a similar licence for the same mineral for the same area, then the licence will be refused if the granting of the licence to another applicant is in the interest of efficient and systematic exploration or production.
2. The assessment of the consequences for an efficient and systematic exploration or production may involve:
 - a. the extent to which the applicant can and wishes to contribute to efficient and systematic exploration for and production of hydrocarbons;
 - b. the possibilities for the applicant to perform the exploration or production at the lowest possible cost.
 3. Article 1.3.8.3 similarly applies.

§ 1.4 Application for an environmental mining licence

Article 1.4.1

For the implementation of this paragraph application shall be understood to mean: an application for an environmental mining licence as meant in Article 40 of the Mijnbouwwet.

Article 1.4.2

An application will be submitted in 6-fold.

Article 1.4.3

1. The applicant shall detail in or attach to the application:
 - a. the address, the cadastral registration and the location or the geographical coordinates of the mining work;
 - b. the nature of the mining work;
 - c. the lay-out, the performance, the activities and processes in the mining work and the techniques or installations to be used for that purpose, including the manner of energy supply, to the extent this can reasonably be of relevance for the assessment of adverse consequences for the environment that can be caused by the mining work;
 - d. the characteristic data with respect to raw materials, accessories, intermediate, secondary and finished products relevant for the activities and processes as meant in Article 1.4.3.1.c;
 - e. the maximum capacity of the mining work and the maximum motorial or thermic capacity of the installations belonging to the mining work;
 - f. the times and days, or the periods during which the mining work or its respective components will be in operation;
 - g. the nature of and impact on the environment that the mining work can cause during normal operation, including an overview of the important adverse consequences for the environment that can be caused thereby;
 - h. the measures or facilities for the benefit of:
 - 1° the prevention or limitation of waste substances originating in the mining work;
 - 2° the reuse or beneficial application of, or preparation for reuse or useful application of waste substances originating in the mining work;
 - 3° the storage of waste substances in the mining work;
 - 4° the removal of waste substances that are generated in the mining work;
 - i. the other measures or facilities made or to be made to prevent or limit the adverse consequences for the environment that can be caused by the mining work:

- 1° during operation of the mining work or its relevant components, whereby, to the extent applicable, a distinction is made between testing, normal operation, cleaning, maintenance and repair work;
 - 2° as a result of incidents as meant in Article 82 of the Mijnbouwbesluit that are deemed to be reasonably possible;
 - j. the manner of recording and registration of the impact on the environment that is caused by the mining work during its operation;
 - k. the developments with respect to the mining work that can reasonably be expected by the applicant and that are relevant for the decision to be taken on the application.
2. The Minister can stipulate that Articles 1.4.3.1.i up to and including 1.4.3.1.k shall not be applied if those data are not necessary for a decision on the application, in view of the nature or the magnitude of the consequences the mining work can cause to the environment.
 3. The application shall be accompanied by a non-technical summary of the data as meant in Article 1.4.3.1.

Article 1.4.4

If the mining work for which an environmental mining licence is applied for is by its nature of a temporary nature, then the applicant will mention this in his application. He shall, if possible, also mention the moment in time that the mining work will be decommissioned.

Article 1.4.5

The applicant shall to the extent those data are necessary for the decision on the application at the request of the Minister submit with the application the results of a soil quality survey with respect to the location where the mining work has been or will be located.

Article 1.4.6

The Minister shall enable the following government bodies to render, within 4 weeks, advice about the draft of the decision taken on the application, if the mining work is located on land or in the territorial sea;

- a. a civil servant designated by Our Minister van Infrastructuur en Milieu if discharges into the subsoil will take place;
- b. the mayor and aldermen of the municipality in which the mining work is or will be located;
- c. the mayor and aldermen of the municipalities of which the boundary is at a distance of less than 200 metres from the place where the mining work is or will be located;
- d. the mayor and aldermen of the municipalities of which the boundary is at a distance of more than 200 metres and less than 10 kilometres from the place where the mining work is, or will be located, if the competent authority is of the opinion that it is reasonably to be expected that the influence of the impact on the environment, caused by the mining work to which the application applies, is to occur in those municipalities;
- e. gedeputeerde staten of the province in which the mining work is located;
- f. in all cases the inspecteur-generaal der mijnen;
- g. a civil servant of Rijkswaterstaat designated by Our Minister van Infrastructuur en Milieu in the event that a mining work will be located in the territorial sea or in the proximity of a work within the authority of the Rijk;
- h. the directeur Kustwacht, if the mining work is located in the territorial sea.

Article 1.4.7

The Minister shall enable the following government bodies to render within 4 weeks advice about the draft of the decision taken on the application if the mining work is located on the continental shelf:

- a. the inspecteur-generaal der mijnen in all cases;
- b. a civil servant of Rijkswaterstaat designated by Our Minister van Infrastructuur en Milieu in all cases;
- c. a civil servant designated by Our Minister van Infrastructuur en Milieu with respect to discharges into the subsoil;
- d. the directeur Kustwacht.

§ 1.5 Application for licences and exemptions with respect to reconnaissance survey

Article 1.5.1

The applicant shall together with the application as meant in Articles 18 and 19 of the Mijnbouwbesluit provide data with respect to:

- a. the period for which the licence is applied for;
- b. the area for which the licence is applied for, and
- c. the manner in which the reconnaissance survey will be carried out and the techniques and tools used thereby.

Article 1.5.2

The applicant shall together with the application as meant in Article 22 of the Mijnbouwbesluit provide data with respect to:

- a. the period for which the licence is applied for;
- b. the area for which the licence is applied for;
- c. the nature, name and quantity of the explosive substances;
- d. the manner of use of the substances as meant under Article 1.5.2.c, and
- e. the measures that will be taken to prevent damage.

§ 1.6 Application for licences and exemptions with respect to mining works

Article 1.6.1

The applicant shall together with the application as meant in Article 44.2 and Article 45.2 of the Mijnbouwbesluit provide data with respect to:

- a. the period for which the licence is applied for;
- b. the place for which the licence is applied for;
- c. the date on which the mining installation will be installed, and
- d. measures that will be taken in view of the interest of shipping and the defence of the realm.

Article 1.6.2

The applicant shall in the application for an exemption as meant in Article 51.5 of the Mijnbouwbesluit detail why a helicopter deck is not necessary.

Article 1.6.3

1. Applications for an exemption as meant in Article 52.6 of the Mijnbouwbesluit shall be submitted to the Minister van Verkeer en Waterstaat in two-fold.
2. The applicant shall in the application detail why sound and light beacons are not necessary.

§ 1.7 Application for licences for pipelines and cables

Article 1.7.1

1. The applicant shall together with the application for the laying of a pipeline as meant in Article 94 of the Mijnbouwbesluit provide data with respect to:
 - a. the period for which the licence is applied for;
 - b. the trajectory of the pipeline;
 - c. the manner in which the pipeline will be laid and the depth of the pipeline bed in the subsoil;
 - d. the results of the survey of the intended trajectory in a strip of 600 meters, of which the axis coincides with the trajectory chosen and in which is described:
 - 1° the profile of the bottom of the sea;
 - 2° the obstacles present;
 - 3° the location of existing pipelines and cables;
 - 4° the soil mechanic characteristics;
 - 5° the stratigraphy of the bottom of the sea, and
 - 6° the analysis and quality of soil samples and probes.
 - e. a report on the preliminary design of the pipeline, detailing:
 - 1° the characteristics and diameter of the pipeline;
 - 2° the substances transported in it;
 - 3° an analysis of the safety risks and environmental risks, and
 - 4° the period of time during which the pipeline will be used for the transportation of those substances.
2. The data as meant in Article 1.7.1.1 shall be submitted in four-fold.

Article 1.7.2

1. The applicant shall together with the application for a licence to lay a cable as meant in Article 106 in conjunction with Article 94 of the Mijnbouwbesluit, provide data with respect to:
 - a. the period of time for which the permit is applied for;
 - b. the trajectory of the cable;
 - c. the characteristics of the cable;
 - d. the composition of the cable, and
 - e. the purpose for which the cable will be used.
2. The trajectory of the cable will be detailed on a map.

§ 1.8 Applications for splitting and combining licences

Article 1.8.1

The applicant shall in the application for the splitting of a licence as meant in Article 135 of the Mijnbouwbesluit provide data with respect to:

- a. the licence that is the subject of the request for splitting;

- b. a description of the licence areas that will be created as a result of the splitting;
- c. the reason for the splitting;
- d. a map detailing the minerals, terrestrial heat or storage deposits in the licence area;
- e. the persons that, according to Article 22.5 of the Mijnbouwwet will be appointed for the separate licences that will result from the splitting.

Article 1.8.2

The applicant shall in the application for the joining of 2 or more licences as meant in Article 137 of the Mijnbouwbesluit, provide the following data:

- a. the licences that are the subject of the request for joining;
- b. the reason for the joining;
- c. a map detailing the minerals, terrestrial heat or storage reservoirs in the licence areas to be joined, and
- d. the person that in accordance with Article 22.5 of the Mijnbouwwet will be appointed for the licence that will result from the joining.

Article 1.8.3

The applicant shall in the application for a splitting off of a licence as meant in Article 143.8 of the Mijnbouwwet provide the following data:

- a. the licence for which a split off is requested;
- b. an indication of the areas that will result from the split off;
- c. the reason for the split off;
- d. a map detailing the mineral reservoirs;
- e. the persons that in accordance with Article 22.5 of the Mijnbouwwet will be designated for the separate licences that will result from the split off.

§ 1.9 Application for licence with respect to the production of limestone or other use of a quarry

Article 1.9.1

The applicant shall in the application for a licence as meant in Article 146 of the Mijnbouwbesluit provide the following data:

- a. the period for which the licence is applied for;
- b. a map detailing the surface area under which the quarry will be present, detailing:
 - 1° all buildings, land-, rail and water roads above the area of the quarry;
 - 2° the place where the activities will take place;
 - 3° the entrances to the quarry;
- c. a map of the subsurface area of the quarry, detailing the position, height and width of the tunnels, shafts or other subsurface works and the already existing subsurface tunnel system, to the extent present;
- d. a description of the manner in which the production will take place;
- e. the size of the pillars;
- f. the measures to be taken if earth pipes are found;
- g. the measures to be taken for the crossing of tunnels, shafts or other subsurface works;
- h. measures, other than as meant in Articles 1.9.1.f and 1.9.1.g that will be taken for the protection of safety in view of collapse, and
- i. a description of the manner in which, and the frequency with which measurements will be made with respect to rock mechanic safety of the quarry.

Article 1.9.2

The applicant shall in an application for the use of a quarry for a purpose other than as meant in Article 151 of the Mijnbouwbesluit, provide the following data:

- a. the period for which the licence is applied for;
- b. a map of the surface and subsurface of the quarry, in which the area intended to be used is detailed, together with the data mentioned in Articles 1.9.1.b and 1.9.1.c;
- c. a description of the purpose for which the quarry will be used;
- d. a description of the proposed changes to the quarry in connection with the intended use;
- e. a description of the manner in which the parts that will not be used, will be shut off;
- f. a description of the manner in which, and the frequency with which measurements will be made with respect to the rock mechanic safety of the quarry, and
- g. a description of the measures for the protection of safety with a view to collapse.

§ 1.10 Restricted Areas

Article 1.10.1

The parts of the territorial sea and the continental shelf as meant in Article 16 of the Mijnbouwbesluit consist of those parts of the territorial sea and the continental shelf located south of the line established by the points 171, 172, 173, 174, 189, 215, 216, 224 and 225, indicated in Appendix 4 to this Mijnbouwregeling and that are not located in:

- a. the approach area of Hoek van Holland, the anchoring areas and the other areas indicated in Appendix 4, and
- b. the municipal areas.

Article 1.10.2

The parts of the territorial sea and the continental shelf as meant in Article 17 of the Mijnbouwbesluit consist of the other areas indicated in Appendix 4.

Article 1.10.3

The parts of the territorial sea and the continental shelf as meant in Article 18 of the Mijnbouwbesluit, consist of the anchoring areas indicated in Appendix 4.

Article 1.10.4

The roadsted of Hoek van Holland as meant in Article 20 of the Mijnbouwbesluit coincides with the Hoek van Holland approach area indicated in Appendix 4.

Article 1.10.5

The areas as meant in Article 45.1 of the Mijnbouwbesluit are, as indicated in Appendix 4:

- a. anchoring areas;
- b. the approach area Hoek van Holland, and
- c. other areas.

Article 1.10.6

The areas meant in Article 45.1 of the Mijnbouwbesluit are the areas indicated in Appendix 4.

Article 1.10.7

The parts of the surface waters as meant in Article 19 of the Mijnbouwbesluit and the areas as meant in Article 44 of the Mijnbouwbesluit are the areas detailed in Appendix 5 to this Mijnbouwregeling.

§ 1.11 Work Plan

Article 1.11.1

1. A work plan as meant in Article 4 of the Mijnbouwbesluit shall for a licence area contain the following:
 - a. an overall description of the main mining activities anticipated in the next 5 years;
 - b. a description of the mining activities intended to be performed in the next year, comprising:
 - 1° a description of proposed reconnaissance survey;
 - 2° a description of boreholes to be constructed, well repairs and stimulations;
 - 3° a description of construction activities such as new facilities or modifications to existing mining works and the laying of pipelines;
 - 4° a statement of activities within the scope of external safety, including the safety exercises to be held;
 - 5° a summary of the activities as meant in Articles 1.11.1.b.1° up to and including 1.11.1.b.4°;
 - c. an up to date organogram with details of the persons responsible for the mining activities
 - d. maps or drawings of the surface and structure of the subsurface to support the data as meant in Article 1.11.1.b.2° up to and including 1.11.1.b.4°;
 - e. a timeframe within which the activities mentioned in Article 1.11.1.b.2° up to and including 1.11.1.b.5° are described;
 - f. to the extent applicable:
 - 1° the name of the company that will carry out the reconnaissance survey;
 - 2° the name of the mining work that will construct the boreholes, and
 - 3° the names of the locations where the boreholes will be constructed.

§ 1.12 Safety zone

Article 1.12.1

The prohibition as meant in Article 43.2 of the Mijnbouwwet does not apply to a ship entering the safety zone or remaining there:

- a. in connection with the construction, the inspection, the testing, the repair, the maintenance, the change, renewal or removal of a subsea pipelines or pipelines in or in the proximity of the safety zone,
- b. to perform services for or to transport persons or goods from or to the installation,
- c. for the purpose of supervision of compliance and the enforcement of applicable legislation,
- d. to save life or property, or to attempt such,
- e. forced by weather,
- f. when in distress, or
- g. if it has obtained the consent of the operator or the owner of the installation.

Article 1.12.2

The applicant for an exemption as meant in Article 43.4 of the Mijnbouwwet shall provide to Our Minister :

- a. the geographical co-ordinates of the mining installation that is the subject of the application;
- b. the delimitation of the zone to which the prohibition as meant in Article 42.2 of the Mijnbouwwet applies, if this zone cannot extend to a zone of 500 metres around the mining installation;
- c. a map detailing the position of the mining installation including the safety zone and the particulars of the surrounding area;
- d. the anticipated period during which the exemption should apply;
- e. the extra measures that will be taken to as much as possible minimize possible risks resulting from the specific position of the mining installation.
- f.

CHAPTER 2. RECONNAISSANCE SURVEY

§ 2.1 Reconnaissance survey in surface water

Article 2.1.1

If a reconnaissance survey is performed in surface water using artificially generated vibrations, it shall start with a low sound volume and that volume shall gradually increase.

§ 2.2 Reconnaissance survey using explosives

Article 2.2.1

Paragraphs 2.2. up to and including 2.8. shall apply to reconnaissance survey using explosive substances.

Article 2.2.2

The performance of work using explosive substances shall take place in accordance with a written instruction. The instruction and changes therein shall, at the request of the inspecteur-generaal der mijnen, be made available to him before the start of operations.

Article 2.2.3

1. The placing of explosive charges shall take place only between sunrise and sunset.
2. The placing of explosive charges in the bottom of surface waters shall take place only if visibility is at least 300 metres.

Article 2.2.4

1. Reconnaissance survey shall not be performed within a radius of 100 metres of main waterway banks.
2. Reconnaissance survey shall be performed in such a way that the distance at ground level between the charge and buildings or similar works is more than 50 metres. If vulnerable objects are present in the area in which the survey has its effects, DIN 4150,

Part 3, issue 1999-02 applies or a comparable norm that at least provides the same result.

3. The Minister can grant exemption from Articles 2.2.4.1 and 2.2.4.2 if the surveying person shows that damage will be prevented.

§ 2.3 Storage of explosive substances

Article 2.3.1

Explosive substances and blasting caps shall be stored in sparkless boxes suitable and intended for this purpose.

Article 2.3.2

If blasting caps are located outside a blasting cap box the the transmission part of the transmission installation present shall be disconnected unless the transmission capacity of that installation does not exceed one Watt or the blasting caps in use are, by virtue of their construction, immune to electromagnetic radiation.

§ 2.4. The drilling of shot holes

Article 2.4.1

1. The depth of a shot hole, measured from ground level to the top of the charge, shall be at least the number of metres as specified for the quantity of explosive substances listed below:

a.	50 - 100 grams	2.0 metres
b.	101 - 200 grams	2.5
c.	201 - 300 grams	3.0
d.	301 - 400 grams	4.0
e.	401 - 500 grams	5.0

etc. up to 1000 grams etc. up to 10.0.
2. The depth of a shot hole for charges of 1000 grams or more shall be at least 10 m.

Article 2.4.2

The explosive substances and blasting caps required for a shot hole shall during drilling of the shot holes be stored at a distance of at least 10 metres therefrom and be stored under supervision.

§ 2.5 The preparation of the charge

Article 2.5.1

During operations involving explosive substances only persons entrusted therewith shall be present.

Article 2.5.2

1. Explosive substances and blasting caps shall be transported separately from one another from the place where they are stored to the shot holes unless sparkless boxes suitable for this purpose are used.

2. The preparation of the charge shall take place in the direct vicinity of the shot holes and immediately prior to the insertion into the shot holes.

Article 2.5.3

During operations involving explosive substances no more than one charge shall be prepared at the same time.

Article 2.5.4

No subsequent charge shall be prepared as long as a charge has yet to be put into position in the shot hole.

Article 2.5.5

Explosive substances shall only be used in the form and the packaging in which they have been supplied by the manufacturer.

§ 2.6 The charging of shot holes

Article 2.6.1

An ignition circuit of a charge shall be tested with a measurement instrument suitable for that purpose.

Article 2.6.2

If during the pulling of the pipe with which a shot hole is drilled the pipe becomes stuck or the charge is entrained, then the pipe shall not be pulled further and the charge shall be ignited.

Article 2.6.3

Charges shall be protected against removal by unauthorised persons.

Article 2.6.4

Shot holes shall be filled over their entire length with material suitable for this purpose.

