

ENVIRONMENTAL REGULATION

This site is designed to provide quick information related to environmental regulation, such as in industrial effluent treatment system. We hope to bring about awareness to industry management the legislative requirement of Malaysia's government in issues such as notification, performance monitoring, competent person and etc. For more information, please refer to the website of Department of Environment Malaysia at <http://www.doe.gov.my>.

Environmental Quality (Industrial Effluent) Regulations 2009

Regulation 3

Application

These regulations shall apply to any premises which discharge or release industrial effluent or mixed effluent, onto or into any soil, or into inland waters or Malaysian waters, other than the premises as specified in the First Schedule.

Regulation 4

Obligation to notify the Director General

- (1) No person shall, without prior written notification to the Director General –
 - (a) carry out any work on any premises that may result in a new source of discharge of industrial effluent or mixed effluent;
 - (b) construct on any land, building or facility designed or used for a purpose that may cause the land or building or facility to result in a new source of discharge of industrial effluent or mixed effluent;
 - (c) make or cause or permit to be made any change of, to, or in any plant, machine, or equipment used or installed at the premises that causes a material change in the quantity or quality of the discharge or release from an existing source; or
 - (d) carry out upgrading work of an existing industrial effluent treatment system that may result in a material change in the quantity or quality of the discharge or release.
- (2) The written notification to carry out any work, construction, or upgrading, or to make any change referred to in subregulation (1) shall be submitted to the Director General in the form as specified in the Second Schedule within thirty days before the work or construction or upgrading commences.

Regulation 5

Design and Construction of Industrial Effluent Treatment System

- (1) An owner or occupier of a premises shall conduct any design and construction of the industrial effluent treatment system to collect and treat the industrial effluent or mixed effluent generated within the premises in strict compliance with the specifications as specified in the Guidance Document on the Design and Operation of Industrial Effluent Treatment System issued by the Department of Environment.
- (2) An owner or occupier of the premises shall appoint a professional engineer to undertake the design and supervision of the construction of the industrial effluent treatment system and the work performed shall meet the satisfaction of the Director General.
- (3) An owner or occupier of the premises and the professional engineer referred to in subregulation (2) shall provide a written declaration, in a form as specified in the Third Schedule, certifying that the design and construction of the industrial effluent treatment system have complied with the specifications referred to in subregulation (1).
- (4) As-built drawings that show the placement of any works or structures that form part of the industrial effluent treatment system shall be submitted to the Director General not later than thirty days from the date the premises commences operation.
- (5) In this regulation, “as-built drawings” means any engineering drawing that shows the placement of facilities as measured after a work is completed.

Regulation 6

Compliance with Specifications of Industrial Effluent Treatment System

- (1) No person shall operate any industrial effluent treatment system unless it complies with the specifications as specified in subregulation 5(1).
- (2) The Director General may issue a directive to the owner or occupier of a premises who does not comply with subregulation (1) requiring him to repair, alter, replace or install any additional equipment or instruments or to conduct performance monitoring of industrial effluent treatment system at his own expenses, in any manner as the Director General may determine in such directive.

Regulation 7

Monitoring of Discharge of Industrial Effluent or Mixed Effluent

- (1) An owner or occupier of a premises that discharges industrial effluent or mixed effluent onto or into any soil, or into any inland waters or Malaysian waters shall, at his own expense –
 - (a) monitor the concentration of chemical oxygen demand (COD) and any parameter as specified in the Fifth Schedule; and
 - (b) install flow-meters, sampling, monitoring and recording equipment.
- (2) The owner or occupier of the premises shall maintain a record of industrial effluent or mixed effluent discharge monitoring data in the form as specified in the Tenth Schedule.
- (3) The owner or occupier of the premises shall submit the first record of industrial effluent or mixed effluent discharge monitoring data to the Director General within thirty days after the day of coming into operation of these Regulations and the subsequent records shall be submitted within thirty days after the end of the calendar month for the report of the previous month.
- (4) The record of industrial effluent or mixed effluent discharge shall also be made available for inspection by any authorized officer.

