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# The Environment Conservation Rules, 1997

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#### **Un-official English Version**

## The Environment Conservation Rules, 1997

[Bangla text of the Rules was published in the Bangladesh Gazette, Extra-ordinary Issue of 28-8-1997 and amended by Notifications S.R.O 29-Law/2002, S.R.O 234-Law/2002 and S.R.O 88-Law/2003]

## Government of the People's Republic of Bangladesh Ministry of Environment and Forest

#### NOTIFICATION

Date, 12 Bhadra 1404/27 August 1997

- **S.R.O. No. 197-Law/97-** In exercise of the powers conferred by section 20 of the Bangladesh Environment Conservation Act, 1995 (Act 1 of 1995), the Government is pleased to make the following Rules:-
- 1. **Short Title**. These Rules may be called the Environment Conservation Rules, 1997.
- 2. <sup>1</sup>**Definitions.** In these Rules, unless there is anything contrary to the subject or context --
  - "Act" means Bangladesh Environment Conservation Act, 1995 (Act I of 1995); [Ref. clause (b)]
  - "Department" means the Department of Environment established under sub-section (1) of section 3 of the Act; [Ref. clause (a)]
  - "Form" means a form appended to these Rules; [Ref. clause (e)]
  - **"local authority"** means the City Corporation in relation to a metropolitan area, the Municipality in relation to a municipal area and the Union Parishad in relation to a rural area; [Ref. clause (g)]
  - "parameter" means the characteristics of a standard; [Ref. clause (f)]
  - **"Schedule"** means a schedule appended to these Rules; [Ref. clause (c)]
  - "section" means a section of the Act. [Ref. clause (d)].
- 3. **Declaration of Ecologically Critical Area**. (1) The Government shall take the following factors into consideration while declaring any area as Ecologically Critical Area under sub-section (1) of section 5:-
  - (a) human habitat;

<sup>&</sup>lt;sup>1</sup> The definitions are re-arranged in English alphabetical order with reference to the relevant clause of rule 2 as in the Bangla text.

- (b) ancient monument:
- (c) archeological site;
- (d) forest sanctuary;
- (e) national park;
- (f) game reserve;
- (g) wild animals habitat;
- (h) wetland;
- (i) mangrove;
- (j) forest area;
- (k) bio-diversity of the relevant area; and
- (1) other relevant factors.
- (2) The Government shall, in accordance with the standards referred to in rules 12 and 13, specify the activities or processes which can not be continued or initiated in an Ecologically Critical Area.
- <sup>1</sup> 4. **Measures relating to vehicles emitting smoke injurious to health and environment.-** (1) For the purposes of section 6 of the Act, every motor vehicle using petrol, diesel or gas as fuel shall be fitted with catalytic converter or oxidation catalyst or diesel particulate filter, or with such other instrument or device as may be approved by the Director General for ensuring that emission from the vehicle does not exceed the standards specified in schedule- 6.
- (2) If a vehicle is driven without being fitted with the apparatus specified in sub-rule (1), it shall deemed to be a vehicle emitting smoke injurious to the environment or health, and for such violation the owner or the driver of the vehicle or in an appropriate case both the owner and the driver shall be liable to the penalty specified at serial no. 3 of the Table of section 15(1).
- (3) Where a penalty is imposed under sub-rule (2), the fact of such imposition shall be recorded briefly in such document or, as the case may be, demonstrated on such conspicuous part of the vehicle, in such form and for such period, as may be specified by the Director General.
- 5. **Application relating to pollution or degradation of environment**. (1) Any person affected or likely to be affected as mentioned in sub-section (1) of section 8 may apply to the Director General in Form-1 for remedy of the damage or apprehended damage.
- (2) The Director General shall, within three months of receiving an application under sub-rule (1), dispose it of in accordance with sub-section (2) of section 8.
- 6. **Notice for collection of Sample.** An officer intending to collect a sample under sub-section (3) of section 11 shall send to the occupier of the concerned place or his agent a notice in accordance with Form-2 about his intention.

<sup>&</sup>lt;sup>1</sup> Rule 4 was substituted by MoEF Notification No. SRO 88-Law/2003 of 31<sup>st</sup> March 2003, w.e.f 1<sup>st</sup> April 2003.

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7. **Procedure for issuing Environmental Clearance Certificate**. – (1) For the purpose of issuance of Environmental Clearance Certificate, the industrial units and projects shall, in consideration of their site and impact on the environment, be classified into the following four categories:-

- (a) Green;
- (b) Orange -A;
- (c) Orange B; and
- (d) Red.
- (2) Industries and projects included in the various categories as specified in sub-rule (1) have been described in Schedule -1.
- (3) Environmental Clearance Certificate shall be issued to all existing industrial units and projects and to all proposed industrial units and projects falling in the Green Category.
- (4) For industrial units and projects falling in the Orange A, Orange B and Red categories, firstly a Location Clearance Certificate and thereafter an Environmental Clearance Certificate shall be issued:

Provided that the Director General may, without issuing a Location Clearance Certificate at the first instance, directly issue Environmental Clearance Certificate if he, on the application of an industrial unit or project, considers it appropriate to issue such certificate to the industrial unit or project.

- (5) The entrepreneur of the concerned industrial unit or project shall apply to the concerned Divisional Officer of the Department in Form-3 along with appropriate fees as specified in Schedule -13.
- (6) The following documents shall be attached with an application made under sub-rule (5):-

#### (a) For Green Category:

- (i) general information about the industrial unit or project;
- (ii) exact description of the raw materials and the manufactured product; and
- (iii) no objection certificate from the local authority;

#### (b) For Orange – A Category:

- (i) general information about the industrial unit or project;
- (ii) exact description of the raw materials and the manufactured product;
- (iii) no objection certificate from the local authority;
- (iv) process flow diagram;

- (v) Layout Plan (showing location of Effluent Treatment Plant);
- (vi) effluent discharge arrangement;
- (vii) outlines of the plan for relocation, rehabilitation (if applicable);
- (viii) other necessary information (if applicable);

#### (c) For Orange – B Category:

- (i) report on the feasibility of the industrial unit or project (applicable only for proposed industrial unit or project);
- (ii) report on the Initial Environmental Examination of the industrial unit or project, and also the process flow diagram, Layout Plan (showing location of Effluent Treatment Plant), design of the Effluent Treatment Plant (ETP) of the unit or project (these are applicable only for a proposed industrial unit or project);
- (iii) report on the Environmental Management Plan (EMP) for the industrial unit or project, and also the Process Flow Diagram, Layout Plan (showing location of Effluent Treatment Plant), design of the Effluent Treatment Plant and information about the effectiveness of the ETP of the unit or project, (these are applicable only for an existing industrial unit or project);
- (iv) no objection certificate from the local authority;
- (v) emergency plan relating adverse environmental impact and plan for mitigation of the effect of pollution;
- (vi) outline of the relocation, rehabilitation plan (where applicable):
- (vii) other necessary information (where applicable).

