

The Environment (Protection) Rules,1986

MINISTRY OF ENVIRONMENT AND FORESTS
(Department of Environment, Forest and Wildlife)
NOTIFICATION

New Delhi, the 19th November, 1986

S.O. 844(E). -In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules, namely :-

1. (i) These rules may be called the Environment (Protection) Rules, 1986

(ii) They shall come into force on the date of their publication in the Official Gazette.

2. In these rules, unless the context otherwise requires,

(a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);

(aa) "Areas" means all areas where the hazardous substances are handled;

(b) "Central Board" means the Central Pollution Control Board constituted under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);

(c) "Form" means a form set forth in Appendix A to these rules;

(d) "Government Analyst" means a person appointed or recognized as such under section 13;

(e) "Person" in relation to any factory or premises means a person or occupier or his agent who has control over the affairs of the factory or premises and includes in relation to any substance, the person in possession of the substance.

(ee) "Prohibited substance". Means the substance prohibited for handling;¹

(f) "Recipient system" means the part of the environment such as soil, water, air or other which receives the pollutants;

¹ Clauses (aa), (ee) and (ff) inserted by Notification NO.G.S.R.931(E) dated 27-10-89 published in the Gazette NO 564 dated 27-10-89. These rules are referred to as Principal Rules in all Notifications beginning with S.O 82(E) published in the Gazette No. 66 dated 16-2-87

(ff) "Restricted substance" means the substance restricted for handling;¹

(g) "section" means a section of the Act.

h) "Schedule" means a Schedule appended to these rules;

(i) "Standard;" means standards prescribed under these rules;

(j) "State Board" means a State Pollution Control Board constituted under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or a State Pollution Control Board constituted under section 5 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);

3. (1) For the purpose of protecting and improving the quality of the Environment and Preventing an abating environmental pollution the standards for emission or discharge of environmental pollutants from the industries, operations or processes shall be as pollutants. specified in ² [schedule I to IV].

(2) Notwithstanding anything contained in sub-rule (1), the Central Board or a State Board may specify more stringent standards from those provided in ³[Schedule I to IV]in respect of any specific industry, operation or process depending upon the quality of the recipient system and after recording reasons therefor in writing.

⁴[(3) The standards for emission or discharge of environmental pollutants specified under sub-rule (1) or sub-rule (2) shall be complied with by an industry, operation or process within a period of one year of being so specified.]

1. Clauses (aa), (ee) and (ff) inserted by Notification No. G.S.R 931(E) dated 27-10-1989 published in the Gazette No. 564 dated 27-10-1989. These rules are referred to as principal rules in all Notifications beginning with S.O 82(E) published in the Gazette No. 66 dated 16-02-1987

2. Substituted by notification G.S.R 422(E) dated 19.05.1993 published in the Gazette No. 174 dated 19.05.1993.

3. Substituted *ibid*.

4. The sub-rule (3) of rule 3 inserted *vide* S.O 23(E) dated 16-01-1991.

1[3A] (i) Notwithstanding anything contained in sub-rules (1) and (2), on and from the 1st day of January, 1994, emission or discharge of environmental pollutants from the 2[industries, operations or processes other than those industries, operations or processes for which standards have been specified in Schedule-I] shall not exceed the relevant parameters and standards specified in schedule VI.]

Provided that the State Boards may specify more stringent standards for the relevant parameters with respect to specific industry or locations after recording reasons therefore in writing.

(ii) The State Board shall while enforcing the standard..; specified in Schedule VI follow the guidelines specified in Annexure I and II in that Schedule]

3 [(3B)] The combined effect of emission or discharge of environmental pollutants in an area, from industries, operations, processes, automobiles and domestic sources, shall not be permitted to exceed the relevant concentration in ambient air as specified against each pollutant in columns (3) to (5) of Schedule VII]

(4) Notwithstanding anything contained in sub-rule(3)--

(a) the Central Board or a State Board, depending on the local conditions or nature of discharge of environmental pollutants, may, by order, specify a lesser period than a period specified under sub-rule (3) within which the compliance of standards shall be made by an industry, operation or process.

(b) The Central Government in respect of any specific industry, operation or process, by order, may specify any period other than a period specified under sub-rule(3) within which the compliance of standards shall be made by such industry, operation or process.

1. The sub-rule (3A) of rule 3 inserted by the rule 2(a)(iii) of the Environment (Protection) Second Amendment Rules, 1993 notified vide GSR 422(E) dated 19-05-1993 published in the Gazette No. 174 dated 19-5-1993

2. Substituted by rule 2(a) of the Environment (Protection) Second (Amendment) Rules, 1998 notified by notification GSR 7 dated 22.12.1998.

(5) Notwithstanding anything contained in sub-rule (3) the standards for emission or discharge of environmental pollutants specified under sub-rule (1) or sub-rule (2) in respect

of an industry, operation or process before the commencement of the Environment (Protection) Amendment Rules, 1991, shall be complied by such industry, operation or process by the 31st day of December 1991.

1[(6) Notwithstanding anything contained in sub-rule (3), an industry operation or process which has commenced production on or before 16th May, 1981 and has shown adequate proof of atleast commencement of physical work for establishment of facilities to meet the specified standards within a time-bound programme, to the satisfaction of the concerned State Pollution Control Board, shall comply with such standards latest by the 31st day of December, 1993.

(7) Notwithstanding anything contained in sub-rule (3) or sub-rule (6) an industry, operation or process which has commenced production after the 16th day of May, 1981 but before the 31st day of December 1991 and has shown adequate proof of atleast commencement of physical work for establishment of facilities to meet the specified standards within a time-bound programme, to the satisfaction of the concerned State Pollution Control Board, shall comply with such standards latest by the 31st day of December, 1992.]

4. (1) Any direction issued under section 5 shall be in writing.

(2) The direction shall specify the nature of action to be taken and the time within which it shall be complied with by the person, officer or the authority to whom such direction is given.

(3) (a) The person, officer or authority to whom any direction is sought to be issued shall be served with a copy of the proposed direction and shall be given an opportunity of not less than fifteen days from the date of service of a notice to file with an officer designated in this behalf the objections, if any, to the issue of the proposed direction.

(b) Where the proposed direction is for the stoppage or regulation of electricity or water or any other service 'affecting the carrying on any industry, operation or process and is sought' to be issued to an officer or an authority, a copy of the proposed direction shall also be endorsed to the occupier of the industry, operation or process, as the case may be and objections, if any, filed by the occupier with an officer designated in this behalf shall be dealt with in accordance with the procedures under sub-rules (3a) and (4) of this rule:

2. Sub rule (6) and (7) of rule 3 were added by the Environment (Protection) (Amendment) Rules, 1992 vide GSR 95(E) dated 12.02.1992.

Provided that no opportunity of being heard shall be given to the occupier if he had already been heard earlier and the proposed direction referred to in sub-rule (3b) above for the stoppage or regulation of electricity or water or any other service was the resultant decision of the Central Government after such earlier hearing. 1

(4) The Central Government shall within a period of 45 days from the date of receipt of the objections, if any or from the date upto which an opportunity is given to the person, officer or authority to file objections whichever is earlier after considering the objections, if any received from the person, officer or authority sought to be directed and for reasons to be recorded in writing, confirm, modify or decide not to issue the proposed direction.

(5) In case where the Central Government is of the opinion that in view of the likelihood of the grave injury to the environment it is not expedient to provide an opportunity to file objections against the proposed direction, it may, for reasons to be recorded in writing, issue directions without providing such opportunity.

(6) Every notice or direction required to be issued under this rule shall be deemed to be duly served-

(a) where the person to be served is a company, if the document is addressed in the name of the company at its registered office or at its principal office or place of business and is either-

(i) sent by registered post, or

(ii) delivered at its registered office or at the principal office or place of business;

(b) where the person to be served is an officer serving Government, if the document is addressed to the person and a copy thereof is endorsed to this Head of the Department and also to the Secretary to the Government, as the case may be, in charge of the Department in which for the time being the business relating to the Department in which the officer is employed is transacted and is either-

(i) sent by registered post, or

(ii) is given or tendered to him;

(c) in any other case, if the document is addressed to the person to be served and-

(i) is given or tendered to him, or

(ii) if such person cannot be found, is affixed on some conspicuous part of his last known place of residence or business or is given or tendered to some adult member of his family or is affixed on some conspicuous part of the land or building, if any, to which it relates, or

1. Sub rule (3) of rule 4 of the Principal Rules was re-numbered as sub-rule 3(a) and sub-rule 3(b) inserted vide Notification No. S.O 64(E) published in the Gazette No. 42 dated 18-1-88

(iii) is sent by registered post to that person;

*Explanation:-*For the purpose of this sub-rule,-

(a) "company" means any body corporate and includes a firm or other association of individuals;

(b) "a servant" is not a member of the family.

5. (1) The Central government may take into consideration the following factors while prohibiting or restricting the location of processes and operations in different areas.

(i) Standards for quality of environment in its various aspects laid down for an area, different areas.

(ii) The maximum allowable limits of concentration of various environmental pollutants (including noise) for an area.

(iii) The likely emission or discharge of environmental pollutants from an industry, process or operation proposed to be prohibited or restricted.

(iv) The topographic and climatic features of an area.

(v) The biological diversity of the area which, in the opinion of the Central Government needs to be preserved.

(vi) Environmentally compatible land use.

(vii) Net adverse environmental impact likely to be caused by an industry, process or operation proposed to be proscribed or restricted.

(viii) Proximity to a protected area under the Ancient Monuments and Archaeological Sites and Remains Act, 1958 or a sanctuary, National Park, game reserve or closed area notified as such under the Wild Life (protection) Act, 1972 or plans protected under any treaty, agreement or convention with any other country or countries or in pursuance of any decision made in any international conference, association or other body.

(ix) Proximity to human settlements.

(x) Any other factor as may be considered by the Central Government to be relevant to the protection of the environment in an area.

(2) While prohibiting or restricting the location of industries and carrying on of processes and operations in an area, the Central Government shall follow the procedure hereinafter laid down.

(3) (a) Whenever it appears to the Central Government that it is expedient to impose prohibition or restrictions on the locations of an industry or the carrying on of processes and operations in an area, it may by notification in the Official Gazette and in such other manner as the Central Government may deem necessary from time to time, give notice of its intention to do so.

(b) Every notification under clause (a) shall give a brief description of the area, the industries, operations, processes in that area about which such notification pertains and also specify the reason for the imposition of prohibition or restrictions on the locations of the industries and carrying on of process or operation in that area.

(c) Any person interested in filing an objections against the imposition of prohibition or restrictions on carrying on of processes or operations as notified under clause (a) may do so in writing to the Central Government within sixty days from the date of publication of the Notification in the Official Gazette.

