



BELIZE

**ENVIRONMENTAL PROTECTION ACT
CHAPTER 328**

REVISED EDITION 2000
SHOWING THE LAW AS AT 31ST DECEMBER, 2000

This is a revised edition of the law, prepared by the Law Revision Commissioner under the authority of the Law Revision Act, Chapter 3 of the Laws of Belize, Revised Edition 1980 - 1990.

This edition contains a consolidation of the following laws-

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ARRANGEMENT OF SECTIONS

3

ENVIRONMENTAL PROTECTION ACT

8

Amendments in force as at 31st December, 2000.



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CHAPTER 328**ENVIRONMENTAL PROTECTION**

22 of 1992.

2 of 1998.

10 of 2000.

Commencement

[6. 1. 1993]

S.I. 157 of 1992.

[14th October, 1992]

PART I*Preliminary*

Short title. 1. This Act may be cited as the Environmental Protection Act.

Interpretation. 2.-(1) In this Act, unless the context otherwise requires-

“Department” means the Department of the Environment established under section 3 of this Act;

2 of 1998. “designated officer” or “authorized officer” means an officer designated by the Department for carrying out the provisions of this Act and any regulations made thereunder, and includes the Chief Environmental Officer, Environmental Officers and other officers designated by the Chief Environmental Officer;

“ecological balance” means the various conditions required for the survival and development of persons and other living organisms;

“element” in relation to the environment means any of the principal constituent parts of the environment including water, atmosphere, soil, vegetation, climate, sound, odour, aesthetics, fish and wildlife;

“environment” includes water, coasts, seas, air and land and the interrelationship which exists among and between water, air, and land, and human beings, other living creatures, plants, micro-organisms and property;

“environmental pollution” means the presence in the environment of any

environmental pollutant that endangers human health, the integrity of the environment, or disrupts the ecological balance;

“environmental pollutant” means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be injurious to human health or the environment; it includes objectionable odours, noise, vibrations, radio activity, temperature change, or physical, chemical or biological change to any element of the environment;

“environmental health” means control of all environmental factors that have an adverse direct or indirect effect on the physical, mental or social well-being of man;

“hazardous substance” means any substance or preparation which, by reason of its chemical or physio-chemical or biological properties or handling, is liable to cause harm to human beings, other living creatures, plants, micro-organisms, property or the environment; and includes but is not limited to the substances specified in the Schedule;

Schedule.

“Minister” means the Minister charged with the responsibility for the environment;

“natural resources” means those living and non-living natural components which are available to man in order to satisfy his economic, social and cultural needs;

“waste” includes any matter prescribed to be waste, and any matter, whether liquid, solid, gaseous or radio active, which is discharged, emitted, or deposited in the environment in such a volume, composition or manner as to cause an alteration of the environment.

(2) For the purpose of this Act, the term “water resources” means surface waters, ground water and impoundments of water.

PART II

Administration

Establishment of
Department of the
Environment.

3.-(1) For the administration of this Act and the regulations made thereunder, there shall be established under the Ministry for the time being responsible for the Environment, a department to be known as the “Department of the Environment”.

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(2) The Department shall be headed by a public officer to be known as the Chief Environmental Officer who shall be appointed by the Governor-General in accordance with section 107 of the Belize Constitution:

Provided that the public officer who is working as the Chief Environmental Officer immediately before the commencement of this Act shall be deemed to have been appointed under this section.

(3) It shall be the responsibility of the Department to monitor the implementation of this Act and the regulations made thereunder and to take necessary action to enforce its provisions.

(4) There shall be appointed by the Public Services Commission such other environmental officers, inspectors and other staff having suitable qualifications as may be necessary for carrying out the provisions of this Act and any regulations made thereunder.

Functions of the
Department.

4. The powers, duties and functions of the Department shall be to-

- (a) be responsible for the continuous and long-term assessment of natural resources and of pollution;
- (b) ensure the protection and rational use of natural resources for the benefit of the present and future generations;

- (c) prevent and control pollution by co-ordinating all activities relating to the discharge of wastes into the environment;
- (d) control the volume, types, constituents and effects of wastes, discharges, emissions, deposits or other sources of emission and substances which are of danger or a potential danger to the quality of the environment;
- (e) issue the necessary licences, with or without conditions, for use for the exercise of activities that may cause pollution;
- (f) undertake surveys and investigations into the causes, nature, extent and prevention of pollution and to assist and co-operate with other persons or bodies carrying out similar surveys or investigations;
- (g) conduct, promote, and co-ordinate research in relation to any aspect of environmental pollution or the prevention thereof, and to develop criteria for the protection and improvement of the environment;
- (h) specify methods to be adopted in taking samples and making tests for the purpose of this Act;
- (i) maintain a register of all wastes, discharges, emissions, deposits or other sources of emission or substances which are of danger or potential danger to the environment;
- (j) undertake investigations and inspections to ensure compliance with this Act or the regulations made thereunder;
- (k) provide information and education to the public regarding the importance of protection and improvement of the environment;

- (l) undertake resource inventories, surveys and ecological analyses to obtain information on the social and bio-physical environment with special reference to environmentally sensitive areas and areas where development is already taking place or likely to take place;
- (m) examine and evaluate and if necessary carry out environmental impact assessments and risk analysis and to make suitable recommendations to mitigate against harmful effects of any proposed action on the environment;
- (n) monitor environmental health;
- (o) advise the Government on the formulation of policies relating to good management of natural resources and the environment;
- (p) recommend measures aimed at controlling pollution resulting from industrial process or otherwise;
- (q) advise on any aspect of conservation;
- (r) provide decision-making with the necessary information so as to achieve long-term sustainable development;
- (s) highlight the value of wetland ecosystems and promote successful management approaches in their utilization;
- (t) assist the Forestry Department in promoting the development of a balanced forestry management programme;
- (u) conduct studies and make recommendations on standards relating to the improvement of the environment and the maintenance of a sound ecological system;

- (v) monitor trends in the use of natural resources and their impact on the environment;
- (w) advise on the effects of any sociological or economic development of the environment;
- (x) play a major role in providing the direction for long-term sustainable development based on the promotion or incorporation of ecological concerns in the economic development process;
- (y) foster, through inter-ministerial cooperation, the prudent use and proper management of the natural resources of Belize, the control of pollution of the natural environment and the re-establishment of an ecological equilibrium, where needed, so as to guarantee a better quality of life for present and future generations;
- (z) encourage governmental and non-governmental institutions/agencies to align their activities with the ideas of sustainable development;
- (aa) exercise any other functions relating to the protection of the environment.

