

# Water Resources Regulation 1982

## Unvalidated References:

*Water Resources Act 1982*

This reprint of this Statutory Instrument incorporates all amendments, if any, made before 25 November 2006 and in force at 1 July 2001.

.....

Legislative Counsel

Dated 25 November 2006

## INDEPENDENT STATE OF PAPUA NEW GUINEA.

Chapter 205.

### *Water Resources Regulation 1982*

#### ARRANGEMENT OF SECTIONS.

1. Applications for permits.
2. Permits.
3. Notice of hearing, etc.
4. Fees for permits.
5. Fees for use, etc., of water.
6. Fees for copy of register, etc.
7. Water quality standards.

### *Water Resources Regulation 1982*

MADE under the *Water Resources Act 1982*.

Dated                    200 .

#### **1. APPLICATIONS FOR PERMITS.**

(1) An application for a water use permit—

- (a) to take, dam, direct or otherwise use water—shall be in Form 1; and  
(b) to discharge water or wastes—shall be in Form 2.

(2) An application for a water investigation permit shall be in Form 3.

#### **2. PERMITS.**

(1) A water use permit shall be in Form 4.

(2) A water investigation permit shall be in Form 5.

### **3. NOTICE OF HEARING, ETC.**

(1) A notice of an application and a public hearing under Section 30 of the Act shall be in Form 6.

(2) A notice of a decision by the Board under Section 31 of the Act shall be in Form 7.

### **4. FEES FOR PERMITS.**

(1) The fee for a permit for a small scheme or project where the volume of—

(a) water to be taken or used; or

(b) wastes to be discharged,

does not exceed 5,000 m<sup>3</sup> per year is K10.00.

(2) The fee for a permit for a moderately sized scheme or project where the volume of—

(a) water to be taken or used; or

(b) wastes to be discharged,

exceeds 5,000m<sup>3</sup> but does not exceed 50,000,000m<sup>3</sup> per year is K100.00.

(3) The fee for a permit for a large scheme or project where the volume of—

(a) water to be taken or used; or

(b) wastes to be discharged,

exceeds 50,000,000m<sup>3</sup> per year is K500.00.

(4) The fee for a water investigation permit is K500.00.

### **5. FEES FOR USE, ETC., OF WATER.**

(1) Fees for the use of water are as specified in Schedule 2.

(2) Fees for the discharge of wastes are as specified in Schedule 3.

### **6. FEES FOR COPY OF REGISTER, ETC.**

The fee for a copy of—

(a) entries in the register; or

(b) a summary under Section 30 of the Act; or

(c) entries comprising the data collection under Section 62 of the Act,

shall be K1.00 per page or part of a page.

## **7. WATER QUALITY STANDARDS.**

- (1) Subject to this section, the quality standards and other standards for water are in accordance with Schedule 4.
- (2) Any discharges to, or use of, water must not cause a lowering of water quality below the prescribed standards, subject to the allowance for mixing of wastes with the receiving water.
- (3) The portion of the receiving waters that may be allowed for mixing of wastes (the mixing zone) shall be determined by the Board on a case by case basis with definite limits placed on the dimensions of the mixing zone depending on the type of wastes being discharged and the various chemical, physical and biological conditions occurring in the receiving water.
- (4) If reliable scientific evidence indicates that the standards are not appropriate for particular waters or for the uses of those waters, the standards shall be modified by the Board to meet the requirements pertaining specifically to those waters and the uses of them.
- (5) The water quality standards shall be subject to change only when scientific advances necessitate their modification.
- (6) The water quality standards specify, unless stated otherwise, maximum permissible levels or limits of various substances and parameters unless the natural level is greater.
- (7) A discharge into, or use of, water must not increase the level of any substance or parameter above that prescribed or above the maximum level to be found naturally.

Penalty: A fine not exceeding K5,000.00.

Default penalty: A fine not exceeding K2,000.00.