§ 2.7 Unexploded charges

Article 2.7.1

1. If a charge has not exploded and it has emerged that the ignition circuit is intact then the charge shall, when possible, still be ignited.
2. If a charge has not exploded and it has emerged that the ignition circuit is not intact, then the attempt as meant in Article 2.7.1.1 shall be made by igniting a suitable charge in a new shot hole drilled at a distance of at least 0.5 m from the original shot hole down to the depth of the top of the unexploded charge.

§ 2.8. Reporting

Article 2.8.1

The blast manager shall keep a blast register up to date specifying the following details on a day-to-day basis:

- a. the number and type of cartridges and blasting caps used, with details of the date of use and quantity used;
- b. the number of exploded charges;
- c. the number of unexploded charges;
- d. the special circumstances that have arisen during operations with explosive substances.

CHAPTER 3. THE PRODUCTION AND STORAGE OF SUBSTANCES

Article 3.1

The following units shall be used for specifying quantities of substances as meant in Articles 24, 25, 26 and 27 of the Mijnbouwbesluit:

- a. solid substances: in m³ or tons;
- b. liquid substances other than brine: in tons and in m³ at an absolute pressure of 101.325 kPa and a temperature of 15 degrees Celsius;
- c. gaseous substances: in 1000 m³ at an absolute pressure of 101.325 kPa and a temperature of 0 degrees Celsius;
- d. brine: in m³.

Article 3.2

The register of CO₂ streams as meant in Article 31f of the Mijnbouwwet shall commencing the day of first injection of substances detail:

- a. the amounts of substances expressed in kilotons that have been supplied, injected or that leaked;
- b. the composition of the substances and every change in their composition stating the day and moment of change.
2. The composition of the substances include details of each of them and their position in volume and weight in the total volume and weight sufficiently precise in view of the interests of the environment and safety.
3. The register will be updated at least weekly.

CHAPTER 4. THE ENTRY INTO OR THE LEAVING OF NETHERLANDS WATERS BY AN EXISTING MINING INSTALLATION

Article 4.1

The period as meant in 49.2 of the Mijnbouwbesluit is 8 weeks.

CHAPTER 5. IDENTIFICATION SIGNS, SOUND, SOUND BEACONS AND LIGHT BEACONS

Article 5.1

At least one of the identification signs as meant in Articles 52.4.a and 52.4.b of the Mijnbouwbesluit shall be visible day and night, regardless of the direction from which the installation is approached.

Article 5.2

1. Sound beacons as meant in Article 52.1.b of the Mijnbouwbesluit shall be of such power and be positioned in such a way that the safety of shipping and the mining installation is warranted.
2. The sound beacons shall be positioned not less than 6 m and not more than 30 m above mean sea level.
3. In the case of visibility of less than 3600 m, the sound beacons shall emit a synchronous sound signal corresponding to that of the Morse letter U, with a period of 30 seconds broken down as follows: signal $\frac{3}{4}$ second, silence 1 second, signal $\frac{3}{4}$ second, silence 1 second, signal $2\frac{1}{2}$ seconds, silence 24 seconds.

Article 5.3

1. A mining installation projecting above surface water shall be equipped with one or more white lights.
2. The lights shall be on from sunset to sunrise and if visibility from the mining installation is less than 1500 m between sunrise and sunset. The lights shall be on synchronously and shall have a Morse character corresponding to that of the Morse letter U, with a period of 15 seconds broken down as follows: bright $\frac{1}{2}$ second, dark $\frac{1}{2}$ second, bright $\frac{1}{2}$ second, dark $\frac{1}{2}$ second, bright $1\frac{1}{2}$ seconds, dark $1\frac{1}{2}$ seconds.
3. The lights shall each have a strength of at least 1400 candelas.
4. The lights shall be positioned in such a way that, regardless of the direction from which the installation is approached, at least one light is visible. The lights shall be positioned not less than 12 m and not more than 30 m above mean sea level.
5. The light beam shall be split in the vertical plane in such a way that the light is visible at a height of 5 metres above mean sea level from the largest distance of visibility to the immediate vicinity of the mining installation.
6. The Minister van Verkeer en Waterstaat can, at the request of the operator, set different requirements concerning the positioning of the lights for the period of installation or removal of the mining installation.

Article 5.4

1. A mining installation projecting above surface water with a greatest maximum horizontal dimension of more than 15 metres shall also be equipped with fixed white lights fitted at the tips of the installation.
2. The lights shall be on from sunset to sunrise or if visibility from the mining installation is less than 1500 m between sunrise and sunset.
3. The lights shall each have a strength of at least 200 candelas.
4. The lights shall be positioned in such a way that shipping from every direction of approach can observe at least 2 lights.
5. The obligation to install lights as meant in Article 5.4.1 does not apply if the lights as meant in Article 5.3 are mounted on the said tips.

6. In the event that the mining installation consists of several parts that are each located in the surface water and physically interconnected, then one or more extra lights shall be positioned between the tips of the mining installation.

Article 5.5

1. A mining installation with a height of more than 30 metres above mean sea level shall also be equipped with a fixed red light at the highest point of the installation.
2. The light as meant in Article 5.5.1 shall be positioned in such a way that it is visible from any point above the horizon.
3. A mining installation with a height of more than 45 metres above mean sea level shall also be equipped with such a number of fixed red lights located halfway between the light mentioned in Article 5.5.1 and mean sea level that at least one of them is visible from any point above the horizon.
4. The lights as meant in Articles 5.5.1 and 5.5.3 shall be on from sunset to sunrise and between sunrise and sunset, if visibility from the mining installation is less than 1500 m.
5. The lights as meant in Articles 5.5.1 and 5.5.3 shall each have a strength of at least 10 candelas.

CHAPTER 6. COMMUNICATION FACILITIES AND METEOROLOGICAL EQUIPMENT

§ 6.1 General

Article 6.1.1

This Chapter shall apply to mining installations that project above the surface of the water.

§ 6.2 Communication facilities

Article 6.2.1

For the purposes of this paragraph the following definitions apply:

- a. telecommunication device: a device or set of devices intended for the transfer, transmission or receipt of data of any kind whatsoever by means of cables, via a radio-electric pathway or by means of optical or other electromagnetic systems;
- b. radiotelephony device: a radio-electric transceiver including the antenna device and the power supply unit;
- c. DSC: a technique (digital selective calling) via which, through the use of digital codes by a radio station, a link is established and information is exchanged with one or more other stations and that meets the applicable recommendations of the International Radio Consultative Committee (CCIR);
- d. maritime VHF radiotelephony device: a radiotelephony device for use on the channels intended for the maritime service in the frequency band between 156 and 162.650 MHz (marine telephone);
- e. MF radiotelephony device: a radiotelephony device for emergency, urgency and safety purposes using DSC, and also for use on the frequencies intended for the maritime service in the frequency band between 1605 and 2850 kHz;
- f. VHF-DSC watch receiver: a radio-electric receiver suitable for maintaining a non-interrupted DSC watch on channel 70;

- g. MF-DSC watch receiver: a radio-electric receiver suitable for maintaining a no-interrupted DSC watch on the 2187.5 kHz frequency;
- h. VHF radiotelephony device for the aeronautical service: a radiotelephony device for use on the channels intended for the aeronautical service in the frequency band between 118 and 137 MHz;
- i. HF radiotelephony device for the aeronautical service: a radiotelephony device for use on the channels intended for the aeronautical service in the frequency bands between 3 and 5 MHz;
- j. direct link with the public telephone network: an automatically operating telephone installation at a mining installation with which under normal circumstances telephone links can be formed at all times between the mining installation in question and the Dutch public telephone network;
- k. non-dependent mining installation: a mining installation from which direct communication is possible with the shore, vessels and aircraft;
- l. dependent mining installation: a mining installation from which, other than by a direct link with the public telephone network, communication is possible with the shore, vessels and aircraft only via a non-dependent mining installation;
- m. hazardous area: as defined in the standard NEN-EN-IEC 60079-10, "Electrical apparatus for explosive gas atmospheres", Part 10: Classification of hazardous areas; July 1997;
- n. sea area A1: an area within the radiotelephony range of at least one VHF radio coastal station, in which non-interrupted DSC alarm signalling is available;
- o. sea area A2: an area, with the exception of sea area A1, within the radio telephony range of at least one MF radio coastal station, in which a non-interrupted DSC alarm signalling is available.

Article 6.2.2

The provisions applicable to mining installations in sea area A1 shall also apply to mining installations located in inland waters.

Article 6.2.3

1. A manned non-dependent mining installation in sea area A1 with a direct link with the public telephone network shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC;
 - b. two VHF radiotelephony devices for the aeronautical service;
 - c. a VHF-DSC watch receiver.
2. A manned non-dependent mining installation in sea area A1 without a direct link with the public telephone network shall be equipped with:
 - a. two maritime VHF radiotelephony devices with DSC;
 - b. two VHF radiotelephony devices for the aeronautical service;
 - c. a VHF-DSC watch receiver.
3. A manned non-dependent mining installation in sea area A2 with a direct link with the public telephone network shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC;
 - b. two VHF radiotelephony devices for the aeronautical service;
 - c. an MF radiotelephony device or a satellite telephone that is completely independent of the aforementioned direct link with the public telephone network;
 - d. a VHF-DSC watch receiver;
 - e. an MF-DSC watch receiver.
4. A manned non-dependent mining installation in sea area A2 without a direct link with the public telephone network shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC;

- b. two MF radiotelephony devices;
 - c. a VHF-DSC watch receiver;
 - d. an MF-DSC watch receiver;
 - e. two VHF radiotelephony devices for the aeronautical service;
 - f. an HF radiotelephony device for the aeronautical service.
5. Of the VHF radiotelephony devices for the aeronautical service as meant in Articles 6.2.3.1 up to and including 6.2.3.4, one can be of a portable type.

Article 6.2.4

1. A manned dependent permanently installed mining installation in sea area A1 with a direct link with the public telephone network shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC and
 - b. a VHF-DSC watch receiver or another equivalent telecommunication device.
2. A manned dependent permanently installed mining installation in sea area A1 without a direct link with the public telephone network shall be equipped with:
 - a. two maritime VHF radiotelephony devices, including at least one with DSC and
 - b. a VHF-DSC watch receiver or another equivalent telecommunication device.
3. A manned dependent permanently installed mining installation in sea area A2 with a direct link with the public telephone network shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC and
 - b. a VHF-DSC watch receiver or other equivalent telecommunication device.
4. A manned permanently installed mining installation in sea area A2 without a direct link with the public telephone network shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC;
 - b. an MF radiotelephony device;
 - c. a VHF-DSC watch receiver or other equivalent telecommunication device and
 - d. an MF-DSC watch receiver.

Article 6.2.5

1. If a mining installation is equipped with accommodation that is permanently fitted out for the temporary care of injured or ill patients, then this accommodation shall be equipped with a telecommunication device with which a two-way telephonic or radio-telephonic link with the shore is directly possible.
2. The telecommunication device shall be fitted with a microphone, a telephone and a loudspeaker. Operation of the microphone, operation of the transmission and receipt switch and connection and disconnection of the loudspeaker must be capable of taking place in this accommodation.

Article 6.2.6

1. If one or more persons are present on an unmanned non-dependent mining installation in sea area A1 or A2 intended for production with a direct link with the public telephone network, the latter shall be equipped with:
 - a. a maritime VHF radiotelephony device with DSC and
 - b. a VHF radiotelephony device for the aeronautical service.
2. If one or more persons are present on an unmanned non-dependent mining installation intended for production in sea area A1 without a direct link with the public telephone network, the latter shall be equipped with:
 - a. two maritime VHF radiotelephony devices with DSC and
 - b. a VHF radiotelephony device for the aeronautical service.
3. If one or more persons are present on an unmanned non-dependent mining installation in sea area A2 intended for production without a direct link with the public telephone

network, but within the VHF range of a manned non-dependent mining installation, the latter shall be equipped with:

- a. two maritime VHF radiotelephony devices with DSC and
 - b. a VHF radiotelephony device for the aeronautical service.
4. If one or more persons are present on an unmanned non-dependent mining installation intended for production in sea area A2 without a direct link with the public telephone network and outside the VHF range of a manned non-dependent mining installation, the latter shall be equipped with:
- a. a maritime VHF radiotelephony device with DSC;
 - b. a VHF radiotelephony device for the aeronautical service, and
 - c. an MF radiotelephony device.

Article 6.2.7

1. If one or more persons are present on an unmanned dependent mining installation intended for production with a direct link with the public telephone network, then it shall be equipped with a maritime VHF radiotelephony device with DSC.
2. If one or more persons are present on an unmanned dependent permanently installed mining installation intended for production without a direct link with the public telephone network, then the latter shall be equipped with two maritime VHF radiotelephony devices with DSC.

Article 6.2.8

1. If several persons are present on a mining installation, one person shall be in charge of the operation of the communication devices prescribed in this paragraph. The person in charge of the operation of communication devices in emergency situations shall in such situations not be charged with other tasks.
2. A radiotelephony device shall be operated by persons who have passed an examination set by the Minister van Verkeer en Waterstaat to obtain a certificate for operating the radiotelephony device in question.

Article 6.2.9

1. The communication devices prescribed in this paragraph shall be installed and maintained in such a way that they are in a good condition and function properly.
2. If one of the communication devices does not function or does not function properly, it shall be repaired or replaced immediately.
3. The communication devices prescribed in this paragraph shall be:
 - a. installed in a fixed manner on a manned mining installation and
 - b. installed in a fixed manner on an unmanned mining installation when in use.

Article 6.2.10

1. All communication devices and accessories present on a mining installation shall, subject to the provisions of Article 6.2.10.2, be installed and used outside an hazardous area.
2. If the installation or the use of a communication device and accessories within an hazardous area cannot be avoided then this communication device and the accessories shall meet the requirements of the Besluit explosieveilig materieel.
3. The communication devices prescribed in this paragraph shall be positioned in such a way that:
 - a. the ingress of water is prevented as much as possible and
 - b. they are easily accessible for inspection, repair and maintenance.

Article 6.2.11

1. An operating room for a radiotelephony device shall be equipped in such a way that the effective exchange of messages cannot be disrupted by irritating noise.
2. In the operating room instructions shall be present with clear descriptions of the normal radiotelephony procedures, the radiotelephony emergency procedures and also of the frequencies or channels to be used.
3. The room as meant in Article 6.2.11.1 shall be equipped with emergency lighting fixed and installed in such a position that the operating instruments of the radiotelephony devices and the descriptions as meant in Article 6.2.11.2 are well illuminated .
4. A portable fire extinguisher shall be positioned in the room as meant in Article 6.2.11.1 and also outside it in the direct vicinity of the entrance door, with the said extinguisher being filled with a fire-extinguishing agent that does not conduct electric current and that disrupts operation of the prescribed telecommunication devices as little as possible.
5. The room as meant in Article 6.2.11.1 shall only be occupied by persons who are on duty there.

Article 6.2.12

The sound signal emitted by the VHF-DSC watch receiver, the MF-DSC watch receiver or another equivalent telecommunication device as meant in Article 6.2.4 shall be audible at all times by the radio telephonist on duty.

Article 6.2.13

1. A mining installation shall be equipped with one or more emergency power sources that, in the event of failure of the normal power source, can take care of the simultaneous powering of all the communication devices prescribed in this paragraph, the emergency lighting and any equipment that transmits the sound signal as meant in Article 6.2.12.
2. The obligation as meant in Article 6.2.13.1 does not apply to one of the two MF radiotelephony devices prescribed in Article 6.2.3.4.b and the HF radiotelephony device for the aeronautical service prescribed in Article 6.2.3.4.f.

Article 6.2.14

1. An emergency power source shall be capable of supplying the entire power needed for at least 6 hours under all circumstances, even if the prescribed communication devices, the emergency lighting and the sound signal as meant in Article 6.2.12 are simultaneously in operation assuming a transmission/reception ratio of 1:1.
2. An emergency power source and the associated switching and distribution devices shall be constructed in such a way that, in the event of failure of the other power sources on the mining installation, the communication devices, the emergency lighting and the sound signal as meant in Article 6.2.12 are able to continue functioning properly.
3. The normal power source and the emergency power source shall be electrically separated from one another or shall be capable of being simply separated from one another. Failure of the proper functioning of the normal power source shall not affect the availability of the emergency power source.

Article 6.2.15

1. The following documents shall be present on a manned non-dependent mining installation:
 - a. "List of Coast Stations, List IV", issued by the International Union for Telecommunications (IUT);
 - b. "List of Ship Stations, List V", issued by the IUT;
 - c. "List of Call Signs and Numerical Identities of Stations Used by the Maritime Mobile and Maritime Mobile-Satellite Services, List VIIA", issued by the IUT;
 - d. International Aeronautical and Maritime Search and Rescue Manual Volume III, (IAMSAR III) and the list of rescue signs as meant in Article 98.1 of the Schepenbesluit 1965;
 - e. the "General Maritime Radiocommunications Handbook" and
 - f. the "Limited Maritime Radiocommunications Handbook".
2. If a mining installation is equipped with a satellite communication device then the for the subject mining installation relevant "INMARSAT Maritime Communications Handbook", issued by the International Maritime Satellite Organisation, shall also be present in a suitable location.
3. If a mining installation is not equipped with an MF radiotelephony device, then the presence of the list as meant in Article 6.2.15.1.a and the book as mentioned in Article 6.2.15.1.e shall not be mandatory.

§ 6.3. Meteorological and oceanographical equipment

Article 6.3.1

1. The devices as meant in Article 52.3 of the Mijnbouwbesluit shall be suitable for observing and recording:
 - a. horizontal visibility, in particular the meteorological optical range;
 - b. the level of cloud and the height of the cloud base;
 - c. current weather, including precipitation;
 - d. wind direction and speed;
 - e. temperature of the air and of the seawater;
 - f. relative humidity or dew-point temperature;
 - g. air pressure, and
 - h. height, period or spectrum and direction of the waves.
2. The devices as meant in Article 6.3.1.1 shall be reliable, operate accurately and be positioned at a suitable location. For the purposes of their use the devices and their position require the approval by the director of the Koninklijk Nederlands Meteorologisch Instituut.
3. The device as meant in Article 6.3.1.1 shall be used for continuous monitoring on the basis of which at least once every 10 minutes a monitoring report will be drawn up, reflecting the moment of monitoring. This report shall within 5 minutes be passed on to the director of the Koninklijk Nederlands Meteorologisch Instituut using a standard format. The Manual on codes/international codes of the World Meteorological Organisation no. 306 or a comparable standard as approved by the director shall be used as the standard format.

CHAPTER 7. INVESTIGATION OF THE STRENGTH OF MINING INSTALLATIONS AND THE METHOD OF REMOVAL OF MINING INSTALLATIONS BELOW SURFACE WATER

Article 7.1

This Chapter relates to mining installations intended for production or storage.

Article 7.2

1. The investigation programme as meant in Articles 53.1 and 53.2 of the Mijnbouwbesluit shall comprise a summary of:
 - a. the component parts of the mining installation;
 - b. the year in which those component parts are checked on technical integrity;
 - c. if certain component parts are not checked on technical integrity annually, a motivation therefor.

