IT is hereby notified that the Minister of Health has, in terms of section 112 of the Public Health Act [Chapter 167], made the following regulations:—

- 1. These regulations may be cited as the Public Health (Effluent) Regulations, 1970.
  - 2. In these regulations-
    - "approval" means written approval by a health authority given in terms of these regulations;
    - "council" means any municipal council, town council or rural council;
    - "effluent liquid" means any liquid containing waste, sewage or other offensive matter;
    - "health authority" means--
      - (a) in the case of an application for approval in respect of land within the jurisdiction of a council, the council, and
      - (b) in the case of an application for approval in respect of land outside the jurisdiction of a council, the chief health officer.
    - "oxidation ponds" include aerated oxidation ponds, passveer channels and their variations;
    - "sewage-treatment works" means a works using a process of biological filtration, activated sludge or extended aeration, but does not include oxidation ponds.
  - 3. No person may--
    - (a) discharge any effluent liquid on to: or
    - (b) use any effluent liquid for the irrigation of:

any land without having first applied for and received the approval of the appropriate health authority.

4. (1) Any person requiring the approval mentioned in section 3 shall apply to the health authority and give full details of his proposed use or discharge of the effluent liquid, and any other information reasonably required by the health authority.

- (2) In considering an application made in terms of subsection (1), the health authority shall take into account, inter alia, the quantity and nature of the effluent liquid in relation to the area and type of land on to which it is to be discharged, or where it is to be used.
- (3) The approval mentioned in section 3 may be made subject to all or any of the following conditions—
  - (a) that a reticulation system is provided for the effluent liquid entirely separate from any system for the reticulation of potable water;
  - (b) that all piping, equipment and installation for use in the storage and reticulation of the effluent liquid, above or below ground, are distinctively and indelibly marked so as to be immediately distinguishable from any system for the reticulation of potable water;
  - (c) that all pipe connexions are below the ground;
  - (d) that adequate warning notices are erected in appropriate languages indicating that effluent liquid is being used, and
  - (e) any other conditions deemed necessary by the health anthority to protect the health of the public.
- (4) In giving the approval mentioned in section 3 in respect of effluent liquids from sewage treatment works or oxidation ponds, the health authority shall prescribe standards of purity which shall not be lower, but may be higher, than those specified in the Schedule for the effluent liquid.
  - (5) A health authority may, by notice in writing-
  - (a) revoke its approval or any conditions to which the approval was subject; or
  - (b) amend or add to any conditions to which the approval was subject.
- 5. Where any effluent liquid from sewage-treatment works or oxidation ponds which are the property of a council is to be used for the irrigation of land the council shall comply with the standards of purity prescribed in terms of section 4.
- 6. No person may use any effluent liquid from any sewage-treatment works or oxidation ponds for the irrigation of any land on which salad crops to be eaten raw, vegetable crops or berry fruits are growing:

Provided that the council or the chief health officer, as the case may be, may grant an exemption, in writing, from the provisions of this section in specific cases in respect of vegetable crops and berry fruits.

- 7. No person may use, for the irrigation of any land within 200 metres of an occupied dwelling or 50 metres of any public road by sprinklers, any effluent liquid from any sewage-treatment works or oxidation ponds unless such liquid complies with the minimum standards prescribed in the Schedule for use in relation to public amenities.
- 8. (1) No person may, without having first applied for and received approval, use-
  - (a) any digested sludge for agricultural purposes; or
  - (b) any raw or undigested sludge for any composting process.
- (2) The health authority may make approval granted in terms of subsection (1) subject to any conditions it deems necessary to protect the public health.
- 9. No person may use any raw or undigested sludge for agricultural purposes.

Type of usage or crop

A. Public amenities, e.g., Effluent from sewage-treat- Surface sports fields, public ment worksparks, golf courses, etc., but not swimming-pool surrounds.

Minimum standards of purity of effluent

(1) biological oxygen demand sprinkler not exceeding 10 parts per million; and

(2) stability as measured by the methylene blue test not less than 21 days; and (3) E. Coli (type 1) not ex-

ceeding 10 per millilitre; and (4) residual chlorine not less than 0-3 parts per million after 30 minutes' contact in samples taken at the sewagetreatment works.

Effluent from oxidation Surface ponds -

(1) stability of not less than 10 sprinkler days when filtered through No. 4 Whatman paper or 21 days when filtered through Whatman GF/C glass paper:

Method of irrigation

Other requirements

Method of

Minimum standards of

Type of usage or crop	purity of effluent	irrigation	Other requirements
	(2) E. Coli (type 1) not exceeding 10 per millilitre; and (3) residual chlorine not less than 0-3 parts per million after 30 minutes' contact in samples taken at the oxidation ponds.		
B. (a) Grain crops; and	Effluent from sewage-ireal- ment works	Surface only	
(b) crops grown for in- dustrial processing, such as oil-seeds, fibre, etc., which are not for direct human consumption, but ex- cluding crops grown for dehydration, can- ning or preserving; and	(1) biological oxygen demand not exceeding 70 parts per million; and (2) stability as measured by the methylene blue test not less than 36 hours.		
(c) crops grown solely for seed-production for sale to registered, seed merchants but not human consumption; and	Effluent from oxidation ponds— (1) stability not less than one day when filtered through Whatman No. 4 paper.		
<ul><li>(d) nursing production, excluding cut flowers grown for sale; and</li></ul>			
<ul><li>(e) fodder crops for harvesting; and</li></ul>			
(f) pastures for slaugh- ter stock; and			No grazing to be permitted within 24 hours of application of elf-fluent, and drinking-troughs to be provided for stock.
(g) deciduous and citrus orchards, trellised vines, plantation and tree crops			No fruit windfalls to be marketed.
C. As in B (a), (b), (c), (d), (c) and (f)	Effluent from sewage-treat- ment works	Surface or	
	(1) biological oxygen demand not exceeding 30 parts per million; and	sprinkler	
	(2) stability as measured by the methylene blue test not less than 10 days.		As for B.
	Effluent from exidation ponds		
	(1) Stability not less than 10 days when filtered through Whatman No. 4 paper or 21 days when filtered through Whatman GF/C glass paper.		

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- D. (a) As in B; and
  - (b) pastures for dairy stock; and
  - (c) cut flowers grown tor sale

Minimum standards of purity of efficient

irrigation Surface As for B (f) and (g).

Other requirements

Effluent from sewage-treatment works-

- (1) biological oxygen demand not exceeding 10 parts per million; and
- (2) stability as measured by the methylene blue test not less than 21 days; and
- (3) is. Call (type 1) not exceeding 10 per millilitre.
- Effluent from oxidation pands--
- (1) stability not less than 10 days when filtered through Whatman GF/C glass paper; and
- (2) E. Coli (type 1) not exceeding 10 per millilitre,

O٢ sprinkler

Method of