Regulation 8

Proper Operation of Industrial Effluent Treatment System

- (1) An owner or occupier of a premise shall operate and maintain industrial effluent treatment system in accordance with sound engineering practice for the treatment of the industrial effluent or mixed effluent and ensure that all components of the industrial effluent treatment system are in good working condition.
- (2) In this regulation, “sound engineering practice” means the manner by which effluent treatment system is operated where the operational characteristics are maintained within the normal range of values commonly used for the treatment of industrial effluent or mixed effluent.

Regulation 9

Performance Monitoring of Effluent Treatment System

- (1) An owner or occupier of a premise shall –
 - (a) conduct performance monitoring of the components of the effluent treatment system in the manner as specified in the Guidance Document on Performance Monitoring of Industrial Effluent Treatment Systems issued by Department of Environment; and
 - (b) equip himself or itself with facilities, relevant equipment or instruments for the purpose of conducting performance monitoring referred to in paragraph (a).
- (2) In this regulation, “performance monitoring” means the routine monitoring of certain characteristics to provide an indication that a treatment process is functional and capable of treating the industrial effluent or mixed effluent.

Regulation 10

Competent Person

- (1) The operation of an industrial effluent treatment system shall be supervised by a competent person.
- (2) A competent person shall be any person who has been certified by the Director General that he is duly qualified to supervise the operation of an industrial effluent treatment system.
- (3) An owner or occupier of a premise shall ensure that a competent person is on duty at any time the industrial effluent treatment system is in operation.

Regulation 11

Acceptable Conditions for the Discharge of Industrial Effluent Other Than Parameter of Chemical Oxygen Demand (COD)

- (1) No person shall discharge industrial effluent which contains any parameter in concentration greater than the limits of –
 - (a) Standard A, as shown in the third column of the Fifth Schedule, into any inland waters within the catchment areas as specified in the Sixth Schedule; or

(b) Standard B, as shown in the fourth column of the Fifth Schedule, into any other inland waters or Malaysian waters.

(2) Where two or more of the metals specified as parameter (xii) to (xvi) as specified in the Fifth Schedule, pursuant to subregulation (1), are present in the industrial effluent or mixed effluent, the concentration of these metals shall not be greater than –

(a) 0.5 milligrammes per litre in total, where Standard A is applicable; or

(b) 3.0 milligrammes per litre in total, and 1.0 milligramme per litre in total for soluble forms, where Standard B is applicable.

(3) Where Standard B is applicable and when both phenol and free chlorine are present in the same industrial effluent, the concentration of phenol individually, shall not be greater than 0.2 milligrammes per litre and the concentration of free chlorine individually, shall not be greater than 1 milligramme per litre.

Regulation 12

Acceptable Conditions for the Discharge of Industrial Effluent for Parameter of Chemical Oxygen Demand (COD)

In relation to any trade or industry as specified in the Seventh Schedule, no person shall discharge industrial effluent which contains COD in concentration greater than the limits of –

(a) Standard A, as shown in the third column of the Seventh Schedule, into any inland waters within the catchment areas as specified in the Sixth Schedule; or

(b) Standard B, as shown in the fourth column of the Seventh Schedule, into any other inland waters or Malaysian waters.

Regulation 13

Acceptable Conditions for the Discharge of Mixed Effluent for Parameter of Chemical Oxygen Demand (COD)

No person shall discharge mixed effluent which contains COD in concentration greater than the limits of –

- (a) Standard A, as shown in the second column of the Eighth Schedule, into any inland waters within the catchment areas as specified in the Sixth Schedule; or
- (b) Standard B, as shown in the third column of the Eighth Schedule, into any other inland waters or Malaysian waters.

Regulation 14

Best Management Practice for the Discharge of Industrial Effluent or Mixed Effluent for Other Parameters

An owner or occupier of a premise shall adopt the best management practice for discharge of any industrial effluent or mixed effluent for any parameter as specified in the Ninth Schedule.

Regulation 15

License to Contravene the Acceptable Conditions for the Discharge of Industrial Effluent or Mixed Effluent

- (1) Any person may apply for a license under subsection 25(1) of the Act to contravene the acceptable conditions of discharge of industrial effluent or mixed effluent as specified in regulations 11, 12 and 13.
- (2) An application for a license shall be made in accordance with the procedures as specified in the Environmental Quality (Licensing) Regulations 1977 and shall be accompanied by –
 - (a) a report on industrial effluent characterization study in a format as specified in the Guidance Document on Industrial Effluent Characterization Study issued by Department of Environment; and
 - (b) a license and effluent-related license fee as specified in regulation 31.