2. The investigation programme shall be aimed at the following elements:
 - a. an inspection of the sea bottom in order to:
 - 1° determine the level of erosion relative to a fixed reference point. The permissible level of erosion should remain within the limits of the design criteria;
 - 2° identify whether waste or peculiar objects are present on the bottom that may have an influence on or pose a danger to the structure;
 - b. an inspection of the underwater steel structure and connected pipelines in order to conclude that:
 - 1° all structural parts are present and not damaged or corroded;
 - 2° all pipelines are in their right place, properly secured and not damaged or corroded;
 - 3° the corrosion protection system is present and in good condition; if the condition of the pipeline locking clamps cannot be properly assessed, then these points shall first be cleaned before being inspected;
 - c. an inspection to determine the level of underwater fouling on the steel structure and connected pipelines. If the fouling exceeds the maximum thickness as set out in the original design calculations, then this fouling should be removed;
 - d. an inspection of repairs performed or emergency measures taken;
 - e. an inspection of the well conductors and load-bearing steel structure above water and in the so-called splash zone as well as the mountings for connected pipelines, corrosion protection systems, stairs and steps located in the wind and water zone;
 - f. the degree of functioning of the corrosion protection system and:
 - 1° where the corrosion protection system operates insufficiently, thickness measurements shall be performed to determine the level of corrosion in the insufficiently protected areas together with an investigation to ascertain the cause of the corrosion;
 - 2° if the level of corrosion exceeds the corrosion supplements as per the design calculations, then steps shall be taken in consultation with the competent institute;
 - 3° If corrosion has been detected on the primary structural components or conductors below and above water, wall thickness measurements shall also be performed together with a general inspection to ascertain the cause of the corrosion;
 - g. inspection and examination of a number of critical welds of joints, as indicated beforehand in the 5 year inspection plan, together with an inspection of the material thickness of joints and adjoining connections.

Article 7.3

The operator shall at least 8 weeks before the removal of a mining installation fully positioned under surface water as meant in Article 63 of the Mijnbouwbesluit report to the inspecteur-generaal der mijnen about:

- a. the probable moment of removal;
- b. the manner in which the mining installation and the scrap and other material as meant in Article 44.2 of the Mijnbouwwet shall take place, and
- c. the manner in which it will be demonstrated that the location on which the mining installation was positioned is free from scrap and other material.

CHAPTER 8. BOREHOLES AND WELLS

Part 8.1. General

Article 8.1.1

1. For the purpose of this chapter, the following definitions apply:
 - a. well: borehole taken into service following construction, fitting-out and commissioning;
 - b. gushing producible well: a well from which production can be carried out via pressures prevailing in the productive stratum or strata, without artificial lift methods;
 - c. non-gushing producible well: a well from which production is only possible by using artificial lift methods;
 - d. production tree (X-mas tree): above soil finishing with shutoff valves and lateral outlet ports, whether or not integrated, that is installed after the borehole has been constructed;
 - e. main operating manifold: set of storage vessels, storage tank, pumps and distribution and control valves including the pipes with the aid of which the borehole protection is operated;
 - f. control panel: aid for the remote control of the main operating manifold;
 - g. compression body shutoff valve: tool in which an elastic body is located that can be deformed by expansion in such a manner that it can shut off a borehole, even if drilling equipment is present therein;
 - h. suspended casing: casing that is suspended in previously constructed casing and that does not run to the surface of the earth;
 - i. mechanical plug: a construction for remote operation that is inserted in a borehole up to a predetermined position and that, following activation, fully and continuously seals off the borehole;
 - j. pressurized series of tubing: tubing meant to manage contained pressures from the borehole.
2. The term 'sea bottom' shall in this part also be understood to mean: the bottom of surface water.

Part 8.2 Work programmes for boreholes and wells and reporting on boreholes

§ 8.2.1 Work programme for construction of boreholes

Article 8.2.1.1

1. A work programme for the construction of a borehole shall contain:
 - a. in the case of boreholes at sea:
 - 1^o the alphanumeric designation of the block in which the borehole will be constructed;
 - 2^o the indication of the borehole;
 - 3^o the location of the spudding point of the borehole expressed in geographical co-ordinates in accordance with the ETRS89 system, and
 - 4^o details of the height of the drilling floor or of another reference point to be specified in more detail, in metres relative to both the mean water level and the sea bottom;
 - b. in the case of boreholes on land:
 - 1^o the name of the municipality in which the borehole will be constructed;
 - 2^o the name of the borehole;
 - 3^o the location of the spudding point thereof expressed in the geographical coordinates in accordance with the ETRS89 system;
 - 4^o a notification of the height of the ground level in meters relative to N.A.P. and the height of the drilling table, or, instead of the drilling table, another point of reference relative to N.A.P. to be further specified.
2. The work programme shall further contain at least:
 - a. the exact location where a borehole will penetrate the deposit and the proposed depth of the borehole;
 - b. a schematic report on:
 - 1^o the selection criteria on the basis of which the casing depths have been chosen, taking into account the maximum allowable inflow volumes based on the expected formation strengths;
 - 2^o the geological formations that will probably be penetrated by drilling;
 - 3^o the casing depths of adjacent boreholes with their mudweights used, temperature and formation strength tests, compared with those of the borehole to be constructed, together with the correlated stratigraphical column,
 - 4^o the pore pressure that can be expected in the borehole and the rock deformation pressure at the planned drilling mud pressures, and
 - 5^o each location where:
 - mud losses can occur;
 - plastic rock is to be expected, or
 - hydrocarbon accumulation can be present;
 - c. the type of the drilling installation to be used;
 - d. a description:
 - 1^o of the method of isolation of the sweet and salt water layers stating:
 - the local groundwater hydrology;
 - the identification of sweet and salt water layers;
 - the intended isolation after the drilling through the sweet and salt water layers;
 - the manner of verification of the new isolation after penetration by drilling.
 - 2^o with drawings of each casing series with details of the diameter;
 - 3^o of the type of material, the weight per unit of length and the depth envisaged for the incorporation of each series, and
 - 4^o of the planned diameter of the borehole in the drilling trajectory to each of the depths as meant in Article 8.2.1.1.2 d.2^o;
 - e. a report on all occurring charge situations of each series of casing with correction for influences by corrosion, wear and tear and fatigue, and design and safety factors that are used to secure the casing in these charge situations;

- f. a schematic report of the triaxial tension analysis diagram in which is demonstrated that the calculated triaxial tensions for all occurring charge situations with the pertaining safety factors can not lead to plastic deformation of each casing series.
- g. details of the cementing of each casing series to be applied, with details of the planned depth of the top of the annular cement column;
- h. details of the test pressure of each casing series;
- i. details of the petrophysical measurements to be performed;
- j. details of the methods to be applied for formation strength testing;
- k. details of the core trajectories to be taken;
- l. details of the drilling fluid to be used and a detailed explanation of the choice made;
- m. a report on the chemicals to be used at the construction of the borehole, their quantities, and a description of the use of those chemicals showing that compliance is established with:
 - 1^o. the EC Directive registration, evaluation and authorization of chemical substances and the conditions set by or by virtue of section 9.3 of the Wet milieubeheer for the implementation of that Directive;
 - 2^o. The EC Directive categorization, labelling and packaging of substances and mixtures and the conditions set by or by virtue of section 9.3a of the Wet milieubeheer for the implementation of that Directive;
 - 3^o. the biocides Directive and the conditions set by or by virtue of the Wet gewasbeschermingsmiddelen en biociden for the implementation of that Directive;
- n. if a bore dust cleaning system is to be used: details of the system to be used as well as any chemicals that may be used thereby;
- o. a site drawing of the proposed profile of the borehole and details of the measurement technique to be used in relation to the profile of the borehole;
- p. if the borehole is to be constructed on a location near one or more existing boreholes, whether or not decommissioned, in such a way that a danger to the borehole or another borehole already in existence is not excluded a calculation of the expected minimum distance and the expected minimum separation factors on the basis of the measurement instruments used;
- q. a description of the safety protection installation to be used for each casing series, detailing:
 - 1^o the type of every component of the installation, and
 - 2^o the maximum pressure that every component can withstand and that at which every component is tested;
- r. if the borehole will be tested, a description of:
 - 1^o the procedure to be followed;
 - 2^o the layout of the borehole, and
 - 3^o the associated above surface equipment;
- s. details of the technical auxiliary and other safety protection installations to be used and the times when these are set up, and
- t. a description with a drawing of the intended completion of the borehole.

Article 8.2.1.2

1. The work programme for the construction of a borehole shall be in the possession of the inspecteur-generaal der mijnen at least 4 weeks before the start of the activities in question.
2. Major changes shall only be made to a work programme after these have been notified in writing to the inspecteur-generaal der mijnen.

3. If unforeseen circumstances prevent such prior written notification to be given in good time, then the inspecteur-generaal der mijnen shall be notified immediately of the change by telephone or otherwise, which notification shall immediately be confirmed in writing.

§ 8.2.2 Reports on the construction of boreholes

Article 8.2.2.1

1. A daily report on the profile of every borehole shall, during working days, be notified to the inspecteur-generaal der mijnen ultimately at 09.00 a.m. following the day to which the report relates.
2. The daily report shall contain the details as set out in Appendix 11 and shall be compounded in accordance with that Appendix.

Article 8.2.2.2

The final report on the construction, repair and decommissioning of a borehole shall contain the details set out in Appendix 12 and shall be drawn up in accordance with that Appendix.

§ 8.2.3 Work programme for the repair of wells

Article 8.2.3.1

1. A work programme for the repair of a well shall contain:
 - a. in the case of wells at sea:
 - 1^o the alphanumeric designation of the block in which the well to be repaired is located;
 - 2^o the indication of the well;
 - 3^o the location of the spudding point of the well expressed in geographical co-ordinates in accordance with the ETRS89 system, and
 - 4^o details of the height of the drilling floor or of another reference point to be specified in more detail, in metres relative to both the mean water level and the sea bottom;
 - b. in the case of wells on land:
 - 1^o the name of the municipality in which the well to be repaired is located;
 - 2^o the name of the well;
 - 3^o the location of the spudding point of the well expressed in geographical co-ordinates in accordance with the ETRS89 system;
 - 4^o details of the height of both the ground level and the drilling floor or another reference point, to be specified in more detail with all this being quoted in metres relative to N.A.P.
2. The work programme shall further contain at least:
 - a. the reason for the repair and a brief summary of the behaviour of and problems with the well since construction or, if this well has been repaired earlier, the last repair;
 - b. the date of the original completion or of the last repair;
 - c. a sketch of the deviation, if applicable;
 - d. details of the reference plane from which the depth measurements are quoted;
 - e. a description with drawings of:
 - 1^o the production tubing with specifications;

- 2° the cementing depth, and
- 3° the depth of the top of the annular cement columns;
- f. on the integrity management of the well a description of:
 - 1° the solidity of the annular cement columns present, with a statement on the integrity measurements to be made for that purpose, and
 - 2° the manner in which the integrity of the well before and after the carrying out of the various activities is secured;
- g. a description with drawings of the completion above or below surface water, including specifications of the X-mas tree;
- h. a description of the subsurface completion of the well;
- i. the expected maximum enclosed above surface pressures and pressures in the various annular spaces;
- j. the formation pressure and the reference depth;
- k. the subsurface and above surface temperature of the well;
- l. the content of the production string and of the annular spaces;
- m. the production mechanism;
- n. the maximum production capacity (open flow potential);
- o. the name or type designation of the installation with which the well repair is carried out and also the name of the drilling contractor;
- p. a description of the safety protection installation to be used for sealing the well in the various phases;
- q. a chronological overview of the proposed successive repair works, with as much account as possible being taken of alternative possibilities adopted beforehand together with, in particular, an explanation of operations that are critical from a safety point of view or otherwise;
- r. in view of the location of the well to be repaired and, where applicable: the method by which wells in the vicinity will be made safe;
- s. details of the completion of the well after the repair;
- t. the estimated duration of the repair;
- u. a description of the substances and volumes of substances that are injected on the occasion of such repair, stating the registration number as meant in Article 64.9 of the EG Guideline registration, evaluation, or, as may be the case the registration number that has by virtue of the Guideline biocides or the Wet gewasbeschermingsmiddelen en biociden been given to the substance, showing that compliance is established with:
 - 1°. the EC Directive registration, evaluation and authorization of chemical substances and the conditions set by or by virtue of section 9.3 of the Wet milieubeheer for the implementation of that Directive;
 - 2°. the EC Directive categorization, labelling and packaging of substances and mixtures and the conditions set by or by virtue of section 9.3a of the Wet milieubeheer for the implementation of that Directive;
 - 3°. the biocides Directive and the conditions set by or by virtue of the Wet gewasbeschermingsmiddelen en biociden for the implementation of that Directive.

Article 8.2.3.2

1. The work programme for the repair of a well shall be in the possession of the inspecteur-generaal der mijnen at least 2 weeks before the start of the activities in question.
2. Articles 8.2.1.2.2 and 8.2.1.2.2.3 similarly apply.

Article 8.2.3.3

This paragraph similarly applies to boreholes.

§ 8.2.3a Work programme for stimulation of a reservoir via a well

1. A work programme for the stimulation of a reservoir via a well shall contain:
 - a. in the case of wells at sea:
 - 1^o the letter and alphanumeric designation of the block in which the well to be stimulated is located;
 - 2^o the indication of the well;
 - 3^o the location of the spudding point of the well expressed in geographical co-ordinates in accordance with the ETRS89 system, and
 - 4^o details of the height of the drilling floor or of another reference point to be specified in more detail, in metres relative to both the mean water level and the sea bottom;
 - b. in the case of wells on land:
 - 1^o the name of the municipality in which the well to be stimulated is located;
 - 2^o the name of the well;
 - 3^o the location of the spudding point of the well expressed in geographical co-ordinates in accordance with the ETRS89 system, and
 - 4^o details of the height of both the ground level and the drilling floor or another reference point to be specified in more detail, all this being quoted in metres relative to N.A.P.
2. The work programme shall further contain at least:
 - a. the cohesion of the various intended stimulation activities if there are various stimulation activities in the same formation;
 - b. the reason for the stimulation and a short overview of the behaviour and possible problems with the well as from its construction, or, if the reservoir has previously been stimulated, the reason for the previous stimulation;
 - c. the date of the original completion, of the latest repair or the latest stimulation activity;
 - d. a sketch of the deviation, if applicable;
 - e. an indication of the reference plane from which the depth sizes are indicated;
 - f. a description with drawings of:
 - 1^o the tubing with specifications;
 - 2^o the cementing depth;
 - 3^o the depth of the top of the annular cement columns and
 - 4^o the depths of the perforated formations;
 - g. a description of the integrity management of the well relating to:
 - 1^o the suitability of the annular cement columns present with a statement on the integrity measures to be performed;
 - 2^o the manner in which the integrity of well, before and after the stimulation of the reservoir be measured and assured, and
 - h. a description with drawings of the completion above or under surface water, including specifications of the X-mas tree;
 - i. a description of the subsurface completion of the well;
 - j. the expected maximum closed in above surface pressure and the pressures in the various annular spaces;
 - k. the formation pressure and the reference depth;
 - l. the subsurface and above surface temperature of the well;
 - m. the volume of the annular column and of the annular spaces;
 - n. the production mechanism;
 - o. the maximum production capacity (open flow potential);

- p. the name or type indication of the installations with which the stimulation of the reservoir will be carried out and the names of the service companies;
- q. a description of the safety installations to be used for the shutting off of the well in the various phases of the stimulation process;
- r. a chronological overview of the planned successive works in relation to stimulation activities, including the clean production of the well, whereby as much as possible previously adopted alternative possibilities will be taken into account, with in particular an elucidation on from a safety or other point of view critical operations;
- s. if the stimulation of a reservoir consists of a pre-treatment and a principal treatment:
 - 1^o the tubing with specifications;
 - 2^o the cementing depth;
 - 3^o the depth of the top of the annular cement columns and
 - 4^o the depths of the perforated formations.
- t. to the extent applicable the method by which the wells are made safe that are present in the vicinity of the reservoir to be stimulated;
- u. a description of the completion of the well after finalization of the stimulation activities;
- v. the estimated duration of the works;
- w. a description of the substances and volumes of the substances that are used and injected during the stimulation stating the registration number as meant in Article 64.9 of the EC Directive registration, evaluation and authorization of chemical substances, or, as appropriate, the registration number that has been given to the substance by or by virtue of the biocides Directive or the Wet gewasbeschermingsmiddelen en biociden, showing compliance with:
 - 1^o. the EC Directive registration, evaluation and authorization of chemical substances and the conditions set by or by virtue of section 9.3 of the Wet milieubeheer for the implementation of that Directive;
 - 2^o. The EC Directive categorization, labelling and packaging of substances and mixtures and the conditions set by or by virtue of section 9.3a of the Wet milieubeheer for the implementation of that Directive;
 - 3^o. the biocides Directive and the conditions set by or by virtue of the Wet gewasbeschermingsmiddelen en biociden for the implementation of that Directive;
- x. a description of the geochemical reactions that can occur between the fluids used for the stimulation, the formations and the fluids present in these formations, including a description of the composition and the effects of possible resulting products;
- y. a description of the volumetric balance of the fluids used for the stimulation before and after the stimulation of the reservoir;
- z. a description of the manner in which the integrity and protection of the sealing formations above and under the formation to be stimulated are secured;
- aa. a description of the profile and the orientation of the stimulating of the reservoir relative to the well, including graphics thereof, and the manner how this profile and this orientation have been set, detailing:
 - 1^o. a description of the applied rock stresses and characteristics and the uncertainties assumed thereby;
 - 2^o the distance of the well from the natural faults in the direction of the reservoir to be stimulated;
- bb. a description of the seismic risks, including the seismic measurement tools and measures to be taken in the event of seismicity;
- cc. a description of criteria for other stimulation activities in the same formation, and

- dd. distances chosen to other stimulation activities performed or to be performed in the same formation.

Article 8.2.3a.2

1. The work programme for the stimulation of a well shall be in the possession of the inspecteur-generaal der mijnen at least 6 weeks before the commencement of the activities concerned.
2. The Articles 8.2.1.2.2 and 8.2.1.2.3 similarly apply.

Article 8.2.3a.3

This paragraph similarly applies to boreholes.