(d) The Central Government shall within a period of one hundred and twenty days from the date of publication of the notification in the official Gazette consider all the objections received against such notification and may 1[within one hundred and 2[eighty] days from such day of publication] impose prohibition or restrictions on location of such industries and the carrying on of any process or operation in an area.

6. The Central Government or the officer empowered to take samples under section II shall collect the sample in sufficient quantity to be divided into two uniform samples parts and effectively seal and suitably mark the same and permit to the person from whom the samples is taken to add his own seal or mark to all or any of the portions so sealed and marked. In case, where the samples is made up in containers or small volumes and is likely to deteriorate or be otherwise damaged if exposed, the Central Government or the officers empowered shall take two of the said samples without opening the containers and suitably seal and ask the same. The Central Government or the officer empowered shall dispose of the samples so collected as follows: -

(i) One portion shall be handed over to the person from whom the sample is taken under acknowledgement; and

(ii) the other portion shall be sent forthwith to the Environment laboratory or analysts.
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7. The Central Government or the officer empowered shall serve on the occupier or his agent or person in charge of the place a notice then and there in Form I of his intention to have the sample analysed.

8. (1) Sample taken for analysis shall be sent by the Central Government or the officer empowered to the environmental laboratory by registered post or through special messenger along with Form II.

1. Inserted by Rule 2 of the Environment(Protection)(Third Amendment)Rules,1992 notified vide G.S.R 562(E)dated 22.5.1992

2. Substituted by Rule 2 of the Environment(Protection)(Fourth Amendment)Rules,1992 notified vide G.S.R 636(E)dated 25.6.1992

3. For rule 6 of the principal rules this rule was substituted vide S.O64(E)published in the Gazette No. 42 dated 18.1.88

(2) Another copy of Form II together with specimen impression of seals of the officer empowered to take samples along with the seals/marks, if any, of the person from whom the sample is taken shall be sent separately in a sealed cover by registered post or through a special messenger to the environmental laboratory.

(3) The findings shall be recorded in Form III in triplicate and signed by the Government Analyst and sent to the officer from whom the sample is received for analysis.

(4) On receipt of the report of the findings of the Government Analyst, the officer shall send one copy of the report to the person from whom the sample was taken for analysis, the second copy shall be retained by him for his record and the third copy shall be kept by him to be reproduced in the Court before which proceedings, if any, are instituted.

9. The following shall be the functions of environmental laboratories :-

(i) to evolve standardised methods for sampling and analysis of various types of environmental pollutants;

(ii) to analyse sample sent by the Central Government or the officers empowered under sub-section (1) of section 11.

(iii) to carry out such investigations as may be directed by the Central Government to lay down standards for the quality of environment and discharge of environmental pollutants, to monitor and to enforce the standards laid down;

(iv) to send periodical reports regarding its activities to the Central Government;

(v) to carry out such other functions as may be entrusted to it by the Central Government from time to time.

10. A person shall not be qualified for appointment or recognised as a Govt. Analyst unless he is a :-

(a) graduate in science from a recognised university with five years experience in laboratory engaged in environmental investigation, testing or analysis; or

(b) post-graduate in science or a graduate in engineering or a graduate in medicine or equivalent with two years experience in a laboratory engaged in environmental investigations, testing or analysis; or

(c) post-graduate in environmental science from a recognized university with two years experience in a laboratory engaged in environmental investigations, testing or analysis.

11. The manner of giving notice under clause (h) of section 19 shall be as follows namely:-

(1) The notice shall be in writing in Form IV.

(2) The person giving notice may send notice to-

(a) if the alleged offence has taken place in a Union territory

(A) The Central Board and

(B) Ministry of Environment and Forests (represented by the Secretary to Government of India);

(b) if the alleged offence has taken place in a State :-

(A) the State Board: and

(B) the Government of the State (represented by the Secretary to the State Government in charge of environment): and

(C) the Ministry of Environment and forests (represented by the Secretary to the Government of India);

(3) The notice shall be sent by registered post acknowledgement due; and

(4) The period of sixty days mentioned in clause (b) of section 19 of the Environment (Protection) Act, 1986 shall be reckoned from the date it is first received by one of the authorities mentioned above.

12. Where the discharge of environmental pollutant in excess of the prescribed standards occurs or is apprehended to occur due to any accident or other unforeseen act or event, the person in charge of the place at which such discharge occurs or is apprehended to occur shall forthwith intimate the fact of such occurrence or apprehension of such occurrence to all the following authorities or agencies, namely :-

(i) The officer-in-charge of emergency or disaster relief operation in a district or other region of a state or Union territory specified by whatever designation by the Government of the said State or Union territory, and in whose jurisdiction the industry, process or operation is located.

(ii) Central Board or a State Board as the case may be and its regional officer having local jurisdiction who have been delegated powers under section 20, 21, 23 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974) and section 24 of the Air (prevention and Control of Pollution) Act. 1981 (14 of 1981).

(iii) The statutory authorities or agencies specified in column 3 in relation to places mentioned in column 2 against thereof of the Schedule II]

1.Rule 12 inserted vide Notification No. S.O 32(E)dated 16-2-87 published in the Gazette No. 66 dated 16-2-87

1[13. (1) The Central Government may take into consideration the following while prohibiting or restricting the handling of hazardous substance in different areas:-

(i) The hazardous nature of the substance (either in qualitative or quantitative terms as far as may be) in terms of its damage causing potential to the environment human beings other living creatures. plants and property;

(ii) the substances that may be or likely to be readily available as substitutes for. the substances proposed to be prohibited or restricted;

(iii) the indigenous availability of the substitute, or the state of technology available in the country for developing a safe substitute;

(iv) the gestation period that may be necessary for gradual introduction of a new substitute with a view to bringing about a total prohibition of the hazardous substance in question; and

(v) any other factor as may be considered by the Central Government to be relevant to the protection of environment.

2) While prohibiting or restricting the handling of hazardous substances in an area including their imports and exports the Central Government shall follow the procedure hereinafter laid down :-

(i) Whenever it appears to the Central Government that it is expedient to impose prohibition or restriction on the handling of hazardous substances in an area, it may, by notification in the Official Gazette and in such other manner as the Central Government may deem necessary from time to time, give notice of its intention to do so.

(ii) Every notification under clause (i) shall give a brief description of the hazardous substances and the geographical region or the area to which such notification pertains, and also specify the reasons for the imposition of prohibition or restriction on the handling of such hazardous substances in that region or area.

1.Rule 13 inserted vide Notification No. G.S.R 931(E)dated 27-10-89 published in the Gazette No. 564 dated 27-10-89

(iii) Any person interested in filing an objection against the imposition of prohibition or restrictions on the handling of hazardous substances as notified under clause (i) may do so in writing to the Central Government within sixty days from the date of publication of the notification in the Official Gazette.

(iv) The Central Government shall within a period of ninety days from the date of publication of the notification in the official Gazette consider all title, objections received against such notification and may impose prohibition or- restriction on the handling of hazardous substances in region or an area.

1[14. Every person carrying on an industry, operation or process environment [Statement] requiring consent under section 25 (Prevention and Control of Pollution) act, 1974 (6 of 1974) or under section 2 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) or both or authorisation under the Hazardous Wastes (Management and Handling) Rules, 1989 issued under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an environmental² [statement] for the financial year ending the 31st March in Form V to the concerned State Pollution Control Board on or before the ³[thirteenth day of September] every year, beginning 1993.]

1.Inserted by Rule 2 of the Environment (Protection)(Second amendment)Rules,1992 vide notification G.S.R 329(E)dated 13.3.1992

2.Substituted by Rule 2(a)(i)of the Environment (Prtection)Amendment Rules,1993 vide notification G.S.R 386(E)dated 22.4.1993

3.Substituted by Rule 2(a)(ii),ibid

S.O. 83(E).-In exercise of the powers conferred under sub section (1) of section 10 1[of the Environment (Protection) Act, 1986 (29 of 1986)] the Central Government hereby empowers the persons listed in the Table here below for the purpose of that sub-section.

TABLE

SI No	Officer /Agency	Applied under.
1.	Director General, Factory Advice Service and Labour Institute.	Dock Workers (Safety, Health and Welfare)Act, 1986
2.	Deputy Director General Factory Advice Service & Labour Institute.	
3.	Director (Dock Safety)	-do-
4.	Joint Director (Dock Safety)	-do-
5.	Deputy Director (Dock Safety)	-do-
6.	Assistant Director (Dock Safety)	-do-
7.	Additional Assistant Director (Dock. Safety)	-do-
8.	Chief Inspector of Factories	The Factories Act, 1948
9.	Additional Chief Inspector of Factories.	-do-
10.	Joint Chief Inspector of Factories.	-do-
11.	Deputy Chief Inspector of Factories.	-do-
12.	Inspector of Factories.	-do-
13.	Controller General, of Indian Bureau of Mines.	The Mines & Mineral (Regulation Development) Act, 1957
14.	Chief Controller of Mines.	-do-
15.	Controller of Mines	-do-
16.	Regional Controller of Mines	-do-
17.	Deputy Controller of Mines	-do-

1.The words "of the Environment (Protection)Act,1986(29 of 1986)" inserted vide corrigendum No. S.O 238(E)dated 26-3-87 published in the Gazette No. 129 dated 26-3-87

18 Port Authority.	The Dock Workers Safety Health & Welfare Scheme, 1961 and Dock Work-ers Advisory Committee Rules.
19. Inspector	-do-
20. Chief Inspector of pollution	The Plantation or Labour Act, 1951.
21. Inspector	-do-
22. Inspector of Dock Safety.	The Indian Dock Labourers Act, 1934.
23. Conservator of Ports.	The Indian Port Act 1908.
24. Deputy Conservator of Ports	The Indian Port Act, 1908.
25. Harbour Matter	-do-
26. Director (Marine Dcparuncm)	The Merchant Shipping Act, 1958.
27. Manager (Marine Operation)	-do-
28. Dirctor (pollution Control)	-do-
29. Slate Pollution Control Board and the officers empowered by State Board under section 21 and 23 of 1974 or under section	The Water(Prevention and Control of pollution)Act,1974 and rules made thereunder.
24 of the Air (Prevention and Control of Pollution) Act, 1981	The Air(Prevention and Control of Pollution) Act,1981
30. Central Pollution Control Board and any officer empowered by the, Board under section 23 of the Water (Prevention Water and Control of Pollution) Act, 1974 or under section 24 of the Air (Prevention and Control of Pollution)Act,1981	The Air(Prevention and Control of Pollution)Act,1981 or the Water (Prevention and Control of Pollution) Act,1974 and rules made thereunder.
31. State Transport Authority.	The Motor Vehicles Act, 1939.
32. Regional Trnnspon Authority.	-do-

33. Any other authority or person delegated with powers by the State Transport Authority under the provisions of section 44(5) of the Motors Vehicles Act,. 1939.	-do-
34. Food (Health) Authorities in the State/ Union territory or such other subordinate or local authorities as may be specified under the provisions of the Prevention of Food Adulteration Act, 1955 <i>for the time being.</i>	The Prevention of Food Adulteration Act, 1955 and Rules made thereunder.
35. Food Inspcctor.	The Prevention of Foud Adulteration Act, 1955 and Rules made hereunder.
36. The Atomic Energy Regulatory	The Atomic Energy Act, Board. 1972.
37. Drug Controller <i>of</i> India.	The Drugs & Cosmetics Act, 1940.
38. Commissioner for Food and Drug Administration or any authority incharge <i>of</i> State Drug Control AdminisInltion.	The Drugs & Cosmetics Act, 1940.
39. Drug Inspector	-do-
40. Chief Controller <i>of</i> Explosives.	The Explosives Act, 1884 and the Explosives Rules, 1983
41. Joint Chief Controller <i>of</i> Explosives	-do-
42. Deputy Chief Controller <i>of</i> Explosives.	-do-
43. Controller of Explosives	-do-
44. Licensing Officer	The Insecticides Act. 1968
45. Insecticides Inspector.	-do-
46. Chief Controller <i>of</i> Explosives	The Petroleum Act, 1934.

