

**CONSENT TO INVESTIGATE A
GROUNDWATER SOURCE**
Section 32(3) Water Resources Act 1991



This **CONSENT** is issued by the Environment Agency ("the Agency") to:

PGFI III Limited ("the Consent Holder")

of;

19 Worpole Road, London, SW19 4JS

This consent authorises the Consent Holder to construct a borehole and abstract water for testing purposes from that borehole at:

Park Avenue, Dove Valley Park, Foston, Derby, DE65 5BZ

National Grid Reference: **SK 2028 3237**

subject to the conditions set out in the Schedules 1 and 2 to this consent.

This consent is effective from the date below and expires on 1st October 2019.

Signature 	Print name Paul Carroll
Position Team Leader, Groundwater & Contaminated Land Team	Date 25 th April 2019

This consent is issued by the Environment Agency, West Midlands Area from its office at Sentinel House, Wellington Crescent, Fradley Park, Lichfield, Staffordshire, WS13 8RR. The person whom the Consent Holder should contact during the carrying out of the works and if he has any queries is Jennifer Gannon, tel.ext/direct line 020302 53012.

SCHEDULE 1 - General Conditions

1 INTERPRETATION

- a) "The Consent Holder" means the person (whether an individual or organisation) to whom this consent is granted. Where the Consent Holder is two or more persons (e.g. a partnership) such persons shall be jointly and severally liable for the proper fulfilment of the conditions of this consent. In this consent the expression may also include, where the context so admits, a person who is the applicant for a consent i.e. before a consent is granted.
- b) "The works" means the activities authorised or required by this consent, including the survey, construction of the well, borehole, well points, catchpit, or other work, and/or test pumping of the same, as the context so requires. The expression "the works" does not include activities for which this consent is unnecessary, such as construction of ancillary buildings, access roads, pits for drill cuttings, etc.

2 CLEARANCE/DEVELOPMENT PUMPING

Clearance/development pumping to remove any products of the well drilling or well development treatment is permitted under this Consent for a period not exceeding 48 hours. Clearance/development pumping that extends beyond 48 hours must be agreed with the Agency prior to the commencement of pumping. There must be a **full recovery** of water levels before a proper test pumping commences. Condition 5 of Schedule 1 of this Consent concerning the discharge of water and potential for

pollution/physical disturbance applies to any such pumping operations.

3 SURVEY

The works shall not proceed unless and until the Agency has informed the Consent Holder in writing to the effect that (i) it considers the survey of water sources and other features which may be relevant to the works as specified by the Agency has been carried out adequately and (ii) it appears unlikely that test pumping will significantly affect other water users.

4 NOTICES etc TO THE AGENCY

Unless other periods are agreed in writing with the Agency, the Consent Holder shall give written notice to the Agency as follows:-

- a) 5 days' notice before first commencing construction of the works
- b) 5 days' notice before commencing acidisation or other treatment of the works
- c) 10 days' notice before commencing test pumping.

Notice, and other information required by the Agency, shall be sent to the office at the address shown on the front of this consent for the attention of the person named there.

5 DISCHARGE OF WATER and POTENTIAL FOR POLLUTION/ PHYSICAL DISTURBANCE

- a) The Consent Holder shall construct and finish the works so that water is

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prevented from running to waste.
Any artesian flow must be securely capped.

- b) The Consent Holder shall secure any completed works so as to prevent pollution or other hazard through those works, for example by capping and locking a completed borehole.
- c) The Consent Holder shall ensure that pollution of, interference with, or damage to inland freshwaters or groundwater does not occur, whether from abstracted water or from substances or materials used in connection with the works.
- d) The Consent Holder shall be responsible for obtaining necessary consents in relation to structures in, over or under watercourses.
- e) The Consent Holder shall be responsible for the proper disposal of wastes from the works.
- f) The Consent Holder shall notify neighbouring landowners who may be affected by discharge from the works and, if applicable, the Internal Drainage Board for the area, and shall take all necessary steps to prevent flooding.
- g) The Consent Holder shall ensure that all persons engaged in the works are free from, and are not carriers of, waterborne diseases, and shall ensure that they operate to a high standard of hygiene.

6 EFFECTS ON OTHER WATER SOURCES

The Consent Holder shall immediately inform the Agency if any information or complaint is received by him about the

consented operation, and shall immediately consult with the Agency as to the appropriate action to be taken.

7 RECORDS

The Consent Holder shall keep such records of strata encountered, construction of the works, results of any geophysical logging, water quality analyses, and test pumping data as may be required by the Agency. The information shall be given on forms provided by the Agency, and/or on compatible computer disk in a format agreed with the Agency. These records must be returned within one month of completion of the works or with any subsequent licence application (whichever is sooner).

8 PRESENTATION OF RESULTS

The Consent Holder shall present results and analysis of test pumping in the form specified in Schedule 2 to this consent.

9 INFORMATION TO THE BRITISH GEOLOGICAL SURVEY (BGS) ON BEHALF OF THE NATURAL ENVIRONMENT RESEARCH COUNCIL

- a) Where the proposed works are intended to be more than 15 metres (50 feet) deep, the Consent Holder must notify BGS before starting the works. BGS' address for the purpose is the Hydrogeology Group, British Geological Survey, Maclean Building, Crowmarsh Gifford, Wallingford, Oxon OX10 8BB.
- b) The Consent Holder shall send BGS stratigraphic and test pumping information as required by section 198 Water Resources Act 1991

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within one month of completing the work. By arrangement with BGS, the Agency will do this on behalf of the Consent Holder unless the Consent Holder instructs otherwise.