§ 8.2.4 Work programme for decommissioning of wells

Article 8.2.4.1

1. A work programme for the decommissioning of a well shall contain:
 - a. in the case of wells at sea:
 - 1^o the alphanumeric designation of the block in which the well to be decommissioned is located;
 - 2^o the number and/or name of the well;
 - 3^o the location of the spudding point of the well expressed in geographic coordinates in accordance with the ETRS89 system, and
 - 4^o details of the height of the drilling floor or of another reference point to be specified in more detail, in metres relative to both the mean water level and the sea bottom;
 - b. in the case of wells on land:
 - 1^o the name of the municipality in which the well to be decommissioned is located;
 - 2^o the name of the well; and
 - 3^o the location of the spudding point of the well expressed in accordance with the system of coordinate of the ETRS89 system, and
 - 4^o details of the height of both the ground level and the drilling floor or another reference point to be specified in more detail, all this being quoted in metres relative to N.A.P.
2. The work programme shall further contain at least:
 - a. the reason for the decommissioning of the well;
 - b. the date of the original completion or, if the well has previously been repaired, the last repair;
 - c. a sketch of the deviation, if applicable;
 - d. details of the reference plane from which the depth measurements are quoted;
 - e. a description with drawings of:
 - 1^o casing;
 - 2^o the cementing depths, and
 - 3^o the depths of the top of the annular cement columns;
 - f. the depth at which the well has been completed and the depth of the perforated part of the production tubing;
 - g. a description of the completion of the well above or below surface water, including specifications of the x-mastree;
 - h. a description of the subsurface completion of the well;

- i. the expected maximum enclosed above surface pressure and the annular pressures;
- j. the formation pressure and the reference depth;
- k. the subsurface and above surface temperature of the well;
- l. the content of the production string and of the annular spaces;
- m. the name or type designation of the installation with which the well is decommissioned and also the name of the drilling contractor;
- n. a description of the safety protection installation to be used for sealing the well;
- o. a chronological overview of the successive activities, with as much account as possible being taken of alternative possibilities adopted beforehand together with, in particular, an explanation of operations that are critical from a safety point of view or otherwise;
- p. in view of the location of the well to be decommissioned and, where applicable: the method by which wells in the vicinity will be made safe;
- q. a description with drawings of the completion of the well after the decommissioning, and
- r. the estimated duration of the decommissioning.

Article 8.2.4.2

1. The work programme for the decommissioning of a well shall be in the possession of the inspecteur-generaal der mijnen at least 4 weeks before the start of the activities in question.
2. Articles 8.2.1.2.2 and 8.2.1.2.3 similarly apply.

Article 8.2.4.3

This paragraph similarly applies to boreholes.

Part 8.3 Rules concerning the construction of boreholes and the use and repair of wells

§ 8.3.1 Safety protection in connection with the construction of boreholes

Article 8.3.1.1

This section does not apply to boreholes that aim to show the presence of or the production of salt, provided that in the document as meant in Article 37.2 of the Mijnbouwbesluit the operator has demonstrated that there is no danger of the harmful egress of subsurface gases or liquids.

Article 8.3.1.2

1. During the drilling activities preceding the incorporation and cementing of the first pressurised series of casing, measures shall be taken to remove directly and with the least possible impediment gas formed or liquid formed that originated from a formation containing gas or liquid at a higher pressure than the drilling liquid column.
2. The measures as meant in Article 8.3.1.2.1 shall consist of:
 - a. a shutoff valve that can shut off the borehole around the drilling tools present in the borehole, and

- b. a flow piece with an internal diameter at least equal to the shutoff device as meant in Article 8.3.1.2.a and that is equipped with at least one lateral outlet port with a shutoff valve whose operation is linked to the shutoff valve as meant in Article 8.3.1.2.a, but whose operation is opposite to that of this shutoff valve.
- 3. The evacuation pipes required for these measures shall have an internal diameter of at least 250 mm and shall be installed with the smallest possible number of elbows. Internal devices that prevent erosion of the pipes shall as far as possible be installed at the location of the elbows.
- 4. The aid for operating the devices shall be positioned at a point that is readily accessible to the drilling supervisor.
- 5. The Articles 8.3.2.1 up to and including 8.3.1.4 do not apply if the operator has, in the document as meant in Article 37.2 of the Mijnbouwbesluit, demonstrated that during the drilling activities as meant in Article 8.3.1.1 there is no danger for harmful egress of subsurface gasses or liquids.

Article 8.3.1.3

- 1. Following incorporation and cementing of the first pressurised series of the casing, the borehole shall be fitted with a safety protection installation with which the borehole can be sealed under all circumstances.
- 2. The safety protection installation as meant in Article 8.3.1.3.1 shall be composed of:
 - a. borehole shutoff valves;
 - b. a main operating manifold;
 - c. two control panels;
 - d. a choke manifold;
 - e. conduits between the aforementioned components, and
 - f. drilling equipment shutoff valves.
- 3. The safety protection installation, with the exception of the operating part and the compression body shutoff valve as meant in Article 8.3.1.4.1.a, shall at all times be capable of withstanding at least the maximum pressure to be expected at the top of the borehole.
- 4. If any suspicion exists that gas containing hydrogen sulphide is present, then the safety protection installation shall be resistant to exposure to gas containing hydrogen sulphide.

Article 8.3.1.4

- 1. The safety protection installation as meant in Article 8.3.1.3.1 shall in any event contain the following borehole shutoff valves:
 - a. a compression body shutoff valve;
 - b. a gate valve that can shut off a borehole around the drilling tools present in the borehole, and
 - c. a gate valve that can shut off a borehole in which no drilling tools are present.
- 2. Following the incorporation and cementing of the second pressurised series of the casing the safety protection installation shall, before drilling work is resumed, be extended by:
 - a. a second gate valve as meant in Article 8.3.1.4.1.b, and
 - b. a device for the gate valve as meant in Article 8.3.1.4.1.c for cutting the drilling tools present in the borehole at the level of this shutoff valve.
- 3. The shutoff valve as meant in Article 8.3.1.4.1.a shall be suitable for admitting drilling equipment if a pressure higher than atmospheric pressure exists in the top of the borehole.
- 4. The shutoff valves as meant in Article 8.3.1.4.1.a, Article 8.3.1.4.1.b and Article 8.3.1.4.1.c can be closed and opened with the aid of remote control.

5. The shutoff valves as meant in Article 8.3.1.4.1.b and Article 8.3.1.4.1.c can be secured against accidental opening.
6. The Minister can grant exemption from Article 8.3.1.4.1.

Article 8.3.1.5

1. The main operating manifold:
 - a. shall be positioned in a readily accessible location outside the drilling floor;
 - b. shall contain such a quantity of operating liquid that, with the pumps switched off and under prevailing atmospheric conditions, all shutoff valves as meant in Article 8.3.1.4.1.a, Article 8.3.1.4.1.b and Article 8.3.1.4.1.c can be closed and opened and subsequently the shutoff valve as meant in Article 8.3.1.4.1.a, Article 8.3.1.4.1.b or Article 8.3.1.4.1.c can be closed again under prevailing atmospheric conditions, and
 - c. shall be arranged and maintained in such a way that such a quantity of electric power, air pressure and operating liquid is present at all times that the borehole can be shut off.
2. The Minister can grant exemption from Article 8.3.1.5.1.a. The exemption can be granted subject to conditions or restrictions.

Article 8.3.1.6

1. One of the control panels as meant in Article 8.3.1.3.2 shall be positioned on the drilling floor in a position that is readily accessible to the drilling supervisor.
2. The second control panel shall be positioned such that it is readily accessible to anyone even during calamities.
3. The borehole shutoff valves as meant in Article 8.3.1.6.1 and Article 8.3.1.6.2 shall be operated with the aid of the control panels as meant in Articles 8.3.1.4.1.a, 8.3.1.4.1.b and 8.3.1.4.1.c.
4. The control panel as meant in Article 8.3.1.6.1 shall be fitted with visual indicators that indicate the position of the associated distribution valve in the main operating manifold.
5. Article 8.3.1.6.4 does not apply if the main operating manifold on the drilling floor has been set up in a location that is readily accessible to the drilling supervisor.

Article 8.3.1.7

1. The choke manifold shall be well accessible.
2. The choke manifold shall be equipped with at least two adjustable chokes:
 - a. that, when the manifold is in operation, can be exchanged individually without any danger, and
 - b. of which at least one can be remotely adjusted.

Article 8.3.1.8

1. The conduits forming part of the main operating manifold leading to the borehole shutoff valves shall be so flexible that there will be no damage resulting from the movement of the drilling installation.
2. The conduits as meant in Article 8.3.1.8.1 shall at all times be capable of withstanding the maximum pressure that may arise in the main operating manifold.
3. The choke manifold and associated supply and discharge conduits shall be anchored in such a way that forces resulting from the supply and removal of gases or liquids can be absorbed without causing damage to the manifold or to the supply or discharge conduits.

4. The conduits of the safety protection installation and the associated shutoff valves upstream and directly downstream of the choke manifolds shall be capable of withstanding at least the same operating pressure as the borehole shutoff valves as meant in Article 8.3.1.4.1.b and Article 8.3.1.4.1.c.

Article 8.3.1.9

1. The drilling tool suspended in the drilling table can be shut off with the aid of a shutoff mechanism present on the drilling table in such a position that it can be immediately placed in or on the drilling tool.
2. The driving part of the drilling tool shall be equipped with two shutoff valves to enable hollow drilling tools to be shut off internally.
3. If a friction bar is used as the driving part, then one of the shutoff valves as meant in Article 8.3.1.9.2 shall be fitted above the friction bar and one below. If another driving part is used at least one of those shutoff valves shall be remotely operable.

Article 8.3.1.10

The annular space between the last pressurised series of installed casing and the drilling tool present therein shall comprise at least two lateral outlet ports, each with two shutoff valves that can operate separately with a nominal width of at least 50 mm such that the quantity of liquid or gas to be expected can be effectively removed.

Article 8.3.1.11

1. The safety protection installation shall be arranged in such a way that liquids can also be pumped into the borehole other than via the drilling tool, while gas or liquids can be simultaneously removed via the choke manifold.
2. In each conduit for pumping liquid into the borehole and for removing gas or liquids, two shutoff valves shall be positioned as closely as possible to the borehole shutoff valves. At least one of those shutoff valves can be operated via the control panel as meant in Article 8.3.1.6.1.
3. The conduit for the pumping liquid into the borehole shall be equipped with a non-return valve.
4. The conduit for the removal of gas or liquid shall have a nominal width of at least 75 mm.
5. Openings in the borehole shutoff valves other than those to which a conduit as meant in Article 8.3.1.11.2 is connected shall be shut off via:
 - a. two shutoff valves;
 - b. a fully closed plate, or
 - c. a shutoff plug.

§ 8.3.2 Testing of borehole and gate valves

Article 8.3.2.1

During a pressure test up to the maximum pressure that may occur in the casing series according to calculations, no leakage shall, following shutdown of the pressure pumps and stabilisation of the pressure, occur for a period of at least:

- a. 10 minutes, if the volume tested is 3 m³ or less, or
- b. 20 minutes, if the volume tested is greater than 3 m³.

Article 8.3.2.2

1. The connected borehole shutoff valves, choke manifolds and conduits shall be tested for good shutoff performance by means of a pressure test:
 - a. at least once every 3 weeks for 5 minutes at 2.5 MPa and subsequently during the period as mentioned in Article 8.3.2.1.a or Article 8.3.2.1.b, at at least 50% of the expected maximum pressure that can occur at the top of the borehole under the most unfavourable conditions, and
 - b. during 5 minutes at 2.5 MPa and subsequently for the period as meant in Article 8.3.2.1.a or Article 8.3.2.1.b, at the expected maximum pressure that can occur at the top of the borehole under the most unfavourable conditions:
 - 1^o within 1 week before the possible encountering of a formation expected to be productive, and in addition
 - 2^o at least once every 6 weeks.
2. If repair work has been performed on or modifications have been made to the protection installation, then the respective parts of the installation and the parts directly connected thereto shall be tested in accordance with Article 8.3.2.2.1.
3. For the test of the compression body shutoff valve containing the drilling tool with the smallest diameter in use, the test pressure shall in all cases be no more than 70% of the maximum allowable operating pressure.
4. The Minister can grant exemption from Article 8.3.2.2.1.a. The exemption can be granted subject to conditions or restrictions.

Article 8.3.2.3

1. All gate valves shall be tested weekly with respect to their mechanical operation.
2. The presence of sufficient operating liquid shall be tested once a week under the operating pressure for borehole shutoff valves in use.
3. The gate valves in use shall be tested with respect to their operation at least once every 4 weeks, with the operating liquid under maximally reduced pressure.
4. Directly after work on the operating part of the safety protection installation has taken place, the applicable tests as meant in Article 8.3.2.3.1, Article 8.3.2.3.2 and Article 8.3.2.3.3 shall, for that section and the parts directly connected thereto, be repeated under the operating pressure as meant in Article 8.3.1.8.2.
5. The test as meant in Article 8.3.2.3.1 shall take place by using each of the control panels alternately.

Article 8.3.2.4

1. The operator shall prior to the use of the borehole shutoff valves and during the period mentioned in Articles 8.3.2.1a and 8.3.2.1b test, by means of a pressure test, the combination of the borehole shutoff valves, the suspension construction of the casing series and the connection between the borehole shutoff valves and the suspension construction of the casing series at the lowest operating pressure of the borehole shutoff valves and the suspension construction of the casing series.
2. The operator shall repeat the pressure test:
 - a. prior to first use of the borehole shutoff valves;
 - b. after a repair or replacement of the borehole shutoff valves;
 - c. directly after the lapse of a period of 13 weeks in which the borehole shutoff valves are in operation, and
 - d. subsequently always directly after the lapse of a period of 26 weeks after the latest test that was performed.
3. In the case of the test on the compression body shutoff valve containing the drilling tool with the smallest diameter in use, the test pressure shall under all circumstances be no more than 70% of the maximum allowable operating pressure.

Article 8.3.2.5

1. The results of the tests as meant in Articles 8.3.2.2 and 8.3.2.4 shall be recorded in writing.
2. The data shall be recorded in writing in the case of the tests as meant in Article 8.3.2.3, using a form the model whereof is contained in Appendix 13.

Article 8.3.2.6

1. The borehole shutoff valves shall be inspected and checked at least once every 12 months of use or at least once every 24 months in accordance with the manufacturer's instructions.
2. All parts of the safety protection installation shall be overhauled at least once every 5 years in accordance with the manufacturer's instructions.
3. A description of the activities as meant in Article 8.3.2.6.1 and Article 8.3.2.6.2 shall be recorded in a written report.
4. The instructions as meant in Article 8.3.2.6.1 and the reports as meant in Article 8.3.2.6.3 shall for inspection by the inspecteur-generaal der mijnen be present at the drilling works or the mining installation, respectively. These instructions and reports shall be kept for at least 6 years for this purpose.

§ 8.3.3 Periodic safety protection exercises in connection with boreholes and wells

Article 8.3.3.1

1. Once the well safety protection installation has been installed at a drilling operation or work on a producible well, all persons directly involved in the well shall take part at least once a week in one of the well safety protection exercises as meant in Article 8.3.3.2.
2. A record of persons as meant in Article 8.3.3.1.1 and of well safety protection exercises held by them shall be kept in the daily drilling register.

Article 8.3.3.2

1. The exercises shall be held by alternately simulating a situation during work that is intended to identify a blow-out in good time and also to perform the correct operation with pipes in the borehole.
2. The exercises as meant in Article 8.3.3.2.1 shall consist at least of:
 - a. identifying pressure difference, increase or loss of liquids in the well;
 - b. suspending pipes at the appropriate height in the well safety protection installation;
 - c. mounting a safety shutoff valve on the pipes in the well;
 - d. observing the liquid level in the well;
 - e. killing the well, and
 - f. recording the time required.
3. For the performance of a well safety protection exercise a procedure shall have been drawn up that is available at the well.

§ 8.3.4 Repair of a well

Article 8.3.4.1

1. When replacing the X-mas tree with the borehole shutoff valves, Articles 8.3.1.3 up to and including Article 8.3.2.6, with the exception of Article 8.3.1.6.2, shall be observed with the proviso that, in deviation of Article 8.3.1.3.2.c, one control panel will suffice.
2. During the removal and the replacement of the X-mas tree a gushing producing well shall be protected at least three-fold against egress and non-gushing producing wells shall be at least protected twice-fold.
3. Activities other than as meant in Article 8.3.4.1.1 shall only be carried out if the well can under all circumstances be brought and kept under control.
4. The Minister can grant exemption from Article 8.3.4.1.2. The exemption can be granted subject to conditions or restrictions.

Part 8.4 Construction of wells

Article 8.4.1

1. A gushing producible well shall be equipped with a safety protection installation installed at a depth of at least 50 metres below the earth's surface or the bottom of surface water to prevent uncontrolled gushing of the well. This protection facility shall be operable from above the earth's surface or surface water.
2. As soon as operation of the safety protection installation as meant in Article 8.4.1.1 is no longer possible, the well shall be automatically shut in.
3. The good operation of the safety protection installation shall be demonstrated by means of periodic tests. The frequency of the tests and their results shall be recorded.
4. The tubing hanger shall be designed with an internal profile in which a plug or shutoff valve can be installed to obtain full shut in of the production string.
5. The Minister can grant exemption from Article 8.4.1.1 provided that it has been demonstrated that at least the same level of safety is achieved in another manner.

Article 8.4.2

1. In the case of a completed well on land or above surface water, all lateral outlet ports of the annular spaces intended for pumping in liquids or gases or for removing liquids or gases shall be equipped with 2 shutoff valves with a nominal diameter of at least 50 mm.
2. The annular spaces as meant in Article 8.4.2.1 shall be provided with at least 1 lateral outlet port. The tubing head housing shall be equipped with 2 lateral outlet ports, each equipped with 2 shutoff valves with a nominal diameter of at least 50 mm.
3. If the spaces as meant in Article 8.4.2.1 between 2 successive casing series are not openly linked to the subsoil or are not used for injection or production, then the housing in question can be equipped with 1 lateral outlet port with a nominal diameter of at least 50 mm, with the proviso that that shutoff valve is equipped with a flange and a stop-cock as a connection for a pressure gauge with a blow-off facility. Every additional lateral outlet port shall be equipped in accordance with the first sentence or fitted with a blind flange.
4. Shutoff valves as meant in Article 8.4.2.1 and Article 8.4.2.3 can be made pressure-free for replacement purposes.

Article 8.4.3

1. In the case of a completed well below surface water, the spaces between 2 successive casing series shall not be openly connected to the subsoil. The first sentence does not apply to the annular space of the casing series openly connected to the subsoil for the purpose of expansion as a result of temperature fluctuations during production. The production annular space shall then be sealed off at the suspension construction.
2. If the spaces as mentioned in Article 8.4.3.1 have been sealed off at the casing head of the casing series, this sealing shall be tested for integrity directly after installation.
3. The space between the casing series and the successive casing shall be accessible by means of a lateral outlet port with a nominal diameter of at least 50 mm. This lateral outlet port shall be equipped with:
 - a. at least 1 remotely controllable shut-off valve (bidirectional type) with a nominal diameter of at least 50 mm, if a permanent connection to other installations for the extraction of minerals is present, or
 - b. at least 2 shutoff valves with a nominal diameter of at least 50 mm.
4. The Minister can grant exemption from Article 8.4.3.1 and Article 8.4.3.3 provided that it has been demonstrated that the same level of safety is achieved in another manner.

Article 8.4.4

1. In the case of producing, injecting and shut in wells the pressures in the tubing/casing annulus and in the first casing/casing annulus shall be inspected. Anomalies found in the pressure pattern as meant in the first sentence shall be recorded. In the case of a completed well below surface water the second sentence does not apply to inspecting and recording of the pressure in the annular space of the production piping series connected to the subsoil whereby the annular space has been sealed off at the suspension construction.
2. With regard to annular pressures the cause of the said pressure shall be diagnosed as quickly as possible.
3. If deviations in annular pressures arise as meant in Article 8.4.4.1, then the inspecteur-generaal der mijnen shall be informed in writing, and an action programme for the investigation to be conducted and possible action to be taken shall be submitted to him. The said deviations shall be reported immediately by telephone in urgent cases,.