47. Deputy Chief Controller of Explosives.	-do-
48. Controller of Explosives.	-do-
49. Deputy Controller of Explosives	-do-
50. Assistant Controller of Explosives.	-do-
51. Inspector.	-do-
52. Chief Inspector of Boilers	The India Boilers Act, 1923.
53. Deputy Chief Inspector of Boilers	-do-
54. Inspector of Boilers.	-do-
SS. Director General of Shipping	Merchant Shipping Act, 1958.
56. Surveyor.	-do-
57. Director General (TD) or his nominee not below the rank of Development Officer.	Industrial(Development & Regulation)Act,1951
58. Chairman & Director General, National Council for Cement and Building Materials or his nominee not below the rank of Programme leader.	-do-
59. Office appointed under the Bengal Smoke Nuisance Act, 1905 .	The Bengal Smoke Nuisance Act,1905
The Bombay Smoke Nuisance Act,	The Bombay Smoke Nuisance Act,1912
	and
The Gujarat Smoke Nuisance Act, 1963	The Gujarat Smoke Nuisance Act,1963.

1[60. Chief Inspector of Mines Safety

The Mines Act,1952 and the rules and regulations made thereunder .]

2[61. Chairman of the Committee of Pollution) Act, 1974 and in respect of Union Territories

The Water (Prevention and Control the Air (Prevention and Control of Pollution) Act, 1981

62. Member Secretary of the Committee in respect of Territories

The Water (Prevention and of Control Pollution) Act, Union 1974 and the Air (Prevention and Control of Pollution) Act, 1981]

S.O.84(E)-In exercise of the powers under sub-section (i) of section 113[of the Environment(Protection)Act, 1986 (29 of 1986)]the Central Government hereby empowers the person listed in the Table here below for the purpose of that sub-section.

Sl.No.	Officer/Agency	Appointed under
1.	Director General Factory Advice Service and Labour Institute	Dock Workers (Safety,Health and Welfare)Act, 1986
2.	Deputy Director General Factory Advice Service and Labour Institute	Dock Workers (Safety,Health and Welfare)Act, 1986
3.	Director(Dock safety)	-do-
4.	Jiont Director	-do-
5.	Deputy Director(Dock safety)	-do-
6.	Assistant Director(Dock safety)	-do-
7.	Additional Assistant Director(Dock safety)	-do-
8.	Chief Inspector of Factories	The Factories Act,1948

9.	Additional Chief Inspector of Factories	-do-
10.	Joint Chief Inspector of Factories	-do-
11.	Deputy Chief Inspector of Factories	-do-

1. Principal Notification published vide S.O No. 83(E)dated 16.2.87 and S.No 60 and entries relating thereto inserted vide S.O63(E)published in gazette No.42 dated 18.1.88
2. Sl. No 61 and 62 and entries relating thereto inserted vide S.O622(E)dated 3.9.1996
3. The words "of the Environment(Protection)Act,1986(29 of 1986)"inserted vide corrigendum No. S.O 239(E)published in the Gazette No. 129dated 26.3.87

12. Inspector of Factories	-do-
13. Controller General of Indian Bureau of Mines	The Mines and Mineral (Regulation and Development) Act, 1957.
14. Chief Controller of Mines	-do-
15. Controller of Mines	-do-
16. Regional Controller of Mines	-do-
17. Deputy Controller of Mines -do-	
18. Port Authority	The Dock Workers (Safety Health & Welfare) Scheme, 1961 and Dock Workers Advisory Committee Rules.
19. Inspector	-do-
20. Chief Inspector of Plantation	The Plantation Labour Act,. 1951.
21. Inspector	-do-
22. Inspector of Dock Safety	The Indian Dock Labourers Act, 1934.
23. Conservator of Ports	The Indian Port Act, 1908.
24. Dcputy Conservator of Ports	-do-
25. Harbour Master	-do-
26. Director (Marine Dcpanment)	The Merchant Shipping Act. 1958

27. Manager (Marine Operation) **-do-**
28. Director (pollution Control) **-do-**
29. State Pollution Control Board and the officers empowered by State Board under section 21 and 23 of the Water 1974 (Prevention and Control of Pollution) Act. thereunder 1974 or under section 24 of the Air (Prevention and Control of Pollution) Act 1981. **Water(Prevention and Control of Pollution) Act. 1974(6 of 1974)and rules made there under**
Air(Prevention and Control of Pollution) Act. 1981.
30. Central Pollution Control Board and any officers empowered by the Board under section 23 of the water (Prevention and Control of Pollution)Act,1974 or under Section 24 of the Air(Prevention and Control of Pollution)Act,1981
Air(Prevention and Control of Pollution(Prevention and the Water (Prevention and control of Pollution)Act,1974(6 of 1974)and rules made thereunder.
31. State Transport Authority **The Motor Vehicles Act. 1939.**
32. Regional Transport Authority. **-do-**
33. Any other authority or person delegated with powers by the State Transport Authority under the provisions of section 44(5) of the Motor Vehicles Act,. 1939. **-do-**
34. Food (Health) Authorities in the territory or such other and subordinate or local authorities as may be. specified **The Prevention of Food Adulteration Act, 1955 and Rules made thereunder.**

under the provisions of the Prevention of Food Adulteration Act, 1955 for the time being.

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| 35. Food Inspector. | The Prevention of Food Adulteration Act, 1955 and Rules made thereunder. |
| 36. The Atomic Energy Regulatory Board. | The Atomic Energy Act, 1972. |
| 37. Drug Controller of India. | The Drugs & Cosmetics Act, 1940. |
| 38. Commissioner for Food and Drug Administration or any authority incharge of State Drug Control Administration | The Drugs & Cosmetics Act, 1940. |
| 39. Drug Inspector | -do- |
| 40. Chief Controller of Explosives. | The Explosives Act, 1884 and The Explosives Rules, 1983 |
| 41. Joint Chief Controller of Explosives | -do- |
| 42. Deputy Chief Controller of Explosives. | -do- |
| 43. Controller of Explosives | -do- |
| 44. Licensing Officer | The Insecticides Act, 1968. |
| 45. Insecticides Inspector. | -do- |
| 46. Chief Controller of Explosives | The Petroleum Act, 1934. |
| 47. Deputy Chief Controller of Explosives. | -do- |
| 48. Controller of Explosives. | -do- |
| 49. Deputy Controller of Explosives | -do- |
| 50. Assistant Controller of Explosives. | -do- |
| 51. Inspector. | -do- |
| 52. Chief Inspector of Boilers | The India Boilers Act, 1923. |

53. Deputy Chief Inspector of Boilers	-do-
54. Inspector of Boilers.	-do-
55. Director General of Shipping	Merchant Shipping Act, 1958.
56. Surveyor.	-do-
57. Director General (TD) or his nominee not below the rank of Development Officer.	Industrial (Development and Regulation) Act, 1951.
58. Chairman & Director General, National Council for Cement and Building Materials or his nominee not below the rank of Programme leader	-do-
59. Officers appointed under the Bengal Smoke 1905 Act, 1905;	The Bengal Smoke Nuisance Act,1905
The Bombay Smoke Nuisance Act,1912; and	The Bombay Smoke Nuisance Act,1912
The Gujarat Smoke Nuisance Act,1963	The Gujarat Smoke Nuisance. Act,1963.
1[60. Chief Inspector of Mines Safety	The Mines Act, 1952 and the rules and regulations made thereunder.
2[61. Chairman of the Committee	The Water (Prevention and Control of Pollution)
in respect of Union Territories	Act. 1974 and the Air (Prevention and Control of Pollution)Act,1981
62. Member Secretary of the in respect of Territories	The Water(Prevention and Control of Pollution)Act,Union 1974 and the Air(Prevention and Control of Pollution)Act,1981

- 1.Principal Notification published vide S.O No. 84(E)dated 16th February,1987 and S.No. 60 and entries relating thereto inserted vide S.O 62(E)published in gazette No.42 dated 18.1.88
- 2.S.No 61 and 62 and entries relating thereto inserted vide S.O 623(E)dated 3.9.1996

**DELEGATION OF POWERS TO THE STATE GOVERNMENTS AND THE
CENTRAL POLLUTION CONTROL BOARD**

MINISTRY OF ENVIRONMENT & FORESTS

(Department of Environment, Forests & Wildlife)

New Delhi, the 10th February, 1988

NOTIFICATION

S.O.152(E)-In exercise of the powers conferred by section 23 of the Environment (Protection)Act, 1986 the Central Government hereby delegates the powers vested in it under section 5 of the Act to the State Government of Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Mizoram, Orissa, Rajasthan, Sikkim and Tamil Nadu subject to the condition that the Central Government may revoke such delegation of powers in respect of all or anyone or more of the State Governments or may itself invoke the provisions of section 5 of the Act, if in the opinion of the Central Government such a course of action is necessary in public interest.

[No.1 (38)/86-PL] .

T. N.SESHAN, Secy.

MINISTRY OF ENVIRONMENT & FORESTS

(Department of Environment, Forests & Wildlife) New Delhi, the 14th April, 1988

NOTIFICATION

S.O.289(E)-In exercise of the powers conferred by section 23 of the Environment (Protection) Act, 1986 the Central Government hereby delegates the powers vested in it under Section 5 of the Act to the State Government of Meghalaya, Punjab and Uttar Pradesh subject to the condition that the Central Government may revoke such delegation of powers in respect of all or anyone or more of the State Governments or may itself invoke the provisions of section 5 of the Act, if in the opinion of the Central Government such a course of action is necessary in public interest.'

