

LEGAL NOTICE NO 14 OF 2010

THE ENVIRONMENT MANAGEMENT ACT, 2002

(Act No 5 of 2002)

THE WATER POLLUTION CONTROL REGULATIONS, 2010

(Under section 37)

In exercise of the powers conferred by section 37 of the Environment Management Act, 2002, and having consulted with the Authority, the Minister for Tourism and Environmental Affairs makes the following Regulations –

Citation and Commencement

1. (1) These Regulations may be cited as the Water Pollution Control Regulations, 2010
2. These Regulations shall come into operation on the date of publication in the gazette.

Definitions

2. In these Regulations:

“Act” means the Environmental Management Act No. 5 of 2002

"Authority" means the Swaziland Environment Authority established under section 9 of the Act;

"effluent" means a waste in liquid form or in suspension in a liquid form or in suspension or in emulsion contaminated by any matter, in solution or suspension and derived from the use of the water in connection with domestic, industrial and other activities;

“waste” means any substance as defined in section 2 of the Act.

"effluent standards" means the limits for effluent quality that is to be discharged into water bodies as contained in Schedule Two of these regulations;

"operator" means a person who owns or manages an undertaking, or who controls an operation or process, which discharges effluent into a water body or which uses water in a way which may impair its quality;

"publish" means advertise in the Gazette;

"person" includes both natural and legal persons, a government ministry, department or agency, a statutory body, a traditional body answerable directly to the Ngwenyama, a municipality, a local authority, a partnership, an unincorporated joint venture and an unincorporated association;

“water authority” means an authority which is legally responsible for monitoring or controlling water quality and without limitation, includes the Water Apportionment Board, the National Water Authority, River Basin Authorities

"water body" means a natural or constructed watercourse or body of water above or below ground;

“water quality objectives” means the minimum quality for a water body that will not cause adverse effect to human health or the environment. These are contained in Schedule One of these regulations.

“inspector” means an officer appointed in terms of Section 60 of the Act.

“Minister” means the Minister responsible for environmental affairs

“watercourse” means any natural or artificial channel, pipe or conduit, excluding the sewerage system or that may carry, and discharging water directly into a water body

Water Quality Objectives

3. (1) Every water authority must exercise its powers in such a manner as to ensure, as far as is reasonably possible by the exercise of those powers, that at all times the water quality of each water body under its jurisdiction meets the water quality objectives.

(2) Every water authority which has a duty to monitor water quality must advise the Authority by notice in writing if the water quality in a water body under its jurisdiction does not meet the water quality objectives and of the measures which the water authority is taking and will take to ensure that the water quality objectives will be met in future.

(3) A water authority must give a notice under sub-regulation (2) to the Authority within two days of detecting or being informed of a failure to meet water quality objectives.

(4) A water authority must submit to the Authority an annual report concerning the water quality of water bodies under its jurisdiction and the measures taken by it to ensure that the water quality objectives are met and that water quality is improved and/or maintained.

(5) The Authority must consider the reports submitted under sub-regulation (4) and review the water quality objectives at least once in every five years in order to ensure that they are appropriate and adequate to ensure a high level of protection for the environment and for human health, and must publish the results of the review.

(6) Before the Minister sets new water quality objectives the Authority must submit the new water quality objectives to public review in accordance with procedure specified in regulation 13 of the Environmental Audit, Assessment and Review Regulations, 2000.

Discharge of effluent exceeding effluent standards prohibited

4. (1) Any person who discharges or permits the discharge, directly or indirectly, into a water body of effluent which exceeds one or more of the effluent standards, commits an offence and is liable on conviction to a fine not exceeding E250,000 or to imprisonment to a term not exceeding five years or to both.

(2) A court may order any person convicted of an offence under sub-regulation (1) to pay a fine of E5000.00 for every day on which the discharge occurred, in addition to any other fine imposed under sub-regulation (1).

Sampling, Testing and Monitoring

5. (1) Every operator who routinely discharges or permits the discharge of effluent into a water body must establish one or more fixed discharge points, and must sample and test the effluent discharged from each discharge point:

(a) for all of the parameters and substances contained in Schedule Two, on commencement of the operation of these Regulations or the operation which gives rise to the discharge, and thereafter annually; and

(b) for those parameters and substances contained in Schedule Two which are known to be in the effluent, monthly.