Article 8.4.5

1. The X-mas tree of a gushing producible well shall consist at least of:
 - a. two main shutoff valves via which the well can be shut off. The top shutoff valve shall be remotely controllable, and
 - b. a shutoff valve at the top of the X-mas tree with a facility for connecting a pressure gauge fitted with a stop-cock with a blow-off facility.
2. If the X-mas tree is located below surface water, it shall be equipped with:
 - a. 2 main shutoff valves via which the well can be shut in, with the top shutoff valve being remotely controllable;
 - b. at least a possibility for relieving pressure at the top of the X-mas tree;
 - c. a flow wing fitted with a remotely controllable shutoff valve, and
 - d. an injection wing with a remotely controllable shutoff valve, if an injection wing has been installed.
3. Remotely controllable shutoff valves can be activated without an appreciable delay.
4. The Minister can grant exemption from Article 8.4.5.2 provided that it has been demonstrated that at least the same level of safety is achieved in another manner.

Article 8.4.6

The X-mas tree and the flow wing up to and including the first shutoff valve, located downstream of the reducing valve (throttle device) of a well, shall be designed for an operating pressure at least equal to the maximum possible pressure occurring at the well head.

Article 8.4.7

A well completion located below surface water shall be constructed in such a way that the well completion is not damaged by fishing material and the fishing material is not damaged by the well completion.

Article 8.4.8

1. A gushing producible well shall be equipped with a sealing structure that shuts off, as deep as possible, the annular space between the series of casing and the productive zone(s).
2. The seal or a pipe section below this seal shall be designed in such a way that at least a plug or safety valve can be installed therein to insulate the productive zone or zones leading to the X-mas tree.
3. The Minister can grant an exemption from Article 8.4.8.1. and Article 8.4.8.1.2.

Article 8.4.9

1. The flow wing of a well shall contain a safety protection installation that automatically shuts off the well in the event of pipe fracture.
2. If the X-mas tree or the flow wing of a non-gushing producible well is damaged, then the power supply for the lifting mechanism shall be automatically shut off.
3. In the case of a non-gushing producible well in respect of which a gas lifting method is used, a safety protection installation shall be fitted to the well connection in order to prevent the uncontrolled outflow of gas therefrom in the event of fracture of that gas lifting injection pipe.

Article 8.4.10

Wells from which mineral oil is produced using a pump facility shall be constructed in such a way that gas released in the annular space between the production string and the last casing series can be removed without danger.

Part 8.5 Decommissioning of wells and boreholes

§ 8.5.1 General

Article 8.5.1.1

This section also applies to boreholes.

Article 8.5.1.2

1. A well shall prior to being decommissioned be filled with a liquid of such specific gravity that any pressure to be expected in the well can be withstood and be of such

composition that corrosion is prevented and no damage is done to any mineral reservoir.

2. Every seal used in the well shall be durable and complete.
3. Where a “cement plug” is prescribed in this paragraph, another device may be used provided that this results in at least an equivalent sealing.

§ 8.5.2 Rules on decommissioning

Article 8.5.2.1

1. Each seal of a well that is decommissioned shall be tested by means of:
 - a. a weight test of at least 100 kN (10 250 kg),
 - b. a test pressure of at least 50 times 100.000 Pa (50 bar) for a period of 15 minutes, or
 - c. negative pressure differential in the well whereby it is established that no liquid or gas from the reservoir flows into the well.
2. The seal shall withstand the tests well.
3. Article 8.5.2.1.1 and Article 8.5.2.2 do not apply to a seal as meant in Article 8.5.2.7.2.

Article 8.5.2.2

1. If a partially uncased well is decommissioned, then a seal consisting of the following shall be installed in the deepest casing series from the shoe to the surface:
 - a. a cement plug of at least 100 metres in length, or
 - b. a mechanical plug with a cement plug of 50 metres in length mounted thereon.
2. If a well whose uncased part is located in a reservoir is decommissioned, then this reservoir shall be fully sealed with the aid of cement plugs at level with or above the reservoir.
3. If the uncased part as meant in Article 8.5.2.2.2 intersects more than one reservoir, these reservoirs shall be insulated from one another by means of cement plugs. The length of the cement plug shall be 100 metres or equal to the natural distance between the reservoirs.

Article 8.5.2.3

1. If a well whose casing has been perforated is decommissioned, then a seal consisting of the following shall be installed at level with or above the perforated part:
 - a. a cement plug that extends more than 100 metres above the perforated part;
 - b. a mechanical plug located as closely as possible above the perforated part, with a cement plug of 50 metres in length mounted thereon, or
 - c. a mechanical plug of 50 metres in length located above the perforated part through which, in the casing, a cement plug is pressed over the entire length of the perforated part with a cement plug mounted directly on the mechanical plug.
2. If perforations have been made to the casing level of various reservoirs, then these reservoirs shall be insulated from one another by means of one of the seals referred to in Article 8.5.2.3.1. The cement plug as meant in Article 8.5.2.3.1a or Article 8.5.2.3.1b may in this case be 50 metres shorter than indicated in Article 8.5.2.3.1 or be just as long as the natural distance between the reservoirs.

Article 8.5.2.4

If a well containing cemented suspended casing is decommissioned, then a seal consisting of the following shall be installed at level with the top of this casing:

- a. a cement plug extending over at least 50 metres below the top of the suspended casing to at least 50 metres above it;
- b. a mechanical plug located approximately 10 metres below the top of the suspended casing with a cement plug of at least 60 metres mounted thereon, or
- c. 2 mechanical plugs, with one being placed just below the top of the suspended casing and the other just above this point.

Article 8.5.2.5

1. In every annular space between the series of casing of a well to be decommissioned, a seal shall be fitted over a length of at least 100 metres from the shoe of the casing directly preceding it. The work programme as meant in Article 8.2.4.1 shall indicate in what manner it is established that this seal has been adequately fitted.
2. If it can not be demonstrated that the annular space between two series has been sealed off:
 - a. the smallest casing limiting the annular space shall be reclaimed over the greatest possible length, with the proviso that the cut-off of this casing series takes place as closely as possible to the top of the shoe and the casing directly preceding it, while the part left in the well is sealed off in accordance with Article 8.5.2.4, or
 - b. the casing shall be perforated at level with the shoe directly preceding it, a cement plug shall be placed in the annular space over a length of at least 100 metres and the seal of the annular space shall be inspected by means of a pressure test.

Article 8.5.2.6

If a well to be decommissioned passes through a reservoir whose contents may possibly flow to the surface, then a cement plug of at least 100 metres shall, at level with the annular seal as meant in Article 8.5.2.5.1, that is located as closely as possible to the top of the reservoir, be fitted in both the well and all the annular spaces on the same level.

Article 8.5.2.7

1. The casing of a well to be decommissioned shall be removed:
 - a. to at least 3 metres below ground level, or
 - b. to at least 6 metres below the sea bottom.
2. In the casing of the well to be decommissioned a seal comprising the following shall be fitted as closely as possible below the point as meant in Article 8.5.2.7.1:
 - a. a cement plug of at least 100 metres, or
 - b. a mechanical plug with a cement plug of at least 50 metres mounted thereon.
3. The Minister can grant exemption from Article 8.5.2.7.1 and Article 8.5.2.7.2.

Article 8.5.2.8

1. If suspicion reasonably exists that a mechanical plug may come into contact with a corrosive medium or if the mechanical plug serves to seal off a high-pressure reservoir as meant in Article 8.5.2.8.2, then a cement plug shall be placed directly above that plug over a length of at least 50 metres.
2. A high-pressure reservoir shall be understood to be a reservoir for which the pressure needed to create an equilibrium at the time of decommissioning is equal to or higher than 1.4 times the hydrostatic pressure, based on a specific gravity of 1.0.

CHAPTER 9. USE AND DISCHARGE OF OIL CONTAINING MIXTURES AND CHEMICALS

§ 9.1 Oil-containing mixtures

Article 9.1.1

1. For the purposes of this paragraph, the following definitions apply:
 - a. Ostar agreement 2005-15: the Ostar agreement 2005-15 for the assessment of the dispersed oil content of an oil containing mixture;
 - b. application of the Ostar agreement 2005-15 for the assessment of the dispersed oil content of an oil containing mixture: assessment of the dissolved oil content of an oil containing mixture, whereby in the gaschromatogramme obtained in accordance with the Ostar agreement 2005-15, the separate surfaces of the peaks of BTEX are measured;
 - c. dispersed oil content: the oil content as assessed in accordance with the Ostar agreement 2005-15;
 - d. BTEX content: the sum of the contents of BTEX, obtained by application of ISO 11423-1:1997 of the Ostar agreement 2005-15 for the assessment of the BTEX content in een oil containing mixture by quantifying the measured peak surfaces against a series of standard solutions of BTEX in n-pentane
 - e. total oil content: the sum of the dispersed and BTEX content of an oil containing mixture;
 - f. Ostar-treaty: treaty w.r.t. the protection of the marine environment in the Northeastern part of the Atlantic Ocean, with appendices and schedules (Trb. 1993, 16 and Trb 1993, 141);
 - g. BTEX: benzene, toluene, ethelbenzene and the isomeres of xylene: orthoxylene, metaxylene and parxylene.

Article 9.1.2

1. This paragraph applies to mining installations projecting above surface water.
2. This paragraph applies to the following oil-containing mixtures:
 - a. oil-containing mixtures released during the production, the purification of crude oil, the loading of crude oil into a storage tank or the desalination of crude oil;
 - b. oil-containing mixtures released during the production or purification of natural gas, and
 - c. rainwater, scrubbing water or rinse water containing oil in any concentration whatsoever.
3. The operator shall see to it that in the event of a discharge of oil containing mixtures the dispersed oil contents as mentioned in Article 9.1.5 present therein will not be exceeded.

Article 9.1.3

1. The flow rate of an oil-containing mixture as meant in Article 9.1.2.2.a, Article 9.1.2.2.b or Article 9.1.2.2.c that is discharged from a mining installation shall be measured with the aid of a flow meter that indicates the total quantity of oil-containing mixture discharged, with a maximum permissible error of plus or minus 5%. The flow meter shall be positioned downstream of the last oil/water separator at a location where the flow is as homogeneous as possible.

2. The Minister can grant exemption from Article 9.1.3.1. The exemption can be granted subject to conditions or restrictions.

Article 9.1.4

1. On a manned mining installation, a representative sample of an oil containing mixture that is discharged shall be taken and analyzed per discharge point ultimately within 4 hours of the commencement of a discharge operation. Subsequent sampling and analyses shall take place in accordance with the following table.

Per Discharge Point	Frequency sampling and analyses
----------------------------	--

Oil containing mixtures as meant in Article 9.1.2.2 under a and b

Disperged oil

≥ 2000 kg disperged oil per calendar year	Every other day
< 2000 kg disperged oil per calendar year	Once every week

BTEX

≥ 2000 kg BTEX per calendar year	Once every week
≥ 200, but < 2000 kg BTEX per calendar year	Once every quarter
< 200 kg BTEX per calendar year	2 times a year

Oil containing mixtures as meant in Article 9.1.2.2c

Disperged oil

≥ 2000 kg disperged oil per calendar year	Every other day
< 2000 kg disperged oil per calendar year	Once every week

Dissolved oil

2 times a year

2. On an unmanned mining installation a representative sample of an oil-containing mixture that is discharged shall be taken on the occasion of a visit lasting more than 8 hours. In the case of a stay on an non-manned mining installation lasting 5 times 24 hours or more the second full sentence of Article 9.1.4.1 applies.
3. Without prejudice to Article 9.1.4.2, on an unmanned mining installation in any event every 3 months 1 representative sample of a discharge of an oil containing mixture shall be taken and analyzed.
4. A sample shall be taken downstream of the last oil/water separator. The sample shall be analyzed within 12 hours after having been taken if the analysis takes place on the mining installation and within 7 days if the analysis takes place elsewhere.
5. For the assessment of the disperged oil content the analysis of the sample takes place in accordance with Ospar agreement 2005-15. Analysis of the disperged oil content in accordance with an alternative method is permitted, provided that prior consent to that

effect has been given by the Minister and the results of the analysis will be calibrated in accordance with Ospar agreement 2006-06.

6. If analysis of the dispersed oil content of a sample at a discharge point of a mining installation, where per calendar year less than 2000 kg dispersed oil is discharged and once a week sampling takes place, shows that during 2 consecutive months the monthly average dispersed oil content is 30 milligramme per litre or more, sampling and analysis shall thereafter immediately take place every other day and analysis take place in accordance with the second full sentence of Article 9.1.4.4. The Minister shall be immediately notified thereof.
7. If analysis of a dispersed oil content of a sample at a discharge point of a mining installation, where per calendar year less than 2000 kg dispersed oil is discharged and where sampling takes place every other day in accordance with Article 9.1.4.6, shows that during 2 consecutive calendar months the monthly average dispersed oil content is less than 30 milligramme per litre, sampling and analysis once a week will suffice. The Minister shall be immediately notified thereof.
8. For the assessment of the BTEX content the analysis of the sample shall be made by application of the Ospar-treaty 2005-15 for the assessment of the BTEX content of an oil containing mixture. Analysis of the BTEX content according to an alternative method, including a calibration method, is allowed, provided that prior consent by the Minister has been obtained and the results of the analyses are calibrated according to the reported method.
9. In deviation of Article 9.4.1.1, on a manned mining installation of which the data as meant in Article 9.1.6. cover a period of less than 3 consecutive calendar months per discharge point, a representative sample of the mixture shall be taken and analyzed ultimately 4 hours after the commencement of a discharge and subsequently every other day until the period of 3 calendar months has lapsed. Thereafter the second full sentence of Article 9.1.4.1 applies

Article 9.1.5

1. The prohibition as meant in Article 80.1 of the Mijnbouwbesluit shall not apply to an oil-containing mixture:
 - a. of which the dispersed oil content does not exceed 100 milligrams of oil per litre and the monthly average dispersed oil content does not exceed 30 milligrams of oil per litre, or
 - b. to the extent it relates to the BTEX content.
2. The provisions of Article 9.1.5.1.a apply separately to each of the oil-containing mixtures as meant in Articles 9.1.2.2.a, 9.1.2.2.b and 9.1.2.2.c. The Minister can grant exemption from the provisions of the first sentence.
3. It is prohibited to dilute an oil containing mixture as meant in Article 9.1.2.2.a with the aim to comply with the statements of Article 9.1.5.a.
4. In deviation of Article 9.1.5.1.a, the discharge of an oil-containing mixture as meant in Article 9.1.2.2.a and Article 9.1.2.2.b with a dispersed oil content of more than 100 milligrams of oil per litre during 4 hours is permitted after the start-up of production after an interruption, provided that the quantity of oil to be discharged is limited as much as possible. In determining the monthly average dispersed oil content of an oil-containing mixture the dispersed oil content of a sample taken within 4 hours after start-up of production shall not be taken into account.

Article 9.1.6

1. A register shall be kept on the discharges of oil-containing mixtures.
2. The register as meant in Article 9.1.6.1 shall be present at:
 - a. any manned mining installation, and

- b. the mining installation from which operations on an unmanned mining installation are directed.
3. The register as meant in Article 9.6.1.1 shall contain the data per month and per day, as specified in Appendix 14 to this Mijnbouwregeling.
4. A copy of the register as meant in Article 9.1.6.1 shall be sent to the inspecteur-generaal der mijnen before 1st March of the year following the year to which the register applies.

Article 9.1.7

1. The notification as meant in Article 82.2 of the Mijnbouwbesluit shall without delay be relayed by telephone to the inspecteur-generaal der mijnen and the Kustwacht and be confirmed by fax within 24 hours by completing the "Pollution Observation Report on Polluters and Combatible Spills", as contained in the "Bonn Agreement Counter Pollution Manual", Chapter IV, annex 2, 4 October 1993.
2. At a request to this effect by the inspecteur-generaal der mijnen, a report will be sent to him within 2 weeks containing a coherent overview of all the facts that have contributed to the incident.

§ 9.2 Use and discharge of chemicals

Article 9.2.1

In paragraphs 9.2 and 9.3 the following terms have the following meaning:

- a. ASTM: American Society for Testing and Materials;
- b. BCF: bio-concentration factor, determined in accordance with OECD 305 or ASTM E 1022;
- c. bore dust: mixture of solid materials, released during the construction of the borehole, that contains drilling fluid of whatever content;
- d. drilling fluid: fluid for the construction of a borehole, to which materials or preparations of whatever content have been added;
- e. CHARM-model: the model for the assessment of chemical hazards and risks as meant in the Ospar-Decision 2000/2;
- f. chemicals: materials or preparations that are intentionally used in the exploration for and production of minerals at sea as meant in the Ospar-recommendation 2010/4;
- g. diesel oil: mineral oils with a flashpoint lower than 100 degrees Celsius, the content of monocyclical aromatics of which is more than 0.5% per weight unit and of which the content of polycyclical aromatics is more than 1 milligramme per kilogramme;
- h. EC50: the concentration of a test substance that results in a 50% response with regard to the effect measured by the test within a defined exposure period;
- i. HOCNF form: harmonised notification form as meant in Ospar-recommendation 2010/3;
- j. LC50: the median lethal concentration;
- k. OECD: Organisation for Economic Co-operation and Development;
- l. OBF fluids: low aromatic and paraffin-like oils and fluids on the basis of mineral oils that are neither synthetic, nor of a category of which the use is prohibited in some other way;
- m. OPF fluids: organic drilling fluids that consist of an emulsion of water and other additives, in which the continuous phase consists of an organic fluid of animal, plant or mineral origin that cannot be mixed with water;
- n. Ospar treaty: the treaty as meant in Article 9.1.1.f;

- o. PEC/PNEC ratio: the generic ratio between the expected concentration in the marine environment and the concentration without expected effects of chemicals, calculated in accordance with the CHARM model, based on standard discharges;
- p. Ospar LCA: the Ospar list of chemicals for priority action as meant in Ospar-agreement 2004-12;
- q. Ospar LSPC: the Ospar list of substances that may cause concern as meant in Ospar-agreement 2002-17;
- r. Plonor list: list of substances set out in the Ospar-agreement 2013-6 used and discharged during mining activities at sea and that are deemed to cause no or little harm to the environment;
- s. pow: the partition coefficient of a substance between N-octanol and water, measured or calculated in accordance with the HOCNF form;
- t. synthetic fluid: an organic fluid originated at the synthesis of oils of animal, plant or mineral origin.

Article 9.2.2

This paragraph applies to the use and the discharge of chemicals on mining installations at sea, including the pipelines at sea as meant in Article 92a of the Mijnbouwbesluit.

Article 9.2.2.a

The operator shall see to it that the use or discharge of chemicals as meant in paragraph 9.2 is limited to what is strictly necessary for mining activities at sea.