## (d) For Red Category:

- (i) report on the feasibility of the industrial unit or project (applicable only for proposed industrial unit or project);
- (ii) report on the Initial Environmental Examination (IEE) relating to the industrial unit or project, and also the terms of reference for the Environmental

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Impact Assessment of the unit or the project and its Process Flow Diagram;

or

Environmental Impact Assessment report prepared on the basis of terms of reference previously approved by the Department of Environment, along with the Layout Plan (showing location of Effluent Treatment Plant), Process Flow Diagram, design and time schedule of the Effluent Treatment Plant of the unit or project, (these are applicable only for a proposed industrial unit or project);

- (iii) report on the Environmental Management Plan (EMP) for the industrial unit or project, and also the Process Flow Diagram, Layout Plan (showing location of Effluent Treatment Plant), design and information about the effectiveness of the Effluent Treatment Plan of the unit or project (these are applicable only for an existing industrial unit or project);
- (iv) no objection certificate of the local authority:
- (v) emergency plan relating adverse environmental impact and plan for mitigation of the effect of pollution;
- (vi) outline of relocation, rehabilitation plan (where applicable);
- (vii) other necessary information (where applicable);
- (7) If an application for an Environmental Clearance Certificate for an industrial unit or project of Green Category is made under sub-rule (5) along with the relevant documents specified in sub-rule (6), then, within 15 days of the receipt of the application, the certificate shall be issued or the application shall be rejected mentioning appropriate reason for such rejection.
- (8) If an application is made under sub-rule (5) along with the relevant documents specified in sub-rule (6), then in the case of an Orange- A Category industrial unit or project, within thirty days of the receipt of the application, and in the case of an Orange-B or Red Category industrial unit or project, within sixty days of the receipt of the application, a Location Clearance Certificate shall be issued or the application shall be rejected mentioning appropriate reasons for such rejection.
- (9) Upon receiving Location Clearance Certificate under Sub-rule (8), the entrepreneur—
  - (a) may undertake activities for land development and infrastructure development;

 (b) may install machinery including ETP (applicable for industrial units or projects of Orange-A and Orange-B Category only);

- (c) shall apply for Environmental Clearance Certificate upon completion of the activities specified in clauses (a) and (b), and, without the Environmental Clearance Certificate, shall not have gas line connection, and shall not start trial production in the industrial unit, and in other cases shall not operate the project (applicable for Orange-A and Orange-B Category industrial units or projects only);
- (d) shall submit for approval of the Department the EIA report prepared on the basis of program outlined in IEE Report along with time schedule and ETP design (applicable only for Red Category industrial units or projects);
- (10) Where an application is received under clause (c) of sub-rule (9), Environmental Clearance Certificate shall, within fifteen working days in case of industrial unit or project of Orange-A Category and within 30 working days in case of industrial unit or project of Orange-B Category, be issued to the entrepreneur or the application shall be rejected mentioning appropriate reasons.
- (11) Where an application is received under clause (d) of sub-rule (9) in relation to an industrial unit or project of Red Category, the EIA report along with the time schedule and ETP design shall, within sixty working days, be approved or the application shall be rejected mentioning appropriate reasons;
  - (12) After EIA is approved under sub-rule (11), the entrepreneur
    - (a) may open L/C for importing machineries which shall include machineries relating to ETP; and
    - (b) shall, after installation of ETP, apply for Environmental Clearance Certificate without which he shall not have gas line connection and shall not start trial production in case of an industrial unit, and in other cases shall not start operation of the project.
- (13) Where an application under clause (a) of sub-rule (12) is received in relation to an industrial unit or project of Red Category, Environmental Clearance Certificate shall be granted to the concerned entrepreneur within thirty working days, or the application shall be rejected mentioning appropriate reasons.
- (14) Where an application is received under sub-rule (5) along with the documents specified in sub-rule (6), Environmental Clearance Certificate shall, within thirty working days in case of an industrial unit or project of Orange-A Category and within sixty working days in case of Orange-B and Red Category, be issued to the concerned entrepreneur or the application will be rejected mentioning appropriate reasons.

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<sup>1</sup>[7A. **Pollution under Control Certificate.-** Within two months after the vehicle is fitted with the apparatus specified in sub-rule (1) of rule 4 and registration and fitness certificate for the vehicle is issued, or as the case may be, within two months after the certificate is renewed, by the Bangladesh Road Transport Authority under the Motor Vehicles Ordinance, 1983 (LV of 1983), the owner of the vehicle shall obtain the "Pollution Under Control Certificate" from the Director General in accordance with Form-4.

- 7B. Restriction on importation and marketing of environmentally harmful smoke controlling apparatus.- Before importation or marketing of the apparatus mentioned in rule 4(1), the person importing or marketing, as the case may be, shall obtain written approval from the Director General by demonstrating and proving its effectiveness.]
- 8. **Validity period of Environmental Clearance Certificate.** (1) The period of validity of an Environmental Clearance Certificate shall be, in case of Green Category, three years from the date of its issuance and in other cases one year.
- (2) Each Environmental Clearance Certificate shall have to be renewed at least thirty days before expiry of its validity period.
- 9. **Appeal.** -(1) In the petition of an appeal under section 14, the grounds of the appeal against the relevant notice, order or direction shall be stated clearly and briefly.
  - (2) Each appeal shall be accompanied by the following documents:-
    - (a) a certified copy of the notice, order or direction against which appeal is filed;
    - (b) a copy of the Environmental Clearance Certificate (if any);
    - (c) a Treasury Chalan showing proof of deposit of the appeal fee of Taka one thousand; and
    - (d) any other paper relevant to the appeal.
- 10. **Procedure to be followed by Appellate Authority.** (1) The Appellate Authority shall fix a date of hearing of the appeal keeping in view of their office work load and the time required to serve notice on the parties.
- (2) The Appellate Authority shall send to the office against whose notice, order or direction the appeal has been filed a notice mentioning the date of hearing along with a copy of the petition of appeal.
- (3) For the purpose of disposing an appeal, the Appellate Authority may, at any time, call for all necessary papers and information from the appellant or the opposite party.

<sup>&</sup>lt;sup>1</sup> Rules 7A and 7B were substituted by MoEF Notification No. SRO-88/Law/2003 of 31<sup>st</sup> March 2003, w.e.f 1<sup>st</sup> April 2003.

11. **Procedure for hearing of appeal.** -(1) The submission of the appellant in support of the appeal shall be heard on the date fixed for hearing or, if it is adjourned, on a subsequent date.

- (2) The Appellate Authority may dismiss the appeal if the appellant does not appear upon call for hearing on such date.
- (3) If the appellant is present but the opposite party is absent, the appeal shall be heard ex-parte.
- (4) If the appeal is dismissed under sub-rule (2), the appellant may, within the next thirty working days, again apply to the Appellate Authority for allowing the appeal.
- (5) The Appellate Authority, after hearing the parties or, as the case may be one of the parties, may approve, modify or set aside the disputed notice, order or direction.
- (6) The Appellate Authority shall record proper reasons in support of their decision, and shall specify the remedy to which the appellate is entitled.
- (7) Copy of the order of the Appellate Authority shall be sent as soon as possible to the concerned office of the Department and to the Director General.
- 12. **Determination of environmental standards.** For carrying out the purposes of clause (a) of sub-section (2) of section 20, the standards for air, water, sound, odor and other components of the environment shall be determined in accordance with the standards specified in Schedules 2, 3, 4, 5, 6,7 and 8.
- 13. **Determination of the standards for discharge and emission of waste.** For carrying out the purposes of clause (e) of sub-section (2) of section 20, the standard limits of the discharge of liquid waste and gaseous emission shall be determined in accordance with the standards specified in Schedules 9, 10 & 11, and the standards of the discharge or emission of wastes of various industrial units shall be determined in accordance with standards specified in Schedule-12.
- 14. **Fees for Environmental Clearance Certificate and its renewal.** The fees for issuance of Environmental Clearance Certificate and its renewal under these Rules shall be payable in accordance with Schedule-13.
- 15. **Various services and their fees.** (1) Upon application of any person or organization, the Department shall supply analysis report of the samples of water, liquid waste, air and sound and also the information or data derived from such analysis.
- (2) For services under sub-rule (1), appropriate fees are payable as described in Schedule-14.
- 16. **Procedure for payment of fees.** Fees payable under these Rules shall be deposited with the Bangladesh Bank or a Government Treasury by a Treasury

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Chalan in favour of the Director General under the Head "65 Miscellaneous Income-tax-free Revenue", and the copy of the Treasury Chalan shall be attached to the relevant application.

17. **Information of special incident.**—If, at any place, discharge or emission of environment pollutants occur in excess of the prescribed standards or if any place is under threat of facing such discharge or emission as a result of any accident or unforeseen incident, then the person or persons in charge of that place shall immediately inform the Director General of the occurrence or the threat.