[No.1 (3 8)/86-PL]

T.N.SESHAN, Secy.

Source- Gazette No. 205 dated 14.4.88

MINISTRY OF ENVIRONMENT & FORESTS

(Department of Environment, Forests & Wildlife)

New Delhi, the 17h May, 1988

NOTIFICATION

S.O. 488(E).- In exercise of the powers conferred by section 23 of the Environment (protection) Act, 1986 the Central Government hereby delegate the powers ,vested in it under section 5 of the Act to the State Government of Maharashtra subject to the condition that the Centr.u Government may revoke sum delegation of powers in respect the State Government or may itself invoke the provisions of section 5 of the Act. if in the opinion of the Central Governmct such a course of action is necessary in public interest.

No. 1 (.18)/86-PL: T.N. SESHAN, Secy

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests & Wildlife)
New Delhi, the 22nd September, 1988
NOTIFICATION

S.O. 881(E).- In exercise of the powers conferred by section 23 of the Environment (protection) Act, 1986 the Central Government hereby delegates the powers vested in it under section 5 of the Act to the State Governments of Goa or Jammu & Kashmir subject to the condition that the Central Government may revoke such delegation of powers in respect of all or any one of the State Governments or may itself invoke the provisions of section 5 of the Act, if in the opinion of the Central Government such a course of action is necessary in public interest.

No. 1(38)/86-PL

K. P. GEETAKRISHNAN, Secy

Source- Gazette No. 749 dated 22.9.88

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests & Wildlife)

New Delhi, the 6th June, 1989

NOTIFICATION

S.O. 408(E).- In exercise of the powers conferred by section 23 of the Environment (protection) Act, 1986 the Central Government hereby delegates the powers vested in it under section 5 of the Act to the State Governments of West Bengal and Manipur subject to the condition that the Central Government may revoke such delegation of powers in respect of all or any one of the State Governments or any one of them or may itself invoke the provisions of section 5 of the Act, if in the opinion of the Central Government such a course of action is necessary in public interest.

No. 1(38)/86-PL

K. MADHAV A SARMA, Jt. Secy

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests & Wildlife)
New Delhi, the 25th July, 1991

NOTIFICATION

S.O. 419(E).- In exercise of the powers conferred by section 23 of the Environment (Protection) Act, 1986 the Central Government hereby delegates the powers vested in it under section 5 of the Act to the State Government of Tripura subject to the condition that the Central Government may revoke such delegation of powers in respect of the State Government or may itself invoke the provisions of section 5 of the Act, if in the opinion of the Central Government such a course of action is necessary in public interest.

No. 1(38)/86-PL

MUKUL SANWAL, Secy.

Source- Gazette No. 414 dated 25.7.91

1 SCHEDULE-I **

(See rule 3)

Sl.No	Industry	Parameter	Standard
1.	2.	3.	4.
1.	Caustic Soda Industry	Total concentration of mercury in the effluent* Mercury bearing waste-water generation(flow) pH	Concentration not to exceed, miligramme per lit(except for pH and flow) 0.01 10 kilolitres/tonne of caustic soda produced 5.5 to 9.0

		<p>*Final effluent is the combined effluent from (a)cell house,(b)brne plant(c)chlorine handling (d)hydrozen handling(f)hydrochloric acid plant</p>	
2.	Man-made fibres(syanthetic)	<p>Suspended solids</p> <p>Bio-chemical oxyzen demand[BOD(3 days at 27°C)]</p> <p>pH</p>	<p>Concentration not to exceed,miligramme per lit(except for pH)</p> <p>100</p> <p>30</p> <p>5.5 to 9.0</p>
<p>1. The Environment (Protection)Rules,1986 are referred to as principal rules in all subsequent Notifications beginning with S.O 32(E)dated 16.2.1987 published in the Gazette No.66 dated 16.2.1987 .The Schedule to be principals rules was renimbered as Schedule-I vude S.O 32(E) supra.</p> <p>** Substituted by Rule 2 of the Environment (Protection) Amendment Rules 1996 notified by G.S.R 176 dated 2.4.1996 may be read as BOD(3 days at 27 °c)wherever BOD 5 days 20° c occurred.</p> <ul style="list-style-type: none"> Standards notified as SI. No. 60 on page 313 may also referred. 			

3.	Oil refinery Industry	<p>Oil and grease</p> <p>Phenol</p> <p>Sulphide</p> <p>Bio-Chemical oxygen demand</p> <p>BOD (3 days at 27°C)</p> <p>Suspended solids</p> <p>pH</p>	<p>10</p> <p>1</p> <p>0.5</p> <p>15</p> <p>20</p> <p>6.0 to 8.5</p>	<p>Quantum (Kg/1000t crude Processed)</p> <p>7</p> <p>0.7</p> <p>0.35</p> <p>10.5</p> <p>14</p>
4.	Sugar industry	<p>Bio-chemical oxygen demand, 5 day 20°C</p> <p>Suspended solids</p>		<p>Concentration not exceed, milligramme per litre</p> <p>100 for disposal on land</p> <p>30 for disposal in surfacewater</p> <p>100 for disposal on land</p> <p>30 for disposal in surface waters.</p>

5.	<p>Thermal power plants</p> <p>Condenser cooling waters(once through cooling system)</p> <p>Boiler blowdowns</p> <p>Cooling Tower blowdown</p> <p>Ash pond effluent</p>	<p>pH</p> <p>Temperature</p> <p>Free available chlorine</p> <p>Suspended solids</p> <p>Oil and grease</p> <p>Copper(total)</p> <p>Iron(total)</p> <p>Free available chlorine</p> <p>Zinc</p> <p>Chromium (total)</p> <p>Phosphate</p> <p>Other corrosion inhibiting materials</p> <p>pH</p> <p>Suspended solids</p> <p>Oil and grease</p>	<p>Maximum limiting concentration, miligramme per litre(except for pH and temperature)</p> <p>6.5-8.5</p> <p>Not more than 5°C higher than the intake water temperature</p> <p>0.5</p> <p>100</p> <p>20</p> <p>1.0</p> <p>1.0</p> <p>5.0</p> <p>1.0</p> <p>0.2</p> <p>5.0</p> <p>Limit to be established on case by case basis</p> <p>by Central Board in case of Union territories and State Board in case of States</p> <p>6.5-8.5</p> <p>100</p> <p>20</p>
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6.	Cotton industries (composite textile and processing)	Common PH Suspended solids Bio-Chemical Oxygen demand day 20°C Oil and grease Bio-assay test Special: Total chromium (as Cr) Sulphide (as S) Phenolic component (as C ₆ H ₅ OH)		Concentration not to exceed milligramme per litre (except for pH and bioassay) 5.5 to 9 100 150 10 90% survival of fish of after 96 hrs. 2 2 5
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The special parameters are to be stipulated by the Central Board in case of Union territories State Boards in case of States depending upon the dye used in the industry. Where the industry uses chromic dyes, sulphur dyes and/or phenolic compounds in the dyeing/ priming process the limits on chromium of 2 mg/litre, sulphides of 2 mg/litre and phenolic compounds of 5 respectively shall be imposed.

Where the quality requirement of the recipient system so warrants, the limit of BOD should be lowered upto 30 according to the requirement by the State Boards for the States and the Board for the Union territories.

A limit on sodium absorption ratio of 26 should be imposed by the State Boards for the the Central Board for the Union territories if the disposal of the effluent is to be made on land

7.	Composite woolen mills			Concentration not to exceed, milligram per litre (except for pH and bioassay)
		Suspended solids		100
		PH		5.5 to 9.0
		Biochemical oxygen demand, 5 day 20°C		100
		Oil and grease		10
		Bio-assay		90% survival of fish after 96 hours
		Total chromium (as Cr)		2
		Sulphide (as S)		2

Phenolic Compounds (as C₆H₅OH)

The special parameters are to be stipulated by the Central Board in case of Union territories and State Boards in case of State depending upon the dye used in the industry. Where the industry uses chrome dyes, sulphur dyes and or/phenolic compounds in the dyeing/printing process, the limits on chromium of 2 mg/litre, sulphides of 2 mg/litre and phenolic compounds of 5 mg/litre respectively shall be imposed.

Where the quality requirement of the recipient system so warrants, the limit of BOD should be lowered upto 30 according to the requirement by the State Boards for the States and the Central Board for the Union territories.

A limit on sodium absorption ratio of 26 should be imposed by the State Boards for the States and the Central Board for the Union territories if the disposal of the effluent is to be made on land.

1[8.	* Dye and Dye Industry			<p>Concentration not to exceed Intermedaite milligrammes per litre(except for pH, temperature and bio-assay)</p> <p>Suspended Solids 100</p> <p>pH 6 to 8.5</p> <p>Temperature Shall not exceed 5°C above the ambient temperature of the receiving body.</p> <p>Mercury(as Hg) 0.01</p> <p>Hexavalent(as Cr) 0.1</p> <p>Chromium. 0.1 Total Chromium(as Cr) 2.0</p> <p>Copper (asCu) 3.0</p> <p>Zinc (as Zn) 5.0</p> <p>Nickel (as Ni) 3.0</p> <p>Cadmium (as Cd) 2.0 Chloride(as Cl) 1000</p> <p>Sulphate(as SO4) 1000</p> <p>Phenolic Compounds (as C6HsOH) 1000</p> <p>Oil and Grease 1.0</p> <p>10</p>
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		Phenolic Compounds(as C ₆ H ₅ OH) Oil and Grease		1.0 10
	<p>1.SI.Nos 8,9 and 10 and entries relating thereto inserted vide S.O 393(E)dated 16.4.87</p> <p>published in the Gazette No. 185 dated 16.4.87</p> <p>*Standards notified at Sl. No 45 on page No. 303 may also be referred</p>			
		Bio-assay Test (with 1:8 dilution of effluents)		90% survival of Test animals after 96 hrs.
<p>The standards for chlorides and sulphades are applicable or disch:1rge into inland and surface water courses. However. when discharged on land for irrigation, the limit for chloride shall not be more than 600 milligrammes pcr litre and the sodium absorption rauo shall not exceed 26</p>				

9.	Electroplating industries	<p>pH</p> <p>Temperature</p> <p>Oil and Grease</p> <p>Suspended Solids</p> <p>Cynides(as CN)</p> <p>Ammonical</p> <p>Nitrizen</p> <p>Total residual chlorides(as Cl)</p> <p>Cadmiun(as Cd)</p> <p>Nickel(as Ni)</p> <p>Zinc(as Zn)</p> <p>Hexavalent</p> <p>Chomium(as Cr)</p> <p>Total Chromium(as Cr)</p> <p>Cupper(as Cu)</p> <p>Lead(as Pb)</p> <p>Iron(as Fe)</p> <p>Total Metal</p>		<p>Concentration not to exceed milligrammes per litre (cxcept for pH and temperature)</p> <p>0.6 to 9.0</p> <p>Shall not exceed 5°C above the ambient temperature of the receiving body.</p> <p>10</p> <p>100</p> <p>0.2</p> <p>50</p> <p>1.0</p> <p>2.0</p> <p>3.0</p> <p>5.0</p> <p>0.1</p> <p>2.0</p> <p>3.0</p> <p>0.1</p> <p>3.0</p> <p>10.0</p>
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10.	Cement Plants dustPlant Capacity Greater than 200 tonnes per day	Total 200	(All Sections) Total dust (All Section)	Not to exceed milligrammes per normal cubic meter. 400 250
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The Central and State Pollution Control Boards may fix stringent standards, not exceeding 2 milligrammes per normal cubic meter for smaller plants and 150 milligrammcs per normal cub meter for larger plants if the industry is located in an area which, in their opinion, requires sltingent standards.