### **SCHEDULE 1**

***PAPUA NEW GUINEA.***

***Water Resources Act 1982.***

***Form 1 – Application for Water Use Permit to Take, Dam, Divert or otherwise use water.***

Act, Sec. 28(1). Form 1.Reg., Sec. 1(1)(a).

1. Name of applicant:
2. Address:
3. Details of proposal.
  - Description of water source:
  - Legal description of land:
  - Map reference and diagram:
  - Description of land involved—
    - Name of owner:
    - Tenure:
  - Description of adjacent land—
    - Name of owner:
    - Address:
  - Plan of structures:
  - Any other relevant details:
4. Volume of water to be used.
  - Estimate of quantity—
    - Litres per hour:
    - Days per month:
    - Months per year:
  - Maximum rate in litres per hour:
  - Quantity of water to be returned to water source—
    - Litres per hour:
    - Days per month:
    - Months per year:

5. Period for which permit is required:

6. Fee: K.

I declare that details in this application are true and correct to the best of my knowledge and belief.

Dated ... , 20 .

*(Signature of Applicant.)*

Received by

*(Signature of Director or person  
authorized to accept applications.)*

**PAPUA NEW GUINEA.**

***Water Resources Act 1982.***

***Form 2 – APPLICATION FOR WATER USE PERMIT TO DISCHARGE WATER OR  
WASTES.***

1. Name of applicant:

2. Address:

3. Details of proposal.

Water source to which discharge is to be made:

Legal description of land:

Map reference and diagram:

Description of land involved—

Name of owner:

Tenure:

Description of adjacent land—

Name of owner:

Address:

4. Volume of water or waste to be discharged.

Estimate of quantity—

Litres per hour:

Days per month:

Months per year:

Maximum rate in litres per hour:

5. Nature of discharge.

Characteristics of waste—

Biochemical oxygen demand and variation:

pH and variation range:

Temperature and variation range:

Appearance, colour, smell and variations:

Chemical nature including chemicals present and likely to be present:

Other relevant details:

6. Fee: K.

I declare that details in this application are true and correct to the best of my knowledge and belief.

Dated , 20 .

Received by

*(Signature of Applicant.)*

*(Signature of Director or person  
authorized to accept applications.)*

**Form 3 – APPLICATION FOR WATER INVESTIGATION PERMIT.**

Act, Sec. 49(1). Form 3.Reg., Sec. 1(2)

1. Name of applicant:

2. Address:

3. Details of investigation.

Legal description of land:

Map reference and diagram:

Nature and purpose of investigation:

Operation and methods:

Proposed structures:

Sites of structures:

Sample analysis details:

Wells or bores to be sunk:

Sites of wells or bores:

Equipment and methods for data analysis, and its storage and retrieval:

Technical resources:

Staff and qualifications:

Description of habitation:

Plans of investigation:

Duration of investigation:

Other relevant details:

I declare that details in this application are true and correct to the best of my knowledge and belief.

Dated ... , 20 .

*(Signature of Applicant.)*

Received by

*(Signature of Director or person  
authorized to accept applications.)*

*Water Resources Act 1982.*

*Form 4 – WATER USE PERMIT.*

Act, Sec. 40. Form 4.Reg., Sec. 2(1)

No.

To *(name)* of *(address)*.

A permit under Section 40 of the *Water Resources Act* is granted to you for the purpose of subject to the Schedule and the conditions.

Dated ... , 20 ..

Minister.

**SCHEDULE.**

Item No.	Description.	Quantity.	Annual charge.	Date

**CONDITIONS.**

**1. Term of permit.**

The permit is from ... to ... , and may be revoked by written notice to the holder under Section 45 of the Act, or if adequate use of the water is not made, under Section 46 of the Act.

**2. Records to be kept.**

The holder shall keep records as reasonably required by the Minister, and on request by him shall supply information recorded.

The holder shall, if required, install at his expense, measuring devices or monitoring equipment for the purpose of maintaining satisfactory records.

