

VOLUME 3

SECTION 2

DRILLING OF WELLS AND MANAGEMENT OF THE WATER RESOURCES OF JAMAICA

**The Responsibility of
The Water Resources Authority
Hope Gardens
Hope Road
Kingston 6**

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CHAPTER I

WATER RESOURCES AUTHORITY

1.0 BACKGROUND

The Water Resources Authority (WRA) is mandated by Section 4(1) of the Water Resources Act 1995 "...to regulate, allocate, conserve and otherwise manage the water resources of Jamaica." In order to carry out this mandate, the Authority performs the following functions:

- Obtain, compile, store and disseminate data concerning the water resources of Jamaica
- Exercise planning functions in relation to the Master Plan and Water Quality Control Plan
- Control the quality of water resources
- Provide technical assistance to any department of Government
- Allocate water resources

1.1 ALLOCATION OF WATER RESOURCES

The Authority allocates the water resources of Jamaica through a permit and licensing system.

In accordance with Section 19 of the Water Resources Act 1995,

"...no person shall abstract and use water; or construct or alter or cause to be constructed or altered any works for abstraction and use of water except under and in accordance with a licence granted by the Authority under this Act."

In accordance with Section 34 of the Water Resources Act 1995,

"...no person shall sink, construct, enlarge or otherwise alter a wellunless he has the consent to do so."

CHAPTER 2

THE PERMIT AND LICENSING SYSTEM

2.0 APPLICATION FOR WELL DRILLING

As stated in Section 34 of the Act and as set out in chapter one, before any new well can be established, a permit to drill must be obtained. A permit is also required in order to alter an existing well (e.g. deepen or widen). This process requires submission of an application form giving the technical details of the proposed well. The following must be submitted:

- i Form C completed in duplicate (Form C is at Appendix i)
- ii Two copies of site maps at 1:50,000 scale
- iii Non-refundable application fee of Ja\$15,000.00

2.1 APPLICATION TO ABSTRACT AND USE WATER

As stated in Section 19 of the Act and as set out above, the abstraction and use of water from all surface or ground water sources require a licence. The Water Resources Authority (WRA) should also be notified prior to changing the pump on any existing works; a new licence is required if this results in a change in the abstraction volume. This requires submission of an application form giving information on the source to be tapped and the use of the water. The following must be submitted:

- i Form A completed in duplicate (Form A is at Appendix 2)
- ii Two copies of site maps at 1:50,000 scale
- iii Non-refundable application fee of J\$15,000.00

Forms A and C may also be obtained from the offices of the WRA or downloaded from its web site at www.wra-ja.org. The non-refundable fee covers the cost of processing the application and one site visit.

A new well will require:

- i a permit to drill and
- ii a licence to abstract and use water.

A new surface water source or a previously drilled well will require only a licence to abstract and use water.

CHAPTER 3

PROCESSING OF APPLICATIONS

3.0 THE PROCESS

Applications are processed and presented to the WRA Board at its monthly meeting for a decision. All applications will be fully processed within 60 days assuming the applicant submits all supporting information.

An application for a permit to drill (new well) will have site investigations undertaken in order to evaluate hydrogeology (water availability, water quality, nature of formation and chance of success), suitability of site (including access) and proximity to other already established systems (possible interference).

An application for a licence to abstract and use water requires that site investigations be undertaken to evaluate hydrology (flow measurements to determine discharge and reliability of source), water quality (for potable or irrigation suitability) and impacts on other users downstream as well as on the aquatic system.

3.1 MATTERS FOR CONSIDERATION

In considering an application for a permit or licence the Authority shall take the following into consideration:

- i The ability of the source to meet the demand reliably
- ii The quality of the source to meet the demand standard
- iii Existence of prior users with rights to the water (in-stream uses of the water)
- iv Impact of the disposal of any wastewater that may be generated – safeguarding of the public health and the environment
- v The provisions of the Master Plan
- vi The consideration that the satisfaction of the demands of the public water supply is a matter of priority
- vii The requirements of the applicant and whether or not he has the financial or technical resources for the enjoyment of the permit/licence and

- viii The requirements of land drainage.

The above information is presented to the Board in the form of a technical report with recommendations and conditions (if needed) for granting or refusing the application.

3.2 DECISION OF BOARD

The decision of the WRA Board is communicated in writing to the applicant. There are two possible outcomes:

3.2.1 Grant Of Permit/Licence

- i The grant of a **permit** for well drilling is valid for one (1) year from the date of issue.
- ii The grant of a **licence** to abstract and use water is valid for five (5) years from the date of issue. However the licence becomes null and void if within twelve (12) months from the date of issue thereof no water is abstracted or used from the approved source.

3.2.2 Renewal Of Permit/Licence

A permit/licence granted may on expiration be renewed by the Authority if:

- i The applicant applies to the Authority for renewal not later than six (6) months before the expiration date and
- ii There has been no material change in the circumstances, which existed at the time the permit/licence was first granted.