Where continuous monitoring integrators are provided on dust emission lines, the integrated average values over a period, to be fixed by the Central and State Boards but not exceeding 72 hours shall be considered instead of momentary dust emission values *for* conformity to standards.

1*11.	Stone Crushing	Suspended particulate matter		The suspended particulate matter measured between 3 metrepllt metres <i>from</i> any process equipment of a stone crushing unit shall not exceed 600 microgrammes as per cubic meter.
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212.	Coke Ovens	pH Biochemical Oxyzen Demand (27°C for 3 days) Suspended Solids Phenolic Compounds (as C ₆ H ₅ OH) Cynides(as CN) Oil & Grease Ammonical Nitrozen (as N)		Concentration in the effluents Synthetic when discharged into inland surface waters not be exceed milligramme per litre (except for colour and pH) 5.5-9.0 30 100 5 0.2 10 50
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13.	Synthetic Rubber	<p>Colour</p> <p>pH</p> <p>Biochemical Oxygen Demand[BOD (3 days at 27°C)</p> <p>Chemical Oxygen Demand</p> <p>Oil and grease</p>		<p>Concentration in the effluents when discharged into inland surface waters not be exceed milligramme per litre(except for colour and pH)</p> <p>Absent</p> <p>5.5-9.0</p> <p>50</p> <p>250</p> <p>10.0</p>
<p>1. SI.No 11 and entries relating thereto inserted vide S.O 443(E)dated 18.4.87 published in the Gazette No. 206 dated 18.1.87</p> <p>2. SI No. 12 to 24 and entries relating thereto inserted vide S.O 64(E)published in the Gazette No. 42 dated 18.1.88</p> <p>* Standards notified at SI. No 37 on page 297 may also be referred</p>				

14.	<p>Small Pulp and Paper Industry</p> <p>*Discharge into 5.5-9.0 inland surface water</p> <p>Disposal on land</p>	<p>pH</p> <p>Suspended Solids</p> <p>BOD</p> <p>pH</p> <p>Suspended Solids</p> <p>BOD</p> <p>Sodium Absorption Ration</p>		<p>Concentration not to exceed <i>mg/l</i> (except for pH and sodium absorption ratio)</p> <p>5.5-9.0</p> <p>100</p> <p>30</p> <p>5.5-9.0</p> <p>100</p> <p>100</p> <p>26</p>
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<p>215.</p>	<p>Fermentation Industry (Distilleries, Maltries and Breweries)</p> <p>1.Substituted by Rule 2 of the Environment (Protection) Rules,1996 notified vide G.S.R 176(E)dated 2.4.1996</p> <p>2.Entries relating to Sl. No. 15 corrected in terms of S.O 12(E)dated 8.1.90 published in the Gazette No. 10 dated 8.1.90</p> <p>3.Substituted by Rule 3(a)of the Environment (Protection)(Amendment)Rules 1996 notified vide G.S.R 176(E)dated 2.4.1996</p>	<p>pH</p> <p>Colour and Odour</p> <p>Suspended Solids</p> <p>1[BOD (3 days at 27°C)]</p> <p>3[disposal into inland 30 surface waters or river /streams</p>		<p>Concentration in the effluents not to exceed milligramme per litre (except for pH and colour & odour)</p> <p>5.5- 9.0</p> <p>All efforts should be made to remove colour and unpleasant odour as far as practicable</p> <p>100</p> <p>30</p> <p>--disposal on land or for 100 irrigation]</p> <p>** [(2)(7)]</p>
<p>Note: (1) * Wastewater generation shall not exceed 250 metre cube per tonne of paper produced.</p> <p>(2)** [(2)(7)]</p>				

16.	Leather Tanneries			Concentration in the effluent not to exceed milligramme per litre (except for pH and per cent sodium)	
		Inland Surface waters	Public Sewers	Land Irrigation for	Marine Coastal areas
	Suspended Solids	100	00	200	100
	2[BOD 3 days at 27°C] 1.Omitted in Rule 3(b)of the Environment(Protection)(Amendment)Rules,1996 notified vide G.S.R 176(E)dated 2.4.1996 2.Substituted by Rules 2 of the Environment (Protection) (Amendment)Rules,1996 notified vide G.S.R 176(E)dated 2.4.1996	30	350	100	100
	pH	6.0-9.0	6.0-9.0	6.0-9.0	6.0-9.0
	Chlorides (as Cl)	1000	1000	200	-
	Hexavalent Chromium (Cr+6)	0.1	0.2	0.1	1

	Total	2	2	2.0	2
	Chromium (as Cr)				
	Sulphide (as S)	2	5	-	5
	Sodium percent	-	60	60	-
	Boron(as B)	2	2	2	-
	Oil and Grease	10	20	10	20

17.	Fertilizer Industry	Effluent- Straight Nitrogenous Fertilizers Excluding the Calcium, Ammonium Nitrate and Ammonium Nitrate Fertilisers	Plants Commissioned Jan 1, 1982 onwards (a)	concentration in the effluents not to exceed milligramme per litre (except for pH)	Plants Commissioned Prior to Jan 1, 1982 onwards (b)
		pH	6.5-8.0		6.5-8.0
		Ammonical Nitrogen	50		75
		Total Kjeldahl Nitrogen	100		150
		Free Ammonical Nitrogen	4		4
		Nitrate Nitrogen	10		10
		Cyanide as CN	0.2		0.2
		Vanadium as V	0.2		0.2
		Arsenic as As	0.2		0.2
		Suspended solids	100		100
		Oil and Grease	10		10

		*Hexavalent hromium as Cr	2		2
		Total Cromium as Cr	2		2
		Suspended Solids			
		*Fluride as F			
		**Hexavalent Chromium as Cr			
		**Total Chromium as Cr			
		Straight Nitrogenous Fertilizers Including the Calsium,Ammonium Nitrate and Ammonium Nitrate Fertilisrs	6.5-8.0		6.5-8.0
		PH	50		50
		Ammonical Nitrozen			
		Total Kjeldahi Nitrozen	4		4
		Free Ammonical Nitrozen	20		20
		Nitrate Nitrozen	0.2		0.2
		Cynide as CN	0.2		0.2
		Vanadium as V	0.2		0.2
		Arsenic as As	100		100
		Suspended Solid	10		10
		Oil and Grease			
		*Hexavalent Chromium as Cr	0.1		0.1
	* To be complited with the outlet of Chromate removal unit	*Total Cromium as Cr	2.0		2.0
	Tripura State Pollution Control Board				41

		Complex Fertilizers excluding the Calcium Ammonium Nitrate, Ammonium Nitrate and Ammonium Nitrophosphate Fertilisers	Plants Commissioned Jan1,1982 onwards (a)		Plants Commissioned prior to Jan1,1982 (b)
		pH	6.5-8.0		6.5-8.0
		Ammonical Nitrogen	50		75
		Total Kjeldahl Nitrogen	100		100
		Free Ammonical Nitrogen	100		100
		Nitrate Nitrogen			
		Cyanide as Cn	20		20
		vanadium as V	0.2		0.2
		Arsenic as As	0.2		0.2
		Phosphate as P	0.2		0.2
		Suspended solids	5		5
		Oil and Grease	100		100
		*Fluoride as F	10		10
		**Hexavalent Chromium as Cr	10		10
			0.1		0.1
		**Total Chromium as Cr			
			2.0		2.0
<ul style="list-style-type: none"> To be complied with at the outlet of fluoride removal unit. If the recipient system so demand, fluoride as F shall be limited to 1.5 mg/l 					
<ul style="list-style-type: none"> **To be complied with at the outlet of chromate removal plant. 					

		<p>Straight Phosphate Fertilizers</p> <p>pH</p> <p>Phosphate as P</p> <p>Suspended solids</p> <p>Oil and Grease</p> <p>*Fluoride as F</p> <p>**Hexavalent Chromium as Cr</p> <p>**Total Chromium as Cr</p>	<p>7.0-9.0</p> <p>5</p> <p>100</p> <p>10</p> <p>10</p> <p>0.1</p> <p>2.0</p>
	<p>Emissions</p> <p>Phosphatic Fertilizers</p> <p>(Fluorides and particulate matter emission)</p> <p>-Urea (Particulate matter emission)</p>	<p>Phosphoric acid manufacturing unit Granulation mixing and grinding of rock phosphate</p> <p>Pricing Tower Commissioned prior to 1-1-1982</p>	<p>25 milligramme per normal cubic metre as total Fluoride</p> <p>150 milligramme per normal cubic metre of particulate matter.</p> <p>150 milligramme per normal cubic metre or</p> <p>2 kilogramme per tone of product.</p> <p>50 miligramme per normal cubic metre or</p> <p>0.5 kilogram me per tonne of product.</p>
18.	Aluminium	<p>Particulate Mauer Emissions</p> <p>-Calcium</p> <p>-Smelling</p>	<p>255 milligramme per normal cubic metre of particulate</p> <p>150 milligramme per normal cubic metre of particulate matter</p>
19.	Calcium Carbide	<p>Particulate Mauer Emission</p> <p>-Kiln</p> <p>-Arc Furnace</p>	<p>250 milligramme per normal cubic metre</p> <p>150 milligramme per normal cubic metre</p>

20.	Carbon Black	Particulate matter Emission	150 milligramme per normal cubic metre
21.	Copper, Lead and Zinc Smelting	Particulate Matter Emission in concentrator Emission of Oxides of sulphur in Smelter & Conventor	150 milligramme per normal cubic metre Off-gases must be utilized for sulphuric acid manufacture. The limits of sulphurdioxide emission from stock shall not exceed 4 kilo-gramme per tonne of concentrated (one hundred percent) acid Produced.
22.	Nitric Acid (emission oxides of nitrogen)	Emission of Oxides of Nitrogen	3 kilogramme of oxides of nitrogen per tone of weak acid (before concentration) produced
23.	Sulphuric Acid (emission of sulphur dioxide and acid mist)	Sulphur dioxide Emissions Acid mist	4 kilogramme per tonne of concentrated (one hundred per cent) acid to Produced 50 minigramme per normal cubic metre.