Article 9.2.2.b

The Minister will only consider a request for exemption and a notification as meant in this paragraph if the chemicals for which exemption is requested or of which notification is made, respectively, have been registered in accordance with paragraph 9.3, and comply with:

- 1^o. the EC Directive registration, evaluation and authorization of chemical substances and the conditions set by or by virtue of section 9.3 of the Wet milieubeheer for the implementation of that Directive;
- 2^o. The EC Directive categorization, labelling and packaging of substances and mixtures and the conditions set by or by virtue of section 9.3a of the Wet milieubeheer for the implementation of that Directive;
- 3^o. the biocides Directive and the conditions set by or by virtue of the Wet gewasbeschermingsmiddelen en biociden for the implementation of that Directive.

Article 9.2.3

- 1. The use of the following chemicals is prohibited:
 - a. drilling fluid based on diesel oil, and
 - b. OPF-fluid, if the OPF-fluid is used in a part of a borehole with a diameter of more than 12 1/4 inch (= 298.9 mm).
- 2. The Minister can grant an exemption from the prohibition set out in the Article 9.2.3.b upon the request of the Operator, if:
 - a. this is necessary because of safety or geological circumstances, and
 - b. the operator demonstrates that the best available techniques and the best environmental practices as meant in Appendix 1 to the Ospar-Decision 2000/3 have been applied.
- 3. The Minister shall take a decision within 8 weeks from receipt of the request.

4. Articles 9.2.5 and 9.2.6 similarly apply to the use of OPF fluids in a borehole with a smaller diameter than as meant in Article 9.2.3.b.

Article 9.2.4

1. The discharge of the following chemicals is prohibited:
 - a. OPF fluids, whether or not mixed with bore dust, and
 - b. bore dust contaminated with synthetic fluids.
2. The Minister can grant an exemption from the prohibition set out in Article 9.2.4.b, at the request of the operator, if the application shows that:
 - a. the damage to the marine environment will be limited as much as possible, and
 - b. the operator demonstrates that principles of the best available techniques and the best environmental practice as meant in Appendix 1 to the Ospar-Decision 2000/3 have been applied.
3. The Minister shall take a decision within 8 weeks from receipt of the request.

Article 9.2.5

1. Without prejudice to Article 9.2.6.1, it is prohibited to use and discharge other chemicals than those as mentioned in Articles 9.2.3 and 9.2.4 without the approval of the Minister.
2. The request for exemption must be submitted to the Minister at the latest 8 weeks prior to the start of the intended use or the intended discharge.
3. The request shall in any event show, in cohesion:
 - a. the location where the use or discharge shall take place;
 - b. the period or periods in which the use or the discharge shall take place;
 - c. the expected volumes of chemicals that will be used or discharged in the period or periods as meant under b.;
 - d. the purposes for which the chemicals to be used or discharged will be applied, and
 - e. the registration number allocated to the chemicals and other data to the extent they have been incorporated in the notification as meant in Article 9.3.2.3.
4. The application shall also sufficiently reason the safety and health aspects and financial factors related to the use or the discharge of chemicals, and the technical performance of the chemicals.
5. The Minister shall decide within 8 weeks after receipt of the request. The exemption can be granted subject to conditions or restrictions.
6. The exemption will be granted for a maximum of 3 years.
7. The exemption can be granted subject to restrictions and conditions can be attached thereto relating to risk of damage to the marine environment, safety and health aspects and the technical performance of the chemicals.

Article 9.2.6

1. If the application for an exemption as meant in Article 9.2.5.2 relates to:
 - a. chemicals as meant in Article 9.2.5.2.a, the application shall be refused;
 - b. chemicals as meant in Articles 9.2.5.2.b up to and including 9.2.5.2.e, the application shall be refused if an alternative substance is available that is less harmful to the marine environment and its technical performance is comparable to those of the chemicals for which an application was made.
2. The chemicals as meant in Article 9.2.6.1.b are:
 - a. the chemicals meant in Ospar LCPA;
 - b. chemicals as mentioned in the Ospar LSPC, chemicals as meant in attachment XIV and attachment XVII to the EU directive registration, evaluation and

- authorization of chemical substances and chemicals that are anorganic and have an LC50 or EC50 of less than 1 mg/l;
- c. chemicals that have a biodegradation of less than 20% during 28 days according to OECD 301, OECD 306, OECD 310, salt water Bodid or an equivalent test or a half-life according to a simulation test performed in relation to the EU directive registration, evaluation and authorization of chemical substances, that is greater than 60 days in sea water or 180 days in sea water sediment according to OECD 308, OECD 309 or an equivalent test;
 - d. chemicals that meet 2 of the following 3 criteria:
 - 1° not rapidly bio-degradable (biodegradation in 28 days of less than 70% (OECD 301A, 301E, or an equivalent test), less than 60% (OECD 306, or an equivalent salt water test) or in the absence of valid results of these tests less than 60% (OECD 301B, 3011C, 3011D, 301F, sweet water Bodis or an equivalent sweet water test));
 - 2° large potential for bio-accumulation $\log Pow \geq 3$ or $BCF > 100$ and taking into account the molecule weight ($M < 700$) or a negative assessment as meant in attachment 3 of the Ospam agreement 2008-5;
 - 3° very toxic ($LC50 < 10 \text{ mg/l}$ or $EC50 < 10 \text{ mg/l}$).
 - e. the chemicals of which the PEC/PNEC ratio as calculated by the operator is 3 or more.
3. If no alternative substance is available for chemicals as meant in Article 9.2.6.2.b, then the Minister can grant an exemption for a maximum of 3 years if the risk of damage to the marine environment permits so. The PEC/PNEC ratio of the chemicals as calculated by the operator shall be taken into account when considering the application for exemption.
 4. The operator shall in the application present his reasoning as to why there are no less harmful alternative means available for the chemicals as meant in Article 9.2.6.1.b.

Article 9.2.6.a

An application for an exemption for discharging as meant in Article 9.2.5.2 with respect to chemicals as meant in Articles 9.2.6.2b, 9.2.6.2c and 9.2.6.2d will be refused unless the operator has in the application demonstrated that because of technical aspects or safety aspects no less harmful means are available. In that case the exemption can be granted for a maximum of 3 years.

Article 9.2.7

1. The use or discharge of chemicals other than those mentioned in Articles 9.2.5.1 and 9.2.6.2 is permitted, provided that the operator:
 - a. has notified this in writing at least 8 weeks before the commencement of the use or discharge and
 - b. has demonstrated that the PEC/PNEC ratio of the chemicals is equal to or less than 1.
2. Article 9.2.7.1 similarly applies if the PEC/PNEC ratio of the chemicals as meant in Article 9.2.7.1 is equal to or smaller than 3, but greater than 1, provided that the operator has with the notification sufficiently reasoned the safety and health and financial factors connected with the use or discharge of chemicals and the technical performance thereof and has further indicated why for the chemicals no less harmful means are available.
3. Article 9.2.5.3 similarly applies to a notification.

Article 9.2.8

1. The use or discharge of chemicals is permitted, provided that these chemicals:
 - a. only consist of substances that are listed in the Plonor – list
 - b. are anorganic and have an LC50 of EC50 of 1mg/l or more, provided that the operator will notify the Minister this at least 8 weeks before commencement of the use or discharge.
2. Article 9.2.5.3 similarly applies.

Article 9.2.9

1. The operator shall annually present a statement of the quantities and types of chemicals that have been used and discharged.
2. The statement as meant in Article 9.2.9.1 shall be presented to the inspecteur-generaal der mijnen before 1st April of the calendar year subsequent to the calendar year to which the statement relates.

§ 9.3 Registration of chemicals

Article 9.3.1

An HOCNF form is a document as meant in Article 10.1.c c of the Wet openbaarheid bestuur.

Article 9.3.2

1. The Minister is in charge of the registration of chemicals.
2. The Minister can list the chemicals in the register for a maximum of 3 years, commencing the date that the registration took place.
3. After registration has been made, the person that has requested a registration as meant in Article 9.3.3 shall be notified hereof whereby in any event the number will be advised that has been allocated to the registered chemicals.

Article 9.3.3

1. An application for registration of chemicals shall, together with an HOCNF form, be filled in in accordance with Ospar agreement 2012-05 and be submitted to the Minister by the manufacturer or supplier.
2. The application for registration will only be processed if the information in the HOCNF form shows that Article 92.2.b.b has been complied with.

Article 9.3.4

The toxicity test of which the result will be incorporated in the HOCNF form shall be executed on a substance basis having regard to the Ospar agreements 2005-11 and 2005-12.

CHAPTER 10. PIPELINES

Article 10.1

The characteristics, the construction, location and the maintenance of a pipeline shall in any event meet the requirements as meant in Articles 93.1 and 93.2 of the Mijnbouwbesluit, if it

can be demonstrated that NEN 3650-3: 2012, NEN 3651: 2012, NEN 3654: 2014, NEN 3656 : 2014, or in the event of a cast iron pipeline with internal cladding it is demonstrated that the pipeline complies with Article 93.1 and Article 93.2 of the Mijnbouwbesluit, taking into account NEN 3650-4 : 2012 and NEN 3650-5 : 2012.

Article 10.2

The characteristics, the construction, location and the maintenance of a flexible pipeline are in any case deemed to meet the requirements as meant in Articles 93.1 and 93.2, of the Mijnbouwbesluit, if it can be demonstrated that there is compliance with the following:

- a. API (American Petroleum Institute) Specification 17J, fourth edition, January 2014, Specification for unbounded flexible pipe, incl. Errata of September 2016 and Specification 17B, fifth edition, May 2014, Recommended practice for flexible pipe, and as most recently adopted in June 2002, and
- b. NEN 3650-1 2012, NEN 3650-2 :2012, NEN 3650-3 : 2012, NEN 3650-4 : 2012, NEN 3650-5 : 2012, as mentioned in Article 10.1, excluding the part about the stress technical design.

Article 10.3

1. The operator shall carry out the investigation with respect to the characteristics of the pipeline with such a frequency that the integrity of the pipeline, including the risk of damage, can be demonstrated at any moment in time.
2. The operator shall carry out the investigation with respect to the location of the pipeline that was constructed in the territorial sea or on the continental shelf in a frequency of at least once per year,
3. The operator shall describe the chosen frequency and the motivation for that choice, and the findings of the investigations for each pipeline in a safety management system drawn up for that purpose.

CHAPTER 11. PROVISION, MANAGEMENT AND USE OF INFORMATION

§ 11.1 Information to be provided

Article 11.1.1

1. The results of geophysical survey as meant in Article 108.a of the Mijnbouwbesluit shall contain the following data:
 - a. the raw data and related reports
 - b. the data of the initial processing and the related reports;
 - c. the data of a reprocessing and related reports.
2. The data as meant in Article 11.1.1.1 shall in the cases concerned be provided within the following periods of time:
 - a. the raw data, at request;
 - b. the data of the initial processing within 1 year after the last day of the carrying out of field activities within the scope of reconnaissance survey;
 - c. the reprocessing data within 1 year after the carrying out of the reprocessing.
3. The results of the geochemical investigation as meant in Article 108.b of the Mijnbouwbesluit shall be submitted within 1 year after the last day of the carrying out of the reconnaissance survey.

Article 11.1.2

1. A profile of a borehole as meant in Article 109.1.a, contains:
 - a. for boreholes in surface water:
 - 1^o the name of the mining company;
 - 2^o the letter or number reference of the block, insofar as the borehole is situated on the seaward side of the line set out in the appendix to the Mijnbouwwet;
 - 3^o the number of the borehole;
 - 4^o the geographical co-ordinates and the geographical system of the location of the borehole;
 - 5^o the date the construction of the borehole started;
 - 6^o the height of the rotary table or of another reference point to be specified, and
 - 7^o the height of the top of the bottom flange in metres compared to the average water level;
 - b. for boreholes on land:
 - 1^o the name of the mining company;
 - 2^o the name and the number of the borehole;
 - 3^o the geographical co-ordinates and the geographical system of the location of the borehole;
 - 4^o the date the construction of the borehole started;
 - 5^o the height of the rotary table or of another reference point to be specified, and
 - 6^o the height of the top of the bottom flange in metres relative to the NAP.
2. The profile shall furthermore contain:
 - a. a summary of all electrical and other borehole measurements, whereby the date of the measurement and the measured trajectory must be indicated;
 - b. an electrical or other diagram and a lithological column with a depth scale of 1:1000 or 1:500 that presents the nature of the penetrated layers and rocks in a representative manner;
 - c. a description of the penetrated lithology;
 - d. with regard to the electrical measurements: the types of electrical curves used with the scaling that was used;
 - e. the type and the characteristics of the mud per drilling trajectory;
 - f. the mud losses stating the location or trajectory and quantity in m³;
 - g. the casing series, stating the diameter of each series and the depth at which each series is anchored;
 - h. the top of the cement behind each casing series and the trajectory of recovered casing;
 - i. the subsurface completion of the borehole, stating the trajectory, type of lost casing, perforations and open hole;
 - j. the plugs placed in the borehole, stating, if applicable, the trajectories over which these plugs extend and the location details;
 - k. the productive intervals;
 - l. the total depth of the borehole after completion of the drilling in metres relative to the NAP or the average water level and the date that the drilling was completed, and
 - m. the deviation measurements and a site plan with the horizontal deviation of the borehole, stating the vertical depths.
3. Insofar as available, the profile shall furthermore contain:
 - a. stratigraphical and paleontological trajectories with boundaries or correlation points;
 - b. indications of mineralsc. core trajectories and bore wall cores;

- c. formation tests setting out the tested trajectory, and
- d. the results of the tests as mentioned in Article 11.2.2.d.

Article 11.1.3

The results of the measurements as meant in Articles 109.1.b and 109.1.c of the Mijnbouwbesluit shall contain the measurement data and the manner in which and the circumstances under which the measurement data were obtained.

Article 11.1.4

The results of executed production or injection tests as meant in Article 109.1.d of the Mijnbouwbesluit shall contain:

- a. data on pressure and temperature measurements in the borehole;
- b. quantities per time units of oil, condensate, gas and water produced or injected;
- c. use and measurement conditions;
- d. data on the measuring instruments used;
- e. data regarding the casing and perforations of the casing, and
- f. data regarding the sequence of measurement steps.

Article 11.1.5

With regard to rock samples as meant in Article 110.1 of the Mijnbouwbesluit the operator shall furnish:

- a. a part of the bore wall cores;
- b. a copy of bio-stratigraphical and palynological preparations;
- c. a segment or a synthetic resin strip of the entire length of the core, and
- d. in the case of bore dust: at least 250 grams thereof.

Article 11.1.6

The operator shall submit to the Minister a statement of the collected fluid and gas samples as meant in Article 110.2 within 4 weeks after they have been obtained. Information relating to the source, the quality and the measuring programme used must be stated.

§ 11.2 Method of providing information to the Minister

Article 11.2.1

The details that are to be provided to the Minister on the basis of Articles 11.1.1 up to and including 11.1.6 must have:

- a. a unique object identification;
- b. an indication of the exploration, production or storage licence with which the data was collected;
- c. indication of the location and depth or geographical scope of the measurement, and
- d. the date when it was obtained.

Article 11.2.2

1. A rock sample as meant in Article 11.1.5 shall furthermore be furnished with the following details:
 - a. the borehole from which it was obtained;
 - b. the depth from which it was obtained;

- c. the date when it was obtained;
 - d. the type;
 - e. if available: a reference to the log measurement and the sequential number with the bore wall core;
 - f. the type of coring method, and
 - g. administrative details of the storage boxes.
2. If available, the results of measurements of rock samples shall be reported in electronic format.

§ 11.3 Units to be used

Article 11.3.1

The following units shall be used for the statement of quantities of substances as meant in this chapter:

- a. solid substances in m³ or tons
- b. liquid substances other than brine in tons and in m³ with an absolute pressure of 101,325 kPa and a temperature of 15 degrees Celsius;
- c. gaseous substances in 1000 m³ with an absolute pressure of 101,325 and a temperature of 0 degrees Celsius;
- d. brine: m³.

§ 11.4 Institution to be designated

Article 11.4.1

The organization as meant in Article 1c of the TNO wet, known as TNO at Utrecht is designated as the institution referred to in Article 123.2 of the Mijnbouwwet.

§ 11.5 Annual plan Staatstoezicht op de mijnen

Article 11.5.1

The annual plan as meant in Article 128.4 of the Mijnbouwwet shall be submitted annually before 1st November.

CHAPTER 11a. OBLIGATIONS EXPLORATION FOR AND PRODUCTION OF HYDROCARBONS

§ 11a.1 Scope

Article 11a.1.1

This chapter applies to the exploration for and the production of hydrocarbons.

§ 11a.2 Report concerning great dangers

Article 11a.2.1

1. A request for concurrence with a report concerning great dangers or a revised report concerning great dangers shall, insofar as the report concerns a non-production installation or a production installation located on the continental shelf or in the territorial sea and this production installation is located on the seaward side of the line as established in the attachment to the Mijnbouwwet, shall be submitted at least 12 weeks before the start of the activity or implementation of the revision or decommissioning.
2. A report concerning great dangers or a revised report concerning great dangers for a production installation on another location than as meant in Article 11a.2.1 shall be submitted at least 12 weeks before the commencement of the activity or implementation of the revision or the decommissioning.
3. The inspecteur-generaal der mijnen shall within 12 weeks decide on the request as meant in Article 11a.2.1.

Article 11a.2.2

A report concerning great dangers for a production installation shall at least contain the information as mentioned in attachment I, part 2 of Guideline 2013/30/EU, with the exception of item 14 and it being understood that the information under item 15 shall be deemed to read: the information about the prevention of serious accidents that may result in significant or serious environmental damage, that is drawn from an environmental impact statement as meant in chapter 7 of the Wet milieubeheer and that is of importance for the activities performed from the installation.

Article 11a.2.3

A report concerning great dangers for a non-production installation shall at least contain the information as mentioned in attachment I, part 3 of Guideline 2013/30/EU, it being understood that the information under item 15 shall be deemed to read: the information about the prevention of serious accidents that may result in significant or serious environmental damage, that is drawn from an environmental impact statement as meant in chapter 7 of the Wet milieubeheer and that is of importance for the activities managed from the installation.

Article 11a.2.4

A revised report concerning great dangers shall at least contain the information as mentioned in attachment I, part 6 of Guideline 2013/30/EU.

§ 11a.3 Disaster control plan

An internal disaster control plan shall at least contain the information as mentioned in attachment I, part 10 of Guideline 2013/30/EU, it being understood that external disaster control plan" shall be deemed to read: the Incidentenbestrijdingsplan Noordzee as meant in Article 23 of the Wet bestrijding maritieme ongevallen, the crisis plan as meant in Article 16 of the Wet veiligheidsregio's, or the disaster fighting plan as meant in Article 17 of the Wet veiligheidsregio's.