5.-(1) Subject to the provisions of this Act, it shall be lawful for duly designated officers of the Department, in carrying out their duties, to have the right to enter at all reasonable times any kind of installation, factory, plant or premises and to require the person in charge to provide them with all relevant information and to assist them in their duties under this Act.

Power to enter premises.

(2) A designated officer may, in exercise of powers conferred by subsection (1)-

- (a) take and remove samples or make copies which in the opinion of the designated officer are necessary for the purposes specified in subsection (3);
- (b) seize any item necessary as evidence of the commission of an offence under this Act or regulations made thereunder;
- (c) take photographs of and on any land or premises as he considers necessary;
- (d) enter upon any land and drill boreholes for the purpose of taking and removing samples of groundwater and making studies to assess the discharges of wastes and monitor the effect of such discharges;
- (e) inspect and take copies of computer records, relating to the provisions of this Act, or regulations made thereunder;
- (f) require any person in any place entered, to produce for inspection or for the purpose of taking copies any books, documents or papers relevant to the administration of this Act or regulations made thereunder.

2 of 1998.

- (3) The purposes referred to in subsection (2) are as follows-
 - (a) to determine whether there has been compliance with, or any contravention of, this Act or any regulations made thereunder, or any licence, environmental compliance plans, notice or thing required under this Act or regulations made thereunder;
 - (b) for the good administration of this Act or regulations made thereunder.

2 of 1998.

- (4) A designated officer may detain any vehicle or person, where

there is reasonable suspicion that an offence has been or is likely to be committed under this Act or any regulations made thereunder, and in the exercise of this power, may request a person to produce his identification.

(5) Where any items or goods are found in any vehicle or on any person which, in the opinion of the designated officer, may constitute evidence of an offence under this Act or regulations made thereunder, the designated officer may seize any such items or goods. 2 of 1998.

(6) A designated officer shall not enter a dwelling house except- 2 of 1998.

(a) with the consent of the occupant of the house; or

(b) under the authority of a warrant issued by a magistrate or justice of the peace.

PART III

Prevention and Control of Environmental Pollution

6. The Minister may, after consultation with the Department, make regulations to specify the permitted level for the emission, discharge or deposit of pollutants or the emission of noise into any area, segment or element of the environment within which the emission, discharge or deposit is prohibited or restricted. Minister to specify levels of pollutants, etc.

7.-(1) The Minister may, after consultation with the Department, make regulations for- Regulations.

(a) recognising one or more laboratories or institutes as laboratories to carry out the functions entrusted to a laboratory under this Act or any regulations made thereunder;

- (b) specifying the procedure for the submission to the said laboratory of samples of air, water, soil, or other substances for analysis or tests, the form of the laboratory report thereon and the fees payable for such report;
- (c) specifying quality standards for the environment;
- (d) specifying the standards in excess of which pollutants discharged into the environment shall not be discharged or emitted;
- (e) formulating environmental codes of practices specifying procedures, practices or release limits for environmental control relating to works, undertakings and activities during any phase of their development and operation, including the location, design, construction, start-up, closure, dismantling and clean-up phases and any subsequent monitoring activities;
- (f) formulating environmental quality guide lines specifying recommendations in quantitative or qualitative terms to support and maintain particular uses of the environment;
- (g) prescribing all matters which by this Act are required or permitted to be prescribed or which are necessary or convenient to be prescribed for the better carrying out of or giving effect to the provisions of this Act;
- (h) the protection of the ozone layer;
- (i) the prevention and reduction of pollution of the air and water including streams and rivers;
- (j) the control of noise;

- (k) protecting the coastal and marine resources of Belize;
- (l) preserving and protecting the barrier reef and prohibiting the dumping of wastes in the marine environment;
- (m) controlling and minimising the transboundary movement of toxic and hazardous wastes; and
- (n) any other matter relating to the prevention and control of environmental pollution.

(2) In carrying out any of the responsibilities mentioned in subsection (1), the Minister may-

- (a) consult with any other Government department or agency, non-governmental organisation, or any person interested in the quality of the environment or the control or abatement of environmental pollution; and
- (b) organize conferences of representatives of industry, labour and municipal authorities and any interested persons described in paragraph (a).

8.-(1) No person, installation, factory or plant shall, unless specifically permitted by the Department, emit or discharge any pollutant into the atmosphere in contravention of the permitted levels specified under section 6 or 7.

Prohibition on discharge of pollutants.

(2) Every person, installation, factory or plant emitting air pollutants is required to maintain and submit to the Department, records of the type, composition and quantity of pollutants emitted.

(3) The Department, where necessary, may instruct the person, installation, factory or plant to make changes with regard to structure, method of operation or manner of disposing of air pollutants.

Penalty for
contravention of
section 8.

9. Any person, installation, factory or plant that contravenes section 8 commits an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment.

Duty of persons,
etc., exploiting
natural resources.

10.-(1) Any person or undertaking exploiting the land, water resources, seas or other natural resources shall ensure the protection of the environment against unnecessary damage or from pollution by harmful substances.

(2) In order to prevent soil pollution, chemicals and biologicals introduced directly or indirectly into the soil in the course of agricultural, forestry or mining activities shall not be used in quantities or in a manner such that the natural equilibrium is disturbed or, in particular, such that there is harmful contamination of the soil or water, fauna or flora, or such that ecosystems are disturbed.

Prohibition on and
penalty for
pollution of
environment.

11.-(1) No person shall emit, import, discharge, deposit, dispose of or dump any waste that might directly or indirectly pollute water resources or damage or destroy marine life.

(2) Any person who contravenes subsection (1) commits an offence and shall be liable on summary conviction to a fine not less than five thousand dollars and not exceeding twenty-five thousand dollars or to imprisonment for a period not exceeding two years or to both such fine and period of imprisonment, and to a further fine not exceeding one thousand dollars a day for every day that the offence is continued after a notice by the duly designated officer requiring him to cease the act specified therein has been served upon him.

PART IV

Prohibition on Dumping

12. In this Part-

Interpretation of
dumping
provisions.