24.	Iron & Steel (Integrated)	Particulate Matter Emission -Sintering Plant -Steel making -during normal operations -during oxygen lancing -Rolling Mill -Carbon monoxide from coke oven	150 milligramme per normal cubic metre 150 milligramme per normal cubic metre 400 milligramme per normal cubic metre 150 milligramme per normal cubic metre 3 kilogramme per tonne of coke produced
25.	Thermal Power Plants	Particulate Malter Emissions: -generation capacity 210 MW or more -generation capacity less than 210 MW	150 milligrammc per normal cubic meter 350 milligrammc per normal cubic meter

26.	Natural Industry Rubber Discharge into inland surface waters	<p>Colour & Odour Absent</p> <p>pH 6.0-9.0</p> <p>BOD 50</p> <p>COD 250</p> <p>Oil and Grease 10</p> <p>Sulphides 2</p> <p>Total Kjeldahl Nitrogen 100</p> <p>Dissolved phosphate (as P) 5</p> <p>suspended solids 100</p> <p>Dissolved solids (inorganic) Ammonical Nitrogen as (N) 2100</p> <p>Free ammonia (as NH₃) 5</p> <p>1. S.No. 25 and 26 and entries relating thereto inserted vide S.O. 8(E) dt. 3-1-89 published in the Gazette No.7dt. 3-1-89.</p> <p>Corrections in rule 2 against S.No. 26 made vide corrigendum No. S.O. 19(J(E) dt. 15-3-89 published in the Gazette No. 126 dt. 15-3-89.</p> <ul style="list-style-type: none"> Depending upon the requirement of local situation, such as protected area, the State Pollution Control Boards and other implementation agencies under the 'Environment (Protection) Act, 1986, may prescribed a limit of ISO milligramme per normal cubic meter, irrespective of generation capacity of the plant. 	<p>Absent</p> <p>6.0-9.0</p> <p>50</p> <p>250</p> <p>10</p> <p>2</p> <p>100</p> <p>5</p> <p>100</p> <p>2100</p> <p>50</p> <p>5</p>
	Disposal on land for irrigation	<p>Colour & Odour</p> <p>pH 6.0-8.0</p> <p>BOD 100</p> <p>COD 250</p> <p>Oil & Grcasc 10</p> <p>Suspended solids 200</p> <p>Dissolved solids 2100</p>	<p>Absent</p> <p>6.0-8.0</p> <p>100</p> <p>250</p> <p>10</p> <p>200</p> <p>2100</p>

1[27.	All types of Asbestos manufacturing units (including all processes involving the use of Asbestos)	EMISSIONS Pure Asbestos material -Total dust	4 Fibre * /cc 2 mg/m ³ (normal)
28.	Callor Alkali (Caustic soda) EMISSIONS (3) mercury Cell (1)All processes (c)All processes	EMISSIONS Mercury (from hydrogen gas holder stack) Chlorine (from hydrogen tower) Hydrochloric acid vapours and mist (from hydro chloric acidplant)	Concentrations in mg/m3 (normal) 0.2 15.0 35.0
29.	Large pulp and paper	EMISSIONS Particulale matter H ₂ S	Concentrations in mg/m3 (normal) 250 ** 10

31.	Re-heating (Reverberatory) Furnaces: Capacity: All sizes Sensitive area Other area	EMISSIONS Particulate matter Particulate matter	Concentration in mg/m ³ (romal) 150 450
1[32.	Foundries(a) Cupola Capacity (Melting rate): Less than 3 Mt/hr 3 Mt/hr and above (b) Arc Furnaces Capacity: All sizes (c) Induction Furnaces Capacity: All sizes	EMISSIONS Particulate matter do Note :-It is essential that stack is constructed over the cupola rewood the Charging door and emissions are directed through the stack which should re atleast six times the diameter of cupola. Particulate matter do Note:- In respect of Arc Furnaces and Induction Furnaces provision has to be made for collecting the fumes before discharging the emissions through the Stack. 1 S.Nos. 32 to 47 and entries relating thereto inserted vide G.S.R. 742(E) dt 30-8-90 pblished in the GazetteNo. 365 dated 30-08-90.	450 150 150 150

33.	Thermal Power Plants	<p>STACK HEIGHT /LIMIT IN METERS *</p> <p>Power generation capacity:</p> <ul style="list-style-type: none"> - 500 MW and above - 200 MW/210 MW and above to less than 500.MW - Less than 200 MW /210MW <p>Stream generation capacity:</p> <ul style="list-style-type: none"> - Less than 2 ton/hr. - More than 2 ton/hr. to 5 ton/hr. - More than 5 ton/hr. to 10 ton/hr. - More than 10 ton/hr. - More than 15 ton/hr. to 20 ton/hr. - More than 20 ton/hr. to 25 ton/hr. - More than 25 ton/hr. to 30 ton/hr. - More than 30 ton/hr. <p>*Correction have been made as per Corrigendum Notificaiton No SO.8(E). dt 31 121990</p>	<p>275</p> <p>220</p> <p>$H-14(Q)^{0.3}$ where Q is MW emission rate of SO₂ in *kg/hr. and *H Stack height in metres 1/2 times the neighbouring building height or 9 metres (whichever is more)</p> <p>12</p> <p>15</p> <p>18</p> <p>*21</p> <p>24</p> <p>27</p> <p>30 or using formula $H-14(Q)^{0.3}$ (whichever is more) Q is emission rate of S02 in kg/hr and *HStack height in meters.</p>
34.	<p>Small Boilers Capacity of Boiler</p> <ul style="list-style-type: none"> -less than 2 ton/hr -2 to 5 ton/hr -More than 15 ton/hr 	<p>EMISSIONS *</p> <p>Particulate matter</p>	<p>1600</p> <p>1200</p> <p>150</p>

35.	Oil Refineries (Sulphur dioxide)	EMISSIONS.* -Distillation (Atmospheric plus Vacuum) -Catalytic Cracker Sulphur Recovery Unit	0.25 kg/MT of feed** 2.5 kg/MT of feed 120 kg/MT of Sulphur in the feed
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36.	<p>Aluminium Plants</p> <p>(a)Alumina Plant :</p> <p>(i)Raw Matcrial Handling</p> <p>(ii) Prccipitation Area</p> <p>-Calcination</p> <p>(b) Smclter Plant</p> <p>(i)Green Anode Shop</p> <p>(ii) Anode Bakc Ovcn</p> <p>(iii) Potroom</p>	<p>EMISSIONS</p> <p>Primary arld Scondary Crusher Particulatc matter</p> <p>Particulate Matter</p> <p>Carbon Monoxidc Stack hcight</p> <p>Particulate Matter</p> <p>-do-</p> <p>-do-</p> <p>ToLaI Fluoride (F)</p> <p>Particulate Matter</p> <p>Total Fluoride (F)</p> <p>VSS</p>	<p>150</p> <p>250</p> <p>1 % max.</p> <p>$H= 14(Q) 0.3$</p> <p>whcrc Q is emission rate of SO₂ in kg/hr and H-Stack height in meters</p> <p>150</p> <p>150</p> <p>0.3 kg/MT of Aluminium</p> <p>4.7 kg/MT of Aluminium produccd</p>	
		<p>*All emissions normalized to 12 percent carbon monoxide.</p> <p>**Feed indicatcs thc fccd for that part of the process under consideration only.</p>		
	<p>Note:</p> <p>VSS= Vertical Stud Soderberg HSS = Horizontal Stud Soderberg PBSW= Pre backed Side Worked</p> <p>PBCW=Prebacked Center Worked</p>	<p>HSS</p> <p>PBSW</p> <p>PBCW</p> <p>Stack height</p>	<p>6,0 kg/tonne of Aluminium produced</p> <p>2,5 kg/tonne of Aluminium produced</p> <p>1.0 kg/tonne of Aluminium produced</p> <p>$H=14(Q)^{0.3}$</p> <p>where Q is emission rate of SO₂ in kg/hr and H-Stack height in meters,</p>	
	<p>Tripura State Pollution Control Board</p>		<p>53</p>	

*37.	Stone Unit	Crushing Suspended particulate matter (SPM)	<p>The Standards consist of two parts:</p> <p>(i) Implementation of the following Pollution Control measures:</p> <p>(a) Dust containment cum suppression system for the equipment,</p> <p>(b) Construction of wind breaking walls,</p> <p>(c) Construction of the metalled roads within the premises,</p> <p>(d) Regular cleaning and wetting of the ground within the premises,</p> <p>(e) Growing of a green belong along the periphery',</p> <p>(ii) Quantitative standard for the SPM:</p> <p>**[measured between three meters and ten metres from any processes equipment of a stone crushing unit shall not exceed 600 microgrammes per cubic meter] from a controlled isolated as well as from a unit located in a cluster should be less than 600 mg/Nm³</p> <p>1[xxx.....]</p> <p>*Standards notified at SI, No. 283 may also be referred</p> <p>** Corrections have been made as per CORRIGENDUM Notification No, S.O.8(E), dated 31.12,1990</p>
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38.	Petrochemicals (Basic intermediates) &	EFFLUENTS PH *BOD 2[(3days at 27°C)] **Phenol Sulphide (as S) 2 COD Cynide (as CN) *** Fluoride (as F) Total suspended solids Hexavalent Chromium 3[(as Cr)] ****Total Chromium 3[(as Cr)]	6.5-8.5 50 5 250 0.2 15 3[100] 0.1 2.0
		<p>* State Board may prescribed the BOD value of 30 mg/l if the recipient system so demands.</p> <p>** The limit for phenol shall be conformed to at the outlet of effluent treatment of phenol plant. However, at the final disposal point, the limit shall be less than 1mg/l.</p> <p>*** The limit for fluoride shall be confirmed to at the outlet of the chromate removalunit. However, at the disposal point fluoride concentration shari be lower than 5mg/l.</p> <p>**** The limits for total and hexavalent chromium shall be conformed to at the outlet of the chromate removal. This implies that in the final treated effluent, total and hexavalent chromium shall be lower than prescribed herein.</p>	

