

REGULATIONS

MADE UNDER

ENVIRONMENTAL PROTECTION ACT 1996
(No. 11 of 1996)

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**IN EXERCISE OF THE POWERS CONFERRED UPON ME BY SECTION 68 (1)
OF THE ENVIRONMENTAL PROTECTION ACT 1996,
I HEREBY MAKE THE FOLLOWING REGULATIONS:-**

PART 1

PRELIMINARY

- Citation. 1. These Regulations may be cited as the Environmental Protection (Water Quality) Regulations 2000.
- Interpretation. 2. In these Regulations, unless the context otherwise requires –
- (a) “activity” means any of the activities prescribed in regulation 4(1);
 - (b) “agriculture” includes horticulture, fruit growing, seed growing, dairy farming, fish farming, the breeding and keeping of livestock (including any animal kept for the production of food, clothing or for the purpose of farming of land), the use of land as grazing land, meadow land, market gardens and nursery grounds, the use of lands for woodlands where that is ancillary to the farming land for other purposes, the harvesting and utilisation of forest resources, and aquaculture;
 - (c) “applicant” means a person who applies for an environmental authorisation for the purposes of these Regulations and includes a person appointed under a duly registered power of attorney;
 - (d) “application” means an application for an environmental authorisation made in accordance with regulation 4;
 - (e) “commerce” means of or pertaining to business, trade or manufacture;
 - (f) “compliance schedule” means a schedule of measures including a sequence of interim requirements that lead to compliance with these Regulations;
 - (g) “discharge” means to release, drain, deposit, spray, inject, abandon, spill, leak, pour, throw, dump, place, emit or cause the seepage of, and includes any entry of, a water contaminant;
 - (h) “facility” includes -
 - (i) any office, room or building, and any place, spot or land, whether open or enclosed;
 - (ii) any aircraft, hovercraft, ship, boat, pleasure craft or other vessel whether afloat or not, and any vehicle;

- (iii) any electrical installation, subterranean installation or installation on land including the foreshore and other land intermittently covered by water;
 - (iv) any offshore installation and any other installation, whether floating or resting on the seabed or the subsoil thereof or resting on other land covered with water or the subsoil thereof; and
 - (v) any dam or other installation designed to hold liquid or store it on a long-term basis;
- (i) “industrial” means of or pertaining to the manufacture, processing, handling, transport, importation, storage or disposal of materials (including the extraction and conversion of mineral resources, raw materials, materials in the process of manufacture, manufactured materials, by-products and any waste or waste materials whether hazardous or not);
 - (j) “inland waters” includes any reservoir, pond, lake, river, stream, creek, canal, drain, spring, well, any part of the sea abutting on the foreshore, and any other body of natural or artificial surface or subsurface water;
 - (k) “institution” includes health care establishments, medical facilities, hospitals, schools and zoos;
 - (l) “parameter limit” means the result of the analysis of any of the chemical factors which the Agency may specify;
 - (m) “Register” means the Register of Water Effluents established under regulation 21 (1);
 - (n) “sewage” means any liquid waste or wastewater discharge from residences, public buildings, institutions or other buildings, including human waste products or liquids containing chemicals in solution and includes an installation for the treatment of waste water, industrial or domestic waste;
 - (o) “sludge” means any viscous, semisolid or residue generated from a process.

PART II

POWER TO ISSUE ENVIRONMENTAL AUTHORISATION

Registration.

3. Every person who discharges or causes or permits to discharge effluent shall, subject to regulation 5, register with the Agency.

General requirement to apply for an authorisation.

4. (1) Any person who, at the commencement of these Regulations, in the construction, installation, operation, modification or extension of any facility relating to -

- (a) industry;
- (b) commerce;
- (c) agriculture;
- (d) any institution; or
- (e) sewage,

discharges any effluent, shall, subject to paragraph (3), apply to the Agency for an environmental authorisation within one year of the commencement of these Regulations in accordance with the provisions of regulation 17 of the *Environmental Protection (Authorisations) Regulations 2000*.

- (2) A person proposing to engage in any of the activities mentioned in paragraph (1) shall submit an application to the Agency at least ninety days before the date on which the discharge is due to commence.
- (3) The Agency may at any time after the commencement of these Regulations, direct a person who engages in any of the activities specified in paragraph (1) to submit an application to the Agency for an environmental authorisation.
- (4) Any person who contravenes this regulation shall be guilty of an offence and shall be liable on summary conviction to a fine of not less than seventy-five thousand dollars nor more than five hundred thousand dollars and to imprisonment for six months.

Restrictions on the discharge of effluence.

5. (1) No person who engages in any of the activities mentioned in regulation 4 shall discharge or cause or permit the discharge of any effluent in or on any inland or coastal waters or on any land unless that person holds an environmental authorisation.

