

THE WATER POLLUTION CONTROL REGULATIONS, 1999

(Under section 5 (1)(a) as read with section 1 8 (1)(a))

In exercise of the powers conferred by sections 5 and 18 of the Swaziland Environment Authority Act, 1992, and having consulted with the Authority, the Minister for Tourism, Environment and Communications makes the following Regulations -

Citation and Commencement

1. These Regulations may be cited as the Water Pollution Control Regulations, 1999 and come into operation on the date of publication in the Gazette.

Definitions

2. In these Regulations:

"Authority" means the Swaziland Environment Authority established under section 4 of the Swaziland Environment Authority Act 15 of 1992;

"effluent" means a waste in liquid form or in suspension in a liquid or in emulsion;

"effluent standards" means the effluent standards contained in Schedule Two;

"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 Water Resources Branch, the Rural Water Supply Branch and the Geological Survey and Mines Department of the Ministry of Natural Resources;

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

"water quality objectives" means the water quality objectives contained in Schedule One.

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) Every 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 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, 1999.

Discharge of effluent exceeding effluent standards prohibited

4. (1) Any person who intentionally or negligently 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 [E #] and on a second or subsequent conviction, to a fine not exceeding [E #] and imprisonment for not more than [# months] or 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, or if the operation is listed in Schedule Three, on each day that effluent is discharged.

(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 employee or agent of the Authority 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 methods approved by the Authority or the relevant water authority.

(5) For the purposes of sub-regulation (4), the Authority shall make documents describing the approved methods available for inspection and copying at its offices during office hours.

(6) 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 [E #] and on a second or subsequent conviction, to a fine not exceeding [E #] and imprisonment for not more than months], or 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 [E #] and on a second or subsequent conviction, to a fine of not less than [E #] and not exceeding [E #] and/or imprisonment for not more than [# months].

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.
- (3) Any person who fails to comply with sub-regulation (2) commits an offence and is liable on conviction to a fine not exceeding [E #] and on a second or subsequent conviction, to a fine not exceeding [E #].

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) immediately 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) immediately notify the Ministry of Health 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, unless the incident has not and will not create a risk to human or animal health; and
- (c) take all reasonable measures to warn potentially affected persons of the danger arising from the discharge, including television and radio broadcasts if appropriate.
- (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.

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 which exceeds one or more of the effluent standards, directly or indirectly into a water body must immediately 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.
- (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 cause the required measures to be taken and may order the person on whom the notice was served, to reimburse the Authority for the costs of taking such measures.
- (4) Any person who is aggrieved by a cost order made under sub-regulation (3) may appeal to the Minister in accordance with section 17(1) 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 #] and on a second or subsequent conviction, to a fine not exceeding [E #] and imprisonment for not more than [# months], or both.

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/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
Aluminum	0.2 mg/l maximum
Microbiological Parameters	
Total Coliforms	1 - 10 per 100 ml maximum
Faecal Coliforms	1 - 10 per 100 ml maximum

SCHEDULE TWO

EFFLUENT STANDARDS (Regulations 2 and 4)

Parameter/Substance	Units of Measurement	Limit
Colour	mg/l Pt Scale	20 maximum
Odour/Taste		not detectable after being, diluted 3

		fold
PH	pH units	minimum of 5.5 and a maximum of 9.5
Conductivity	ms/m	250 maximum
Dissolved oxygen	% saturation	minimum of 75%
Temperature	degrees C	maximum of 35
Chemical oxygen demand	mgO ₂ /l	75 maximum
Biological oxygen demand	mgO ₂ /l	10 maximum
Total dissolved solids	mg/l	maximum of 500 above intake water
Suspended solids	mg/l	25 maximum
Sodium content	mg/l	maximum of 50 above intake water
Soap, oil or grease	mg/l	100 maximum
Residual chlorine	mg/l	0.1 maximum
Free and saline ammonia	mg/l	10.0 maximum
Arsenic	mg/l	0.5 maximum
Boron	mg/l	1.0 maximum
Total chromium	mg/l	0.5 maximum
Copper	mg/l	1.0 maximum
Phenolic compounds (as phenol)	mg/l	0.1 maximum
Phosphates	mg/l	2.0 maximum
Lead	mg/l	0.1 maximum
Cyanides	mg/l	0.5 maximum
Sulphides	mg/l	1.0 maximum
Fluorides	mg/l	1.0 maximum
Zinc	mg/l	5.0 maximum
Cadmium	mg/l	0.05 maximum
Mercury	mg/l	0.02 maximum
Total faecal coliforms	per 100 ml	10 maximum