**3. Access by the Board.**

The holder shall, at all reasonable times, permit access to the Board or a person authorized by it for the purpose, to carry out inspections and measurements.

**4. Structures, etc.**

The design and maintenance of work relating to this permit shall be of the standard described in the application approved by the Board.

**5. Transfer of permit.**

The holder may transfer this permit to a new owner or occupier of the property in respect of which the permit is issued subject to written notice being forwarded to the Board within 14 days by the transferee.

**6. Action in case of drought.**

Rights under this permit are subject to Part IX. of the Act.

**7. Special conditions.**

**8. Annual charges.**

Annual charges under this permit are K.

***PAPUA NEW GUINEA.***

***Water Resources Act 1982.***

***Form 5 – WATER INVESTIGATION PERMIT.***

Act, Sec. 49(1). Form 5.Reg.. Sec. 2(2).

No. ....

To: *(name)* of *(address)*.

A permit under Section 49 of the *Water Resources Act* is granted to you for the purpose of subject to the Schedule and the conditions.

Dated ... , 20 ..

Director.

**SCHEDULE.**

Item No.	Description of area of investigation.	Date.

**CONDITIONS.**

**1. Term of permit.**

The permit is from ... to ... , and may be revoked by written notice to you under Section 53 of the Act.

**2. Records to be kept.**

The holder shall, within two months of the expiry or revocation of this permit, furnish to the Director a report of the investigation with details of information collected.

***PAPUA NEW GUINEA.***

***Water Resources Act 1982.***

***Form 6 – NOTICE OF APPLICATIONS AND PUBLIC HEARING.***

The following applications to use water have been made to the Water Resources Board under the *Water Resources Act*.

Name	Organization.	Nature of application.	Location and grid ref.	Quantity	Application No.

Details of applications and Report compiled by the Board are available for examination and may be copied on request to the Chairman, Water Resources Board.

**Public hearing.**

A public hearing in respect of the applications will be held at (*place*) on (*date*) at (*time*). All interested persons are invited to attend.

**Form 7 – NOTICE OF DECISION OF BOARD.**

Act, Sec. 31(1). Form 7.Reg., Sec. 3(2).

The Water Resources Board has considered the following applications and has made a decision to recommend the grant/refusal\* of the permit.

Name	Organization	Nature of application.	Location and grid reference.	Quantity	Application No.

A person may, within 28 days of publication of this notice, appeal against the decision. Details of the water use permits and their terms and conditions are available for examination and may be copied on request to the Chairman, Water Resources Board.

\* Strike out whichever is inapplicable.

**SCHEDULE 2 – <sup>[1]</sup>FEEES FOR THE USE OF WATER.**

Basic charge–K0.001/m3/year

**FORMULA**

Annual charge = volume taken x basic charge x use factor

(K/year) (m3/year) (K/m3/year/)

Item	Water Use	Use Factor	Minimum Annual Charge
			K
1.	Public distribution and water supply	0	00
2.	Industrial activities within plant re-use of water (must re-use at least 50% of water)	0.8	00
3.	Industrial activities with no re-use of water	0	00
4.	Sprinkler irrigation	0.3	00
5.	Trickle irrigation	0.1	00
6.	Flow irrigation (border, dyke or flooding)	0.5	00
7.	Non-consumptive use (hydro, dam, water wheels, etc.)	0.1	00

**SCHEDULE 3 – FEES FOR DISCHARGE OF WASTES.**

Act, Sec 65(g).Reg., Sec 5 (2).

**Sch. 3.1. Sewage.**

Basic charge–K0.05/m3/year.