First Schedule.

(2) Subject to the provisions of regulation 4, these Regulations shall not apply to discharges of effluent specified in the First Schedule.

(3) Notwithstanding the generality of paragraph (2), discharges of the following wastes regardless of volume shall be prohibited –

- (a) any discharge of any effluent in toxic amounts including substances that may accumulate to toxic amounts during the expected life of the organisms in receiving waters;
- (b) any discharge of radiological or chemical wastes from research and medical facilities;
- (c) any discharge which would substantially impair anchorage and navigation;

- (d) any discharge of sewage from vessels while moored, berthed or underway in the inland or coastal waters of Guyana except through a properly functioning discharge device approved by the Agency; and
- (e) any other discharge which the Agency identifies as having a negative impact on human health and the environment.

(4) Paragraph (3) shall not apply where the discharges are permitted in accordance with a compliance schedule.

(5) Any person who discharges or causes or permits the discharge of any effluent without first having obtained an environmental authorisation shall be guilty of an offence and shall be liable on summary conviction to a fine of not less than seventy-five thousand dollars nor more than five hundred thousand dollars and to imprisonment for six months.

Restrictions on the disposal of sludge.

6. No person shall discharge or cause or permit the discharge of any sludge that is generated from any facility in or on any inland or coastal waters or on any land unless that person holds an environmental authorisation.

PART III

PARAMETER LIMITS AND CONTROL OF EFFLUENT

Change in operating conditions.

7. (1) Where at any facility a failure to operate in the normal manner or a change in operating conditions occurs, or a shut-down of the source or part thereof is made for some purpose, resulting in the discharge of effluent that may result in quantities or concentrations in excess of those allowed in regulation 9, the owner or operator of the source of water contamination shall-

- (i) immediately notify the Agency and furnish to the Agency with the particulars of such failure, change or shut-down; and
- (ii) furnish the Agency with the particulars in writing, as soon as is practicable, of such failure, change or shut down.

(2) If the Agency considers it advisable, it may authorise, in writing, the continuance of such operation for such period of time as it considers reasonable in the circumstances and may impose upon the owner or operator such terms and conditions for such continued operation as it considers necessary in the circumstances.

Application for variance.

8. A person granted an environmental authorisation may make an application to the Agency to vary any provision thereof on submission of supporting particulars in accordance with the provisions of regulation 20 of the *Environmental Protection (Authorisations) Regulations 2000*.

Parameter limits of effluent discharges.

Second Schedule.

9. (1) The Agency may at any time after the commencement of these Regulations, establish the parameter limits of effluent which may be discharged into any inland or coastal waters or land of Guyana with respect to any or all of the substances specified in the Second Schedule.
- (2) No new facility shall discharge any substance, analysed in accordance with regulation 24, in concentrations greater than those established as parameter limits under paragraph (1).
- (3) The Agency, in imposing conditions on an environmental authorisation, shall be guided by the parameter limits established under paragraph (1).
- (4) The Agency shall, on a case-by-case basis, fix in a compliance schedule, the date and the manner in which every existing facility shall comply with the parameter limits established under paragraph (1).
- (5) The Agency may at any time amend the parameter limits established under paragraph (1).
- (6) Any person who contravenes paragraph (2) shall be guilty of an offence and shall be liable on summary conviction to a fine of not less than seventy-five thousand dollars nor more than five hundred thousand dollars and to imprisonment for six months.

Agency may waive applicability.

10. Notwithstanding the provisions of regulation 9 the Agency may in respect of any facility waive the applicability of any parameter limit or any contaminant mentioned in the Second Schedule to any environmental authorisation .

Point of discharge.

11. (1) The point or source for the discharge of effluent from any facility shall be determined by the Agency.

(2) Wherever the concentration of any effluent discharged or to be discharged is mentioned in these Regulations, the reference, unless the context otherwise requires, is to the concentration as at the point of discharge determined in paragraph (1).

PART IV

NEW SOURCES OF EFFLUENT DISCHARGE

Prohibition against new and altered sources of effluent discharge.

12. (1) No person obtaining a variance from the Agency in relation to his environmental authorisation shall –

(a) carry out any work on facilities that may result in a new source of effluent discharge; or

(b) construct on any land or building designed to be used for a purpose that may cause the land or building to result in a new source of effluent discharge.

(2) Any person who contravenes paragraph (1) shall be guilty of an offence and shall be liable on summary conviction to a fine of not less than seventy thousand dollars nor more than three hundred thousand dollars and to imprisonment for three months.

Requirement and approval of plans.