39.	Pharmaceutical Manufacturing and Formulation Industry	<p>. EFFLUENTS</p> <ol style="list-style-type: none"> 1. pH 2. Oil and Grease 3. Total Suspended solids 4. BOD₂ [(3 days at 27°C)] 	<p>5.5-9.0</p> <p>10</p> <p>100</p> <p>30</p>
		<p>1. The sentence 'The measurements are to be conducted at least twice a month for all the 12 month in a year'. deleted as per CORRIGENDUM notification S.D.8(E), dated 31.12.1990.</p> <p>2. Substituted by Rule 2 of the Environment (Protection) (Amendment) Rules, 1996 notified vide G.S.R. 176(E), dated 24/1/96.</p> <p>3. Corrected as per CORRIGENDUM Notification S.O 8(E), dated 31.12.1990.</p>	
		<ol style="list-style-type: none"> 5. Bio-assay test 6. Mercury 7. Arsenic Chromium 8. Chromium .- (Hexavalent) 9. Lead 10. Cyanide 11. Phenolics (as C₆H₅OH) 12. Sulphides (as S) 13. Phosphates (as P) 	<p>90% Survival of fish after 96 hrs in 100% effluent</p> <p>0.01</p> <p>0.20</p> <p>0.10</p> <p>0.10</p> <p>0.10</p> <p>1.00</p> <p>2.00</p> <p>5.00</p>
		<p>Note 1. Parameters listed as 1 to 13 are compulsory for Formulators. However, the remaining parameters (6 to 13) will be optional for others.</p> <p>2. State Board may prescribe limit for chemical oxygen demand (COD) correlated with BOD limit.</p> <p>3. State Board may prescribe limit for total dissolved solids depending upon uses of recipient waterbody.</p> <p>4. Limits should be (complied with at the terminal of the treatment unit before letting out of the factory boundary limits).</p> <p>5. For the compliance of limits, analysis should be done in the 'composite sample collected everyday hour for a period of R hours.</p>	

	<p>© Organics</p> <p>Phenol and phenolic compound as C₆H₅OH</p> <p>Arsenics(as As)</p> <p>Cynikde (as CN)</p> <p>Nitrate(as NO₃)</p> <p>Phosphate(as P)</p>	<p>1.0</p> <p>0.2</p> <p>0.2</p> <p>50</p> <p>5.0</p>
	<p>Note:</p> <p>1. Limits should be complied with at the end of the treatment plant before any dilution.</p> <p>2. Bio-assay test should be carried out with available species offish in receiving water.</p> <p>3. State Boards may prescribe limits of total dissolved solids (TDS) sulphates and chlorides depending on the uses of recipient water body.</p> <p>4. State Board may prescibe COD limit correlated with BOD limit.</p> <p>5. Pesticides are known to have metabolites and isomers. If they are found insignificantconcentration, standards may be prescribed for those in the list by Central or State Board.</p> <p>6. Industries are required to analyse pesticides in waste water by advanced analyticalmethod such as GLC/HPLC.</p> <p>7. All the parameters will be compulsory for formulators, for others, the 7th will be optional.</p>	

41.	<p>Tannery (after primary treatment) Disposal: Channel/Conduit Carrying waste waters to Secondary treatment plants Type of Tanneries --Chrome tanneries/combined chrome & vegetable tanneries --Vegetable tanneries</p>	<p>EFFLUENT</p> <p>pH SS Chromium concentration after treatment in the chrome waste water stream</p> <p>pH SS</p>	<p>6.5-9.0 Not to exceed 600 45 6.5-9.0 Not to exceed 600</p>
		<p>Note: The above standards will apply to those tannery units which have made full contribution to a Common Effluent Treatment Plant(CETP) comprising secondary treatment. Those who have not contributed will be governed by earlier Notification No. S.O.*61(E), dated January 18,1988.</p> <p>*Corrected as per Notification No S.O.8(E), dt. 31.121990</p>	

42.	Paint Industry Waste water discharge	<p>EFFLUENTS</p> <p>pH</p> <p>Suspected Solids</p> <p>BOD₅ 20°C</p> <p>Phenolics as C₆H₅OH</p> <p>Oil & Grease</p> <p>Bio-assay test</p> <p>Lead as Pb</p> <p>Chromium as Cr. Hexavalent</p> <p>Copper as Cu .</p> <p>Nickle as Ni</p> <p>Zinc as Zn</p> <p>Total heavy metals</p>	<p>6.0--8.5</p> <p>100</p> <p>50</p> <p>50</p> <p>10.0</p> <p>90% survival in 96 hours</p> <p>0.1</p> <p>0.1</p> <p>2.0</p> <p>2.0</p> <p>5.0</p> <p>7.0</p>
43.	Inorganic Chemical Industry(Waste Water discharge) Part I (metal compounds of Chromium, Manganesc, Nickel, Copper, Zinc, Cadmium, Lead and Mercury)	<p>EFFLUENTS</p> <p>pH</p> <p>Chromium as Cr Hexavalent Total</p> <p>Manganese as Mn</p> <p>Nickel as Ni</p> <p>Copper as Cu</p> <p>Zinc as Zn</p> <p>Cadmium as Cd</p> <p>Lead as Pb</p> <p>Mercury as Hg</p> <p>Cyanide as CN</p> <p>Oil & Grease</p> <p>In addition to the above, total heavy metals are to be limited to 7mg/l</p>	<p>6.0-8.5</p> <p>0.1</p> <p>2.0</p> <p>2.0</p> <p>2.0</p> <p>2.0</p> <p>2.0</p> <p>5.0</p> <p>0.2</p> <p>0.1</p> <p>0.01</p> <p>0.2</p> <p>10.0</p> <p>30.0</p>

44.	Bullion Refining (Waste-water discharge)	EFLUENTS pH Cynide as CN Sulphide as S Nitrate as N FreeCl ₂ as Cl Zinc as Zn Copper as Cu Nickel as Ni Arsenic as As Cadmium as Cd Oil and Grease Suspended Solids	6.5-8.5 0.2 0.2 10 1 5 2 2 0.1 0.2 10 100
45.	Dye and dye Intermediate Industry(waste-water discharge)	EFFLUENTS pH Colour Hazen Unit Suspended Solids BOD;3 days at 27°C Oil and Grease Phenolics as C ₆ H ₅ OH Cadmium as Cd Copper as Cu Manganese as Mn Lead as Pb Mercury as Hg Nickel as: Ni Zinc as Zn Chromium as Cr 6+ Total Chromium Bio-assay test	6-8.5 400 100 100 10 1 0.2 2 2 0.1 0.01 2 5 0.1 2 90 percent survival in 96 hours.

SCHEDULE		
SL. NO	Category	Standards db(A)
46.	<p>Noise Limits for Automobiles (Free Field) at one meter in dB(A) at the Manufacturing Stage to be Achieved by the Year 1992.</p> <p>(a) Motorcycle, Scooters & Three Wheelers</p> <p>(b) Passenger Cars</p> <p>(c) Passenger or Commercial Vehicles upto 4 MT</p> <p>(d) Passenger or Commercial Vehicles: above 4 MT and upto 12 MT</p> <p>(e) Passenger or Commercial Vehicles exceeding 12 MT</p>	<p>80</p> <p>82</p> <p>85</p> <p>89</p> <p>91</p>
47.	<p>Domestic Appliances and Construction Equipments at the Manufacturing Stage to be Achieved by the Year, 1993</p> <p>(a) Window Air Conditioners of 1 ton to 1.5 ton</p> <p>(b) Air Coolers</p> <p>(c) Refrigerators</p> <p>(d) Diesel generators for domestic purposes</p> <p>(e) Compactors (rollers) Front loaders, Concrete mixers, Cranes (movable), Vibrators and Saws.</p>	<p>68</p> <p>60</p> <p>46</p> <p>85-90</p> <p>75</p>
48.	<p>Glass Industry</p> <p style="text-align: center;">EMISSIONS</p> <p>A. Sodalime & Borosilicate and other special Glass (other than Lead)</p> <p>(a) Furnace:</p> <p>Capacity</p> <p>(i) Upto a product draw capacity of 60 MT/Day</p> <p>(ii) Product draw capacity more than 60 MT/Day</p> <p style="text-align: center;">Particulate matter</p> <p style="text-align: center;">-do-</p> <p>1. S.No. 48 to 55 and entries relating thereto inserted vide G.S.R. 93 (E) dt 21-2-91 published in the Gazette No. 79 dated 27-2-91.</p>	<p>2.0 kg/hr</p> <p>0.8 kg./Mt. of product drawn</p>

	<p>liii) For all capacities</p> <p>B. Lead Glass (a) furnaces:- A11 capacities</p>	<p>Stack height</p> <p>Total Fluorides</p> <p>Nox</p> <p>(b) Implementation of the following measures for fugitive emission control from other sections:-</p> <p>i) Raw materials should be transported in leak proof containers.</p> <p>(ii) Cullet preparation should be dustfree using water spraying.</p> <p>(iii) Batch preparation section should be covered.</p> <p>Particulate matter</p> <p>Lead</p> <p>(b) Implementation of the following measures for fugitive emission control from other sections :-</p> <p>(i) Batch mixing, proportioning section and transfer points should be covered and it should be connected to control equipments to meet the following standards:</p> <p>Particulate matter</p> <p>Lead</p> <p>(ii) Minimum Stack height should be 30 metres in lead glass units.</p> <p>(c) Pot Furnace at Firozabad Furnace:</p>	<p>$H = 14(Q)^{0.3}$ where Q is the emission rate of SO₂ in Kg/hr & H is Stack height in meters</p> <p>5.0 mg/NM³</p> <p>Use of low Nox burners in new plants.</p> <p>50 mg/NM³</p> <p>20 mg/NM³</p> <p>50 mg/NM³</p> <p>20 mg/NM³</p> <p>1200 mg/NM³</p>
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	Glass Industries (for all categories)	<p>Note :- Dependig upon local' environmental conditions, State/Cen.tral Pollution Control Board can Particulate matter prescribe more stringcnt standards than those prescribed above.</p> <p>EFFLUENTS:</p> <p>pH</p> <p>Total Suspended solids</p> <p>Oil & Grease</p>	<p>6.5-8.5</p> <p>100 mg/l.</p> <p>10 mg/l</p>
49.	Lime Kiln Capacity Above 5T/day	<p>Stack height</p> <p>-do-</p> <p>-do-</p>	<p>A Hood should be provided with a stack of 30 meter height from ground level(including kiln height)</p> <p>$H=14(Q)0.3$</p> <p>Where Q is emission rate of SO₂ in kg/hr and H=Stack Height in meters</p>