Regulation 16

Methods of Analysis and Sampling of Industrial Effluent or Mixed Effluent

- (1) An authorized officer may carry out an in-situ or ex-situ analysis of industrial effluent or mixed effluent using any instruments approved by the Director General.

- (2) An analysis of any industrial effluent or mixed effluent discharged or released onto or into any soil, or into any inland waters or Malaysian waters shall be carried out in accordance with the methods contained in the publications as specified in the Fourth Schedule.
- (3) The analysis of the industrial effluent or mixed effluent referred to in subregulation (1) shall be based on grab samples.
- (4) In this regulation –
 - (a) “ex-situ analysis” means the analysis conducted on an industrial effluent or mixed effluent sample that has been removed from its location and conducted at the different site from the site the sample was taken;
 - (b) “in-situ analysis” means the analysis conducted on an industrial effluent or mixed effluent sample that has not been removed from its location or conducted at the site where the sample was taken; and
 - (c) “grab sample” means a discrete individual sample taken within a period of time of less than fifteen minutes.

Regulation 17

Point of Discharge of Industrial Effluent or Mixed Effluent

- (1) The point of discharge of industrial effluent or mixed effluent shall comply with the specifications as specified in the Eleventh Schedule and shall be clearly indicated by the owner or occupier of a premise on the layout plans or engineering drawings certified by a professional engineer.
- (2) An owner or occupier of the premises shall submit to the Director General the layout plans or engineering drawings referred to in subregulation (1) thirty days before the premises commence operation.
- (3) Where an owner or occupier of the premises proposes to make any alteration or change to the location or position of the point of discharge or design of the outlet at the point of discharge of industrial effluent or mixed effluent, he or it shall notify the Director General within thirty days prior to the making of such alteration or change.

Regulation 18

Prohibition against Industrial Effluent or Mixed Effluent Discharge through By-Pass

- (1) No person shall discharge or cause or permit to be discharged any industrial effluent or mixed effluent onto or into any soil, or into any inland waters or Malaysian waters through a by-pass.
- (2) In this regulation, “by-pass” means any diversion of industrial effluent or mixed effluent from any portion of an industrial effluent treatment system.

Regulation 19

Dilution of Industrial Effluent or Mixed Effluent

- (1) No person shall dilute, or cause or permit to be diluted, any industrial effluent or mixed effluent, whether raw or treated at any time or point after it is produced at any premises.
- (2) Industrial effluent or mixed effluent becomes diluted when it undergoes a process to make it less concentrated by adding water or other liquids from external sources other than liquids or materials used for treating the industrial effluent or mixed effluent.

Regulation 20

Spill, Accidental Discharge or Leakage of Industrial Effluent or Mixed Effluent

- (1) In the event of the occurrence of any spill, accidental discharge or leakage of any industrial effluent or mixed effluent which either directly or indirectly gains or may gain access onto or into any soil, or into any inland waters or Malaysian waters, the owner or occupier of the premises shall immediately and not more than six hours from the time of the occurrence inform the Director General of the occurrence.
- (2) An owner or occupier of the premises shall, to every reasonable extent, contain, cleanse or abate the spill, accidental discharge or leakage or recover the industrial effluent or mixed effluent discharged in a manner that satisfies the Director General.
- (3) The Director General may in any particular case, if he considers it necessary to do so, specify the manner in which the spill, accidental discharge or leakage is to be contained, cleansed or abated and the owner or occupier of the premises shall comply with such specification.

- (4) The Director General shall determine any damage caused by any spill, accidental discharge or leakage and may recover all costs and expenses from the owner or occupier of the premises.
- (5) Where the Director General undertakes to cleanse or abate the spill, accidental discharge or leakage, he shall determine the full costs and expenses incurred and may recover such costs and expenses from the owner or occupier of the premises in accordance with the provisions of section 47 of the Act.