13. (1) Where a person intends to undertake any construction after obtaining a variance from the Agency he shall make application to the Agency therefor together with the fee prescribed in regulation 8 of the *Environmental Protection (Authorisations) Regulations 2000*.

(2) The Agency may grant such application either subject to any condition that the Agency considers necessary and may require the applicant -

- (a) to repair, alter, replace or install control equipment;
- (b) to conduct a monitoring programme at his own expense or bear the cost of such programme within such period or at such time and in such manner as the Agency may specify; or
- (c) to do such other thing as the Agency may deem reasonably necessary to protect the land and waters of Guyana.

PART V

FEES

Fees payable for registration, etc.

14. (1) The fee to be charged for an application for registration, an environmental authorisation, a variance for an application to carry out works, construct any building, erection or installation shall be in accordance with the provisions of regulation 8 of the *Environmental Protection (Authorisations) Regulations 2000*.

(2) An effluent-related amount computed according to the amount and concentration of effluent discharged shall be charged in addition to the fee for an environmental authorisation under the *Environmental Protection (Authorisations) Regulations 2000*.

(3) The fee shall accompany the application and shall not be refundable.

(4) The effluent-related amount referred to in paragraph (2) shall not become due until called for by the Agency.

Waiver of fee.

15. (1) If the Agency is satisfied that research on effluent discharge or treatment of a kind or scale that is likely to benefit the cause of environmental protection is being or is to be carried out at any authorised premises, it may, with the approval of the Minister, wholly or partly waive any effluent-related amount payable by virtue of regulation 14.

(2) In deciding on the extent of the waiver, the Agency shall be guided –

- (a) by a consideration of how much research work is involved; or

- (b) by a consideration of the amount, physical and chemical characteristics of the effluent discharged or to be discharged.

PART VI

SAMPLING, RECORDS AND REPORTS

Sampling points.

16. (1) A holder of an environmental authorisation shall establish such sampling point or points, inspection chambers, flow meters, and recording and other apparatuses as an effluent sampling point as the Agency may, from time to time, require.

(2) If the Agency is satisfied, on the basis of written submissions from the holder of an environmental authorisation that one or more of the circumstances described in paragraph (3) exists at the holder's facility, with the result that it is impractical to maintain or use a sampling point established at the facility under this regulation, the Agency may give the holder of the authorisation a written permission to eliminate the sampling point.

(3) For the purposes of paragraph (2), the circumstances at the facility that may make it impractical to maintain or use a sampling point include –

- (a) a process change or redirection of or change in the character of an effluent stream has occurred or is expected to occur at the facility;
- (b) equipment used for sampling or flow measurement at the sampling point is damaged or non-functional;
- (c) the effluent flowing in the stream on which the sampling point was established under these regulations has been or is expected to be permanently eliminated; or
- (d) access to sampling point is restricted or dangerous or both.

(4) Where the holder of an environmental authorisation is permitted to eliminate a sampling point because of a circumstance described in paragraph (3)(a) or (b), the holder shall, within ninety days after the day on which the sampling point is eliminated, establish a replacement sampling point.

(5) The replacement sampling point shall be established on the effluent stream from which the sampling point was eliminated, at a location approved in writing by the Agency.

(6) The Agency shall not approve a location for the replacement sampling point unless it is satisfied that monitoring at the new location would yield results that would reflect the level of discharge of each limited parameter, merged parameter and assessment parameter from the facility as reliably as did monitoring at the eliminated sampling point.

(7) The holder of an environmental authorisation who replaces a sampling point under paragraph (4) has all the obligations in connection with the replacement sampling point that the holder had in connection with the eliminated sampling point.

- Use of sampling points. 17. A holder of an environmental authorisation shall use the sampling points established under this Part for all sampling required under these Regulations.
- Calculation of loadings. No. 11 of 1984. 18. For the purposes of performing a calculation of an effluent loading, the holder of an environmental authorisation shall use the actual analytical result obtained by a laboratory that is certified by the Guyana National Bureau of Standards established by section 3 of the Guyana National Bureau of Standards Act 1984.
- Reports on sampling points. 19. (1) A holder of an environmental authorisation shall submit to the Agency a map showing the sampling points established under this regulation at the holder's facility.
- (2) A holder of an environmental authorisation who eliminates a sampling point at the holder's facility but is not required to replace the sampling point shall, within thirty days after the day on which the sampling point is eliminated, submit a written notice to the Agency describing where the sampling point was previously located, together with a revised list and plot plan without the sampling point.
- (3) Within thirty days after replacing a sampling point, the holder of the environmental authorisation shall submit a written notice to the Agency describing the location of the replacement sampling point, together with a revised list and plot plan showing the replacement sampling point.

