

**GNR.2834 of 27 December 1985: Regulations in terms of [section 26](#) read in conjunction with [section 12A](#) of the Water Act, 1956 (Act [54 of 1956](#)), for the erection, enlargement, operation and registration of water care works**

DEPARTMENT OF WATER AFFAIRS

**as amended by**

**Notice**  
R.224

**Government Gazette**  
10088

**Date**  
7 February 1986

The Minister of Water Affairs has in terms of [section 26](#), read in conjunction with [section 12A](#), of the Water Act, 1956 (Act [54 of 1956](#)) made the regulations in the Annexure hereto.

**ANNEXURE**

ARRANGEMENT OF REGULATIONS

- [1.](#) Definitions
- [2.](#) Application for registration
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- [4.](#) Registration
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- [Schedule I](#) Classification of water care works used for the purification or treatment of water for human consumption or food processing
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- [Schedule III](#) Classification of persons (excluding unskilled labourers) according to educational qualifications and experience to be employed for the operation of water care works
- [Schedule IV](#) Minimum number of persons to be employed for the operation of a water care work

**1. Definitions.**—In these regulations, unless the context otherwise indicates, “the Act” means the Water Act, 1956 (Act [54 of 1956](#)) and any expression to which a meaning has been assigned in the Act shall have the same meaning.

**2. Application for registration.—**

- (a) The owner of a water care work in operation on the date of commencement of these regulations shall within 90 days of such date apply for the registration of such work.  
[Subreg. (a) amended by GNR.224 of 1986.]
- (b) The owner of a water care work to be put into operation after the date of commencement of these regulations shall apply for the registration of such work before it is commissioned.
- (c) An application for registration shall be directed to the Director-General on a form obtainable from him with the following information:
  - (i) in respect of the work concerned, the particulars referred to in [Schedule I](#) or [II](#), as the case may be; and

- (ii) in respect of each person (excluding an unskilled labourer) employed or to be employed for the operation of the said work, his full names, identity number or other proof of identity, date of birth and the qualifications and experience referred to in [Schedule III](#).

**3. Application for a permit.**—Any person requiring a permit for the erection or enlargement of a water care work or for the alteration of any process applied in any water care work and referred to in [Schedule I](#) or [II](#), as the case may be, in a manner which may affect the classification of such work in accordance with [Schedule I](#) or [II](#), shall apply for such permit to the Director-General on a form obtainable from him and furnish the particulars in respect of the work concerned referred to in [Schedule I](#) or [II](#).

**4. Registration.**—The Director-General shall—

- (a) classify in accordance with [Schedule I](#) or [II](#), as the case may be, every water care work in respect of which the particulars under [regulation 2](#) have been furnished to him and in accordance with [Schedule III](#) every person in respect of whom the particulars under [regulation 2](#) or [6](#) have been furnished to him;
- (b) keep a register of particulars of every water care work in respect of which registration or a permit has been granted in terms of section 12A (4) (a) of the Act and of every person classified in accordance with [regulation 4 \(a\)](#);
- (c) issue a certificate of registration in respect of each such work and such person; and
- (d) set out in the certificate of registration of a water care work the conditions determined in terms of section 12A (4) of the Act in respect of such work.

**5. Display of registration certificate.**—The owner of any water care work shall display in a prominent place on that work a copy of the certificate of registration issued under [regulation 4 \(c\)](#) in respect of such work and the names and classifications in terms of [regulation 4 \(b\)](#) of all persons employed on such work.

**6. Notification of employment or termination of employment.**—The owner of any water care work shall in writing notify the Director-General during January of each year of the employment or termination of employment on such work during the past year of any person referred to in [Schedule III](#), stating, in the case of the employment of such person, the information referred to in [regulation 2 \(c\) \(ii\)](#) in respect of such person.

[[Reg. 6](#) amended by GNR.224 of 1986.]

**7. Employment of persons.**—The owner of a water care work shall, as from the date fixed in terms of section 12A (2) of the Act, employ for the operation of such work the minimum number of persons of the classes prescribed in [Schedule IV](#) in respect of the work concerned: Provided that the Director-General may allow fewer persons or persons with lower educational qualifications to be employed for the operation of any particular water care work for the period and subject to the conditions determined by him, if he is of opinion that, in the particular circumstances, the attainment of the objectives of these regulations will not be frustrated by such employment.

### Schedule I

#### CLASSIFICATION OF WATER CARE WORKS USED FOR THE PURIFICATION OR TREATMENT OF WATER FOR HUMAN CONSUMPTION OR FOOD PROCESSING

##### Rating

Class of works	E	D	C	B	A
Range of points	14-21	22-40	41-59	60-78	79-92

Points to be awarded at the discretion of the Director-General in accordance with the following criteria:

		Maximum
Population supplied	Up to 1 000	0
	1 001 to 2 000	4
	2 001 to 5 000	7
	5 001 to 15 000	11
	15 001 to 50 000	14
	Over 50 000	17
Quality of intake water	Fair, with little or no variation	6
	Seasonal variation	9
	Monthly variation	12
	Daily variation	18
	Hourly variation	30
Process	(a) Pumping and/or chlorination	
	(b) (a) plus filtration	4
	(c) (b) plus flocculation and sedimentation or clarification	12
	(d) (c) plus adjustments*	20
	(e) (a) or (b) or (c) or (d) plus special treatment+	28
Designated capacity (cubic metres per day)	Up to 500	1
	501 to 2 500	3
	2 501 to 7 500	5
	7 501 to 25 000	7
	Over 25 000	9

\*

Adjustments; e.g., removal of CO<sub>2</sub>, pH, stability or corrosion control, disinfection, etc.