Where the application for renewal is made after the expiration date or if there is a material change in circumstances, then the application will be treated as a new one with no guarantee of it being granted.

No permit/licence is transferable.

3.3 ADVERTISEMENT AND OBJECTIONS BY THE PUBLIC

Granting of a permit/licence for a new surface or groundwater source is pending an advertisement in a daily newspaper. The format of the advertisement is set out

by the WRA and must be posted at the applicant's expense. The advertisement must be placed twice, seven (7) days apart in a local newspaper. The local Post Office closest to the proposed site is asked to display a map of the site along with a copy of the application form. The public has 21 days from the date of the first newspaper advertisement to submit objections to the WRA on the granting of a permit/licence.

Objections to the grant of a permit/licence are addressed by the WRA in consultation with the applicant. If the objector is still not satisfied, there remains the option of an appeal to the Minister with portfolio responsibilities.

3.4 NOTIFICATION OF APPLICANT

If no objections are received the applicant is advised of the grant of the permit/licence. A formal permit/licence document is prepared and sent to the applicant. It is the duty of the well driller/pump contractor to ensure that the client holds a valid permit/licence prior to commencing any work.

3.5 FINES AND PENALTIES

Persons operating without a licence or permit are contravening Sections 19 and 34 of the Act and shall be guilty of an offence and be liable on summary conviction before a Resident Magistrate's court to a fine not exceeding two hundred thousand (\$200,000) dollars and in default of payment a term of imprisonment not exceeding six (6) months. If the offence is continued after conviction, each person (driller/contractor and applicant) is liable to a fine of ten thousand dollars for each day that the offence is continued without a permit/licence.

3.6 REFUSAL OF PERMIT/LICENCE

If the Authority refuses to grant a permit it will state in writing the reasons for the decision and inform the applicant of his/her right under the Act to appeal the decision.

3.7 THE APPEAL PROCESS

Any person who objects to a decision of the Authority with respect to the grant of a permit or licence, or applicant who objects to the Authority's refusal to grant a permit or licence has the option of appeal. The appeal letter should state the grounds under which the appeal is made and must be submitted for the attention of the Permanent Secretary within fourteen (14) days of the notification of the decision being appealed. Under Section 43 of the Water Resources Act, the Minister may dismiss the appeal and confirm the decision of the Authority, allow the appeal and set aside the decision, vary the decision or allow the appeal and

direct the Authority to re-evaluate the matter being appealed.

All grants and refusals of permits/licences are published in the Jamaica Gazette at the Authority's expense.

3.8 DRILLING AND TESTING

Under Part IV Section 23 of the Fourth Schedule of the Regulations of the Water Resources Act 1995, officers of the WRA have the right of access to any property and all works related to the drilling and testing of a well, monitoring compliance with the provisions of the Act, reading or testing of any meter, measuring any flow or water level, installing equipment for the recording of hydrological and hydro geological data and to examine any records which are required to be kept under the Act or the Regulations.

All well construction, yield test and water quality data must be submitted to the WRA for review and consideration as part of the supporting documents for an application to abstract and use water. Yield and water quality tests are executed in accordance with the format prescribed by the WRA.

3.9 EXPLORATORY WELLS

Where a small diameter borehole is required to ascertain lithology or to explore for groundwater, no permit to drill is required. The WRA however requires formal notification of the intent to drill and reserves the right to refuse permission to drill an exploratory borehole. The WRA may stipulate the drilling of an exploratory hole to determine lithology and guide well design for wells to be completed in sand and gravel aquifers.

All data from the drilling should be submitted to the Authority for inclusion in its database.

3.10 REPLACEMENT SYSTEMS

A replacement well or surface abstraction point has rights to the previous licensed or abstracted volume unless so prescribed by the WRA. Any additional abstraction above that previously licensed is regarded as a new application.

3.11 EFFLUENT DISCHARGE

Under Section 21 of the Water Resources Act 1995, where a permit/licence is required and the use of the water to which that permit/licence relates will likely result in the discharge of an effluent, evidence of an application to the National Environment and Planning Agency (NEPA) for a permit to discharge the effluent shall accompany the application.

CHAPTER 4

GENERAL CONDITIONS OF THE PERMIT OR LICENCE

4.0 ADDITIONAL INFORMATION

The WRA may request additional information and/or tests in order to complete the processing of an application. These additional tests (outside of the routine list of activities of the WRA) are at the expense of the applicant. The WRA will provide supervision for the tests and carry out analysis of the test data.

4.1 TRANSFERS AND UPGRADES

Under Section 7, Part II of the Water Resources Regulations 1995, no transfer of licence is allowed. Acquisition of property on which an abstraction source exists does not imply the acquisition of a licence to abstract and use water. A Licence cannot be upgraded without an application to the Authority.

4.2 SPECIAL CONDITIONS

The WRA may attach special conditions to any permit/licence to facilitate the protection of the resource, public health, prior users or the environment. These conditions may be attached at any time at the discretion of the Authority.