Regulation 21

Prohibition against Discharge of Industrial Effluent or Mixed Effluent Containing Certain Substances

No person shall discharge or cause or permit the discharge of any industrial effluent or mixed effluent containing any of the following substances onto or into any soil, or into any inland waters or Malaysian waters:

- (a) any inflammable solvent;
- (b) any tar or other liquids immiscible with water;
- (c) sawdust or wood waste; or
- (d) sludges

Regulation 22

Making Changes that Alter Quality of Industrial Effluent or Mixed Effluent

- (1) The holder of a license shall not make, or cause or permit to be made, any changes to the premises or in the manner of running, using, maintaining or operating the premises or in any operation or process carried out at the premises, which cause, or is intended or is likely to cause, a material increase in the quantity or quality of industrial effluent or mixed effluent, or both discharges from the premises, unless prior written permission of the Director General has been obtained for the change.
- (2) For the purpose of subregulation (1), changes to licensed premises include –
 - (a) any change in the construction, structure or arrangement of the premises or any building serving the premises;

(b) any change in the construction, structure, arrangement, alignment, direction or condition of any channeling device, system or facility serving the premises; and

(c) any change of, to, or in any plant, machine or equipment used or installed at the premises.

Regulation 23

Restriction on Discharge or Disposal of Sludge

(1) No person shall discharge, or cause or permit the discharge or disposal of any sludge generated from any production or manufacturing process, any industrial effluent treatment system or water treatment plant onto or into any soil, or surface of any land, or into any inland waters or Malaysian waters without the prior written permission of the Director General.

(2) In this regulation, “water treatment plant” means any facility used or constructed for the treatment of water for domestic or industrial purpose.

Regulation 24

Reporting Changes in Information Furnished for Purpose of Application of License

An applicant for a license or for the renewal or transfer of such license shall, within seven days of the occurrence of any material change in any information furnished in his application or furnished in writing pursuant to a request by the Director General under subsection 11(2) of the Act, give the Director General a report in writing of the change.

Regulation 25

Display of License

The holder of a license shall display his license, together with every document forming part of the license, in a conspicuous place in the principal building of the premises.

Regulation 26

Continuance of Existing Conditions and Restrictions in Case of Change in Occupancy

Where a person becomes the occupier of any licensed premises in succession to another person who holds an unexpired license in respect of such premises, then –

- (a) for a period of fourteen days after the change in occupancy; or
- (b) where the new occupier applies within the period specified in paragraph (a) for the transfer of the license to him, for the period from the change in occupancy until the final determination of his application,

the conditions and restrictions of the license shall be binding on the new occupier and shall be observed by him, notwithstanding that he is not yet the holder of the license or that the license may, during the period as specified in paragraph (a) or (b), as the case may be, have expired.

Regulation 27

Maintenance of Record

- (1) An owner or occupier of a premise equipped with the industrial effluent treatment system shall maintain records of the manufacturing processes, operation, maintenance and performance monitoring of the industrial effluent treatment system.
- (2) The records under subregulation (1) shall be made available for inspection by the authorized officer.

Regulation 28

Personnel Training

An owner or occupier of a premise –

- (a) shall ensure that his or its employees attend training on environmental requirements and the best management practices in the operation and maintenance of industrial effluent treatment system before they begin work;
- (b) shall ensure that the training for his or its employees include retraining on updates for new, revised and existing requirements and procedures; and

- (c) shall maintain records of training which shall include the training date, name and position of employee, training provider and a brief description of the training content.

Regulation 29

Owner or Occupier to Render Assistance during Inspection

An owner or occupier of a premise shall provide the Director General or any authorized officer every reasonable assistance and facility available at the premises, including labour, equipment, appliances and instruments that the Director General or authorized officer may require for the purpose of inspection.

Regulation 30

Prohibition Order

- (1) In the event of any undesirable occurrence as listed in the Twelfth Schedule, the Director General may issue a prohibition order to an owner or the occupier of a premise prohibiting the further operation of an industrial plant or process absolutely or conditionally for such period as the Director General may direct or until remedial measures as directed by the Director General have been complied with.
- (2) For the purpose of subregulation (1), a copy of the Director General's prohibition order shall be posted in a conspicuous place in the vicinity of the facility to which the said prohibition order refers and no person shall operate such industrial plant or process with effect from the date of the prohibition order until the prohibition order is withdrawn.
- (3) Where a prohibition order has been issued to an owner or occupier of any premises prohibiting the further operation of an industrial plant or process, the Director General or any authorized officer shall render such industrial plant or process inoperative by any means as the Director General or authorized officer may determine.