# **FORM** – 1

# **Application for remedy** [See Rule 5(1)]

De Go	partment of Environment, vernment of the People's Republic of Bangladesh, 16, Agargaon, Dhaka-1207.
	om:
Sir	,
pol sec res	Im a person affected, or in apprehension of being affected, by environmental flution or environmental degradation and hence applying for remedy under substion-(1) of section-8 of the Bangladesh Environment Conservation Act, 1995, in pect of the following environmental damage/apprehended environmental mage:-
1.	Name of the person/persons affected or in apprehension of being affected by environmental pollution or environmental degradation
2.	Reasons, how affected.
3.	Site, where affected.
4.	Description of damage/apprehended damage.
5.	Time, when affected.
6.	Name, address, etc., of person/persons/organization involved in causing the damage.
7.	Remedy applied for.
Da	te Signature

# **FORM – 2**

# Notice of intention for collection of sample [See Rule 6]

Whereas it is necessary to collect sample of solid	waste/waste water/gaseous
emission/soil/any pollutant for analysis, on	(date), at
hours, from **** of yo	our industrial unit or project;
Therefore, you are hereby notified of the intention for	or collection of sample, and
you/your appropriate representative are required to be	present at the industrial unit
or project on the date for putting signature on the cont	rainer of the sample, and for
rendering assistance in collection of the sample.	
	Sample Collection Officer
	Name-
	Designation-
M/S	

<sup>\*\*\*</sup> Describe the source/location of effluent, waste, stack, etc., from where sample would be collected.

### FORM - 3

# Application for Environmental Clearance Certificate

[See Rule 7(5)]

Director/Deputy Director,
Department of Environment,
Dhaka Division/Chittagong Division/Khulna Division/Rajshahi Division (Bogra).

I do hereby apply for Environmental Clearance Certificate for my proposed industrial unit or project, or for the existing industrial unit or project, and enclose papers and furnish information as follows:

papers	and furnish information as follows:	
1.(a)	Name of the industrial unit or project Address of location of the industrial unit or project	:
(b)	Address of present office	:
2.(a)	Proposed industrial unit or project	
:	Expected date of starting construction	:
:	Expected date of completion of construction	:
:	Expected date of trial production in case of industrial unit, in other cases, date of starting operation of the project	:
(b)	Existing industrial unit or project	
:	Date of starting trial production in case of industrial unit, in other cases, date of starting operation of the project	:
3.	Name of product and quantity to be produced (daily/monthly/yearly)	:
4.(a)	Name of raw materials and quantity required (daily/monthly/yearly)	:
(b)	Source of raw material	:
5.(a)	Quantity of water to be used daily	:

(b) Source of water

Sir,

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6.(a)	Name of fuel and quantity required (daily/monthly/yearly)	:
(b)	Source of fuel	:
7.(a)	Probable quantity of daily liquid waste	:
(b)	Location of waste discharge	:
(c)	Probable quantity of daily emission of gasubstance	seous :
(d)	Mode of emission of gaseous substance	:
8.	Mouza (village) map indicating "Daag" (number and "Khatiyan" (land tax accounnumber	• /
9.	Approval of Rajdhani Unnayan Katripak Chittgong Development Authority/Khulr Development Authority/ Rajshahi Development Authority (if applicable).	
10.(a)	Design & time schedule of proposed Effl Treatment Plant	uent :
(b)	Fund allocated	:
(c)	Area	:
11.	Process Flow Diagram	:
12.(a)	Location map of industrial unit or projec	t :
(b)	Layout plan (with location of Effluent Treatment Plant)	:
13.(a)	IEE/IEA report* (if applicable)	:
(b)	Environmental Management Plan* (if applicable)	:
14.	Feasibility Report (if applicable)	:
Seal	;	Signature of the entrepreneur
		Name : Address:
		Phone : Date :

# -: Declaration :-

I do hereby declare that all information provided by me in this application are true to the best of my knowledge and no information has been concealed or distorted herein.

(Name & signature of entrepreneur)

\* Each page be countersigned by the person who fills out this application form and by the entrepreneur.

E.C.R.- Form-4

# $^{1}$ FORM -4

# **Pollution under Control Certificate**

[See Rule 7A]

	It is hereby certified that vehicle No of
Mr.	of
as me	easured at two-thirds of the maximum rotating speed of the vehicle:-

<u>Parameter</u>	<u>Unit</u>	Limit of Standards	Measurement taken
Black Smoke	Hartridge Smoke Unit (HSU)	65	
Carbon Monoxide	gm/k.m. percent area	24 04	
Hydrocarbon	gm/k.m. ppm	02 180	
Oxides of Nitrogen	gm/k.m. ppm	02 600	

- (2) The measurements so taken do not exceed the standards specified in Schedule-6.
- (3) This Certificate shall remain valid till .....

Signature of Director General/Authorized Officer Seal Department of Environment

 $<sup>\</sup>overline{\ }^{1}$  This form was inserted in the rules by gazette notification S.R.O.29-Law/2002 w.e.f. 28/2/2000.

#### **SCHEDULE - 1**

# Classification of industrial units or projects based on its location and impact on environment.

[ See Rule 7(2) ]

#### (A) GREEN Category

- 1. Assembling and manufacturing of TV, Radio, etc.
- 2. Assembling and manufacturing of clocks and watches.
- 3. Assembling of telephones.
- 4. Assembling and manufacturing of toys (plastic made items excluded).
- 5. Book-binding.
- 6. Rope and mats (made of cotton, jute and artificial fibers).
- 7. Photography (movie and x-ray excluded).
- 8. Production of artificial leather goods.
- 9. Assembling of motorcycles, bicycles and toy cycles.
- 10. Assembling of scientific and mathematical instruments (excluding manufacturing).
- 11. Musical instruments.
- 12. Sports goods (excluding plastic made items).
- 13. Tea packaging (excluding processing).
- 14. Re-packing of milk powder (excluding production).
- 15. Bamboo and cane goods.
- 16. Artificial flower (excluding plastic made items).
- 17. Pen and ball-pen.
- 18. Gold ornaments (excluding production) (shops only).
- 19. Candle.
- 20. Medical and surgical instrument (excluding production).
- 21. Factory for production of cork items (excluding metalic items).
- 22. Laundry (excluding washing).

## **Foot Notes:**

(a) Units of all kinds of cottage industries other than those listed in this Schedule shall remain outside the purview of Environmental Clearance Certificate (Unit of cottage industry means all industrial units producing

- goods or services in which by full-time or part-time labour of family members are engaged and the capital investment of which does not exceed Taka 5 (five) hundred thousand).
- (b) No industrial unit listed in this Schedule shall be located in any residential area.
- (c) Industrial units shall preferably be located in areas declared as industrial zones or in areas where there is concentration of industries or in vacant areas.
- (d) Industrial units likely to produce sound, smoke, odor beyond permissible limit shall not be acceptable in commercial areas.

## (B) ORANGE-A Category

- 1. Dairy Farm, 10 (ten) cattle heads or below in urban areas and 25 cattle heads or below in rural areas.
- 2. Poultry (up to 250 in urban areas and up to 1000 in rural areas).
- 3. Grinding/husking of wheat, rice, turmeric, pepper, pulses (up to 20 Horse Power).
- 4. Weaving and handloom.
- 5. Production of shoes and leather goods (capital up to 5 hundred thousand Taka).
- 6. Saw mill/wood sawing.
- 7. Furniture of wood/iron, aluminum, etc.,(capital up to 5 hundred thousand Taka).
- 8. Printing Press.
- 9. Plastic & rubber goods (excluding PVC).
- 10. Restaurant.
- 11. Cartoon/box manufacturing/printing packaging.
- 12. Cinema Hall.
- 13. Dry-cleaning.
- 14. Production of artificial leather goods (capital up to 5 hundred thousand Taka).
- 15. Sports goods.
- 16. Production of salt (capital up to 10 hundred thousand Taka).
- 17. Agricultural machinery and equipment.
- 18. Industrial machinery and equipment.

- 19. Production of gold ornaments.
- 20. Pin, U Pin.
- 21. Frames of spectacles.
- 22. Comb.
- 23. Production of utensils and souvenirs of brass and bronze.
- 24. Factory for production of biscuit and bread (capital up to 5 hundred thousand Taka).
- 25. Factory for production of chocolate and lozenge. (capital up to 5 hundred thousand Taka).
- 26. Manufacturing of wooden water vessels.