4.3 MODIFICATIONS

The WRA may modify any licence based on the existing conditions in the area. In the case of drought conditions, abstraction rates may be reduced to give priority to the provision of water to meet the demands of the public supply systems. Modifications may be attached at any time at the discretion of the Authority.

4.4 REVOCATION

The Authority may revoke a licence or suspend it for a period of time if it is determined that:

- i There has been a breach of any of the provisions of the Act or terms or conditions as outlined on the licence document.
- ii There has been waste or misuse of the water which can be abstracted under the licence

Before the licence is revoked, the Authority has the option to serve a notice in

writing on the licensee outlining the breach and requiring him to remedy the situation within a specified time and informing him that he may apply to the Authority to be heard on the matter at a time specified in the notice.

4.5 ENTITLEMENT

The licensee is entitled to the protection of his water rights by the WRA and may object to the licensing of any applicant for use of the resource if he feels that he will be affected.

CHAPTER 5

SERVICES OFFERED TO PUBLIC AND PRIVATE SECTORS

5.0 SERVICES OFFERED

The Water Resources Authority offers the following services to both the public and private sectors:

- i Evaluation of development sites for flooding susceptibility
- ii Generation of rainfall-runoff simulation to determine flood boundaries and impact of rainfall events
- iii Evaluation of sewage disposal systems [through the Subdivision Committee of the Town Planning Department and The Technical Review Committee of the National Environment and Planning Agency (TRC-NEPA)].
- iv Evaluation of waste disposal systems (solid and liquid) and the impact on water resources.
- v Evaluation of water resources availability and quality.

5.1 FEES

Fees for any services offered by the Authority are charged on the basis of cost recovery only.

5.3 CONTACT INFORMATION

Managing Director
or
Permits and Licensing Unit

Water Resources Authority
P.O. Box 91, Hope Gardens, Kingston 7
Jamaica, West Indies
Tel: (876) 927-0077/927-0189/927-0293
Fax: (876) 977-0179/702-3937
E-mail: wra@colis.com
Internet: <http://www.wra-ja.org>

Appendix I

Note:

Completed forms must be accompanied by –

- (1) two copies of a map on a scale of 1:50,000 showing location of proposed well
- (2) such other maps documents as the Authority may require; and
- (3) the application fee of J\$15,000.000

I hereby apply for the consent of the Authority under the Water Resources Act for the drilling of a well and hereby declare that to the best of my knowledge the above particulars are true and correct.

Signature of Applicant

Date

To be completed by the Secretary of the Authority

Indicate whether application accepted or refused _____

Date of grant or refusal _____

If application refused, reason for refusal _____

**Secretary
Water Resources Authority**

Date

Appendix 2

FOURTH SCHEDULE Regulations 3(1), 5(4), 18(1) and (2)
19(1) and (3), 30(1)

FORM A (Regulation 3(1))

(To be completed in duplicate)

Application No. _____

THE WATER RESOURCES ACT

APPLICATION FOR A LICENCE TO ABSTRACT AND USE WATER

1. Name of Applicant _____
2. Address of Applicant _____
_____ Telephone _____
3. Location of proposed work or of existing work in respect of which alteration or extension is proposed

4. Name of Contractor _____
5. Address of Contractor _____
6. Source of water for which licence is desired _____

7. Purpose for which water is to be used _____
8. If water is required for irrigation, state -
 - (a) Area and crop type to be irrigated _____

 - (b) System of irrigation _____
9. Means of disposal of excess or waste water _____

10. Technical details:
 - (i) Estimated depth of borehole or well _____ metres
 - (ii) Diameter of borehole or well _____ centimetres
 - (iii) In the case of artesian supplies, the method proposed for controlling the flow from the borehole and for preventing leakage around the borehole lining

 - (iv) Geological strata from which water is to be drawn, e.g. limestone, gravel, etc.

 - (v) State the method of abstracting water _____

WRA – FORM A

Appendix 2

(vi) Maximum daily quantity of water to be abstracted in cubic metres _____

(vii) Type of apparatus proposed for measuring and recording the rate of abstraction _____

(viii) Other relevant technical information _____

11. State whether any request for a supply of water has been made to the National Water Commission or National Irrigation Commission Limited and, if so, with what result

12. Any further information which the Authority may take into account in considering the application.

Note:

Completed forms must be accompanied by –

- (1) two copies of a map on a scale of 1:50,000 showing location of works;
- (2) such other documents as the Authority may require; and
- (3) the application fee of Ja\$15,000.00

I hereby apply for a licence under the Water Resources Act and declare that to the best of my knowledge and belief the particulars set out in this application are true and correct.

Signature of Applicant

Date

To be completed by the Secretary of the Authority

Indicate whether licence granted or refused _____

Date of grant or refusal of licence _____

If application refused, reason for refusal _____

**Secretary
Water Resources Authority**

Date