“dumping” means the deliberate disposal at sea from ships, aircraft, tankers, floating craft or other marine vessels, or other man-made structures, and includes disposal by incineration or other thermal degradation of any substance, but does not include-

- (a) any disposal that is incidental to or derived from the normal operations of a ship, aircraft, tanker, floating craft or other marine vessel or other man-made structure or of any equipment on a ship, aircraft, tanker, floating craft or other marine vessel or other man-made structure other than the disposal of substances from a ship, aircraft, tanker, floating craft or other marine vessels or other man-made structures operated for the purpose of disposing of such substances at sea; and
- (b) any discharge that is incidental to or derived from the exploration for, exploitation of, and associated offshore processing of sea-bed mineral resources;

“master” includes every person having command or charge of a ship but does not include a pilot;

“sea” means-

- (a) the territorial sea of Belize;
- (b) the internal waters of Belize;
- (c) any fishing zone or reserve prescribed under the Fisheries Act; CAP. 210.

and

(d) the exclusive economic zone of Belize;

“ship” includes any description of vessel, boat or craft used or capable of being used solely or partly for marine navigation without regard to its method or lack of propulsion.

Prohibition on
dumping.
2 of 1998.

13.-(1) No person shall dump or dispose of or deposit any garbage, refuse, toxic substances or hazardous wastes in any place that may directly or indirectly damage or destroy flora or fauna, or pollute water resources or the environment.

2 of 1998.

(2) Any person who contravenes subsection (1) commits an offence and shall be liable on summary conviction to a fine not exceeding twenty-five thousand dollars or to imprisonment for a term not less than six months and not exceeding five years, or to both such fine and imprisonment.

Restriction on
dumping from
ships, etc.

14.-(1) Subject to subsection (2), no person shall dump any garbage, refuse, or chemical substances from any aircraft, ship, tanker, floating craft or other marine vessel into the harbours or sea of Belize.

(2) A person may dump a substance as described in subsection (1), where the dumping is necessary to avert danger to human life at sea or to any ship, aircraft, tanker, floating craft or other marine vessel.

(3) Any dumping under subsection (2) shall be carried out as far as possible, in a manner that minimizes danger to human life and damage to the marine environment.

(4) Nothing in this section relieves a person from liability under this Act, where the danger referred to in subsection (2) was caused by a negligent act or omission of that person.

(5) Where dumping takes place under this section, the person in

charge of the aircraft, ship, or other vessel shall, as soon as possible, report the dumping to the Department.

(6) Any person who contravenes the provisions of this section commits an offence and shall be liable on summary conviction to a fine not less than five thousand dollars and not exceeding twenty-five thousand dollars or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment.

15.-(1) No person shall load any hazardous substance on a ship, aircraft, tanker, floating craft or other marine vessel in Belize for the purpose of dumping such substance except in accordance with a permit granted under section 17.

Restriction on loading of hazardous substances.

(2) Any person who contravenes the provisions of subsection (1) commits an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment.

16.-(1) No person shall dispose of any ship, aircraft, tanker or other man-made structure in any area of the sea except in accordance with a permit granted under section 17.

Disposal of ship, aircraft or other man-made structure.

(2) Any person who contravenes the provisions of subsection (1) commits an offence and shall be liable on summary conviction to a fine not exceeding twenty-five thousand dollars or to imprisonment for a term not less than six months and not exceeding five years, or to both such fine and imprisonment.

2 of 1998.

17.-(1) An application for a permit shall be submitted to the Minister in the prescribed form and shall contain all information as may be prescribed and shall be accompanied by the prescribed fee.

Applications for permits and criteria for granting permits.

(2) Subject to this section, and to the provisions of any special area precautionary plan under section 21 of the Disaster Preparedness and Response

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Act, the Minister may grant or refuse an application for a permit required under sections 15 and 16.

Schedule.
Part II.

(3) In determining whether to grant a permit, the Minister shall take into account the factors specified in Part II of the Schedule and any other factors which the Minister may consider necessary.

(4) The Minister may, after consultation with the Department, grant a permit containing terms and conditions as he considers necessary in the interest of human life, marine life, or any legitimate uses of the sea, and, without limiting the generality of the foregoing, the permit may contain terms and conditions relating to any of the following as are applicable-

- (a) the nature of the substance that may be dumped or disposed of and the quantity of the substance;
- (b) the method and frequency of the dumping or disposal authorised including, if necessary, the date or dates on which dumping or disposal is authorized;
- (c) the manner of loading and stowing the substance authorised to be dumped or disposed of;
- (d) the site at which dumping or disposal may take place;
- (e) the route to be followed by the ship or aircraft transporting the substance to the site of the dumping or disposal; and
- (f) any special precautions to be taken respecting the loading, transporting, dumping or disposal of the substance.

Schedule.

(5) No permit may be granted in respect of a substance specified on the list of hazardous substances in the Schedule unless, in the opinion of the Minister-

- (a) the substance is rapidly rendered harmless by physical, chemical or biological process of the sea and does not render normally edible marine organisms inedible or unpalatable or endanger human health or the health of animals;
 - (b) the substance is specified in any of items 1 to 5 of the list of hazardous substances in the Schedule and is contained in another substance in a quantity or concentration that does not exceed the prescribed quantity or concentration; Schedule.
 - (c) the dumping or disposal of a certain quantity of the substance is necessary to avert an emergency that poses an unacceptable risk relating to human health and admits of no other feasible solution; or
 - (d) the substance is to be transformed by incineration or other means of thermal degradation and any substance that results from such transformation is-
 - (i) a substance in respect of which a permit may be granted under paragraph (a) or (b); or
 - (ii) a substance that is not specified on the list of hazardous substances in the Schedule. Schedule.
- (6) A permit shall specify that it is valid for-
- (a) a particular date or dates; or
 - (b) a particular period that shall not exceed one year.
- (7) The Minister may suspend or revoke a permit or vary its terms and conditions where the Minister considers it advisable to do so.

Penalty for breach of conditions of permit.

18. Any person who contravenes any term or condition of a permit granted under section 17 shall be treated for all purposes as having committed the prohibited act without a permit and shall be punished accordingly.

Powers of designated officers.