Article 11a.3.2

1. An internal disaster control plan shall be updated in the event of an essential change in a notification as meant in Article 45n.1 and Article 45p.1 of the Mijnbouwwet.
2. The updated internal disaster control plan shall together with the notification as meant in Article 45n.3 and Article 45p.5 of the Mijnbouwwet, or if this is not possible, as soon as possible thereafter, be submitted to the inspecteur-generaal der mijnen.
3. The operator of a production installation or the owner of a non production installation shall notify the competent authorities for the area concerned with respect to the Incidentenbestrijdingsplan Noordzee as meant in Article 23 of the Wet bestrijding maritieme ongevallen, with respect to the crisisplan as meant in Article 16 of the Wet veiligheidsregio's, or with respect to the disaster fighting plan as meant in Article 17 of the Wet veiligheidsregio's, of the updated internal disaster control plan.

§ 11a.4 Company policy with respect to the prevention of serious accidents and the safety and environment management system

Article 11a.4.1

The company policy with respect to the prevention of serious accidents shall at least contain the information as mentioned in attachment I, part 8 and IV to Guideline 2013/30/EU and the arrangements as meant in attachment IV, part 1 to that Guideline.

Article 11a.4.2

The safety and environment management system shall at least contain the information as mentioned in attachment I, part 9 and IV to Guideline 2013/30/EU and will be developed in conformity with these parts of the Guideline 2013/30/EU.

§ 11a.5 Independent verification

Article 11a.5.1

1. An operator of a production installation or an owner of a non-production installation shall in the selection of the independent verifier see to it that the independency requirements as meant in attachment V, part 1 to Guideline 2013/30/EU will be complied with.
2. The operator of a production installation or an owner of a non-production installation shall see to it that the arrangement for independent verification shall comply with the conditions as meant in attachment V, part 2 to Guideline 2013/30/EU.
3. The results of further verification shall in the event of an essential change as meant in Article 45n.3 of the Mijnbouwwet be reported to the the inspecteur-generaal der mijnen at his request.

Article 11a.5.2

The description of the arrangement for independent verification as meant in Article 45c.1.c and 45g.1.c of the Mijnbouwwet shall contain the information as mentioned in attachment I, part 5 to Guideline 2013/30/EU.

Article 11a.5.3

An operator of a production installation or an owner of a non-production installation shall adhere to the following periods:

- a. for the filing of the advice and the documentation as meant in Article 45l.5.a of the Mijnbouwwet: 6 months after completion of the activities to which they relate;
- b. for the making of an arrangement for independent verification for a production installation as meant in Article 45l.5.b of the Mijnbouwwet: before the design of the production installation has been finalized;
- c. for the making of an arrangement for independent verification for a non-production installation as meant in Article 45l.5.b of the Mijnbouwwet: before commencement of the activities;
- d. for the taking of measures and the reaction to the advice as meant in Article 84g.1 of the Mijnbouwbesluit: 8 weeks after the issuance of the advice;
- e. for the notification of the inspecteur-generaal der mijnen as meant in Article 84g.2 of the Mijnbouwbesluit: 10 working days after lapse of the period as meant in Article 11a.5.3.d.

§ 11a.6 Notification and exchange of information

Article 11a.6.1

1. A notification as meant in Article 45m.1 of the Mijnbouwwet shall ultimately be given at the moment in time of an application for a licence as meant in Article 8.1 of the Wet milieubeheer and Article 40 of the Mijnbouwwet.
2. The notification as meant in Article 11a.6.1.1 shall at least contain the information as mentioned in attachment I, part I to Guideline 2013/30/EU.
3. A notification as meant in Articles 45n.1, 45o.1 and 45p.1 of the Mijnbouwwet shall be submitted 6 weeks before commencement of the activity.
4. A notification as meant in Article 11a.6.1 shall at least contain the following information:
 - a. for the relocation of a production installation as meant in Article 45o of the Mijnbouwwet: the information as mentioned in attachment I, part 1 to Guideline 2013/30/EU;
 - b. for a borehole activity as meant in Article 45n of the Mijnbouwwet: the information as meant in attachment I, part 4 to Guideline 2013/30/EU;
 - c. for a combined activity as meant in Article 45p of the Mijnbouwwet: the information as mentioned in attachment I, part 7 to Guideline 2013/30/EU;

§ 11a.7 Facilities for inspectors

Article 11a.7.1

1. The cases as meant in Article 6 of the Mijnbouwbesluit relate to
 - a. transportation between 0.700 hrs and 20.00 hrs and transportation by helicopter, it being understood that a maximum of 4 seats can be claimed;
 - b. arrangement for lodging, to the extent the night will have to be spent there.
2. In the event that during the conduct of mining activities serious damage is threatening to occur or has occurred, then at the instruction of the inspecteur-generaal der mijnen the transportation as meant in Article 11a.7.1.1 can take place between 0.00 hrs and 24.00 hrs.

CHAPTER 12. FINANCIAL PROVISION AND RETRIIBUTION

Article 12.1

1. The weighted average of the value of the crude oil imported into the Netherlands as meant in the first full sentence of Article 63.4 of the Mijnbouwwet in a particular calendar year shall be calculated by the Minister of Economic Affairs on the basis of data of the Centraal Bureau voor de Statistiek by:
 - a. for each month of the calendar year in question, by multiplying the total of the quantities of crude oil unloaded in that month in numbers of barrels by the weighted monthly average of the average price thereof expressed in US dollars per barrel;
 - b. expressing the result of the calculation under Article 12.1.a in Euros on the basis of the average €/US dollar rate in that month; and
 - c. adding up the monthly results as meant in Article 12.1.1. b and dividing them by the total of the quantity of crude oil in numbers of barrels unloaded in the calendar year in question.
2. If the weighted average as meant in Article 12.1.1 is more than € 25 per barrel in a particular calendar year, then the Minister shall announce this in the Staatscourant within 2 months after the end of the relevant calendar year.

Article 12.1

The contribution as meant in Article 133.1 of the Mijnbouwwet is the compensation as meant in Appendix 15.

CHAPTER 13. TECHNICAL COMMITTEE SOIL MOVEMENT

Article 13.1

The request for advice as meant in Article 114.2.d of the Mijnbouwwet must contain the following information:

- a. name and address of the requesting party;
- b. date of the request;
- c. a description of the damage detailed as much as possible;
- d. insofar as possible an estimate of the amount of the damage;
- e. the geographical indication of the place where the damage occurred;
- f. the moment in time when the damage probably occurred;
- g. the moment in time when the damage was established for the first time;
- h. the mining activity that possibly caused the damage;
- i. copy of the claim of liability as meant in Article 116.1. of the Mijnbouwwet and the final reaction of the mining company thereto;
- j. the reason that no agreement as meant in Article 116.2 of the Mijnbouwwet was reached with the mining company, with a copy of any correspondence;
- k. if applicable, the amount as meant in Article 117.4 of the Mijnbouwwet that the mining company was prepared to pay.

CHAPTER 14. TRANSITION PROVISIONS

§ 14.1 Transition provisions relating to helicopterdecks (deleted as per 31.10.2009)

§ 14.2 Transition provisions relating to boreholes and wells

Article 14.2.1

1. An exemption as meant in Article 2.3 of the Nadere regelen Mijnreglement 1964 en Mijnreglement continental plat beveiliging boorgaten is an exemption as meant in Art. 8.3.1.1.
2. An exemption as meant in Article 6.6 of the Nadere regelen Mijnreglement 1964 en Mijnreglement continental plat beveiliging boorgaten is an exemption as meant in Art. 8.3.1.4.6.
3. An exemption as meant in Article 7.2 of the Nadere regelen Mijnreglement 1964 en Mijnreglement continental plat beveiliging boorgaten is an exemption as meant in Art. 8.3.1.5.2.
4. An exemption as meant in Article 15.4 of the Nadere regelen Mijnreglement 1964 en Mijnreglement continental plat beveiliging boorgaten is an exemption as meant in Art. 8.3.2.2.4.
5. An exemption as meant in Article 20.4 of the Nadere regelen Mijnreglement 1964 en Mijnreglement continental plat beveiliging boorgaten is an exemption as meant in Art. 8.3.4.1.4.

Article 14.2.2

1. Exemptions with regard to the construction of wells that were obtained prior to the entry into force of this Mijnbouwregeling shall be deemed to be exemptions as meant in chapter 8, section 8.4.
2. Exemptions with regard to the casing of a well that is to be decommissioned that were obtained prior to the entry into force of this Mijnbouwregeling shall be deemed to be exemptions as meant in Article 8.5.2.7.3.

§ 14.3 Transition provisions with regard to oil-containing mixtures and other chemicals

Article 14.3.1

1. An exemption as meant in Article 3.2 of the Regeling lozing van oliehoudende mengsels is deemed to be an exemption as meant in Article 9.1.3.2.
2. An exemption as meant in Article 4.4 of the Regeling lozing van oliehoudende mengsels is an exemption as meant in Article 9.1.4.4.
3. An exemption as meant in Article 5.2 of the Regeling lozing van oliehoudende mengsels is an exemption as meant in Article 9.1.5.2.

Article 14.3.2

The norms as mentioned in Article 9.1.5.1.a apply as of 1st October 2003 to mining installations installed before 1st January 1988, provided that up to that time the best available

techniques as meant in Appendix 1 to the Ospar-Treaty were applied on these installations to ensure that the aliphatic oil content is no more than 100 milligrammes of oil per litre and the monthly average aliphatic oil content is no more than 40 milligrammes of oil per litre.

§ 14.4 Transition provisions with regard to introduction of ETRS89

Article 14.4.1

In deviation of the Articles 8.2.1.1.1.b.3^o, 8.2.3.1.1.1.b.3^o, 8.2.4.1.1.b.3^o, 8.2.3a.1.1.b. 3^o, geographical coordinates in a work programme will be expressed in the coördinatenstelsel van de Rijksdriehoekmeting up to the moment in time of the introduction of the ETRS89 system by the Dienst van het Kadaster en openbare registers as meant in Article 2 of the Organisatiewet Kadaster.

Article 14.4.2

A work programme with an indication of a location expressed in geographical coordinates calculated according to the ETRS89 system that was submitted before the moment in time as meant in Article 14.4.1 in relation to activities after that moment in time will be processed.

Article 14.4.3

A work programme with an indication of a location expressed in the coördinatenstelsel van de Rijksdriehoekmeting that is submitted before the moment in time as meant in Article 14.4.1 in relation to activities that will be conducted after that moment in time, will only be processed if the applicant has made a recalculation of the geographical coordinates and has submitted them so according to the ETRS89 system.

§ 14.5 Transition provisions with regard to the provision of data

In deviation of Article 11.1.1.2.c a reprocessing that was performed before the effective date of that Article shall at request be submitted.

CHAPTER 15. FINAL PROVISIONS

Article 15.1

This Mijnbouwregeling shall enter into force as of 1st January 2003, it being understood that:

- a. Articles 9.2.3.1.a and 9.2.3.1.b, 9.2.4.1.a and 9.2.4.1.b and 9.2.5.1, shall enter into force as of 1st July 2003;
- b. Article 9.3.2 shall enter into force as of 1st January 2004.

Article 15.2

This Regulation will be cited as: Mijnbouwregeling.

This Regulation, along with the explanatory notes and the appendices, shall be published in the Staatscourant, with the exception of Appendix 16, that shall be made available for inspection as stipulated in Article 9.3.2.2.

The Hague, 16 December 2002
The Staatssecretaris voor Economische Zaken,
J.G. Wijn

Appendix 1, belonging to Article 1.3.1.2.a

Data to be submitted with an application for an exploration or production licence

A. General information

1. If the application is made by a natural person:
 - a. surname, names, date of birth, profession, domicile and nationality of the applicant;
 - b. any trade names under which the applicant runs his business.
2. If the application is made by a legal person:
 - a. details of the number under which the applicant is registered in the commercial register or an equivalent filing number in the trade register of another member state of the European Union ;
 - b. a short description of the applicant's objectives, together with submission of a copy of the current articles of association;
 - c. a statement on those persons who have a stake in the legal entity, and insofar as the stake is by name, a statement of each stake in the total of the stakes;
 - d. notice regarding any special control held by one or more of those persons who hold a stake in the legal person.

B. Financial details

1. If the application is made by a natural person:
 - a. the applicant's net assets;
 - b. the various assets and liabilities which constitute the capital meant under a;
 - c. a profit and loss account w.r.t. the last financial year and a balance sheet of every business entity which the applicant owns, drawn up as at the end of that year;
 - d. the manner in which the applicant intends to finance the intended exploration or possible production.
2. If the application is made by a legal entity:
 - a. if available, the annual report over the last financial year of the applicant and of the legal entities who in the applicant's opinion can be designated to be its parent companies and, insofar as these are not mentioned in said annual reports, a profit and loss account of the applicant w.r.t. that year and a balance sheet drawn up as at the end of that year; if a consolidated profit and loss account and balance sheet are available, these must also be presented, stating the valuation principles of the consolidation;
 - b. in the event the applicant is an N.V. or a B.V., the applicant's authorised capital, if applicable divided by class (such as ordinary share capital, preference share capital), stating the issued capital and the paid up capital for each of the classes;
 - c. the applicant's reserves, divided by type;
 - d. the applicant's loan capital, divided by type;
 - e. the way in which the applicant intends to finance the intended exploration or possible production.

C. Technical details

The number and any names of mining works, suitable for the work to which the application relates:

- a. owned by the applicant;
- b. under construction at the applicant's expense, stating the country and the business entity where these installations are under construction;
- c. which are in some other way available or are to be made available, stating the way in which they will be made available.

Appendix 2, belonging to Article 1.3.1.2.b

Data to be submitted with an application for an exploration or production licence for or also for hydrocarbons

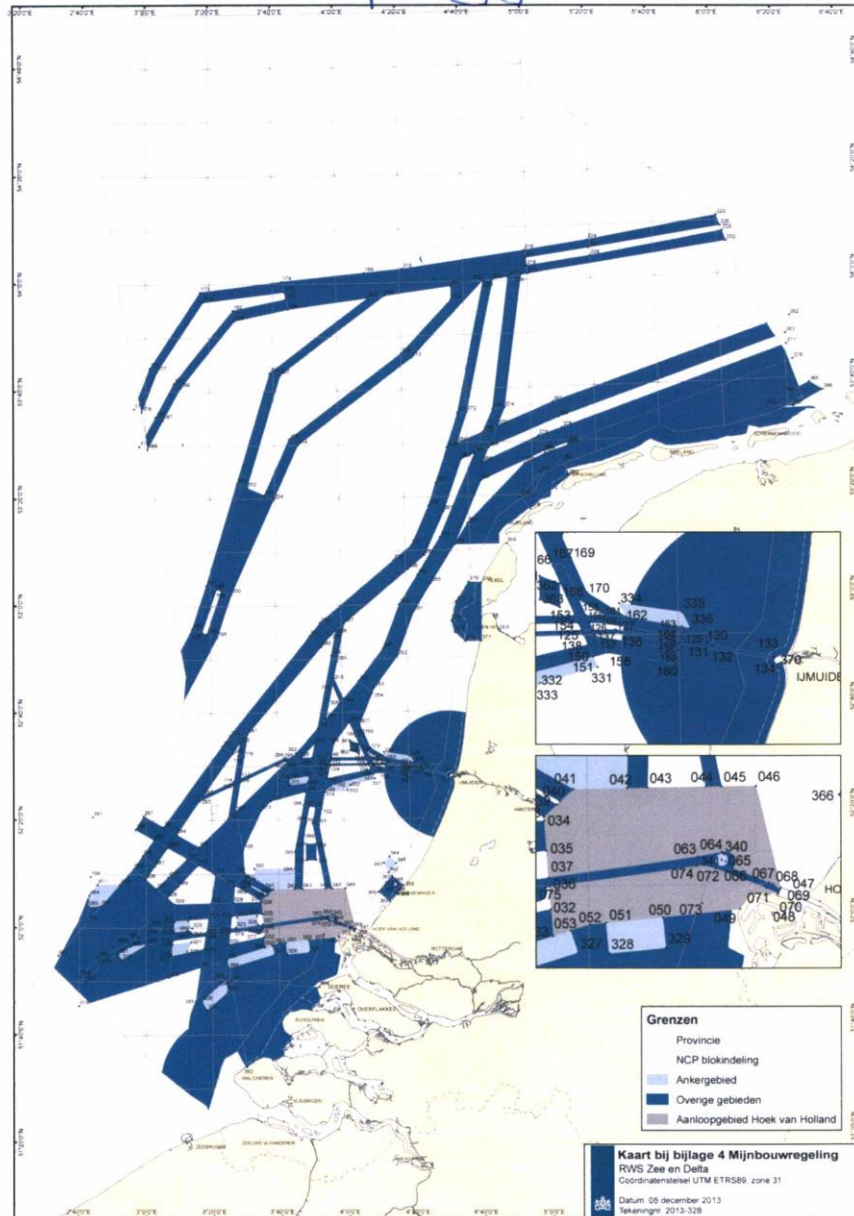
Technical details

1. The experience relating to exploration for hydrocarbons and the production thereof by means of drilling, to be specified per country or area, insofar as the technical management thereof was in the hands of the applicant or of the legal entities which in the opinion of the applicant can be designated to be its parent companies or as belonging to the group to which the applicant belongs, stating:
 - a. the number of drilling operations performed out, whereby indicative figures will suffice for large-scale operations;
 - b. the company in charge of the technical management of the work;
 - c. the period within which the work was carried out.
2. The reconnaissance survey and exploration for oil or gas carried out at the expense of the applicant or of the legal entities who in the applicant's opinion can be designated to be its parent companies or as belonging to the group to which the applicant belongs,
 - 1^o within the territory of the Netherlands, and
 - 2^o on the continental shelf, setting out:
 - a. the size of the seismic surveys performed, expressed in the number of kilometres of section lines surveyed;
 - b. exploration surveys and reconnaissance surveys other than those referred to under a;
 - c. the total costs of the work meant under a and b, expressed in Euros, insofar as these were at the expense of the applicant or of the legal entities who in the opinion of the applicant can be designated to be its parent company or as belonging to the group to which the applicant belongs.
3.
 - a. The quantity of oil, including condensate which the applicant has extracted during the past calendar year, expressed in 1000 m³, both in total and divided per country.
 - b. The information meant under 3.a with regard to the applicant and the legal entities who in the applicant's opinion can be designated to be its parent companies or as belonging to the group to which the applicant belongs, jointly.