PART VII

OFFENCES AND PENALTIES

- Penalties. 20. Where any person commits an offence under these Regulations in respect of which a penalty is not prescribed, such person shall be liable on summary conviction to a fine of not less than thirty thousand dollars nor more than eighty thousand dollars.

PART VIII

GENERAL PROVISIONS

- Register of water effluents. 21. (1) The Agency shall establish and maintain a Register of Water Effluents.
- (2) The Register shall contain information identifying the quantity, conditions or concentrations relevant to the identification of each effluent.
- (3) The Agency shall cause the Register to be updated periodically and published from time to time in the *Gazette* and in one or more daily newspapers having wide circulation in Guyana.

Biological
integrity.

22. (1) The Agency may for the purpose of ensuring the biological integrity of the waters of Guyana –

- (a) classify receiving inland or coastal waters according to present and projected future use;
 - (b) determine the physical, chemical and biological water quality standards according to its different uses;
 - (c) establish a scheme for the final disposal of effluent discharges.
- (2) Any scheme for the final disposal of effluent discharges referred in paragraph (1) (c) shall be made according to the degree and type of treatment, soil, rock, and topographical conditions and the location of any proposed development or industrial activity.
- (3) The methodology employed in developing any scheme for the final disposal of effluent discharges shall be such that –
- (a) any probability of the contamination of existing or potential sources of water supplies (ground or surface water) would be minimised;
 - (b) threats to public health would be reduced; and
 - (c) the possibility of the contamination, actual or potential, to the waters of any bathing beach, shellfish breeding grounds or waters used for recreational purposes would be reduced or eliminated.

Spill or accidental
discharge.

23. (1) In the event of the occurrence of any spill or accidental discharge of any effluent mentioned in the Register of Water Effluents mentioned in regulation 21 which either directly or indirectly gains or may gain access onto any inland or coastal waters or any land, the person or persons responsible for such occurrence shall immediately inform the Agency of the occurrence.

(2) The person responsible for the occurrence of the spill or accidental discharge referred to in paragraph (1) shall be required to contain, cleanse or abate the spill or accidental discharge or to recover substances involved in the spill or accidental discharge in a manner satisfactory to the Agency.

(3) The Agency shall estimate any damage caused by the spill or accidental discharge and may recover all costs and expenses from the person responsible for the occurrence of the spill or accidental discharge.

Standard method
of analysis of
effluent.

Third Schedule.

24. For the purposes of these Regulations, the effluent spilled or discharged into any inland or coastal waters shall be analysed in accordance with the methods contained in the latest edition of the publication listed in the Third Schedule or in accordance with such other methods of analysis as the Agency thinks fit.

LIST OF DISCHARGES TO WHICH THESE REGULATIONS DO NOT
APPLY

Discharges from non-commercial motor vehicles;

Discharges from households except where such households contain industrial or commercial facilities;

Any housing or commercial development or both of less than 30 units, without affecting the generality of 2(3).

Processing, manufacturing, washing or servicing of any other products or goods –

(1) that produce effluent or less than 60 cubic metres per day;

(2) that the effluent of which does not contain those contaminants listed as parameters (vi) to (xvi) in the first column of the Third Schedule;

(3) where the total load of biochemical oxygen demand of the effluent fixed at 20 degrees centigrade for 5 days or suspended solids or both, shall not exceed 6 kilogrammes per day (concentration of 100 milligrammes per litre).

LIST OF SUBSTANCES THE LIMITS OF WHICH ARE TO BE SPECIFIED

(i)	Ammonical Nitrogen
(ii)	Sulphate
(iii)	Chloride
(iv)	Cobalt
(v)	Colour
(vi)	Detergents, Anionic
(vii)	Fluoride (as F)
(viii)	Molybdenum
(ix)	Phosphate (as P)
(x)	Polychlorinated Biphenyls
(xi)	Selenium
(xii)	Silver
(xiii)	Beryllium
(xiv)	Vanadium
(xv)	Radioactive Material
(xvi)	Nitrate Nitrogen
(xvii)	Temperature
(xvii)	Pesticides, fungicides, herbicides, insecticides, rodenticides, fumigants or any other biocides or any other chlorinated hydrocarbons
(xix)	A substance that either by itself or in combination with other waste or refuse may give rise to any gas, fume or odour or substance which causes or is likely to cause pollution

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STANDARD METHODS OF ANALYSIS OF EFFLUENT

1. “Standard Methods of the Examination of Water and Wastewater” published jointly by the American Public Health Association, the American Waterworks Association and the Water Pollution Control Federation of the United States; or
2. “Analysis of Raw, Potable and Wastewaters” published by the Department of the Environment of the United Kingdom.

Made this 28th day of November, 2000.

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Bharrat Jagdeo
President