19.-(1) For the purpose of determining whether any provision of this Part has been or is being contravened, a designated officer may, at any reasonable time:-

- (a) enter any place in which he reasonably believes a substance intended for dumping or disposal is being loaded;
- (b) go on board any ship, platform or other man-made structure anywhere in Belize or within any area on the sea of Belize or any aircraft if the designated officer reasonably believes that the ship, aircraft, platform or man-made structure has on board a substance intended for dumping;
- (c) examine any substance found in any place entered, or on any ship, aircraft, platform or other man-made structure boarded, and open any container found therein that the designated officer has reason to believe contains any substance intended for dumping or disposal and take samples of the substance;
- (d) require any person in any place entered, or on any ship, aircraft, platform or other man-made structure boarded, to produce for inspection or for the purpose of obtaining copies thereof or extracts therefrom any books or other documents or papers containing any matter relevant to the administration of this Part;
- (e) travel on any ship, aircraft, platform or other man-made structure that is loaded with a substance intended for dumping; or
- (f) detain any ship, aircraft, platform or other man-made structure

for a reasonable time.

(2) A designated officer who travels on a ship, aircraft, platform or other man-made structure under subsection (1)(e) shall be carried free of charge to and from the dumping site and the person in command of the ship or aircraft or in charge of the platform or man-made structure shall provide the designated officer with suitable accommodation and food.

Designated officer to receive accommodation.

PART V

Environmental Impact Assessment

20.-(1) Any person intending to undertake any project, programme or activity which may significantly affect the environment shall cause an environmental impact assessment to be carried out by a suitably qualified person, and shall submit the same to the Department for evaluation and recommendations.

Requirement for environmental impact assessment.

(2) An environmental impact assessment shall identify and evaluate the effects of specified developments on-

- (a) human beings;
- (b) flora and fauna;
- (c) soil;
- (d) water;
- (e) air and climatic factors;
- (f) material assets, including the cultural heritage and the landscape;
- (g) natural resources;

(h) the ecological balance;

(i) any other environmental factor which needs to be taken into account.

(3) An environmental impact assessment shall include measures which a proposed developer intends to take to mitigate any adverse environmental effects and a statement of reasonable alternative sites (if any), and reasons for their rejection.

(4) Every project, programme or activity shall be assessed with a view to the need to protect and improve human health and living conditions and the need to preserve the reproductive capacity of ecosystems as well as the diversity of species.

(5) When making an environmental impact assessment, a proposed developer shall consult with public and other interested bodies or organizations.

(6) The Department may make its own environmental impact assessment and synthesise the views of the public and interested bodies.

(7) A decision by the Department to approve an environmental impact assessment may be subject to conditions which are reasonably required for environmental purposes.

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CAP. 145.

(8) Any exercise of the powers of the Department under subsections (6) and (7) is an exercise of a disaster preparedness related power within the meaning of section 13 (1) of the Disaster Preparedness and Response Act.

Regulations for
environmental
impact
assessment.

21. The Minister may make regulations prescribing the types of projects, programmes or activities for which an environmental impact assessment is required and prescribing the procedures, contents, guidelines and other matters relevant to such an assessment.

22. Every person who fails to carry out an environmental impact assessment as required under this Act or any regulations made thereunder, commits an offence and shall be liable on summary conviction to a fine not exceeding twenty-five thousand dollars or to imprisonment for a term not less than six months and not exceeding five years, or to both such fine and imprisonment.

Penalty for failing to carry out assessment. 2 of 1998.

23. Notwithstanding the provisions of any other Act, rules or regulations, the procedure for carrying out an environmental impact assessment shall be in accordance with the provisions of this Act and any regulations made thereunder.

Procedure. 2 of 1998.

PART VI

Nutrients

24. In this Part, unless the context otherwise requires-

Interpretation as to nutrients.

“cleaning agent” means any laundry detergent, dish-washing compound, household cleaner, metal cleaner, degreasing compound, commercial cleaner, industrial cleaner, phosphate compound or other substance intended to be used for cleaning purposes;

“nutrient” means any substance or combination of substances that, if added to any waters in sufficient quantities, provides nourishment that promotes the growth of aquatic vegetation in those waters to such densities as to-

- (a) interfere with their use by human beings or by any animal, fish or plant that is useful to human beings; or
- (b) degrade or alter or form part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by human beings or by any animal, fish or plant that is useful to human beings;

“water conditioner” means any water softening chemical, anti-scale chemical, corrosion inhibitor or other substance intended to be used to treat water.

Prohibition on nutrients.

25.-(1) No person shall manufacture or import for use or sale in Belize any cleaning agent or water conditioner that contains a prescribed nutrient in a concentration that is greater than the prescribed permissible concentration of that nutrient in the cleaning agent or water conditioner.

(2) Any person who contravenes the provisions of subsection (1) commits an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment, and the cleaning agent or water conditioner in respect of which the offence was committed shall be forfeited.

Regulations in respect of nutrients.

26. The Minister may make regulations-

- (a) prescribing nutrients;
- (b) prescribing the permissible concentration of any prescribed nutrient in any cleaning agent or water conditioner; and
- (c) respecting the manner in which the concentration of any prescribed nutrient in a cleaning agent or water conditioner shall be determined.

PART VII

Investigation, Procedures and General Penalties

Investigation of offences.

27.-(1) Any person who has information that an offence has been committed under this Act or any regulations made thereunder may report the facts to the Department for investigation.

(2) The Department shall investigate every report made under subsection (1) and where there is sufficient evidence that an offence has been committed, the Department may institute legal proceedings or report the matter to the Police, as may be appropriate.

28. Every person who assaults, obstructs or hinders a designated officer in the execution of his duty under this Act or regulations made thereunder commits an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars, or to imprisonment for a term not less than six months and not exceeding five years, or to both such fine and imprisonment.

Obstruction,
etc., of
designated
officer.

29.-(1) Every person who-

- (a) intentionally or recklessly causes a disaster that results in a loss of the use of the environment; or
- (b) shows wanton or reckless disregard for the lives or safety of other persons and thereby causes a risk of death or harm to another person,

Damage to
environment and
death or harm to
persons.
2 of 1998.

commits an offence and is liable on summary conviction to a fine of not less than twenty-five thousand dollars and not exceeding two hundred thousand dollars, or, in the case of a conviction under paragraph (a), to three times the assessed value of the damage caused, whichever is the greater, or to imprisonment for a term of not less than two years and not exceeding ten years, or to both the fine (or the assessed value of the damage), and the term of imprisonment.