(2) Every operator who routinely discharges effluent into a water body must keep records of each of the tests conducted on effluent discharged and of the total volume of effluent discharged, in such a manner as to enable a reasonably accurate estimate to be made of the total volume of the monitored pollutants discharged into the water body over a period.

(3) Every operator must at all times give an inspector access to the premises at which the operation is conducted, to the records referred to in sub-regulation (2), and to any place where effluent is stored or is discharged into a water body to enable the employee or agent to sample and test effluent.

(4) Every operator must ensure that all sampling and testing of effluent is conducted in accordance with the latest edition of Standard Methods for Examination of Water and

Wastewater published jointly by the American Public Health Association, The American Water Works Association and the Water Environment Federation.

(5) Any person who fails to comply with the provisions of this regulation is guilty of an offence and is liable on conviction to a fine not exceeding E150,000.00 or to imprisonment for a term not exceeding 3 years, or to both.

Obligation to submit results

6. (1) Every operator who is required under regulation 5 to sample and test effluent must submit the results to the Authority within two weeks of receipt of the results of the tests and must indicate each instance of non-compliance with the effluent standards.

(2) Any person who fails to comply with subsection (1) commits an offence and is liable on conviction to a fine not exceeding E150,000.00 and imprisonment for not more than 3 years, or to both.

Abatement

7. (1) If an operator fails to comply with the effluent standards, the Authority may serve a notice requiring the operator to ensure compliance within a specified period.

(2) Any person who receives a notice referred to in sub-regulation (1) must demonstrate, to the satisfaction of the Authority, within the period stipulated in the notice that all effluent discharged is complying with the effluent standards.

Reporting pollution incidents

8. (1) If any accidental, sudden, or non-routine, discharge into a water body of effluent or a potentially polluting substance, occurs, which is significant according to sub-regulation (2), the operator of the undertaking whose business gave rise to the discharge or any person who caused or authorised the discharge, must:

(a) within 12 hours report the incident to the Authority, giving details of the incident including the quantity, quality and reason for the discharge and what measures (if any) have been taken to mitigate any adverse environmental impacts of the discharge;

(b) within 12 hours notify the Ministry of Health, Department of Water Affairs and any other bodies in the locality which may be able to assist in preventing or mitigating harm to human or animal health or to the environment; and

(c) take all reasonable measures to warn potentially affected persons of the danger arising from the discharge, by means of 1 (one) television and radio announcement followed by a newspaper warning the subsequent day.

(2) For the purpose of sub-regulation (1), an effluent discharge is “significant” if it differs significantly in quantity, quality or composition, or is discharged at a different place or in a different manner, from the effluent ordinarily discharged by the operator. –

(3) Any person who fails to comply with subsection (1) commits an offence and is liable on conviction to a fine not exceeding E150,000.00 and imprisonment for not more than 3 years, or to both

(4) If this offence is continued, penalties will be exercised as specified in Section 71 of the Act.

Obligation to mitigate harm and take remedial action

9. (1) Any person who causes or permits a discharge, and any operator whose business gives rise to a discharge, of effluent, including accidental, sudden or non routine discharge of effluent or a potentially polluting substance, directly or indirectly into a water body must within 12 hours, take all reasonable measures to avoid and mitigate any damage which may be caused to the environment or to human health as a result of the discharge including, but not limited to:

- a. Containment of the discharge
- b. Clean up and remediation
- c. Provision of alternative sources of potable water to affected parties
- d. Updating the Authority and affected parties on the progress of the clean up and remediation

(2) The Authority may by notice in writing served on a person referred to in sub-regulation (1) require that person to take measures to mitigate or repair any damage to the environment caused as a result of the discharge or to prevent a recurrence of any incident, which caused the damage, within a reasonable period prescribed in the notice.

(3) If a person fails to comply with a notice under sub-regulation (2), the Authority may issue a cost order in terms of the Act.

(4) Any person who is aggrieved by a cost order made under sub-regulation (3) may appeal to the Minister in accordance with section 82 of the Act.