## (C) ORANGE-B Category

- 1. PVC items.
- 2. Artificial fiber (raw material).
- 3. Glass factory.
- 4. Life saving drug (applicable to formulation only).
- 5. Edible oil.
- 6. Tar.
- 7. Jute mill.
- 8. Hotel, multi-storied commercial & apartment building.
- 9. Casting.
- 10. Aluminum products.
- 11. Glue (excluding animal glue).
- 12. Bricks/tiles.
- 13. Lime.
- 14. Plastic products.
- 15. Processing and bottling of drinking water and carbonated drinks.
- 16. Galvanizing.
- 17. Perfumes, cosmetics.
- 18. Flour (large).
- 19. Carbon rod.
- 20. Stone grinding, cutting, polishing.

- 21. Processing fish, meat, food.
- 22. Printing and writing ink.
- 23. Animal feed.
- 24. Ice-cream.
- 25. Clinic and pathological lab.
- 26. Utensils made of clay and china clay/sanitary wares (ceramics).
- 27. Processing of prawns & shrimps.
- 28. Water purification plant.
- 29. Metal utensils/spoons etc.
- 30. Sodium silicate.
- 31. Matches.
- 32. Starch and glucose.
- 33. Animal feed.
- 34. Automatic rice mill.
- 35. Assembling of motor vehicles.
- 36. Manufacturing of wooden vessel.
- 37. Photography (activities related to production of films for movie and x-ray).
- 38. Tea processing.
- 39. Production of powder milk/condensed milk/dairy.
- 40. Re-rolling.
- 41. Wood treatment.
- 42. Soap.
- 43. Repairing of refrigerators.
- 44. Repairing of metal vessel.
- 45. Engineering works (up to 10 hundred thousand Taka capital.)
- 46. Spinning mill.
- 47. Electric cable.
- 48. Cold storage.
- 49. Tire re-treading.
- 50. Motor vehicles repairing works (up to 10 hundred thousand Taka capital).

51. Cattle farm: above 10 (ten) numbers in urban area, and above 25 (twenty five) numbers in rural area.

- 52. Poultry: Number of birds above 250 (two hundred fifty) in urban area and above 1000 (one thousand) in rural area.
- 53. Grinding/husking wheat, rice, turmeric, chilly, pulses machine above 20 Horse Power.
- 54. Production of shoes and leather goods, above 5(five) hundred thousand Taka capital.
- 55. Furniture of wood/iron, aluminum, etc., above 5(five) hundred thousand Taka capital.
- 56. Production of artificial leather goods, above 5(five) hundred thousand Taka capital.
- 57. Salt production, above 10(ten) hundred thousand Taka capital.
- 58. Biscuit and bread factory, above 5 (five) hundred thousand Taka capital.
- 59. Factory for production of chocolate and lozenge, above 5(five) hundred thousand Taka capital.
- 60. Garments and sweater production.
- 61. Fabric washing.
- 62. Power loom.
- 63. Construction, re-construction and extension of road (feeder road, local road).
- 64. Construction, re-construction and extension of bridge (length below 100 meters).
- 65. Public toilet.
- 66. Ship-breaking.
- 67. G.I. Wire.
- 68. Assembling batteries.
- 69. Dairy and food.

#### **Foot Notes:**

- (a) No industrial unit included in this list shall be located in any residential area.
- (b) Industrial units shall preferably be located in areas declared as industrial zones or in areas where there is concentration of industries or in vacant areas.

(c) Industrial units likely to produce sound, smoke, odor beyond permissible limit shall not be acceptable in commercial areas.

## (D) RED Category

- 1. Tannery.
- 2. Formaldehyde.
- 3. Urea fertilizer.
- 4. T.S.P. Fertilizer.
- 5. Chemical dyes, polish, varnish, enamel.
- 6. Power plant.
- 7. All mining projects (coal, limestone, hard rock, natural gas, mineral oil, etc.)
- 8. Cement.
- 9. Fuel oil refinery.
- 10. Artificial rubber.
- 11. Paper and pulp.
- 12. Sugar.
- 13. Distillery.
- 14. Fabric dying and chemical processing.
- 15. Caustic soda, potash.
- 16. Other alkalis.
- 17. Production of iron and steel.
- 18. Raw materials of medicines and basic drugs.
- 19. Electroplating.
- 20. Photo films, photo papers and photo chemicals.
- 21. Various products made from petroleum and coal.
- 22. Explosives.
- 23. Acids and their salts (organic or inorganic).
- 24. Nitrogen compounds (Cyanide, Cyanamid etc.).
- 25. Production of plastic raw materials (PVC, PP/Iron, Polyesterin etc.)
- 26. Asbestos.
- 27. Fiberglass.

- 28. Pesticides, fungicides and herbicides.
- 29. Phosphorus and its compounds/derivatives.
- 30. Chlorine, fluorine, bromine, iodine and their compounds/derivatives.
- 31. Industry (excluding nitrogen, oxygen and carbon dioxide).
- 32. Waste incinerator.
- 33. Other chemicals.
- 34. Ordnance.
- 35. Nuclear power.
- 36. Wine.
- 37. Non-metallic chemicals not listed elsewhere.
- 38. Non-metals not listed elsewhere.
- 39. Industrial estate.
- 40. Basic industrial chemicals.
- 41. Non-iron basic metals.
- 42. Detergent.
- 43. Land-filling by industrial, household and commercial wastes.
- 44. Sewage treatment plant.
- 45. Life saving drugs.
- 46. Animal glue.
- 47. Rodenticide.
- 48. Refractories.
- 49. Industrial gas (Oxygen, Nitrogen & Carbon-dioxide).
- 50. Battery.
- 51. Hospital.
- 52. Ship manufacturing.
- 53. Tobacco (processing/cigarette/Biri-making).
- 54. Metallic boat manufacturing.
- 55. Wooden boat manufacturing.
- 56. Refrigerator/air-conditioner/air-cooler manufacturing.
- 57. Tyre and tube.
- 58. Board mills.

- 59. Carpets.
- 60. Engineering works: capital above 10 (ten) hundred thousand Taka.
- 61. Repairing of motor vehicles: capital above 10 (ten) hundred thousand Taka.
- 62. Water treatment plant.
- 63. Sewerage pipe line laying/relaying/extension.
- 64. Water, power and gas distribution line laying/relaying/extension.
- 65. Exploration/extraction/distribution of mineral resources.
- 66. Construction/reconstruction/expansion of flood control embankment, polder, dike, etc.
- 67. Construction/reconstruction/expansion of road (regional, national & international).
- 68. Construction/reconstruction/expansion of bridge (length 100 meter and above).
- 69. Murate of Potash (manufacturing).

#### **Foot Notes:**

- (a) No industrial unit included in this list shall be allowed to be located in any residential area.
- (b) Industrial units shall preferably be located in areas declared as industrial zones or in areas where there is concentration of industries or in vacant areas.
- (c) Industrial units likely to produce sound, smoke, odor beyond permissible limit shall not be acceptable in commercial areas.
- (d) After obtaining location clearance on the basis of Initial Environment Examination (IEE) Report, the Environmental Impact Assessment (EIA) Report in accordance with the approved terms of reference along with design of ETP and its time schedule shall be submitted within approved time limit.

### **SCHEDULE - 2**

# Standards for Air [See Rule 12]

## Density in microgram per cusec meter

Sl. No.	Categories of Area	Suspended Particulate Maters (SPM)	Sulphur- dioxide	Carbon Monoxide	Oxides Nitrogen
a.	Industrial and mixed	500	120	5000	100
b.	Commercial and mixed	400	100	5000	100
c.	Residential and rural	200	80	2000	80
d.	Sensitive	100	30	1000	30

#### **Notes:**

- (1) At national level, sensitive area includes monuments, health center, hospital, archeological site, educational institution, and government designated areas (if any).
- (2) Industrial units located in areas not designated as industrial areas shall not discharge pollutants which may contribute to exceeding the standard for air surrounding the areas specified at Sl. nos. c and d above.
- (3) Suspended Particulate Matter means airborne particles of a diameter of 10 micron or less.