APPENDIX 4, belonging to § 1.10



Kaart behorende bij bijlage 4 *(Map belonging to attachment 4)*



Appendix 11, belonging to Article 8.2.2.1.2

1.0 Project details

- 1.1 the name of the mining company
- 1.2 the indication of the drilling operation
- 1.3 the name of the drilling installation
- 1.4 the name of the standby vessel if a standby ship is present at the drilling operation
- 1.5 the name of the author of the daily report
- 1.6 the telephone numbers on which the author can be reached during working hours
- 1.7 the serial number of the daily report
- 1.8 the date to which the daily report applies
- 1.9 the time period to which the daily report relates

2.0 Borehole section details

- 2.1 the diameter (in inches) of all casing
- 2.2 the drilling bit diameters (in inches) of all casing
- 2.3 the casing shoe depth (in metres) of all casing indicated in the drilling plan
- 2.4 the casing shoe depth (in metres) of all casing placed
- 2.5 the formation strength of all relevant casing, expressed in the drilling mud gradient in kPa/m, bar/10 m or in an equivalent drilling mud weight
- 2.6 the final depth (in metres) of a borehole section

3.0 Drilling mud details

- 3.1 the type of drilling mud at the relevant depth
- 3.2 the viscosity of the drilling mud in accordance with MARSH in seconds
- 3.3 the filtrate loss in accordance with the standard method in 0.001 m³ (cc)
- 3.4 the solids content of the drilling mud in gr/l
- 3.5 the drilling mud weight in kN/m² or kg/dm³
- 3.6 the viscosity and gel of the drilling mud in accordance with FANN
- 3.7 the PH of the filtrate obtained in 3.3
- 3.8 the oil content of the fluids obtained in 3.4

4.0 Geological details

- 4.1 the name of the last penetrated earth layer
- 4.2 the top of the above-mentioned earth layer, measured from the drilling floor along the borehole, at the depth in metres where this was expected ('along hole depth' (AHD)/'true vertical depth' (TVD))
- 4.3 the depth in metres where this top was found (AHD)
- 4.4 the name of the next earth layer expected
- 4.5 the expected top of the next earth layer (AHD)

5.0 Details relating to the progress of the work

- 5.1 a short summary of the work during the reporting period
- 5.2 a short summary of the work foreseen for the subsequent reporting period
- 5.3 a short summary of the work already carried out in the subsequent reporting period until the reporting time

6.0 Unforeseen events

- 6.1 a short summary of all unforeseen events during the reporting period

Appendix 12, belonging to Article 8.2.2.2

1.0 Project details

1.1 General

1. the names of the managers with an indication of their function
2. the period during which they carried out management duties.

1.2 Drilling operation

1. an indication (code or name) of the drilling operation including sidetracks
2. for wells on land: the spudding location expressed in the system of co-ordinates of the Rijksdriehoeksmeting.
3. for wells at sea: spudding location expressed in geographical co-ordinates, calculated according to the ETRS89 system.
4. the purpose of the drilling operation
5. the date of commencement of the drilling operation and the number of days on the location.

1.3 Mining or drilling rig

1. the name of the installation
2. the names of the owners of the installation

2.0 Borehole section details

2.1 Depths

1. the depth reference in metres relative to
 - a. Normal Amsterdam Water Level (NAP), if in the drilling operation no use is made of a mining installation, or
 - b. Mean Sea Level (MSL), if in the drilling operation use is made of a mining installation
2. the depth in metres ('along hole depth' (AHD) and 'true vertical depth' (TVD)) at the end of the deep drilling
3. the deviation plots of the deep drilling, both vertical and horizontal, in A4 format
4. the water depth under MSL, if in the drilling operation use is made of a mining installation.

2.2 Casing placed

1. the dimensions
2. the casing shoe depth in metres and the depth in metres on the top side
3. the material type and the weight per length unit of the casing placed
4. the cement types, the weight and volume of the slurry
5. the top side of the cement (theoretically or established)
6. a casing diagram in A4 format.

3.0 Drilling mud data

1. the type of drilling mud per borehole section
2. the specific gravity of the drilling mud as function of the depth.

4.0 Geological data

4.1 Stratigraphical column

1. the depth in metres (AHD) of the top side of the geological strata found

2. the fault depths found
3. the abnormal formation pressures found.

4.2 Hydrocarbons

1. the products found
2. the productive earth layers
3. the maximum tested production (choke sizes and flowing tubing head pressure)
4. the enclosed formation pressure after testing.

5.0 Details relating to the well completion operation

1. the well status
2. a drawing of the well that has been decommissioned (definitely or temporarily) in A4 format
3. a drawing with the dimensions of the well head completion in A4 format
4. a drawing with the dimensions of the nozzle series in A4 format.

6.0 Signature

1. place
2. date
3. signature of manager.

Appendix 13, belonging to Article 8.3.2.5.2

CAPACITY TEST

NB. quote pressure unit identical units (e.g. Pascals, bar, psi)

Tested Item		Close	ΔP	Open	ΔP	Close	ΔP	Open	ΔP	Close	ΔP	Open	ΔP	Close	ΔP	Open	ΔP	Close	ΔP	Open	ΔP	
Annular Type	start																					
	end																					
Gate Type	start																					
	end																					
Gate Type	start																					
	end																					
Gate Type	start																					
	end																					
Annular Type (2x)	start																					
	end																					
Gate Type (2x)	start																					
	end			P.end				P.end				P.end				P.end					P.end	
Date																						
Pump type & Time			type	min	Type		min	type		min	type		min	type		min	type		min	type		min

- 1 Composition of the accumulators
- 2 Prepressure of the gas charge
- 3 Reduced service pressure
- 4 Number of K&C shutoff valves, hydraulically operated

- 5 Date
- 6 Test performed by:
- 7 Manager of the Facility:
- 8 Name of Facility:

Appendix 14, belonging to Article 9.1.6.3

Method of calculation:

the average of the discharged dispersed oil is the weighted average and is established by means of the following formula:

- a. Every sampling for analysis of the dispersed oil content shall include registration of the pertaining flow rate (in m³/day) of the discharged water in column C;
- b. Multiply thereafter the dispersed oil content in mg/l (column E) by the pertaining flow rate (column C). This results in the volume of discharged dispersed oil on the day of sampling. Record the result in column H.
- c. If the BTEX content (column F) has also been analysed, multiply thereafter that content by the pertaining flow rate in column I;
- d. The total oil content (column G) is the sum of the dispersed oil content and the BTX content;
- e. The quantity of total oil discharged (column J) is the sum of the quantities of discharged dispersed oil (column H) and the discharged BTEX (column I);
- f. On the days that no sampling takes place the data of the last sampling are valid;
- g. At the end of the monthly period the columns C, H, I and J will be summed. Thereafter the average for a month is calculated by dividing the total quantities of dispersed oil, BTEX and total oil for the full month with the total flow rate for that month.

Appendix 15, belonging to Article 12.2

A. Definitions

In this Appendix the following means:

- a. *land*: the part of the Netherlands territory that lies on the landward side of the line as laid down in the Appendix of the Mijnbouwwet;
- b. *small production installation*: a production installation on land without an installation for the treatment of hydrocarbons, unless the installation exclusively separates water or gas condensate and the hydrocarbons do not stem from one or more other production installations;
- c. *middlesize production installation on land*: a production installation on land with no more than 1 installation for the treatment of hydrocarbons that does not exclusively separate water or gas condensate or that stem from one or more other production installations;
- d. *big production installation on land*: a production installation on land that is neither a small production installation on land nor a middlesize production installation on land;
- e. *sea*: the continental shelf and the part of the Netherlands territory that lies on the seaward side of the line as laid down in the Appendix of the Mijnbouwwet;
- f. *small production installation at sea*: a production installation at sea without an installation for the treatment of hydrocarbons unless the installation exclusively separates water or gas condensate and the hydrocarbons do not stem from one or more other production installations;
- g. *big production installation at sea*: a big production installation at sea that is not a small production installation at sea;
- h. *essential change*: a change in the design, the nature or size of the production installation, the full or partial removal of a production installation, the decommissioning of a borehole or a well;
- i. *neutral change*: a change of the installation that does not require an assessment of the possible consequences for the safety or the environment.

B. The compensation for the performance of tasks as meant in Article 133.1.b of the Mijnbouwwet in connection with a mining work

1. The compensation that is charged annually to the operator of a production installation amounts to: € 5.000.
2. The compensation as meant in B.1 will be increased by:
 - a. € 618 per annum for every small production installation on land, including the case in which the operator has ceased the production and the case in which an operator has ceased the production of a middlesize production installation on land until the moment in time that the implementation of a closing plan or the description of measures as meant in Article 40 or 40a of the Mijnbouwbesluit is ready;
 - b. € 618 per annum for a small production installation at sea of which the operator has ceased production until the moment in time that the implementation of the removal plan as meant in Article 60 of the Mijnbouwbesluit is ready;
 - c. € 618 per annum for a small production installation at sea and for a middlesize production installation on land, and in the case in which the operator has ceased the production, for a big production installation on land or at sea, until thee

- moment in time that the implementation plan, the description of measures or the removal plan as meant in the Articles 40, 40a, respectively, of the Mijnbouwbesluit is ready;
- d. € 618 per annum for a small production installation at sea and for a middle size production installation on land per annum for a big production installation at sea and a big production installation on land;
 - e. € 618 for the part of a year that the establishment of a new production installation is assessed until 6 months after commencement of the production, after receipt of:
 - 1^o. a request for advice on an application for an environmental licence as meant in Article 2.1.1.e of the Wet algemene bepalingen omgevingsrecht;
 - 2^o. a request for advice on an application for a licence as meant in Article 40.2 first full sentence of the Mijnbouwwet or
 - 3^o. a report on great dangers as meant in Article 45^e.2 of the Mijnbouwwet;
 - f. € 618 for the part of a year that an essential change of an existing production installation, excluding a change of a small production installation on land or a neutral change of another production installation, is assessed until 6 months after the commissioning of the changed installation or after implementation of the decommissioning as meant in Article 45e.1 of the Mijnbouwwet, however subtracting the part of the year of the increase as meant in B.c and B.d after receipt of:
 - 1^o. a request for advice on an application for an environmental licence as meant in Article 2.1.1.e of the Wet algemene bepalingen omgevingsrecht;
 - 2^o. a request for advice on an application for a licence as meant in Article 40.2 first full sentence of the Mijnbouwwet or
 - 3^o. a report on great dangers as meant in Article 45e.2 of the Mijnbouwwet;
 - g. € 618 per day during the period of borehole activities as meant in Articles 1.y. 1^o. and 1.y. 2^o of the Mijnbouwwet where at any moment in time a borehole shutoff valve with a working pressure of 68,95MPa (689,5 bar) is applied;
 - h. € 618 per day during the period of borehole activities as meant in Articles 1.y. 1^o. and 1.y. 2^o of the Mijnbouwwet where at any moment in time a borehole shutoff valve with a working pressure higher than 68,95MPa (689,5 bar) is applied;
 - i. € 618 per day during the period of borehole activities as meant in Article 1.y. 3^o. of the Mijnbouwwet;
 - j. € 618 per day for the assessment of a notification as meant in the Articles 45m and 45n of the Mijnbouwwet;
 - k. € 618 per day for the assessment of a notification as meant in the Articles 45o and 45p of the Mijnbouwwet.
3. The compensation that will be charged to the owner of a non-production installation for the supervision of each and every separate installation, once off for the period of a year as from the first daily report as mentioned in Article 8.2.2.1 of this Mijnbouwregeling amounts to: € 12,355.

C. The compensation as meant in Article 133.1.b of the Mijnbouwwet in connection with a gas transmission network

The compensation that is charged annually to:

- a. a network operator of a gas transportation network other than the national gas transportation network as meant in Article 1.n of the Gaswet, excluding a gas transportation network with exclusively high pressure gas transportation, amounts to € 8,99 per annum per 100 connections;

- b. a network operator of the national gas transportation network as meant in Article 1.1.n of the Gaswet is equal tot the amount that is charged to the network operator as meant under a. with the most number of connections;
- c. the network operator of a gas transportation with exclusively high pressure gas transportation is equal to the amount that is charged to the network operator as meant under a, with the least number of connections.

D. The compensation for the taking of a decision, the assessment of a notification and the report concerning great dangers as meant in Article 133.1.a, or Article 1271.f , respectively, of the Mijnbouwwet

- 1.The compensation for the taking of a decision or the assessment at request in table 2 is equal to the amount mentioned in the category concerned in table 1 increased by the cost of the publication or notification of draft decisions in the public media.
2. In the event that by virtue of the Regeling leges omgevingsvergunning Rijksoverheid a compensation is due, then the articles 2.13 and 2.15 thereof shall not be applied if in table 2 of this Appendix a compensation has been provided for.

Table 1

Category	Amount
A	€38,200.00
B	€19,200.00
C	€17,960.00
D	€15,280.00
E	€13,970.00
F	€12,450.00
G	€10,030.00
H	€8,020.00
I	€7,280.00
J	€5,200.00
K	€4,300.00
L	€3,600.00
M	€1,920.00
N	€1,020.00
O	Nihil

Table 2

The amount belonging to	as meant in	is the amount of category:
a. the withdrawal of a decision	Article 161a.2.b, 161a.2.c and 161a.2.f up to and including 161a.2.j of the Mijnbouwbesluit	O
b. the granting of an exploration or production licence	Article 6.1.a or Article 6.1.b of the Mijnbouwwet	H
c. the amendment of an exploration or production licence	Articles 18, 19,20 and 143.8 of the Mijnbouwwet	K
d. withdrawal of an exploration licence	Article 21 in conjunction with Article 6.1.a of the Mijnbouwwet	M
e. withdrawal of a production licence	Article 21 in conjunction with Article 6.1.b of the Mijnbouwwet	J
f. concurrence with and change of concurrence with a production licence on land	Article 34.3 of the Mijnbouwwet	A
g. concurrence with and change of concurrence with a production plan on land of minor importance	Article 34.3 and Article 34.4.b of the Mijnbouwwet	C
h. concurrence with and change of concurrence with a production plan for a location on the continental shelf or in the territorial sea	Article 34.3 of the Mijnbouwwet	J
i. the granting or change of an exemption for the presence or having or causing to have an object in a safety zone	Article 43.4 of the Mijnbouwwet	K
j. the withdrawal of an exemption for the having or cause to have an object in a safety zone	Article 43.4 of the Mijnbouwwet	O
k. the granting or changing of an environmental licence with the normal procedure	Article 2.1.1.e and paragraph 3.2 of the Wet Algemene bepalingen omgevingsrecht and Article 3.3.4 of the Besluit Omgevingsrecht	I
l. the granting or changing of an environmental licence with the extended procedure	Article 2.1.1.e and paragraph 3.3 of the Wet Algemene bepalingen omgevingsrecht and Article 3.3.4 of the Besluit Omgevingsrecht	G

<p>m. the granting of an environmental licence w.r.t. a change of a site or mining work or the operation thereof that does not lead to other or greater adverse consequences for the environment compared with the normal procedure</p>	<p>Article 2.1.1.e and paragraphs 3.2 and 3.10.3 of the Wet algemene bepalingen omgevingsrecht</p>	<p>J</p>
<p>n. the granting of an environmental licence w.r.t. a change of a site or mining work or the operation thereof that does not lead to other or greater adverse consequences for the environment compared with the extended procedure</p>	<p>Article 2.1.1.e and paragraph 3.3 of the Wet algemene bepalingen omgevingsrecht</p>	<p>H</p>
<p>o. the granting of a licence for a mining work on the continental shelf</p>	<p>Article 40.2 first full sentence of the Mijnbouwwet</p>	<p>G</p>
<p>p. the granting of a licence for a mining work on the continental shelf with assessment submission of an environmental impact assessment</p>	<p>Article 40.2 first full sentence of the Mijnbouwwet in conjunction with Article 7.16 of the Wet milieubeheer</p>	<p>E</p>
<p>q. the granting of a licence for a mining work on the continental shelf with an environmental impact assessment</p>	<p>Article 40.2 first full sentence of the Mijnbouwwet in conjunction with Article 7.28 of the Wet milieubeheer</p>	<p>B</p>
<p>r. the changing or withdrawal of a licence for a mining work on the continental shelf</p>	<p>Article 40.2 first full sentence of the Mijnbouwwet</p>	<p>K</p>
<p>s. the concurrence with a report concerning great dangers w.r.t.:</p> <ul style="list-style-type: none"> a. new production installation at sea or b. essential changes of the general part and one specific part of an existing production installation at sea 	<p>Article 45b.2 and 45.e.2 respectively of the Mijnbouwwet</p>	<p>D</p>
<p>t. the concurrence with a report concerning great dangers w.r.t.:</p> <ul style="list-style-type: none"> a. new non production installations at sea or b. essential changes of the general part and one specific part of an existing non production installation at sea 	<p>Article 45b.2 and 45.f.2 respectively of the Mijnbouwwet</p>	<p>D</p>
<p>u. the assessment of an extra specific part of a report concerning great dangers or a change thereof as meant under s and t</p>	<p>Article 45b.2 and 45.f.2 respectively of the Mijnbouwwet</p>	<p>K</p>
<p>v. the granting of an environmental licence with assessment environmental impact statement with the regular procedure</p>	<p>Article 2.1.1.e and paragraph 3.2 of the Wet algemene bepalingen omgevingsrecht</p>	<p>G</p>

w. the granting of an environmental licence with assessment environmental impact statement with the extended procedure	Article 2.1.1.e and paragraph 3.3 of the Wet algemene bepalingen omgevingsrecht	F
x. the granting of an environmental licence with an environmental impact statement with the regular procedure	Article 2.1.1.e and paragraph 3.2 of the Wet algemene bepalingen omgevingsrecht and Article 7.28 of the Wet Milieubeheer	D
y. the granting of an environmental licence with an environmental impact statement with the extended procedure	Article 2.1.1.e and paragraph 3.3 of the Wet algemene bepalingen omgevingsrecht and Article 7.28 of the Wet Milieubeheer	C
z. the granting or changing of a licence or exemption for the use of explosive substances for exploration in total for the activity	Article 22.3 of the Mijnbouwbesluit and Article 2.2.4.3 of the Mijnbouwregeling	L
aa. the concurrence with a measurement plan and the exemption for measuring equipment		N
bb. the granting or changing of a concurrence with a closing plan or a removal plan	Articles 39.2 and 60.3 of the Mijnbouwbesluit	L
cc. the granting or changing of an exemption for the establishment of a mining installation in an exercise or shooting area, an area with dense shipping, an area designated Articles 3.1 or 9.1, respectively, of the Wet windenergie op zee	Article 44.2 and Article 45.2, respectively of the Mijnbouwbesluit	K

E. Additional compensation of cost

The compensation of cost as meant in B and D will be increased by:

- a. the cost of investigation as meant in Article 127.1.d of the Mijnbouwwet into:
 - 1^o. the effects of the manner of production and the activities related thereto;
 - 2^o. the effects of soil movement as a result of production and the measures for prevention of damage as a result of soil movement;
 - 3^o. the risks for neighbours, buildings or infrastructural works or the functionality thereof;
 - 4^o. the taking of samples necessary for the investigation;
 - 5^o. the calculation of risks and the processing of analyses on samples if relevant in connection with the effects as meant in 1^o. and 2^o. or the risks as meant in 3^o, and
- b. the cost made for the investigation as meant in a relation to the following components:
 - 1^o. calculations, audit calculations, literature studies, analyses, model studies and investigations;
 - 2^o. the preparation of reports and advices;
 - 3^o. laboratory cost;
 - 4^o. processing and mailing cost;

- 5°. administration cost;
- 6°. travel, transportation and board and lodging cost of the persons involved in the work activities;
- 7°. an hourly amount per person in charge of the work activities;
- 8°. other cost relating to these work activities.