- c) Under "The Borehole Sites and Operations Regulations 1995" HSE must be notified when drilling boreholes more than 30 metres deep into used or disused mining areas. The regulations define "mining area" as land within one kilometre in a horizontal or other direction of workings in a mine, or where a licence to mine for minerals has been granted.

10 MEASUREMENT ACCESS

The Consent Holder shall provide an access tube of diameter adequate for measuring instruments to be lowered safely into the borehole. In the case of lagoons, the consent holder shall install a gauge board, of a design approved by the Agency, in a position in the lagoon so that at all times the full range of water levels from normal top water level to the maximum drawdown level can be safely observed. The datum level on the gauge board shall be accordingly levelled to Ordnance Datum (Newlyn).

11 ENTRY BY THE AGENCY or BGS

The Consent Holder shall allow representatives of the Agency or BGS to enter the site at all reasonable hours, to inspect the works, to inspect and take copies or extracts of documents, and to take measurements and samples, as such representatives consider appropriate.

12 STANDARDS OF WORK

Unless otherwise specified in this consent or subsequently agreed with the Agency, the Consent Holder shall carry out the works and present data fully in accordance with British Standard ISO 14686 (2003) "Hydrometric determinations – pumping tests for water wells – considerations and guidelines for design, performance and use". Copies of this are available from BSI, 389 Chiswick High Road, London, W4 4AL. Tel: (020) 89969000. <http://www.bsi-global.com/>. The Agency may require repetition of tests or other appropriate remedial activities should the required standards not be met.

SCHEDULE 2 – Special Conditions

1. CONSTRUCTION DETAILS

When constructing the works:

- a. The maximum depth of the borehole shall be 250 metres
- b. The maximum diameter of the borehole shall be 311 mm.
- c. The borehole shall be lined with solid casing and grouted with cement to a depth of at least 30 metres.
- d. A dip tube shall be positioned in the borehole so that a cable dipper can be lowered to record the water level without fouling installed pumping equipment. The dip tube shall be at least 25mm in diameter and shall at all times extend to a depth not less than 1 metre below the minimum water level as recorded when the borehole is operating at the proposed maximum hourly rate of abstraction.

2. PROGRAMME

The Consent Holder shall carry out test pumping and measurement of water levels in the works and at other points using an operational test. Full Details of your test requirements are given in section 4.

During the test pumping rates shall not exceed a maximum of 45m³/hr.

3. WATER LEVEL MONITORING

Before, during and after test pumping the Consent Holder is required to monitor the following specified features:

3a. At the pumped source

The Consent Holder shall measure and record water levels at least twice daily for 3 days **before** pumping commences. Thereafter the Consent Holder shall measure water levels as shown on the attached data sheets from the commencement and completion of the operational test until full recovery. The water level must be measured prior to the commencement of each pumping session. Discharge rates or meter readings must be recorded during pumping.

3b. At Observed Source

At location:

Nestle Tutbury, 'BH1': NGR SK 2161 2968

Monitoring of the above location is required during the Constant Rate Test. The Consent Holder shall measure and record water levels at least twice daily for 3 days **before** pumping commences. Thereafter the Consent Holder shall measure water levels as shown on the attached data sheets from the commencement and completion of the operational test until full recovery. The water level must be measured prior to the commencement of each pumping session

4. TEST PUMPING

4a. Step Tests

Step Tests are permitted following the construction and well development of the borehole.

Water levels should be allowed to substantially recover before any Step Testing commences following any pumping for well development purposes or from constant rate tests, unless otherwise agreed.

The abstraction rates during each step of the tests should be recorded accurately. Pumping rates shall not exceed 45m³/h.

4b. Constant Rate Test

A Constant Rate Test will be undertaken for a minimum duration of 4 weeks. As a maximum the pumping rates will be approximately 45m³/hour, 1080m³/d.

5. DISCHARGE OF WATER

There must be no discharge, runoff or leakage of any coloured, silted or contaminated water to any ditch, watercourse or other "Controlled Waters".

- 5.a. We have a regulatory position statement on the .Gov.uk website regarding discharges, which the link below takes you to;

<https://www.gov.uk/guidance/dewatering-building-sites-and-other-excavations-environmental-permits>

We expect you to follow this advice. The consent will require you to confirm the position of the discharges and require you to give us a week or so's notice of the commencement of the test. The discharge may have to be reduced or cease if it coincides with heavy rainfall and there is a risk of flooding.

The pumped water should be disposed of in such a way as to prevent re-circulation back to the aquifer

6. CONSTRUCTION DETAILS AND PUMPING TEST RESULTS

Borehole construction details and results of test pumping shall be presented on form WR-39 (Pumping Test Data Sheets) supplied by the Environment Agency, or in a substantially similar format. A Pumping Test Report shall be produced in the format set out in note WR-43, provided by the Environment Agency, or in a substantially similar format.

7. OTHER SPECIAL CONDITIONS

If after pumping for 12 hours groundwater levels within the abstraction source have not stabilised then the Consent Holder must continue pumping until these conditions are achieved.

All notifications and queries relating to this consent should be directed to;

Jennifer Gannon (Groundwater & Contaminated Land Team) at;
Environment Agency
Sentinel House
9 Wellington Crescent
Fradley Park
Lichfield
WS13 8RR

Tel: 020302 53012

Email: jennifer.gannon@environment-agency.gov.uk