Regulation 31

License Fee

- (1) The fee for a license shall be five hundred ringgit and an additional effluent-related license fee computed in accordance with the method as specified in the Thirteenth Schedule.

- (2) The fee for a license and the additional effluent-related license shall accompany the application.
- (3) If the Director General refuses to approve the application for a license, only the effluent-related license fee shall be refunded.
- (4) The fee for transfer of license shall be one hundred ringgit.

Regulation 32

Penalty

Any person who contravenes regulations 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29 and 30 shall be guilty of an offence and shall, on conviction, be liable to a fine not exceeding one hundred thousand ringgit or to a term of imprisonment for a period not exceeding five years or to both and to a further fine not exceeding one thousand ringgit a day for every day that the offence is continued after the notice by the Director General requiring him to cease the act as specified in the notice has been served upon him.

Regulation 33

Revocation, Transitional and Savings Provision

- (1) The Environmental Quality (Sewage and Industrial Effluents) Regulations 1979 is revoked (hereinafter referred to as “the revoked Regulations”).
- (2) Any application made under this revoked Regulations for a license for contravene the acceptable conditions, renewal or transfer of such license, or written permission, which are pending immediately before the date of the coming into operation of these Regulations shall, after the date of the coming into operation of these Regulations, be dealt with under the revoked Regulations and for such purposes it shall be treated as if these Regulation have not been made.
- (3) All licenses issued and written permission granted under the revoked Regulations shall, after the date of the coming into operation of these Regulations, continue to remain in full force and effect until the license expires, is amended, suspended or cancelled or the written permission expires or is revoked under the revoked Regulations and for such purposes it shall be treated as if these Regulation have not been made.

- (4) The provisions of the revoked Regulations relating to the acceptable conditions for discharge of effluent shall continue to apply until twelve months after the date of the coming into operation of these Regulations where on the date of the coming into operation of these Regulations –
- (a) any work on any construction of any industrial effluent treatment system has not commenced within twelve months from date of the issuance of the written permission for its construction immediately before the date of the coming into operation of these Regulation;
 - (b) any work on any construction of any industrial effluent treatment system has commenced but has not been completed immediately before the date of the coming into operation of these Regulations; or
 - (c) any work on any construction of any industrial effluent treatment system has been completed but has not begun its operation before the date of the coming into operation of these Regulations.
- (5) Where on the date of the coming into operation of these Regulations, any premises is discharging industrial effluent or mixed effluent into any inland waters which is not specified as a catchment area under the revoked Regulations immediately before the date of the coming into operation of these Regulations, the provisions of the revoked Regulations relating to acceptable conditions for discharge of effluent shall continue to apply to such effluent until twelve months after the date of the coming into operation of these Regulations.
- (6) Any proceeding, whether civil or criminal, commenced under the revoked Regulations and are pending on the date of the coming into operation of these Regulations shall, on the date of the coming into operation of these Regulations, be continued and concluded under the revoked Regulations and for such purposes it shall be treated as if these Regulation have not been made.

FIRST SCHEDULE

(Regulation 3)

LIST OF PREMISES TO WHICH THESE REGULATIONS DO NOT APPLY

1. Processing of oil-palm fruit or oil-palm fresh fruit bunches into crude palm oil, whether as an intermediate or final product
2. Processing of natural rubber in technically specified form, latex form including prevulcanised or the form of modified and special purpose rubber, conventional sheet, skim, crepe or scrap rubber
3. Mining activities
4. Processing, manufacturing, washing or servicing of any other products or goods that produce industrial effluent or mixed effluent of less than 60 cubic meters per day
5. Processing, manufacturing, washing or servicing of any other products or goods that produce industrial effluent or mixed effluent of which does not contain oil and grease or those contaminants listed as parameters (v) to (xv) in the first column of the Fifth Schedule
6. Processing, manufacturing, washing or servicing of any other products or goods where the total load of biochemical oxygen demand (BOD₅ at 20°C) or suspended solids or both, shall not exceed 6 kilogrammes per day (concentration of 100 milligrammes per litre)

FOURTH SCHEDULE

[Subregulation 16(2)]

METHODS OF ANALYSIS OF INDUSTRIAL EFFLUENT OR MIXED EFFLUENT

1. The 21st edition of “Standard Methods for the Examination of Water and Wastewater” published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation of the United States of America; or
2. “Code of Federal Regulations, Title 40, Chapter 1, Subchapter D, part 136” published by the Office of the Federal Register, National Archives and Records Administration, United States of America.