(2) A person shall not be liable under this section if he establishes that he exercised all due diligence to prevent the commission of the offence.

30. Where an offence under this Act or regulations made thereunder is committed or continued on more than one day, the person who committed the offence is liable to be convicted for a separate offence for each day on which the offence is committed or continued.

Continuing
offence.
2 of 1998.

- Offences by Corporations. 31. Where an offence under this Act or any regulations made thereunder is committed by a body corporate, every person who at the time of the commission of the offence was a director, general manager, secretary or other similar officer of the body corporate, or was purporting to act in any such capacity, shall be deemed to be guilty of that offence unless he proves that the offence was committed without his consent or connivance and that he exercised all such diligence to prevent the commission of the offence as he ought to have exercised, having regard to the nature of his functions in that capacity and to all the circumstances.
- Identifying owner, master, etc. 32. The owner or master of a ship or the owner or pilot in command of an aircraft may be charged with an offence arising out of a contravention of Part IV (Prohibition on Dumping) as owner, master, pilot in command or person in charge, as the case may be, of the ship or aircraft, if it is adequately identified, and no such charge is invalid by reason only that it does not name the owner, master, pilot in command or person in charge, as the case may be, of the ship or aircraft.
- Proof of offences. 33.-(1) In any prosecution of an offence under this Act, it is sufficient proof of the offence to establish that it was committed by an employee or agent of the accused, whether or not the employee or agent is identified or prosecuted for the offence.
- (2) In any prosecution of the master of a ship or the pilot in command of an aircraft for an offence arising out of a contravention of Part IV, it is sufficient proof of the offence to establish that it was committed by a crew member or other person on board the ship or aircraft, whether or not the crew member or other person is identified or prosecuted for the offence.
- (3) No person shall, by virtue of this section, be found guilty of an offence under section 29 if that person establishes that the offence was committed without his knowledge or consent and that he took all due diligence to prevent its commission.

34.-(1) Where an offender is convicted of an offence under this Act, the court may suspend the passing of sentence and may, having regard to the nature of the offence and the circumstances surrounding its commission, make an order under section 35.

Suspended sentence.

(2) Where the passing of sentence has been suspended under section (1), and the offender contravenes or fails to comply with an order made under section 35, or is convicted of an offence under this Act, the prosecutor may apply to the court to impose any sentence that could have been imposed if the passing of sentence had not been suspended.

35.-(1) Where an offender has been convicted of an offence under this Act, in addition to any other punishment that may be imposed under this Act, the court may, having regard to the nature of the offence and the circumstances surrounding its commission, make an order having any or all of the following effects-

Order of court.

- (a) prohibiting the offender from doing any act or engaging in any activity that may result in the continuation or repetition of the offence;
- (b) directing the offender to take such action as the Court considers appropriate to remedy or avoid any harm to the environment that results or may result from the act or omission that constituted the offence;
- (c) directing the offender to publish, in the manner prescribed, the facts relating to the conviction;
- (d) directing the offender to notify, at the offender's own cost and in the manner prescribed, any person aggrieved or affected by the offender's conduct, of the facts relating to the conviction;
- (e) directing the offender to post such bond or pay such amount of money into court as will ensure compliance with any order made

pursuant to this section;

- (f) directing the offender to submit to the Department, on application made by it within three years after the date of conviction, such information with respect to the activities of the offender as the Court considers appropriate and just in the circumstances;
- (g) directing the offender to compensate the Department, in whole or part, for the cost of any remedial or preventive action taken by or caused to be taken on behalf of the Department as a result of the act or omission that constituted the offence;
- (h) directing the offender to perform community service, subject to such reasonable conditions as may be imposed therein;
- (i) requiring the offender to comply with such other reasonable conditions as the court considers appropriate and just in the circumstances for securing the offender's good conduct and for preventing the offender from repeating the same offence or committing other offences.

(2) Where an offender fails to comply with an order made under subsection (1) (c) directing the publication of the facts relating to the offence, the Department may publish the facts in compliance with the order and recover the costs of publication from the offender.

(3) Where the court makes an order under subsection (1) (g) directing an offender to pay costs or the Department incurs publication costs under subsection (2), the costs constitute a debt due to the Government of Belize and may be recovered as such in any court of competent jurisdiction.

(4) An order made under subsection (1) comes into force on the day on which it is made or on such other day as the court may determine and

shall not continue in force for more than three years after that day.

36. Where an offender has been convicted of an offence under this Act, the Court may, where it is satisfied that as a result of the commission of the offence the offender acquired any monetary benefits or that monetary benefits accrued to the offender, order the offender to pay, notwithstanding the maximum amount of any fine that may otherwise be imposed under this Act, an additional fine in an amount equal to the court's estimation of the amount of those monetary benefits.

Additional fine.

37.-(1) Where an offender has been convicted of an offence under this Act, the Court may, at the time of passing the sentence and on the application of the person aggrieved, order the offender to pay to that person an amount by way of satisfaction or compensation for loss of or damage to property suffered by that person as a result of the commission of the offence.

Compensation for loss of property.

(2) Where an amount that is ordered to be paid under subsection (1) is not paid forthwith, the applicant may, by filing the order, enter as a judgment in the Court in which the trial was held, the amount ordered to be paid, and that judgment is enforceable against the offender in the same manner as if it were a judgment rendered against the offender in that Court in civil proceedings.

38. Every person who contravenes or fails to comply with an order or direction made under section 35 commits an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment.

Penalty for contravening orders of court.

39.-(1) Where, on the application of the Department, it appears to the Supreme Court that a person has done, or is about to do, or is likely to do, any act or thing constituted or directed toward the commission of an offence under this Act, the Court may issue an injunction ordering any person named in the application-

Injunction.

(a) to refrain from doing any act or thing that it appears to the

Court may constitute or be directed towards the commission of an offence under this Act; or

- (b) to do any act or thing that it appears to the Court may prevent the commission of an offence under this Act.

(2) No injunction shall issue under subsection (1) unless forty-eight hours notice is given to the party or parties named in the application or the urgency of the situation is such that service of notice would not be in the public interest.

Civil cause of action.