## SCHEDULE - 3

### **Standards for Water**

[See Rule 12]

## (A) Standards for inland surface water

	est Practice based Parameter assification				
Cia	issincation	pН	BOD mg/l	DO mg/l	Total Coliform number/100
a.	Source of drinking water for supply only after disinfecting:	6.5-8.5	2 or less	6 or above	50 or less
b.	Water usable for recreational activity: Source of drinking water	6.5 - 8.5	3 or less	5 of more	200 or less
d. e.	for supply after conventional treatment: Water usable by fisheries: Water usable by various		6 of less 6 of less	6 or more 5 or more	5000 or less
f.	process and cooling industries: Water usable for irrigation:	6.5 - 8.5 $6.5 - 8.5$	10 or less 10 or less	5 or more 5 or more	5000 or less 1000 or less

#### **Notes:**

- 1. In water used for pisiculture, maximum limit of presence of ammonia as Nitrogen is 1.2 mg/l.
- 2. Electrical conductivity for irrigation water 2250 μmhoms/cm (at a temperature of 25°C); Sodium less than 26%; boron less than 0.2%.

# (B) Standards for drinking water

Sl.	Parameter	Unit	Standards
No.			
1	2	3	4
1.	Aluminum	mg/l	0.2
2.	Ammonia (NH <sub>3</sub> )	"	0.5
3.	Arsenic	"	0.05
4.	Balium	"	0.01
5.	Benzene	,,	0.01

6.       BODS, 20°C       "       0.2         7.       Boron       "       1.0         8.       Cadmium       "       0.005         9.       Calcium       "       75         10.       Chloride       "       150 – 600*         11.       Chlorinated alkanes carbontetrachloride       "       0.01         1.1 dichloroethylene       "       0.001         1.2 dichloroethylene       "       0.03         1.2 dichloroethylene       "       0.03         trichloroethylene       "       0.03         12.       Chlorinated phenols       "       0.03         -pentachlorophenol       "       0.03         13.       Chlorinated phenols       "       0.03         14.       Chloroform       "       0.05	1	2	3	4
8. Cadmium , 0.005 9. Calcium , 75 10. Chloride , 150 – 600* 11. Chlorinated alkanes carbontetrachloride , 0.01 1.1 dichloroethylene , 0.001 1.2 dichloroethylene , 0.03 tetrachloroethylene , 0.09 12. Chlorinated phenols - pentachlorophenol , 0.03 - 2.4.6 trichlorophenol , 0.03 13. Chlorine (residual) , 0.2 14. Chloroform , 0.09 15. Chromium (hexavalent) , 0.05 16. Chromium (total) , 0.05 17. COD , 4 18. Coliform (fecal) n/100 ml	6.	BOD <sub>5</sub> 20°C	22	0.2
9. Calcium	7.	Boron	,,	1.0
10. Chloride ,, 150 – 600*  11. Chlorinated alkanes carbontetrachloride	8.	Cadmium	,,	0.005
11. Chlorinated alkanes carbontetrachloride 1.1 dichloroethylene 1.2 dichloroethylene 1.2 dichloroethylene 1.3 dichloroethylene 1.4 dichloroethylene 1.5 dichloroethylene 1.6 dichloroethylene 1.7 dichloroethylene 1.8 dichloroethylene 1.9 dichloroethylene 1.9 dichloroethylene 1.1 dichloroethylene 1.2 dichloroethylene 1.3 dichloroethylene 1.4 dichloroethylene 1.5 chlorinated phenols 1.6 chlorine (residual) 1.7 dichlorophenol 1.8 chlorine (residual) 1.9 coliform (fecal) 1.0 dichloroethylene 1.9 coliform (fecal) 1.0 dichloroethylene 1.9 coliform (total) 1.0 dichloroethylene 1.1 dichloroethylene 1.2 dichloroethylene 1.3 dichloroethylene 1.4 chloroform 1.5 dichloroethylene 1.6 dichloroethylene 1.7 dichloroethylene 1.8 dichloroethylene 1.9 dichloroethylene 1.9 dichloroethylene 1.9 dichloroethylene 1.9 dichloroethylene 1.9 dichloroethylene 1.9 dichloroethylene 1.0 di	9.	Calcium	"	75
carbontetrachloride       " 0.001         1.1 dichloroethylene       " 0.001         1.2 dichloroethylene       " 0.03         tetrachloroethylene       " 0.09         tetrachloroethylene       " 0.09         12. Chlorinated phenols       " 0.03         - pentachlorophenol       " 0.03         - 2.4.6 trichlorophenol       " 0.03         - 2.4.6 trichlorophenol       " 0.03         13. Chlorine (residual)       " 0.2         14. Chloroform       " 0.09         15. Chromium (hexavalent)       " 0.05         16. Chromium (total)       " 0.05         17. COD       " 4         18. Coliform (fecal)       n/100 ml       0         19. Coliform (total)       n/100 ml       0         20. Color       Hazen 15 unit       15         21. Copper       mg/l       1         22. Cyanide       " 0.1       0.1         23. Detergents       " 0.2         24. DO       " 6         25. Fluoride       " 1         26. Hardness (as CaCO <sub>3</sub> )       " 200 – 500         27. Iron       " 0.3 – 1.0         28. Kjeldhl Nitrogen (total)       " 1	10.	Chloride	,,	150 – 600*
- pentachlorophenol - 2.4.6 trichlorophenol 3. Chlorine (residual) 3. Chlorine (residual) 3. Chloroform 3. 0.09 4. Chloroform 4. 0.05 6. Chromium (hexavalent) 7. COD 7. COD 7. 4 7. COD 8. Coliform (fecal) 7. Coliform (total) 7. Color 8. Coliform (total) 8. Coliform (total) 8. Color	11.	carbontetrachloride 1.1 dichloroethylene 1.2 dichloroethylene tetrachloroethylene	" " "	0.001 0.03 0.03
14. Chloroform       " 0.09         15. Chromium (hexavalent)       " 0.05         16. Chromium (total)       " 0.05         17. COD       " 4         18. Coliform (fecal)       n/100 ml       0         19. Coliform (total)       n/100 ml       0         20. Color       Hazen unit       15 unit         21. Copper       mg/l       1         22. Cyanide       " 0.1         23. Detergents       " 0.2         24. DO       " 6         25. Fluoride       " 1         26. Hardness (as CaCO <sub>3</sub> )       " 200 – 500         27. Iron       " 0.3 – 1.0         28. Kjeldhl Nitrogen (total)       " 1	12.	- pentachlorophenol	mg/l	
15. Chromium (hexavalent)  16. Chromium (total)  17. COD  18. Coliform (fecal)  19. Coliform (total)  20. Color  19. Copper  21. Copper  22. Cyanide  23. Detergents  24. DO  25. Fluoride  26. Hardness (as CaCO <sub>3</sub> )  27. Iron  28. Kjeldhl Nitrogen (total)  39. Lead  30. 0.05	13.	Chlorine (residual)	22	0.2
16. Chromium (total)       "       0.05         17. COD       "       4         18. Coliform (fecal)       n/100 ml       0         19. Coliform (total)       n/100 ml       0         20. Color       Hazen unit       15         21. Copper       mg/l       1         22. Cyanide       "       0.1         23. Detergents       "       0.2         24. DO       "       6         25. Fluoride       "       1         26. Hardness (as CaCO <sub>3</sub> )       "       200 – 500         27. Iron       "       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       "       1         29. Lead       "       0.05	14.	Chloroform	"	0.09
17. COD       ,       4         18. Coliform (fecal)       n/100 ml       0         19. Coliform (total)       n/100 ml       0         20. Color       Hazen unit       15         21. Copper       mg/l       1         22. Cyanide       ,       0.1         23. Detergents       ,       0.2         24. DO       ,       6         25. Fluoride       ,       1         26. Hardness (as CaCO <sub>3</sub> )       ,       200 – 500         27. Iron       ,       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       ,       1         29. Lead       0.05	15.	Chromium (hexavalent)	"	0.05
18. Coliform (fecal)       n/100 ml       0         19. Coliform (total)       n/100 ml       0         20. Color       Hazen unit       15         21. Copper       mg/l       1         22. Cyanide       "       0.1         23. Detergents       "       0.2         24. DO       "       6         25. Fluoride       "       1         26. Hardness (as CaCO <sub>3</sub> )       "       200 – 500         27. Iron       "       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       "       0.05	16.	Chromium (total)	,,	0.05
19. Coliform (total)       n/100 ml       0         20. Color       Hazen unit       15         21. Copper       mg/l       1         22. Cyanide       "       0.1         23. Detergents       "       0.2         24. DO       "       6         25. Fluoride       "       1         26. Hardness (as CaCO <sub>3</sub> )       "       200 – 500         27. Iron       "       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       "       0.05	17.	COD	,,	4
20. Color       Hazen unit       15         21. Copper       mg/l       1         22. Cyanide       "       0.1         23. Detergents       "       0.2         24. DO       "       6         25. Fluoride       "       1         26. Hardness (as CaCO <sub>3</sub> )       "       200 – 500         27. Iron       "       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       "       1         29. Lead       0.05	18.	Coliform (fecal)	n/100 ml	0
unit       21. Copper     mg/l     1       22. Cyanide     "     0.1       23. Detergents     "     0.2       24. DO     "     6       25. Fluoride     "     1       26. Hardness (as CaCO <sub>3</sub> )     "     200 – 500       27. Iron     "     0.3 – 1.0       28. Kjeldhl Nitrogen (total)     "     1       29. Lead     0.05	19.	Coliform (total)	n/100 ml	0
22. Cyanide	20.	Color		15
23. Detergents       ,, 0.2         24. DO       ,, 6         25. Fluoride       ,, 1         26. Hardness (as CaCO <sub>3</sub> )       ,, 200 – 500         27. Iron       ,, 0.3 – 1.0         28. Kjeldhl Nitrogen (total)       ,, 0.5	21.	Copper	mg/l	1
24. DO       "       6         25. Fluoride       "       1         26. Hardness (as CaCO <sub>3</sub> )       "       200 – 500         27. Iron       "       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       "       1         29. Lead       0.05	22.	Cyanide	"	0.1
25. Fluoride       ,,       1         26. Hardness (as CaCO <sub>3</sub> )       ,,       200 – 500         27. Iron       ,,       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       ,,       1         29. Lead       0.05	23.	Detergents	"	0.2
26. Hardness (as CaCO <sub>3</sub> )       ,,       200 – 500         27. Iron       ,,       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       ,,       1         29. Lead       0.05	24.	DO	"	6
27. Iron       ,,       0.3 – 1.0         28. Kjeldhl Nitrogen (total)       ,,       1         29. Lead       0.05	25.	Fluoride	"	1
28. Kjeldhl Nitrogen (total) " 1	26.	Hardness (as CaCO <sub>3</sub> )	"	200 - 500
29 Lead 0.05	27.	Iron	"	0.3 - 1.0
29. Lead ,, 0.05	28.	Kjeldhl Nitrogen (total)	"	1
	29.	Lead	"	0.05

