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	Colour, Temperature, pH, COD, BOD ₅ , Reactive Phosphorus, Free		
textile sector	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 &		
Y 1	Grease, Total Organic Halides, Phenols, Detergents.		
Industrial Slaughtering	Temperature, pH, COD, BOD ₅ , TSS, Chloride, Nitrate as N, TKN,		
I and described	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,		
Livestock Breeding	Detergents PL COD DOD Descrive Phaseborns TSS Nitrate as N TVN		
Livestock breeding	pH, COD, BOD ₅ , Reactive Phosphorus, TSS, Nitrate as N, TKN,		
Manufacture of Chemical Fertilizers	Total Coliforms, E. Coli, Ammoniacal Nitrogen. Temperature, pH, COD, BOD ₅ , Reactive Phosphorus, TSS,		
Wandracture of Chemical Fermizers	Sulphate, Oil & Grease, Ammoniacal Nitrogen.		
Manufacture of Soaps/Detergents and	Temperature, pH, COD, BOD ₅ , Reactive Phosphorus, Free		
Bulk Storage of raw materials	Chlorine, TSS, Oil & Grease, Total Organic Halides, Detergents,		
	Ammoniacal Nitrogen		
Mechanical Workshop	pH, COD, BOD ₅ , Oil & Grease, Total Chromium, Lead,		
1	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		
m 12 21	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

Total coliforms	Parameter	Unit	Maximum permissible limit	
Total coliforms				Surface water
E. Coli MPN per 100 ml <1000 <200			Underground	courses
Tree Chlorine	Total coliforms	MPN per 100 ml	-	<400
Total Suspended Solids (TSS) mg/l mg/l 10	E. Coli	MPN per 100 ml	<1000	<200
Reactive Phosphorus mg/l 10			-	
Colour				
Temperature pH	Reactive Phosphorus	mg/l	10	1
PH		-		
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^{*} 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) Reactive Phosphorus	mg/l mg/l	35 1
Colour	-	Not objectionable
Temperature	$^{0}\mathrm{C}$	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 Nitrate as N	mg/l	10
Total Kjeldahl Nitrogen (TKN)	mg/l	25
Nitrite as N	mg/l	1
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 Total Chromium	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