FIFTH SCHEDULE

[Subregulation 11(1), 11(2), 11(3)]

ACCEPTABLE CONDITIONS FOR DISCHARGE OF INDUSTRIAL EFFLUENT OR MIXED EFFLUENT OF STANDARDS A AND B

Parameter	Unit	Standard	
		A	B
(1)	(2)	(3)	(4)
(i) Temperature	°C	40	40
(ii) pH Value	-	6.0-9.0	5.5-9.0
(iii) BOD ₅ at 20°C	mg/L	20	50
(iv) Suspended Solids	mg/L	50	100
(v) Mercury	mg/L	0.005	0.05
(vi) Cadmium	mg/L	0.01	0.02
(vii) Chromium, Hexavalent	mg/L	0.05	0.05
(viii) Chromium, Trivalent	mg/L	0.20	1.0
(ix) Arsenic	mg/L	0.05	0.10
(x) Cyanide	mg/L	0.05	0.10
(xi) Lead	mg/L	0.10	0.5
(xii) Copper	mg/L	0.20	1.0
(xiii) Manganese	mg/L	0.20	1.0
(xiv) Nickel	mg/L	0.20	1.0
(xv) Tin	mg/L	0.20	1.0
(xvi) Zinc	mg/L	2.0	2.0
(xvii) Boron	mg/L	1.0	4.0
(xviii) Iron (Fe)	mg/L	1.0	5.0
(xix) Silver	mg/L	0.1	1.0
(xx) Aluminium	mg/L	10	15
(xxi) Selenium	mg/L	0.02	0.5
(xxii) Barium	mg/L	1.0	2.0
(xxiii) Fluoride	mg/L	2.0	5.0
(xxiv) Formaldehyde	mg/L	1.0	2.0
(xxv) Phenol	mg/L	0.001	1.0
(xxvi) Free Chlorine	mg/L	1.0	2.0
(xxvii) Sulphide	mg/L	0.50	0.50
(xxviii) Oil and Grease	mg/L	1.0	10
(xxix) Ammoniacal Nitrogen	mg/L	10	20
(xxx) Colour	ADMI*	100	200

*ADMI-American Dye Manufacturers Institute

SEVENTH SCHEDULE

(Regulation 12)

ACCEPTABLE CONDITIONS FOR DISCHARGE OF INDUSTRIAL EFFLUENT CONTAINING CHEMICAL OXYGEN DEMAND (COD) FOR SPECIFIC TRADE OR INDUSTRY SECTOR

(1) Trade/Industry	(2) Unit	(3) Standard A	(4) Standard B
(a) Pulp and paper industry			
(i) pulp mill	mg/L	80	350
(ii) paper mill (recycled)	mg/L	80	250
(iii) pulp and paper mill	mg/L	80	300
(b) Textile industry	mg/L	80	250
(c) Fermentation and distillery industry	mg/L	400	400
(d) Other industries	mg/L	80	200

EIGHTH SCHEDULE

(Regulation 13)

ACCEPTABLE CONDITIONS FOR DISCHARGE OF MIXED EFFLUENT CONTAINING CHEMICAL OXYGEN DEMAND (COD)

(1) Unit	(2) Standard A	(3) Standard B
mg/L	80	200

NINTH SCHEDULE

(Regulation 14)

LIST OF PARAMETERS FOR DISCHARGE OF INDUSTRIAL EFFLUENT OR MIXED EFFLUENT WHICH BEST MANAGEMENT PRACTICE TO BE ADOPTED

- (i) Nitrate Nitrogen
- (ii) Sulphate
- (iii) Chloride
- (iv) Cobalt
- (v) Detergent, Anionic
- (vi) Molybdenum
- (vii) Phosphate (as P)
- (viii) Polychlorinated Biphenyls
- (ix) Beryllium
- (x) Vanadium
- (xi) Pesticides, fungicides, herbicides, rodenticides, fumigants or any other biocides or any other chlorinated hydrocarbons
- (xii) Any substance that either by itself or in combination or by reaction with other waste may give rise to any gas, fume or odour or substance which causes or is likely to cause pollution
- (xiii) Total Organic Carbon
- (xiv) Whole Effluent Toxicity (WET)
- (xv) Dioxin
- (xvi) Endocrine disruptors