1	2	3	4
30.	Magnesium	3	30 – 35
31.		"	0.1
	Manganese	22	
32.	Mercury	,,	0.001
33.	Nickel	"	0.1
34.	Nitrate	"	10
35.	Nitrite	22	<1
36.	Odor	"	Odorless
37.	Oil and grease	"	0.01
38.	pH	"	6.5 - 8.5
39.	Phenolic compounds	22	0.002
40.	Phosphate	,,	6
41.	Phosphorus	"	0
42.	Potassium	"	12
43.	Radioactive materials (gross alpha activity)	Bq/l	0.01
44.	Radioactive materials (gross beta activity)	Bq/l	0.1
45.	Selenium	mg/l	0.01
46.	Silver	,,	0.02
47.	Sodium	,,	200
48.	Suspended particulate matters	"	10
49.	Sufide	"	0
50.	Sulfate	,,	400
51.	Total dissolved solids	22	1000
52.	Temperature	°C	20-30
53.	Tin	mg/l	2
54.	Turbidity	JTU	10
55.	Zinc	mg/l	5
	<del></del>	1118/1	2

### **SCHEDULE - 4**

### **Standards for Sound**

[See Rule 12]

Sl.	Category of areas	Standards determined at dBa		
No.		Day	Night	
a.	Silent zone	45	35	
b.	Residential area	50	40	
c.	Mixed area	60	50	
	(mainly residential area, and also simultaneously used for commercial and industrial purposes)			
d.	Commercial area	70	60	
e.	Industrial area	75	70	

#### **Notes:**

- 1. The time from 6 a.m. to 9 p.m. is counted as daytime.
- 2. The time from 9 p.m. to 6 a.m. is counted as night time.
- 3. Area up to a radius of 100 meters around hospitals or educational institutions or special institutions/ establishments identified/to be identified by the Government is designated as Silent Zones where use of horns of vehicles or other audio signals, and loudspeakers are prohibited.

SCHEDULE – 5
Standards for Sound originating from Motor Vehicles or Mechanized Vessels
[ See Rule 12]

Category of Vehicles	Unit	Standards	Remarks
*Motor Vehicles (all types)	dBa	85	As measured at a distance of 7.5 meters from exhaust pipe.
		100	As measured at a distance of 0.5 meter from exhaust pipe.
Mechanized Vessels	dBa	85	As measured at a distance of 7.5 meters from the vessel which is not in motion, not loaded and is at two thirds of its maximum rotating speed.
		100	As measured at a distance of 0.5 meter from the vessel which is in the same condition as above.

- \* At the time of taking measurement, the motor vehicle shall not be in motion and its engine conditions shall be as follows:-
  - (a) Diesel engine maximum rotating speed.
  - (b) Gasoline engine –at two thirds of its maximum rotating speed and without any load.
  - (c) Motorcycle If maximum rotating speed is above 5000 rpm; two-thirds of the speed, and if maximum rotating speed is less than 5000 rpm, three-fourth of the speed.

**SCHEDULE - 6** 

# **Standards for Emission from Motor Vehicles**

[ See Rule 12 ]

Parameter	Unit	Standard Limit
Black Smoke	Hartridge Smoke Unit (HSU)	65
Carbon Monoxide	gm/k.m. percent area	24 04
Hydrocarbon	gm/k.m. ppm	02 180
Oxides of Nitrogen	gm/k.m. ppm	02 600

<sup>\*</sup> As measured at two thirds of maximum rotating speed.

SCHEDULE - 7

# Standards for Emission from Mechanized Vessels

[ See Rule 12 ]

Parameter	Unit	Standard Limit
Black Smoke*	Hartridge Smoke Unit (HSU)	65

<sup>\*</sup> As measured at two thirds of maximum rotating speed.

### SCHEDULE - 8

## **Standards for Odor**

[ See Rule 12 ]

Parameter	Unit	Standard Limit
Acetaldehyde	nnm	0.5 - 5
Acetaidenyde	ppm	0.3 - 3
Ammonia	"	1 – 5
Hydrogen Sulfide	22	0.02 - 0.2
Methyl Disulfide	22	0.009 - 0.1
Methyl Sulfide	22	0.01 - 0.2
Styrene	22	0.4 - 2.0
Trim ethylamine	"	0.005 - 0.07

#### Notes:

(1) Following regulatory limit shall be generally applicable to emission/exhaust outlet pipe of above 5 meter height:

Q =  $0.108 \text{ x He}^2\text{Cm}$  (Where Q = Gas Emission rate Nm<sup>3</sup>/hour) He = Height of exhaust outlet pipe (m)

Cm = Above mentioned limit (ppm)

In cases where a special parameter has been mentioned, the lower limit (2) shall be applicable for warning purposes, and the higher limit shall be applicable for prosecution purpose or punitive measure.

SCHEDULE - 9

# **Standards for Sewage Discharge**

[See Rule 12]

Parameter	Unit	Standard Limit
BOD	miligram/l	40
Nitrate	"	250
Phosphate	"	35
Suspended Solids (SS)	"	100
Temperature	Degree Centigrade	30
Coliform	number per 100 ml	1000

### Notes:

- (1) This limit shall be applicable to discharges into surface and inland waters bodies.
- (2) Sewage shall be chlorinated before final discharge.