+

Special treatment: e.g., reverse osmosis, activated carbon, softening, demineralising, fluoridation, etc.

### Schedule II

#### CLASSIFICATION OF WATER CARE WORKS USED FOR THE PURIFICATION, TREATMENT OR DISPOSAL OF EFFLUENT OR SEWAGE

##### Rating

Class of works	E	D	C	B	A
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Range of points	5-9	10-19	20-29	30-39	40-68
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Points to be awarded at the discretion of the Director-General in accordance with the following criteria:

		Maximum
Design capacity (megalitres per day)	Up to 1	1
	1 plus to 5	3
	5 plus to 20	7
	20 plus to 100	12
	Over 100	15
Concentration of raw effluent or sewage, as COD	less than 700 mg/l	1
	700 mg/P and over	3
Process	Preliminary treatment with more than one mechanical item	
	Primary sedimentation	2
	Anaerobic digestion	2
	Sludge drying beds	2
	Gas utilisation (gasholder, boiler, etc)	1
	Oxidation ponds (not tertiary treatment)	3
	Biofilters (Biof) or biodiscs	1
	Activated sludge (AS) – any form	2
	Tertiary treatment (e.g., sand filters)	6
	Maturation ponds	4
	Chlorination	2
	Mechanical or physical/chemical sludge treatment including stabilisation and/or dewatering	3
	Nutrient removal (extra to AS or Biof)	5
Complicating factors (gas engines, air filtration, etc.)		
Sensitivity of water into which purified or treated effluent is discharged	Low – e.g., ocean or evaporation pond	1
	Medium – e.g., where the General Standard prescribed under section 21 (1) (a) of the Act is applicable or the ocean near a swimming beach	4
	High – e.g., where the Special Standard prescribed under section 21 (1) (a) of the Act is applicable or a trout stream or upstream of a potable water supply	8
Other factors which make the operation more or less complex		5 to -5

### Schedule III

#### CLASSIFICATION OF PERSONS (EXCLUDING UNSKILLED LABOURERS) ACCORDING TO EDUCATIONAL QUALIFICATIONS AND EXPERIENCE TO BE EMPLOYED FOR THE OPERATION OF WATER CARE WORKS

##### Minimum requirements

Educational class	Years appropriate experience					
	Trainee	I	II	III	IV	V
Std 6	0	-	-	-	-	-
Std 6 plus Maintenance Workers Certificate	0	4	-	-	-	-
Std 7 plus Maintenance Workers Certificate	0	3	-	-	-	-
Std 8 (or NTC I) plus Maintenance Workers Certificate	0	2	5	-	-	-

Std 8 (or NTC I) plus Water and Wastewater Treatment Practice N1						
NTC 1 in Water and Wastewater Treatment Practice	0	1½	4	-	-	-
Std 8 (or NTC I) plus Operators Certificate	0	1	3	9	-	-
Std 9 (or NTC II) plus Operators Certificate NTC II in Water and Wastewater Treatment Practice	0	½	2	7	15	-
MATRIC (or NTC III) plus Operators Certificate MATRIC (or NTC III) plus Water Treatment Practice N 3 MATRIC (or NTC III) plus Wastewater Treatment Practice N 3 NTC III in Water Treatment Practice NTC III in Wastewater Treatment Practice		0	½	3	8	15
National Diploma or National Techn. Dipoma or NTC VI or 3 years BSc. (All in appropriate field)				0	2	6
Higher National Diploma or 4 years BSc. (Both in appropriate field)					0	4
Professional Engineer (Act <a href="#">81 of 1968</a> ) in appropriate field Natural Scientist (Act <a href="#">55 of 1982</a> ) in appropriate field Corporate Member of IWPC					0	3

Apprentices are regarded as equivalent to Std 8 or NTC I.

Artisans are regarded as equivalent to MATRIC or NTC III.

#### Schedule IV

#### MINIMUM NUMBER OF PERSONS TO BE EMPLOYED FOR THE OPERATION OF A WATER CARE WORK

Work class	Class and number of persons as operators	Class of person as supervisor	Class of Person for weekly inspection*
E	1 x Trainee	I	II
D	1 x Trainee 1 x I	II	III
C	1 x Trainee 2 x I 1 x II	III	IV
B	1 x Trainee 2 x I 1 x II 1 x III	IV	V
A	1 x Trainee 2 x I 1 x II 1 x III 1 x IV	V	-

*Note*

These are the minimum requirements for the operation of the various classes of works and do not include maintenance or laboratory personnel.

\*If the owner of a water care work has no person of this class employed on that work, he shall appoint a consultant with the required qualifications as prescribed in [schedule III](#) in respect of that particular class of person, to visit the work weekly.