# British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL

#### NATIONAL GEOLOGICAL RECORDS CENTRE

# Notification of intent to construct new wells and boreholes and the subsequent provision of information – overview of requirements

Water Resources Act 1991 and Water (Scotland) Act 1980

The Water Resources Act 1991 Section 198 and Water (Scotland) Act 1980 Section 93 both contain legislation concerning underground water. They require that: (a) the Natural Environment Research Council be notified of the intention to sink new wells and boreholes for water to a depth of fifty feet (15 metres); (b) that journals be kept of the programme of work, including measurements of any water levels and flow rates; (c) that these journals together with details of water levels and yields be provided to the Council at the following address:

The Records Section
Hydrogeology Group
British Geological Survey
Maclean Building
Crowmarsh Gifford
Wallingford
Oxon OX1O 8BB

Section 205 of the Water Resources Act and Section 93(6) of the Water (Scotland) Act provide for such information to be furnished in confidence if so required.

The Natural Environment Research Council is confident that it can count upon the full and willing co-operation of all concerned, and this leaflet has been prepared for the guidance of contractors and others. Sections 198 and 205 of the Water Resources Act 1991 and Section 93 of the Water (Scotland) Act 1980 are reproduced, and notes on the arrangements for the receipt of information are appended.

#### NOTES ON THE ARRANGEMENTS FOR THE RECEIPT OF INFORMATION

### 1 Operations to which the Act applies

The Act applies to all of the following operations if carried out for the purpose of searching for or abstracting water. Observation or monitoring boreholes are also deemed to be for these purposes.

- (i) The sinking of a new well or borehole intended to reach a depth of more than 15 metres (50 feet) from the ground surface.
- (ii) The deepening of an existing well or borehole of less than 15 metres in depth, so as to reach a depth of more than 15 metres from the ground surface.
- (iii) The deepening of any existing well or borehole of 15 metres or more in depth.
- (iv) The sinking from headings of a new well or borehole, intended to reach a depth of more than 15 metres below the ground surface.

## 2 Duties of persons sinking wells and boreholes for water

The person responsible for the actual sinking of a well or borehole (normally the contracted well-sinker or driller) must take the following steps:

(i) Notify the Council before operations are begun. This may be done by sending a Notification of Intent card to the address given on the first page of this leaflet. Notification will also be welcomed of other borings, sinkings and work not specified under Section 198(1) as may be expected to yield results of interest to the Council.

- (ii) Keep a daily record (journal) of the operations. Such a journal should include all the details given on a Well Record Form plus, where practicable, measurements of water levels during test pumping at recorded time intervals; a drawing or tracing preferably from a six-inch or 1:10 000 Ordnance Survey map, showing the precise site of the well, and a copy of any analysis of the water.
- (iii) On the completion or abandonment of the work, send to the British Geological Survey, at the address given on the first page of this leaflet, a copy of the completed record.

Copies of Notification of Intent cards and of Well Record Forms are provided free of charge on request to the address given on the first page of this leaflet.

The person sinking the well or borehole should notify the British Geological Survey in writing if he desires that the information supplied should be treated as confidential as provided under section 205 of the Water Resources Act 1991. Any officer of the Natural Environment Research Council visiting wells or boreholes should similarly be warned if it is desired that any such information should be kept confidential.

### 3 Rights of access of the Natural Environment Research Council to wells and boreholes for water

Under the Act free access to journals of wells and boreholes for water, as well as to the workings, is given to officers of the Council and to any other officers whom the Council may appoint for this purpose. The officers of the Council may take copies of the journals, may inspect the cores and other materials removed from the wells and boreholes, and may take such representative specimens of rocks, fossils, minerals, etc., and samples of water, as may seem necessary or desirable for the purpose of the Council.

The officers of the Council will carry documents of identification sufficient to establish that they are authorised persons.

#### 4 General remarks

The information required in the completed journals is indicated on the Well Record Form. Save in exceptional cases, a completed form will be accepted by the British Geological Survey as discharging the obligation imposed by the Act to maintain and, on completion or abandonment of the work, to furnish to the Council a journal of the operations.

Present-day methods of boring do not produce cores from the majority of boreholes for water. Nevertheless, specimens obtained should be as good as possible, and their depths below the ground surface recorded as accurately as possible. Care should be given to the description of strata recorded in the journal.

Cores, when taken, should be laid out in regular order with marks at intervals showing depths of origin, and gaps in which the cores are absent or imperfect should be marked with an indication of the extent of the missing core and such fragmentary specimens as have been obtained at that depth should be retained in place.

Specimens of the material obtained in well sinking should be laid out in order, and those from each depth should be kept together. If any band encountered contains fossils, all materials from that band should be kept together as those fossils may furnish important evidence of the geological horizon penetrated in the sinking.

Any portions of cores or materials from well sinking or borings of special interest, or liable to disintegrate if exposed to rain and the action of the air, should receive special attention to ensure their preservation. Precautions should be taken to prevent disturbance by members of the public, or by cattle, sheep or other animals.

In cases of special interest, it may be desirable for repeated visits to be paid by the officers of the Council to a well or borehole under construction and it is requested that, when desired, notification of the progress of work and particularly of any unforeseen developments should be sent to the British Geological Survey to ensure that no valuable information should be lost. For this purpose it is hoped that the active co-operation of the contractors undertaking the work will be extended to the officers of the Council.

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