SCHEDULE – 10

Standards for Waste From Industrial Units or Projects Waste
[ See Rule 13 ]

Sl. No		Unit	Plac	es for determinat standards	ion of
			Inland Surface Water	Public Sewerage system connected to treatment at second stage	Irrigated Land
_1	2	3	4	5	6
1	Ammonical Nitrogen (as elementary N)	mg/l	50	75	75
2	Ammonia (as free ammonia)	22	5	5	15
3	Arsenic (as)	,,	0.2	0.05	0.2
4	BOD <sub>5</sub> at 20°C	,,	50	250	100
5	Boron	,,	2	2	2

1	2	3	4	5	6
6	Cadmium (as CD)	,,	0.50	0.05	0.05
7	Chloride	"	600	600	600
8	Chromium (as total Cr)	"	0.5	1.0	1.0
9	COD	,,	200	400	400
10	Chromium (as hexavalent Cr)	"	0.1	1.0	1.0
11	Copper (as Cu)	"	0.5	3.0	3.0
12	Dissolved Oxygen (DO)	"	4.5 - 8	4.5 - 8	4.5 - 8
13	Electro-conductivity (EC)	micro mho/ cm	1200	1200	1200
14	Total Dissolved Solids	"	2,100	2,100	2,100
15	Fluoride (as F)	"	2	15	10
16	Sulfide (as S)	"	1	2	2
17	Iran (as Fe)	"	2	2	2
18	Total Kjeldahl Nitrogen (as N)	"	100	100	100
19	Lead (as Pb)	,,	0.1	1.0	0.1
20	Manganese (as Mn)	"	5	5	5
21	Mercury (as Hg)	,,	0.01	0.01	0.01
22	Nickel (as Ni)	"	1.0	2.0	1.0
23	Nitrate (as elementary N)	mg/l	10.0	Not yet Fixed	10
24	Oil and Grease	"	10	20	10
25	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	"	1.0	5	1
26	Dissolved Phosphorus (as P)	,,	8	8	15
27	Radioactive substance	To be sp Commis	-	Bangladesh Atomic	e Energy
28	pH		6 - 9	6 – 9	6 – 9
29	Selenium (as Se)	mg/l	0.05	0.05	0.05
30	Zinc (as Zn)	Degree	5	10	10

1	2	3	4	5	6
31	Total Dissolved Solids	,,	2,100	2,100	2,100
32	Temperature	Centig rade	40	40	40- Summer
			45	45	45- Winter
33	Suspended Solids (SS)	mg/l	150	500	200
34	Cyanide (as Cn)	,,	0.1	2.0	0.2

#### **Notes:**

- (1) These standards shall be applicable to all industries or projects other than those specified under the heading "Standards for sectorwise industrial effluent or emission."
- (2) Compliance with these standards shall be ensured from the moment an industrial unit starts trial production, and in other cases, from the moment a project starts operation.
- (3) These standards shall be inviolable even in case of any sample collected instantly at any point of time. These standards may be enforced in a more stringent manner if considered necessary in view of the environmental conditions of a particular situation.
- (4) Inland Surface Water means drains/ponds/tanks/water bodies/ditches, canals, rivers, springs and estuaries.
- (5) Public sewerage system means treatment facilities of the first and second stage and also the combined and complete treatment facilities.
- (6) Irrigable land means such land area which is sufficiently irrigated by waste water taking into consideration the quantity and quality of such water for cultivation of selected crops on that land.
- (7) Inland Surface Water Standards shall apply to any discharge to a public sewerage system or to land if the discharge does not meet the requirements of the definitions in notes 5 and 6 above.

SCHEDULE – 11
Standards for Gaseous Emission from Industries or Projects
[See Rule 13]

Sl.No.	Parameters	Standard present in a unit of mg/Nm <sup>3</sup>
1	2	3
1.	Particulate	
(a)	Power plant with capacity of 200 Megawatt or above.	150
(b)	Power plant with capacity less than 200 Megawatt.	350
2.	Chlorine	150
3.	Hydrochloric acid vapor and mist	350
4.	Total Fluoride F	25
5.	Sulfuric acid mist	50
6.	Lead particulate	10
7.	Mercury particulate	0.2
8.	Sulfur dioxide	kg/ton acid
(a)	Sulfuric acid production (DCDA* process)	4
(b)	Sulfuric acid production (SCSA* process)	10
(* DCD	A: Double Conversion, Double Absorption	
SCSA:	Single Conversion, Single Absorption.)	
Lowest	height of stack for dispersion of sulfuric ac	id (in meter).
(a)	Coal based power plant	
	(1) 500 Megawatt or above	275
	(2) 200 to 500 Megawatt	220
	(3) Less than 200 Megawatt	$14(Q)^{0.3}$
(b)	Boiler	
	(1) Steam per hour up to 15 tons	11
	(2) Steam per hour more that 15 tons	$14(Q)^{0.3}$
[Q = E]	mission of Sulfur dioxide (kg/hour)].	

3
kg/ton acid
50 ppm
50 ppm
40 ppm
30 ppm
200 ppm
$mg/Nm^3$
500
1000
500
250
3

## SCHEDULE – 12

# **Standards for Sector-wise Industrial Effluent or Emission** [See Rule 13]

## (A) Fertilizer Plant

### Nitrogenous fertilizer plant

Parameters	Standard presence in a unit of mg/l
As Nitrogen	50 (New) 100 (Old)
Total Kjieldahl Nitrogen	100 (Old) 250 (New)
рН	6.5 - 8
Chromium at discharge point of the chromate removal plant (as total Cr)	0.5
Hexavalent Chromium	0.1
Suspended Solids	100
Oil and Grease	10
Wastewater flow	10m <sup>3</sup> /t Urea

#### **Gaseous Emission**

Source	Parameters	Standard of presence in a unit of mg/Nm <sup>3</sup>
Urea Prilling Tower	Particulate	150 dry de dusting
		50 wet de dusting and new plant

## Phosphatic

## **Effluent (liquid waste)**

Parameters	Standard of presence in a unit of mg/l
Fluoride at the exhaust of Fluoride removal plant (as F)	10
Phosphate (as P)	5
Suspended Solids Chromium at the discharge point of	100
Chromate removal plant (as Cr)	
Total	0.5
Hexavalent Cr	0.1
Oil and Grease	10

#### **Gaseous Emission**

Source	Parameters	Standard of presence in a unit of mg/Nm <sup>3</sup>
Granulation, Mixing and Grinding section	Particulate	150
Phosphoric acid preparation	Total Fluoride (as F)	25
Sulfuric acid plant	Sulfur dioxide	
	DCDA	4 kg/t of Sulfuric acid (100%)
	SCSA	10 kg/t of Sulfuric acid (100%)
	Sulfuric acid mist	50

# (B) Composite textile plant and large processing unit (in which capital investment is more than thirty million Taka)

Parameters	Standard and presence in a unit of mg/l
рН	6.5 – 9
Suspended solids	100

BOD <sub>5</sub> 20°C	150
Oil and Grease	10
Total dissolved solids	2100
Wastewater flow	100 per kg of fabric processed

Note: BOD limit of 150 mg/l implies only with physico chemical processing.

Special parameters based on classification of dyes used

Total Chromium, as Cr	2
Sulfide, as S	2
Phenolic compounds, as C <sub>6</sub> H <sub>5</sub> OH	5

### (C) Pulp and Paper Industry

#### **Gaseous Effluent**

Parameter	Standard and presence in a unit of mg/l, except pH		
	Large plant with production capacity of above 50 tons per day.	Small plant with production capacity of less than 50 tons per day.	
pН	6 – 9	6 – 9	
Suspended Solids	100	100	
BOD <sub>5</sub> 20°C	30	50	
COD	300	400	
Wastewater flow	200 cubic meter per ton of paper	200 cubic meter per ton of paper produced of agricultural raw materials.	
		75 cubic meter per ton of paper produced of wastepaper.	