**FORMULA:**

**Annual charge = 0.05 x volume x treatment factor.**

**(K/year) (K/m3) (m3/year)**

<i>Type of Sewage Treatment</i>	<i>Treatment Factor</i>
1. No treatment-this includes sewage that is screened and macerated	0
2. Primary treatment (screened and settled) providing the retention time in sedimentation tank is at least 45 minutes	0.6
3. Secondary treatment (trickling filters, activated sludge, oxidation ponds or lagoons), providing sewage loadings do not exceed manufacturers	0.3

- recommendations
4. Tertiary treatment (all forms of advanced sewage treatment) 0.01

**Sch. 3.2.Industrial Wastes.**

Basic charge K0.34/kg biochemical oxygen demand (5 day)/year. These include–

- (a) agricultural and horticultural wastes; and
- (b) meat processing and packaging industry wastes; and
- (c) wastes of a similar kind, consisting predominantly of organic wastes that contain substantial numbers of bacteria and viruses pathogenic to man.

**Sch. 3.3.Industrial Wastes.**

Basic charge K0.25/kg biochemical oxygen demand (5 day)/year. These include–

- (a) agricultural and horticultural wastes associated with–
  - (i) coffee; and
  - (ii) oil palm; and
  - (iii) cocoa; and
  - (iv) sugar,
 industries; and
- (b) food processing wastes, consisting predominantly of organic wastes that are free of bacteria and viruses pathogenic to man.

**SCHEDULE 4 – QUALITY STANDARDS FOR WATER.**

Act, Sec., 66(j).Reg., Sec. 7

All values in g/m<sup>3</sup> unless otherwise specified.

TABLE 1.

Parameters.	Fresh water.	Sea water.
Ammonia-nitrogen	Dependent on pH and temperature (See accompanying Table 2.)	
Arsenic	0.05	0.05
Barium	1.0	1.0
Boron	1.0	2.0
Cadmium	0.01	0.001
Chlorine (total residual)	0.005 at pH6	0.005
Chromium (as hexavalent form)	0.05	0.01

Colour	No alteration to natural colouration	
Cobalt	Limit of detectability	
Copper	1.0	0.03
Cyanide (as HCN)	0.005	0.01
Faecal coliform bacteria	<i>(See Note 1.)</i>	
Fats	None	None
Fluoride	1.5	1.5
Grease	none	None
Insoluble residues	No insoluble residues or sludge formation to occur	
Iron (in solution)	1.0	1.0
Lead	0.005	0.004
Manganese (in solution)	0.5	2.0
Mercury	0.0002	0.0002
Nickel	1.0	1.0
Nitrate (as NO <sub>3</sub> <sup>-</sup> + NO <sub>2</sub> <sup>-</sup> )	45.0	45.0
Odour	No alteration to natural odour	
Oil	None	None
Oxygen	Not less than 6.0	Not less than 5.0
Pesticides	None	None
pH	No alteration to natural pH	
Phenols	0.002	0.002
Potassium	5.0	450
Radioactivity	None	None
Selenium	0.01	0.01
Silver	0.05	0.05
Sulphate (as SO <sub>4</sub> <sup>2-</sup> )	400.0	—
Sulphide (HS <sup>-</sup> )	0.002	0.002
Tars	None	None
Taste	No alteration to natural taste	
Temperature	No alteration greater than (2°C)	
Tin	0.5	0.5
Toxicants, miscellaneous	None	None
Turbidity	No alteration greater than 25 N.T.U.	
Zinc	5.0	5.0

TABLE 2. Maximum Permitted Concentrations of Ammonia-nitrogen.

Temperature. °C	pH value.		
	7.0	8.0	9.0
5 5	1	6	0.2
10 10	0	1	0.1
15 15	5	0.8	0.09
20 20	2	0.5	0.07
25 25	6	0.4	0.06
30 30	6	0.3	0.05
35 35	6	0.2	0.04

*Note* Faecal Coliform Bacteria Standards.

Based on not fewer than five samples taken over not more than a 30 day period, the median value of the faecal coliform bacteria content of the waters shall not exceed 200 per 100 ml.

Office of Legislative Counsel, PNG

---

<sup>[1]</sup> Schedule 2 replaced by *Water Resources (Amendment) Regulation* 1998 (No 17 of 1998).