General Notice No.44.of 2003

THE ENVIRONMENT PROTECTION ACT 2002

Regulations made by the Minister under sections 39 and 96 of the Environment Protection Act 2002

1. These regulations may be cited as the Environment Protection (Standards for effluent discharge) Regulations 2003.

2. In these regulations -

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

"HWM" means the High Water Mark at spring tide;

"influent" means water diverted from a river, stream, spring, canal, underground or water supply network used in connection with any activity listed in the First Column of the First Schedule;

"parameter" means, in relation to an effluent, the characteristics or constituent elements set out in the Second Column of the First Schedule in respect of the corresponding activity set out in the First Column of the First Schedule;

"Wastewater system" –

(a) means a sewer, conduit, pump, engine or other appliance used or intended to be used for the reception, conveyance, removal, treatment and disposal of effluent; and

(b) does not include house sewers;

"waterbody" includes a stream, a river, a canal, a lake, a pond, a reservoir, an estuary, a wetland and underground water;

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

3. No person shall discharge effluent onto land, into a watercourse or into a waterbody unless he ensures that the parameters of the effluent do not exceed the permissible limits set out in the Second Schedule.

4. Notwithstanding regulation 3 or any other enactment, no person shall discharge or cause to be discharged any effluent into a waterbody or watercourse used or earmarked to be used for potable water supply.

5. Notwithstanding regulation 3, any person using an influent, the concentration or value of any parameter of which exceeds the permissible limit for that parameter set out in the Second Schedule, shall ensure that the concentration or value of the parameter in the effluent does not exceed that of the influent.

6. Any industry existing prior to the promulgation of these regulations and which is within a distance of 200 metres from the HWM shall comply with the permissible limits set out in the Third Schedule.

7. These regulations shall come into operation on 01 September 2003.

Made by the Minister on 05 February 2003

FIRST SCHEDULE

(regulation 2)

List of parameters for each industrial activity

INDUSTRIAL ACTIVITY	PARAMETERS
Beverages Industries	Temperature, pH, COD, BOD_5, TSS, Sodium, Detergents
Breweries and Distilleries	Temperature, pH, COD, BOD_5, TSS, Nitrate as N, Selenium, Zinc, Oil & Grease, Detergents, Ammoniacal Nitrogen
Canning and Food Processing	Temperature, pH, COD, BOD_5, Free Chlorine, TSS, Chloride, Nitrate as N, TKN, Sodium, Oil & Grease, Total Coliforms.
Dairy Processing	Temperature, pH, COD, BOD_5, TSS, Oil & Grease, Detergents, Ammoniacal Nitrogen
Dye houses and Washing Units in the textile sector	Colour, Temperature, pH, COD, BOD_5, Reactive Phosphorus, Free Chlorine, TSS, Chloride, Sulphate, Sulphide, Ammoniacal Nitrogen, Nitrate as N, Detergents, Cadmium, Total Chromium, Cobalt, Copper, Sodium, Zinc, Oil & Grease, Total Pesticides, Total Organic Halides
Edible Oil Refining	Temperature, pH, COD, BOD_5, TSS, Chloride, Sodium, Oil & Grease, Total Organic Halides, Phenols, Detergents.
Industrial Slaughtering	Temperature, pH, COD, BOD_5, TSS, Chloride, Nitrate as N, TKN, Oil & Grease, Total Coliforms, E. Coli
Laundry processes	Temperature, pH, COD, BOD_5, Reactive Phosphorus, Free Chlorine, TSS, Nitrate as N, Oil & Grease, Total Organic Halides, Detergents
Livestock Breeding	pH, COD, BOD_5, Reactive Phosphorus, TSS, Nitrate as N, TKN, Total Coliforms, E. Coli, Ammoniacal Nitrogen.
Manufacture of Chemical Fertilizers	Temperature, pH, COD, BOD_5, Reactive Phosphorus, TSS, Sulphate, Oil & Grease, Ammoniacal Nitrogen.
Manufacture of Soaps/Detergents and Bulk Storage of raw materials	Temperature, pH, COD, BOD_5, Reactive Phosphorus, Free Chlorine, TSS, Oil & Grease, Total Organic Halides, Detergents, Ammoniacal Nitrogen
Mechanical Workshop	pH, COD, BOD_5, Oil & Grease, Total Chromium, Lead, Manganese, Zinc.
Metal Plating and Galvanising	Temperature, pH, COD, Free Chlorine, TSS, Chloride, Sulphate, Sulphide, Nitrate as N, Cyanide, Cadmium, Total Chromium, Cobalt, Copper, Iron, Lead, Nickel, Zinc, Oil & Grease, Total Organic Halides.
Paint Manufacturing	Colour, Temperature, pH, COD, BOD_5, TSS, Chloride, Sulphate, Sulphide, Aluminium, Cadmium, Total Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Zinc, Oil & Grease, Total Organic Halides.
Tanning	Colour, Temperature, pH, COD, BOD_5, Reactive Phosphorus, TSS, Sulphate, Sulphide, Nitrate as Nitrogen, Cadmium, Total Chromium, Mercury, Oil & Grease, Total Organic Halides, Total Coliforms, E. Coli, Ammoniacal Nitrogen.
Thermal Power Plant	Temperature, pH, TSS, Oil & Grease, Total Chromium, Copper, Iron, Zinc.