#### (D) Cement Industry

#### **Gaseous Emission**

#### 1. Basic units for manufacturing cement

Source	Parameters	Standards for presence in a unit of mg/Nm <sub>3</sub>
All sections	Particulate	250

2. Clinker Grinding units

Source	Parameters	Standards for presence in a unit of mg/Nm <sub>3</sub>
All sections	Particulate	
	Daily production capacity above 1000 ton	200
	Daily production capacity 200-1000 ton	300
	Daily production capacity up to 200 ton	400

## (E) Boiler of Industrial unit

**Gaseous Emission** 

Parameters	Standards for presence in a unit of mg/Nm <sub>3</sub>
1. Soot and particulate (fuel based)	
(a) Coal	500
(b) Gas	100
(c) Oil	300
2. Oxides of Nitrogen (fuel based)	
(a) Coal	600
(b) Gas	150
(c) Oil	300

## (F) Nitric Acid Plant

Сосоонс	<b>Emission</b>
Gaseous	EIIIISSIOII

Parameters	Standards for presence in a unit of mg/Nm <sub>3</sub>
Oxide of Nitrogen	3 kg/ton of weak nitric acid produced

## (G) Distillery

Parameters	Standards for presence in a unit of mg/l
pH	6 - 9
Suspended solids	150

BOD₅ 20°C	5000 (standard for 2 years transitional period)
	500 (standard for 74 years transitional period)
Oil and Grease	10

## (H) Sugar Industry

**Effluent (liquid waste)** 

Parameters Standard for presence in a unit of mg/l	
рН	6 – 9
Suspended solids	150
BOD <sub>5</sub> 20°C	50
Oil and Grease	10
Wastewater per ton of sugarcane crushing (in Cubic meter)	0.5

#### **Gaseous Emission**

0 00		
Particulate, mg/Nm <sub>3</sub>	Stepgrade	250
	Pulsating/	500
	horse	
	shoe	800
	Spreader	
	Stocker	

## (I) Tannery Industry

Emucht (ilquid waste)		
Parameters	Standard for presence in a unit of mg/l	
pH	6 – 9	
Suspended solids	150	
BOD <sub>5</sub> 20°C	100	
Sulfide (as S)	1	
Total Chromium (as Cr)	2	
Oil and Grease	10	

Total dissolved solids	2100
Wastewater per ton of hide processing (in cubic meter)	30

Note: Soak liquor shall be separated from wastewater.

## (J) Food Processing, Fish Canning, Dairy, Starch and Jute Industries

**Effluent (liquid waste)** 

Parameters	Maximum Limit of Values in mg/l
Suspended solids	6 – 9
BOD <sub>5</sub> 20°C	150
Wastewater flow	100
Starch	8 Cubic Meter per Ton of raw materials
Jute processing	1.5 Cubic Meter per Ton product
Dairy products	3 Cubic Meter per Ton of Milk

## (K) Crude Oil Refinery

**Gaseous Emission** 

Parameter	Source	Standards for maximum presence	Unit
Sulfur dioxide	Distillation	0.25	kg/ton
	Catalytic Cracker	2.5	kg/ton

Parameters	Standards for maximum presence	Unit
Suspended solids (SS)	100	mg/l
Oil and Grease	10	"
BOD <sub>5</sub> 20°C	30	"
Phenol	1	"
Sulfide (as S)	1	"
Wastewater flow	700	Cubic Meter/1000 Ton of treated crude oil

#### **Notes:**

- (1) All new industrial units from the beginning of their operation shall abide by these standards while discharging/emitting wastes. All existing industrial units shall install necessary treatment facilities within 2 years (if not otherwise directed) from the date of the notification of these rules. In special cases, the Department may extend the deadline on valid reasons.
- (2) These standards shall apply irrespective of the discharge/emission points.
- (3) These standards shall never be violated at the time of sample collection. These standards may be enforced in a more stringent manner, if considered necessary in view of the surrounding conditions of a particular situation.

#### <sup>1</sup> "SCHEDULE – 13

## Fees for Environmental Clearance Certificate or Renewal

[See Rules 7(5), 8(2) and 14]

#### 1. Industrial unit or project

Investment (in Taka)		Environmental ertificate (in Taka	Certificate ) Renewal Fee
(1)		(2)	(3)
(a) Between Tk. 100,000 and	5,00,000	Tk. 1,500	One-fourth of the fees in Column (2).
(b) Between Tk. 5,00,000 and	10,00,000	Tk. 3,000	-Do-
(c) Between Tk. 10,00,000 and	d 50,00,000	Tk. 5,000	-Do-
(d) Between Tk. 50,00,000 an	d 10,000,000	Tk. 10,000	-Do-

<sup>&</sup>lt;sup>1</sup>Schedule-13 was substituted by Notification S.R.O. No. 234-Law/2002 dated 24/08/2002 and came into force on 26/08/2002 being the date of publication in the Bangladesh Gazette Extraordinary Issue.

(1)	(2)	(3)
(e) Between Tk. 10,000,000 and 2,00,000,000	Tk. 25,000	One-fourth of the fees in Column (2).
(f) Between Tk. 2,00,000,000 and 5,00,000,000	Tk. 50,000	-Do-
(g) Above Tk. 5,00,000,000	Tk. 1,00,000	-Do-

## <sup>1</sup>SCHEDULE – 14

Fees to be realized by the Department of Environment for supplying various analytical information or data or test results of samples of water, effluent, air and sound.

[See Rule 15]

(A) Sample of water or effluent

(A) Sample of water or effluent		
	Parameter	Fee
		(in Taka)
1.	Coliform	1,000
2.	Chlorine	500
3.	Total hardness	500
4.	Iron	800
5.	Calcium	800
6.	Magnesium	800
7.	Colour	150
8.	Electrical Conductivity (EC)	200
9.	pH	200
10.	Suspended Solids (SS)	600
11.	Total Solids (TS)	400
12.	Total Dissolved Solids (TDS)	400
13.	Ammonia Nitrogen	800
14.	Arsenic	1,000

<sup>&</sup>lt;sup>1</sup> Schedule-14 was substituted by Notification S.R.O. No. 234-Law/2002 dated 24/08/2002 and came into force on 26/08/2002 being the date of publication in the Bangladesh Gazette Extraordinary Issue.

	Parameter	Fee (in Taka)
15.	Boron	800
16.	Cadmium	1,000
17.	COD	800
18.	BOD	800
19.	Chloride	500
20.	Chromium, Hexavalent	1,000
21.	Chromium, Total	1,000
22.	Cyanide	800
23.	Fluoride	800
24.	Lead	1,000
25.	Mercury	1,000
26.	Nickel	1,000
27.	Organic Nitrogen	800
28.	Oil and Grease	600
29.	Phosphate	800
30.	Phenol	800
31.	Sulfate	800
32.	Zinc	1,000
33.	Temperature	150
34.	Turbidity (GTU)	200
35.	Turbidity (NTU)	200
36.	P-Alcanity	500
37.	T-Alcanity	400
38.	Acidity	400
39.	Carbon dioxide	400
40.	Calcium Hardness	500
41.	DO	600
42.	Nitrate	800
43.	Nitrite	800
44.	Silica	600

#### (B) Sample of Air

	Parameter	Fee (in Taka)
1.	S.P.M.	1,000
2.	Sulfur dioxide	1,000
3.	Nitrous dioxide	1,000
4.	Carbon Monoxide	600
5.	Lead	1,000

#### (C) Sample of Sound

Parameter	Fee (in Taka)
1. Sound	400

#### (D) For Supplying Analytical Information or Data

 Annual information or data about Surface Water (except river water) and Ground Water collected by monitoring stations of Dhaka Division/Chittagong Division and Sylhet Division/Khulna Division and Barisal Division/Rajshahi Division –

(a)	For Government organizations	4,500
(b)	For Others	9,000

2. Annual information or data about river water collected by monitoring stations of Dhaka Division/Chittagong Division and Sylhet Division/Khulna Division and Barisal Division/Rajshahi Division –

(a)	For Government organizations	6,000
(b)	For Others	9,000

3. Annual information or data about Air collected by monitoring stations of Dhaka Division/Chittagong Division and Sylhet Division/Khulna Division and Barisal Division/Rajshahi Division –

(a)	For Government organizations	3,500
(b)	For Others	6,000"

By order of the President

Ahbab Ahmed Secretary.