ELEVENTH SCHEDULE

[Subregulation 17(1)]

SPECIFICATIONS OF POINT OF DISCHARGE OF INDUSTRIAL EFFLUENT OR MIXED EFFLUENT

1. The discharge point is located within the boundary of the premises, immediately after the final unit operation or unit process of the industrial effluent treatment system.
2. The location of the discharge point is easily accessible and does not pose any safety hazards to personnel performing site inspection or effluent sampling.
3. The industrial effluent or mixed effluent is discharged through a pipe, conduit or channel to facilitate effluent sampling.
4. The discharge point is physically identified by installing a metal identification sign which reads “Final Discharge Point”.
5. The discharge point and its surrounding are properly maintained to be free from any obstruction that may pose difficulty or hazards during site inspection or effluent sampling.

TWELFTH SCHEDULE

[Subregulation 30(1)]

LIST OF UNDESIRABLE OCCURRENCES

1. Pollution cases that seriously threaten the environment or public health and safety which warrant immediate halt.
2. Premises that experience industrial disaster such as fire, explosion and the like which may pose serious risk to the environment or the public in the vicinity.
3. Serious environmental pollution which gives rise to frequent complaints and upon investigation, the complaints are found to be justified and the premises are flouting the directives of the Director General.
4. Premises which frequently commit similar offences despite having been subject to various legal actions by the Director General such as notices, directives, compounds or court action.
5. Pollution cases which cause negative impacts to aquatic life and there is evidence indicating that the premises do not make sufficient effort to overcome the pollution problems.
6. Serious environmental pollution with wide coverage in the mass media and there is evidence indicating that the pollution occurred as a result of absence, non-operation or malfunctioning of industrial effluent treatment system in the premises.
7. Premises which discharge untreated or partially treated industrial effluent or mixed effluent or which discharge industrial effluent or mixed effluent through a by-pass and based on measurements or analysis of industrial effluent or mixed effluent quality using in-situ methods, there is evidence indicating that the industrial effluent or mixed effluent is grossly non-compliant.

THIRTEENTH SCHEDULE

[Subregulation 31(1)]

METHOD OF COMPUTING EFFLUENT-RELATED LICENSE FEE

Parameter	Fee per kg of contaminant discharged into inland waters as specified in paragraph 11(1)(a)	Fee per kg of contaminant discharged onto any soil or into other inland waters
(i) BOD ₅ at 20°C	RM 0.50	RM 0.05
(ii) Mercury	RM 2500.00	RM 250.00
(iii) Cadmium	RM 2500.00	RM 250.00
(iv) Chromium, Hexavalent	RM 2500.00	RM 250.00
(v) Chromium, Trivalent	RM 2500.00	RM 250.00
(vi) Arsenic	RM 2500.00	RM 250.00
(vii) Cyanide	RM 2500.00	RM 250.00
(viii) Lead	RM 2500.00	RM 250.00
(ix) Copper	RM 2500.00	RM 250.00
(x) Manganese	RM 2500.00	RM 250.00
(xi) Nickel	RM 2500.00	RM 250.00
(xii) Tin	RM 2500.00	RM 250.00
(xiii) Silver	RM 2500.00	RM 250.00
(xiv) Selenium	RM 2500.00	RM 250.00
(xv) Barium	RM 2500.00	RM 250.00
(xvi) Fluoride	RM 2500.00	RM 250.00
(xvii) Formaldehyde	RM 2500.00	RM 250.00
(xviii) Zinc	RM 2500.00	RM 250.00
(xix) Boron	RM 500.00	RM 50.00
(xx) Iron	RM 500.00	RM 50.00
(xxi) Phenol	RM 500.00	RM 50.00
(xxii) Sulfide	RM 500.00	RM 50.00
(xxiii) Oil and Grease (n-hexane extract)	RM 500.00	RM 50.00
(xxiv) Ammoniacal Nitrogen	RM 500.00	RM 50.00