40.-(1) Any person who has suffered loss or damage as a result of conduct that is contrary to any provision of this Act or the regulations may, in a Court of competent jurisdiction, sue for and recover from the person who engaged in the conduct an amount equal to the loss or damage proved to have been suffered by the person and an amount to compensate for the costs of any investigation in connection with the matter and of proceedings under this section.

(2) Any person who suffers or is about to suffer loss or damage as a result of conduct that is contrary to any provision of this Act or the regulations may seek an injunction from the Supreme Court ordering the person engaged in the conduct-

- (a) to refrain from doing any act or thing that it appears to the Court causes or will cause the loss or damage; or
- (b) to do any act or thing that it appears to the Court prevents or will prevent the loss or damage.

(3) In any action under subsection (1) against a person, the record of proceedings in any court in which that person was convicted of an offence under this Act is, in the absence of any evidence to the contrary, proof that the person against whom the action is brought engaged in conduct that was contrary to a provisions of this Act.

41.-(1) Nothing in this Act shall prevent the prosecution of any person for an offence under any other law.

Other proceedings and remedies not affected.

(2) No civil remedy for an act or omission is suspended or affected by reason only that the act or omission is an offence under this Act and nothing in this Act shall be construed so as to repeal, remove, or reduce any remedy available to any person under any other law.

42.-(1) The Department may appoint any person to prosecute offences under this Act or any regulations made thereunder.

Leave for prosecutions.

(2) No prosecution for an offence under this Act or any regulations made thereunder shall be instituted except with the leave of the Department or of the Director of Public Prosecutions.

PART VIII

Miscellaneous

43. The Minister shall, as soon as possible after the end of each year, prepare and cause to be laid before the National Assembly a report on the administration and enforcement of this Act for that year.

Annual report.

44. The Minister may, from time to time, by Order published in the *Gazette*, amend the Schedule.

Amendment of Schedule.

45.-(1) The Minister may make regulations for the better carrying out of the provisions of this Act.

General regulations.
2 of 1998.

(2) Without prejudice to the generality of subsection (1), regulations made by the Minister may provide for-

2 of 1998.

(a) the forms for permits, licences and authorizations to be granted under this Act or under any regulations made thereunder;

- (b) the fees for permits, licences and authorizations that may be issued under this Act or any regulations made thereunder;
- (c) service of documents required to be served under this Act or any regulations made thereunder;
- (d) the designation of suitably qualified persons as authorized to carry out the functions and duties of environmental officers under this Act;
- (e) the establishment of measures for the use of economic instruments and market-based approaches for emission, trading, effluent and waste disposal fees;
- (f) standards with respect to the protection and rehabilitation of the environment and the conservation of natural resources;
- (g) requiring the filing of returns concerning any matter regulated by or under this Act;
- (h) the grant, refusal, revocation or suspension of any licence or permit that may be issued by the department and the terms, conditions or restrictions subject to which such licence or permits may be granted;
- (i) the importation, collection, storage, recycling, recovery or disposal of substances which may be hazardous to the environment;
- (j) procedures and requirements to be followed by any person or entity carrying out the exploration of land, water resources, seas or other natural resources;
- (k) the terms for enforcement notices or other orders to be made

under this Act;

- (l) prescribing categories of projects or developments which may require a permit;
- (m) standards and codes of practices with respect to the protection and rehabilitation of the environment and the conservation of natural resources;
- (n) the discharge of wastes generally, and fees payable in relation thereto;
- (o) the fees or charges payable to the Department for services rendered by the Department in carrying out the provisions of this Act;
- (p) prohibition or regulation of the open-burning of refuse or other combustible matter;
- (q) prohibition of the use of any equipment, facility, vehicle or boat capable of causing pollution or regulating the construction, installation or operation thereof so as to prevent or minimize pollution; and
- (r) any other matter which the Minister deems necessary to be dealt with by way of regulations.

PART IX

2 of 1998.

Averments and Proof of Documents in Proceedings under this Act

46. Notwithstanding the provisions of the Interpretation Act, regulations made under this Act may provide that the contravention or breach thereof shall be Penalties.
CAP. 1.

punishable on summary conviction by a fine not exceeding twenty thousand dollars or a term of imprisonment not exceeding ten years or by both such fine and imprisonment.

Proof of documents.

47.-(1) In all proceedings in which any notice, order or other document required or authorized to be given or served under this Act has to be proved, the defendant shall be deemed to have received notice to produce it, and until the contrary is shown, that document and its due giving or service may be sufficiently proved by the production of what purports to be a copy, bearing a certificate under the hand of the person authorized to issue the original, stating that it was given or served on the date specified in the certificate.

(2) The validity of any notice, order other document or of its giving or service shall not be affected by an error, misdescription or irregularity which-

(a) is not calculated to mislead; and

(b) in fact does not mislead.

Averment of occupation or control.

48. In a prosecution for an offence under this Act or any regulations made thereunder, an averment in the complaint or to the effect that-

(a) a person was the occupier, or in control, of any premises or of any part of any premises shall be deemed to be proven in the absence of proof to the contrary; or

(b) in any matter the subject of the complaint, a permit or licence was not granted or any other form of authorization had not been given shall be deemed to be proven in the absence of proof to the contrary.

Statement to be evidence of authority.

49. A statement in writing purporting to be signed by the Department-

(a) to the effect that a specified person has been generally

appointed by the Public Service Commission, the Minister or the Department-

- (i) as an environment officer;
 - (ii) as an analyst; or
 - (iii) to institute proceedings for offences against this Act;
or
- (b) to the effect that a specified person was served with a notice under this Act and failed to comply with that notice; or
- (c) to the effect that a specified person has not been appointed by the Department as a designated officer; or
- (d) to the effect that any exemption has been granted, or any conditions have been imposed, or that any variation or revocation of any condition or exemption has been made under this Act; or
- (e) to the effect that for any specified property or person-
- (i) there was, or was not, in force a permit on a certain date or for a certain period; or
 - (ii) there was in force a permit which was subject to a specified condition, limitation or restriction; or
 - (iii) the permit relating to the property or person was suspended on a certain date or for a certain period; or
- (f) to the effect that permission of any specified kind was, or was not, granted under this Act to any specified person; or

- (g) to the effect that no exemption of any specified kind has been granted under this Act in favor of any specified person; or
- (h) to the effect that any person was or was not licensed or did or did not have a licence, permit or authorization on a certain date or for a certain period or that a licence, permit or authorization was subject to any specified conditions, limitations, or restrictions, or that a licence, permit or authorization was suspended during a certain period or that a site was or was not licensed to accept industrial waste on a certain date or for a certain period; or
- (i) a document, standard, rule, specification or method, a copy of which is attached to the statement, is a document, standard, rule, specification or method referred to in a regulation, notice, licence, or permit under this Act; or
- (j) to the effect that a document was or was not lodged with, received by, or served on, the Department,

shall be *prima facie* evidence of the matters stated therein.