(5) Any person who fails to take the measures required under sub-regulation (1) or who fails to comply with a notice under sub-regulation (2) or an order under sub-regulation (3) commits an offence and is liable on conviction to a fine not exceeding E 50,000.00 or imprisonment to a term not exceeding one year.

SCHEDULE ONE

(regulations 2 and 3)

WATER QUALITY OBJECTIVES

Physic-chemical parameters Standard/Objective

Dissolved oxygen minimum of 4 mg/l (surface water only)

pH minimum 6.5 and maximum 8.5

EC 1800 μ S/cm maximum

Turbidity 5 Nephelometric units maximum

Hardness 1000 mg/l maximum (as calcium carbonate)

Chemical oxygen demand 10 mg oxygen/l maximum

Biological oxygen demand 5 mg oxygen/l maximum

Anions

Nitrate 10 mg N/l (as nitrogen) maximum

Nitrite 0.2-3 mg N/l (as nitrogen) maximum

Ammonia 0.6 mg N/l maximum

Fluoride 1.0 mg/l maximum

Cations

Iron 1 mg/l maximum

Manganese 0.5 mg/l maximum

Mercury 0.001 mg/l maximum

Cadmium 0.003 mg/l maximum

Aluminium 0.2 mg/l maximum

Calcium

Microbiological Parameters

Total Coliforms 1 – 10 per 100 ml maximum

Faecal Coliforms 1 – 10 per 100 ml maximum

SCHEDULE TWO

(Regulations 2 and 4)

EFFLUENT STANDARDS

Physical and Microbial Parameters

Parameter/Substance	Units of Measurement	Limit
BOD	mg/l	10
COD	mg/l	75
Colour	TCU	15
Dissolved Oxygen	% saturation	above 75
Electrical conductivity	µS/cm	1500
Odour/Taste	mg/l Pt Scale	20
pH	pH units	6.5 – 8.5
Soap, oil or grease	mg/l	100 <ul style="list-style-type: none">○ can be detected as a visible film○ can be detected by odour○ can be cause tainting of edible aquatic organism○ can form deposits on bottom sediments
Suspended solids	mg/l	25
TDS	mg/l	500
Temperature	°C	35
Total Coliforms	per 100ml	10
Faecal Coliforms	per 100ml	0

SCHEDULE TWO

(Regulations 2 and 4)

EFFLUENT STANDARDS (CONTINUED)

Chemical Parameters

Parameter	Units	Limit (Maximum)
Ammonia	mg/l	10.0
Arsenic	mg/l	0.1
Barium	mg/l	1.0
Boron	mg/l	1.0
Cadmium	mg/l	0.05
Chlorine	mg/l	0.1
Chromium	mg/l	0.5
Cobalt	mg/l	1.0
Copper	mg/l	1.0
Cyanide	mg/l	0.5
Iron	mg/l	0.3
Lead	mg/l	0.1
Magnesium	mg/l	100
Manganese	mg/l	0.1
Mercury	mg/l	0.02
Nickel	mg/l	100
Sodium	mg/l	200
Sulphide	mg/l	0.1
Uranium	mg/l	0.1
Zinc	mg/l	5.0

SCHEDULE TWO

(Regulations 2 and 4)

EFFLUENT STANDARDS (CONTINUED)

Organic Pollutants

Parameter	Units	Limit (Maximum)
Acetamide	mg/l	0.05
Acetanilide	mg/l	0.1
Aldrin/ Dieldrin (Total)	mg/l	0.1
Antracene	mg/l	0.01
Atrazine and metabolites	mg/l	0.05
Benzenes	mg/l	0.1
Chlordane	mg/l	0.05
DDT and metabolites	mg/l	0.05
Endrine	mg/l	0.001
Heptachlor	mg/l	0.05
Hexachlorobenzene	mg/l	0.01
Lindane	mg/l	0.01
Malathion	mg/l	0.2
Mirex	mg/l	0.01
Parathion	mg/l	0.01
Polychlorinated Biphenyls (PCB)	mg/l	0.01
Phenols	mg/l	0.1
Toulene	mg/l	0.05
Toxaphene	mg/l	0.001
Xylene	mg/l	0.3