(Replaced by GN *No. 44 of 2004)*

SECOND SCHEDULE

(regulation 4)

Effluent discharge Standards

Parameter	**Unit**	**Maximum permissible limit**	
		Land/ Underground	**Surface water courses**
Total coliforms	MPN per 100 ml	-	<400
E. Coli	MPN per 100 ml	<1000	<200
Free Chlorine	mg/l	-	0.5
Total Suspended Solids (TSS)	mg/l	45	35
Reactive Phosphorus	mg/l	10	1
Colour	-	Not objectionable	
Temperature	^{0}C	40	
pH	-	5 – 9	
Chemical Oxygen Demand (COD)	mg/l	120	
Biochemical Oxygen Demand (BOD_5)	mg/l	40	
Chloride	mg/l	750	
Sulphate	mg/l	750	
Sulphide	mg/l	0.002	
Ammoniacal Nitrogen	mg/l	1	
Nitrate as N	mg/l	10	
Total Kjeldahl Nitrogen (TKN)	mg/l	25	
Nitrite as N	mg/l	1	
Aluminium	mg/l	5	
Arsenic	mg/l	0.1	
Beryllium	mg/l	0.1	
Boron	mg/l	0.75	
Cadmium	mg/l	0.01	
Cobalt	mg/l	0.05	
Copper	mg/l	0.5	
Iron	mg/l	2.0	
Lead	mg/l	0.05	
Lithium	mg/l	2.5	
Manganese	mg/l	0.2	
Mercury	mg/l	0.005	
Molybdenum	mg/l	0.01	
Nickel	mg/l	0.1	
Selenium	mg/l	0.02	
Sodium	mg/l	200	
Total Chromium	mg/l	0.05	
Vanadium	mg/l	0.1	
Zinc	mg/l	2	
Oil & Grease	mg/l	10	
Total Pesticides	mg/l	0.025	
Total organic halides	mg/l	1	
Cyanide (as CN^-) *or Free cyanide*	mg/l	0.1	
Phenols	mg/l	0.5	
Detergents (as LAS*)	mg/l	15	

* Linear Alkylate Sulphonate

THIRD SCHEDULE
(regulation 6)
Effluent discharge Standards

Parameter	Unit	Maximum permissible limit
Total coliforms	MPN per 100 ml	<400
E. Coli	MPN per 100 ml	<200
Free Chlorine	mg/l	0.5
Total Suspended Solids (TSS)	mg/l	35
Reactive Phosphorus	mg/l	1
Colour	-	Not objectionable
Temperature	^{0}C	40
pH	-	5 – 9
Chemical Oxygen Demand (COD)	mg/l	120
Biochemical Oxygen Demand (BOD_5)	mg/l	40
Chloride	mg/l	1500
Sulphate	mg/l	1500
Sulphide	mg/l	0.002
Ammoniacal Nitrogen	mg/l	1
Nitrate as N	mg/l	10
Total Kjeldahl Nitrogen (TKN)	mg/l	25
Nitrite as N	mg/l	1
Aluminium	mg/l	5
Arsenic	mg/l	0.1
Beryllium	mg/l	0.1
Boron	mg/l	0.75
Cadmium	mg/l	0.01
Cobalt	mg/l	0.05
Copper	mg/l	0.5
Iron	mg/l	2.0
Lead	mg/l	0.05
Lithium	mg/l	2.5
Manganese	mg/l	0.2
Mercury	mg/l	0.005
Molybdenum	mg/l	0.01
Nickel	mg/l	0.1
Selenium	mg/l	0.02
Sodium	mg/l	200
Total Chromium	mg/l	0.05
Vanadium	mg/l	0.1
Zinc	mg/l	2
Oil & Grease	mg/l	10
Total Pesticides	mg/l	0.025
Total organic halides	mg/l	1
Cyanide (as CN^-)	mg/l	0.1
Phenols	mg/l	0.5
Detergents (as LAS*)	mg/l	15

* Linear Alkylate Sulphonate