Offences relating
to false
information.

50.-(1) A person commits an offence who -

- (a) intentionally or negligently provides incorrect or misleading information to, or conceals information from, the Department or a designated officer; or
- (b) intentionally or negligently provides incorrect or misleading information, or conceals information concerning the properties or hazards of industrial waste thereby endangering human life, or the environment, or adversely affecting the operation of any plant or equipment used to treat or dispose industrial waste.

(2) Any person who commits an offence under subsection (1) shall on summary conviction be liable to a fine not exceeding ten thousand dollars or two years imprisonment, or to both such fine and imprisonment.

51.-(1) Notwithstanding anything to the contrary in this Act, if -

- (a) pollutants have been or are being discharged; or
- (b) a condition of pollution is likely to arise; or
- (c) any industrial waste or potentially hazardous substance appears to have been abandoned or dumped; or
- (d) any industrial waste or potentially hazardous substance is being handled; and
- (e) a designated officer is of the opinion that there is or is likely to be imminent danger to the environment,

Special powers
of authorized
officers where
there is
imminent danger
to environment.

the designated officer may give such directions either orally or in writing within twenty-four hours, as the designated officer considers appropriate, to remove, disperse, destroy, dispose of, abate, neutralize or treat any pollutant, waste, substance, environmental hazard or noise.

(2) No matter or thing done by a designated officer or by any person under a direction given by a designated officer shall, if the matter or thing was done in good faith in the exercise of the power conferred by this section on the designated officer, subject the designated officer or that person personally to any action, liability, claim or demand whatsoever.

(3) Any person who contravenes without reasonable cause a direction given by a designated officer under subsection (1) commits an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars or to five years imprisonment, or to both such fine and imprisonment.

2 of 1998.

PART X

*Enforcement Notices and Cessation Orders*Enforcement
notices.

52. (1) If the Department is of the opinion that any person is contravening the provisions of this Act or any regulations made thereunder or is contravening any condition of any licence, permit or any condition imposed under the provisions of this Act or regulations made thereunder or is likely to contravene any such condition, the Department may serve on him an enforcement notice.

(2) An enforcement notice shall -

- (a) state the opinion of the Department in relation to the alleged contravention as provided in subsection (1);
- (b) specify the matters constituting the contravention or the matters making it likely that the contravention will arise;
- (c) specify the steps that must be taken to remedy the contravention or to remedy the matters making it likely that the contravention will arise, as the case may be; and
- (d) specify the period within which those steps must be taken.

(3) A copy of an enforcement notice shall be served-

- (a) on the owner and on the occupier of the land to which it relates; and
- (b) on any other person, including any agent of the owner, having an interest which, in the opinion of the Department, is materially affected by the notice.

(4) An enforcement notice may require-

- (a) the suspension or cancellation of any permit, licence or approval granted or issued by the Department;
- (b) the stopping or shutting down of any activity or thing either permanently or for a specified period;
- (c) the cessation of the construction or operation of any activity or thing until the Department is satisfied that the activity or thing will be constructed or operated in accordance with this Act or any regulations made thereunder;
- (d) the specification of the measures that must be taken in order to effect compliance with this Act or regulations made thereunder;
- (e) the alteration or removal of any buildings or waste; or
- (f) any activity on the land not to be carried on, or to be carried on, only to the extent specified in the notice.

(5) The Department may in the enforcement notice, order the immediate cessation of the offending activity if it is of the opinion that the circumstances giving rise to the notice are such as to warrant an order to that effect.

53.-(1) The Department may withdraw an enforcement notice if the person on whom the enforcement notice has been served consents in writing to comply with the requirements set out in the notice.

Variation or
withdrawal of
enforcement
notice.

(2) The powers conferred by subsection (1) may be exercised whether or not the notice has taken effect.

(3) The Department shall, immediately after exercising the powers conferred by subsection (1), give notice of the exercise to every person who has been served with a copy of the enforcement notice or would, if the notice

were re-issued, be served with a copy of the notice.

(4) The withdrawal of an enforcement notice does not affect the power of the Department to issue a further enforcement notice.

Appeal against an enforcement notice.

54.-(1) A person on whom an enforcement notice is served, or any other person having an interest in the land affected may, at any time before the date specified in the notice as the date on which it is to take effect, appeal to the Supreme Court against the notice on any of the following grounds-

- (a) that, in respect of any breach of this Act or regulations made thereunder, which may be constituted by the matters stated in the notice or, as the case may be, the condition or limitation concerned, have been discharged;
- (b) that those matters have not occurred;
- (c) that those matters (if they occurred) do not constitute a breach of the Act or regulations;
- (d) that copies of the enforcement notice were not served as required by section 52 of this Act;
- (e) that the steps required by the notice to be taken, or the activities required by the notice to cease, exceed what is necessary to remedy any breach of this Act which may be constituted by those matters or, as the case may be, to remedy any injury to any amenity which has been caused by any such breach.

(2) Where an appeal is made against an enforcement notice in which the cessation of an activity is ordered, the notice shall remain in force pending the final determination or withdrawal of the appeal.

55.-(1) Where, at any time after the end of the period for compliance with an enforcement notice, any step required by the notice to be taken has not been taken or any activity required by the notice to cease is being carried on, the person who is then the owner or occupier of the property is in breach of the notice.

Offence where enforcement notice not complied with.

(2) Where the owner or occupier of the property is in breach of the notice, he commits an offence and is liable on summary conviction to a fine not exceeding twenty five thousand dollars or to five years imprisonment, or to both such fine and term imprisonment.

(3) In proceedings against any person for an offence under subsection (2), it shall be a defence for him to show that he did everything he could be expected to do to secure compliance with the notice.

(4) A person who has control of, or an interest in, the land to which an enforcement notice relates (other than the owner) shall not carry on any activity which is required by the notice to cease or permit such an activity to be carried on.

(5) A person who, at any time before the end of the period for compliance with the notice, contravenes subsection (4), commits an offence and is liable to a fine not exceeding twenty thousand dollars or to five years imprisonment, or both such fine and imprisonment, and if the offence is continued, he commits a further offence and is liable to a fine of five thousand dollars for every day the offence continues.

(6) An offence under subsection (2) or (5) may be charged by reference to any day or longer period of time and a person may be convicted of a second or subsequent offence under the subsection in question by reference to any period of time following the preceding conviction of such an offence.

56. A designated officer may arrest, with or without a warrant, any person who contravenes or is suspected on reasonable grounds of contravening or

Arrest of person.

having contravened any provision of this Act or any regulations made thereunder; provided that any person arrested under this section by a designated officer shall as soon as practicable be handed over by him to a police officer or taken by him to a police station.

Penalty.

57.-(1) Any person suspected on reasonable grounds of having contravened, or of being about to contravene, a provision of this Act or any regulations made thereunder shall, upon being requested so to do by a designated officer correctly state his name and address and if he fails to do so, he commits an offence.

(2) Any person who commits an offence under subsection (1) shall be liable on summary conviction to fine not exceeding five thousand dollars or to one year imprisonment, or to both such fine and imprisonment.

Cessation order.

58.-(1) Where a person fails to carry out an environmental impact assessment as required under this Act or any regulations made thereunder or fails to comply with the provisions of section 16, the Department may issue an order in writing to such person directing him to cease, by such date as shall be specified in the order, the activity in respect of which the permit or environmental impact assessment, as the case may be, is required.

(2) Where the person to whom an order is issued under subsection (1) fails to take such steps as he considers appropriate to ensure the cessation of the activity to which the order relates, he commits an offence and is liable on summary conviction to a fine not exceeding twenty-five thousand dollars or to imprisonment for a term of not less than five years and not exceeding eight years, or to both such fine and term of imprisonment.

Limitation period.

59. A prosecution for an offence under this Act or any regulations made thereunder may be commenced within two years after the commission of the offence or within two years after the Department becomes aware of the offence, whichever is the later.

SCHEDULE

[Sections 2 and 17]

PART I

List of Hazardous Substances

Subpart A

1. Organohalogen compounds.
2. Mercury and mercury compounds.
3. Cadmium and cadmium compounds.
4. Persistent plastics and other persistent synthetic materials.
5. Crude oil and its wastes, refined petroleum products, petroleum distillate residues and any mixtures containing any of those substances.
6. High-level radioactive wastes or other high-level radio active matter that may be prescribed.
7. Substances in whatever form, produced for biological and chemical warfare.

Subpart B

1. Arsenic and its compounds.
2. Lead and its compounds.
3. Copper and its compounds.

4. Zinc and its compounds.
5. Organosilicon compounds.
6. Cyanides.
7. Fluorides.
8. Pesticides and their by-products not included in the List of Hazardous Substances in Part I, subpart A.
9. Beryllium and its compounds.
10. Chromium and its compounds.
11. Nickel and its compounds.
12. Vanadium and its compounds.
13. Containers and scrap metal.
14. Radioactive wastes or other radioactive matter not included in the List of Hazardous Substances in Part I, subpart A.
15. Substances that by reason of their bulk would interfere with fishing.
16. Substances that, though of a non-toxic nature, may become harmful due to the quantities in which they are dumped, or that are liable to seriously reduce amenities.

PART II
[Section 17]
List of Factors

1. *Characteristics and Composition of Substance*
 - (1) Total amount and average composition of substance dumped (e.g., per year).
 - (2) Form (e.g., solid, sludge, liquid or gaseous).
 - (3) Properties: physical (e.g., solubility and density), chemical and biochemical (e.g., oxygen demand and nutrients) and biological (e.g., presence of viruses, bacteria, yeasts and parasites).
 - (4) Toxicity.
 - (5) Persistence: physical, chemical and biological.
 - (6) Accumulation and biotransformation in biological materials or sediments.
 - (7) Susceptibility to physical, chemical and biochemical changes and interaction in the aquatic environment with other dissolved organic and inorganic materials.
 - (8) Probability of production of taints or other changes reducing marketability of resources (fish and shellfish).
2. *Characteristics of Dumping Site and Method of Deposit*
 - (1) Location (e.g., coordinates of the dumping site, depth and distance from the coast) and location in relation to other areas (e.g., amenity areas, spawning, nursery and fishing areas and exploitable resources).

- (2) Rate of disposal per specific period (e.g., quantity per day, per week, per month).
- (3) Methods of packaging and containment, if any.
- (4) Initial dilution achieved by proposed method of release.
- (5) Dispersal characteristics (e.g., effects of currents, tides and winds on horizontal transport and vertical mixing).
- (6) Water characteristics (e.g., temperature, pH, salinity, stratification, oxygen indices of pollution - dissolved oxygen (DO), chemical oxygen demand (COD), biochemical oxygen demand (BOD) - nitrogen present in organic and mineral form including ammonia, suspended matter, other nutrients and productivity).
- (7) Bottom characteristics (e.g., topography, geochemical and geological characteristics and biological productivity).
- (8) Existence and effects of other dumpings that have been made in dumping site (e.g., heavy metal background reading and organic carbon content.)
- (9) Whether an adequate scientific basis exists for assessing the consequence of dumping, as outlined in this List, taking into account seasonal variations.

3. *General Considerations and Conditions*

- (1) Possible effects on amenities (e.g., presence of floating or stranded material, turbidity, objectional odour, discoloration and foaming).
- (2) Possible effects on marine life, fish and shellfish culture, fish stocks and fisheries, seaweed harvesting and culture.

-
- (3) Possible effects on other uses of the sea (e.g., impairment of water quality for industrial use, underwater corrosion of structures, interference with ship operations from floating substances, interference with fishing or navigation through deposit of waste or solid objects on the sea floor and protection of areas as of special importance for scientific or conservation purposes).
- (4) The practical availability of alternative land based methods of treatment, disposal or elimination, or of treatment to render the substance less harmful for dumping at sea.
-