50.	<p>*Slaughter House, Meat & Sea Food Industry</p> <p>Category</p> <p>A.Slaughter House</p> <p>(a)Above 70 TL WK</p> <p>(b)Above 70 TLWK</p> <p>B.Meat Processing</p> <p>(a)Frozen Meat</p> <p>(b)Raw Meat from own Slaughter House</p> <p>(c) Raw Meat from other sources</p> <p>C. Sea Food Industry</p>	<p>EFFLUENTS</p> <p>BODS at 20°C</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>BODS at 20°C</p> <p>BOD5 at 20°C</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>BODS at 20°C</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>BODS at 20°C</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>Note :- (i) TLWK-Total Live Weight Killed. (ii) In case of disposal into municipal sewer where sewage is treated the industries shall install screen and oil & grease separation units. (iii) The industries having slaughter house along with meat processing units will be considered in meat processing category as far as standards are concerned.</p>	<p>Concentration in..mg/i</p> <p>100</p> <p>100</p> <p>10</p> <p>500</p> <p>30</p> <p>50</p> <p>10</p> <p>30</p> <p>50</p> <p>10</p> <p>Disposal via Screen and Septic Tank</p> <p>30</p> <p>50</p> <p>10</p>
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51.	*Food and Fruit Processing Industry: Category	EFFLUENTS	Concentration not to exceed -mg/i. except pH	Quantum gm/MT of product
	<p>A. Soft Drinks</p> <p>(a)Fruit based/Synthetic (More than 0.4 MT/Day) bottles and tetrapack</p> <p>(b) Synthetic (Less than 0.4 MT/Day)</p>	<p>pH</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>BOD₅ at 20°C</p>	<p>6.5-8.5</p> <p>100</p> <p>10</p> <p>30</p> <p>Disposal via -Septic Tank</p>	<p>---</p> <p>---</p>
	<p>B. Fruit & Vegetables</p> <p>(a)Above 0.4 MT/Day</p> <p>(b)0.1-0.4 MT/Day (10 MT/yr.)</p>	<p>pH</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>BODS at 20°C</p>	<p>6.5-8.5</p> <p>50</p> <p>10</p> <p>30</p> <p>Disposal via -Septic Tank</p>	<p>---</p>
	<p>C . Bakcry</p> <p>(a) Bread and Bread & Biscuit</p> <p>(i) Continuous process (more than 20T/Day)</p> <p>(ii) Non-continuous process (less than 20MT/Day)</p>	<p>pH</p> <p>BOD5 at 20°C</p>	<p>6.5-8.5</p> <p>200</p> <p>Disposal via Septic lank</p>	<p>---</p>
	<p>(b) Biscuit Production</p> <p>(i)10 T/Day & above</p> <p>(ii) Below IOT/Day</p>	<p>pH</p> <p>BOD5 at 20°C</p> <p>EFFLUENTS</p>	<p>6.5-8.5</p> <p>300</p> <p>Disposal via Septic lank</p>	<p>---</p>
	<p>D. Confectioneries</p> <p>(a) 4 T/Day and above</p>	<p>pH</p> <p>Suspended Solids</p> <p>Oil & Grease</p> <p>BODS at 20°C 30</p> <p>(b) Below 4 T/Day Disposal via Septic Tank</p>	<p>6.5-8.5</p> <p>50</p> <p>10</p> <p>30</p>	<p>---</p>

	(b) below 4T/day	<p>BOD5 at 20°C</p> <p>Note: To ascertain the category of 'unit fails' the average of daily production and waste water discharge for the preceding 30 operating days from the date of sampling shall be considered.</p> <p>*The emission from the boiler house shall conform to the standards already prescribed under E(P)</p> <p>Act, 1986, vide Notification NO. GSR 742(E), dated 30-8-90.</p>	Disposal via Septic tank
52.	Jute Processing Industry:	<p>EFFLUENTS</p> <p>pH</p> <p>BOD5 at 20°C</p> <p>Suspended Solids</p> <p>Oil and Grease</p> <p>Water Consumption</p> <p>Note:- 1. Water Consumption for the Jute processing industry will be 1.5 Cum/Ton of product from January, 1992.</p> <p>2. At the present no limit for colour is given for liquid effluent. However, as far as possible colour should be removed.</p> <p>* Stack emissions from boiler house shall conform to the standards already prescribed under Environment (Protection) Act, 1986, vide Notification-No. GSR 742(E), dated 30-8-90.</p>	<p>Concentration in mg/l except pH</p> <p>and Water consumption</p> <p>5.5-9.0</p> <p>30</p> <p>100</p> <p>10</p> <p>1.60 Cum, Ton of product produced.</p>

53.	<p>Large Pulp & Paper News Print/ Rayon Grade Plants of Capacity above 24000 MT/Annum</p>	<p>EFFLUENTS</p> <p>pH BOD5 at 20°C COD Suspended Solids. TOCL Flow (Total Wastewater discharge) .(i) Large Pulp & Paper (ii) Large Rayon Grade Newsprint.-</p> <p>*The Standards for Total Organic Chloride (TOCL) will be applicable from January, 1992. ** The Standards with respect of Total wastewater discharge for the large pulp and paper mills be established from 1992, will meet the standards of 100 Cum/ton of paper produced.</p>	<p>Concentration in mg/l except pH and TOCL</p> <p>7.0-8.5 30 350 2.0 Kg,rron of product</p> <p>200 Cum{fon of Pa~r produced 150 Cum{fon of Pa~r produced</p>
54.	<p>Small Pulp and Paper Plant of Capacity upto 24000 MT/Annum: Calcgory : A. * Agrohased B. **Waste-paper based</p>	<p>EFFLUENT</p> <p>Total Waste-water discharge -do-</p> <p>* The agrobased mills to be cestablished from January, 1992 will meet the standards of 150 cum/Ton of paper produced. ** The waste-paper mills to bc established from January, 1992 will meet the standards of 50cum/Ton of paper produced</p>	<p>200 cum/Ton of paper produced 75 cum/Ton of paper produced</p>

55.	Common Effluent Treatment Plants: A. Primary Trcauncnt	EFFUENTS (Inlet effluent qllality for CETP) pH Temperature °C " Oil & Grease Phenolic Compounds(as C6H5OH) Ammonical Nirrogen (as N) Cynide (as CN) Chromium hexavalent (as Cr+6) - Chromium (total) (as Cr) Copper (as Cu) Lead (as Pb) Nickel (as Ni) Zinc (as Zn) Arsenic (as As) Mercury (as Hg) Cadmium (as Cd) Selenium (as Se) , Fluride (as F) Boron (as B) Radioactive Materials Alpha emitters, Hc/mL Bcta emitters, He/ml	(Concentration in mg/l) 5.5-9.0 45 20 5 50 2 2 2 3 1 3 15 0.2 0.01 1 0.05 15 2 10-7 10-8
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		<p>Note:- 1. These standards apply to the small scale industries, i.e., total discharge upto 25 KL/Day.</p> <p>2. For each CETP and its constituent units, the State Board will prescribe standards as the local needs and conditions; these' can be more stringent than those prescribed above.</p> <p>However, in case of clusters of units, the State Board with the concurrence of CPCB in writing, may prescribe suitable limits.</p>		
		Into inland surface waters	On land for Irrigation	Into Marine Coastal areas
		(a)	(b)	(c)
B. Treated Effluent	Quality of Common Effluent Treatment Plant Concentration in mg/l except			
PH		5.5-9.0	5.5-9.0	
BOD5 20°C		30	100	
Oil & grease		10	10	
Temperature		Shall not exceed 40°C in any section of the stream within 15 metres downstream from the effluent outlet.		- 45°C at the point of discharge.
Suspended Solids		100	20	(a) For process waste-waters-100 (b) For cooling water effluents 10-percent above total suspended matter of effluent cooling water
Dissolved Solids (Inorganic)		2100	2100	-
Total residual chlorine		1.0		1
Ammonical nitrogen (as N)		50		50
Total Kjeldahl nitrogen (as N)		100		100
		250		250
		2.0		0.2

		<p>Note: *BOD may be made stringent upto 30 mg/l if the recipient fresh water body is a source for drinking water supply. BOD shall be upto 350 mg/l for the chilling plant effluent for applying on land provided the land is designed and operated as a secondary treatment system with suitable monitoring facilities. The drainage water from the land after secondary treatment has to satisfy a limit of 30 mg/l of BOD and 10 mg/l of nitrate expressed as 'N'. The net addition to the groundwater quality should not be more than 3 mg/l of BOD and 3 mg/l of nitrate expressed as 'N'. This limit for applying on land is allowed subject to the availability of adequate land for discharge under the control of the industry, BOD value is relaxable upto 350 mg/l, provided the wastewater is discharged into a town sewer leading to secondary treatment of the sewage.</p> <p>** Suspended solids limit is relaxable upto 450 mg/l, provided the wastewater is discharged into town sewer leading to secondary treatment of the sewage.</p> <p>1 Sl. No. 56 10 61 and entries relating thereto inserted vide G.S.R. 475(E) dt. 5.5.92 published in the Gazette No. 202 dt. 5.5.92.</p>		
57.	Tanneries	<p>Effluents</p> <p>pH.</p> <p>BOD5 at 20°C</p> <p>Suspended solids</p> <p>Sulphides (as S) 1</p> <p>Total Chromium (as Cr)</p> <p>Oil and grease-</p> <p>Waste water generation</p>	<p>Concentration in mg/l except pH</p> <p>6.5-9.0</p> <p>100</p> <p>100</p> <p>1</p> <p>2</p> <p>10</p> <p>--</p>	<p>Quantum per raw hide processed</p> <p>--</p> <p>--</p> <p>--</p> <p>--</p> <p>--</p> <p>--</p> <p>28 m³/T</p>
		<p>1. For effluent discharge into inland surface waters BOD limit shall be made stricter to 30 mg/l by the concerned State Pollution Control Board.</p>		

58.	Natural Rubber Processing industry	Centrifuging and creaming units		Crape and crumb units	
		for disposal into inland surface water	for disposal on land for irrigation	for disposal into inland surface water	for disposal on land for irrigation
		(a)	(b)	(a)	(b)
		(Concentration in mg/l except pH & quantum of waste water generation)		(Concentration in mg/l except pH & quantum of waste water generation).	
	PH	6-8	6-8	6-8	6-8
	Total Kjeldahl nitrogen (as N)	200(100 *)	***	50	***
	Ammonical Nitrogen as (N)	100(50*)	***	25	***
	BOD5 at 20°C	20°C	100 ***	30 250	100 ***
	COD	250	20	10	20
	Oil & Grease	10	***	2	***
	Sulphide(as S)	2	NP**	2100	NP**
	TDS	2100	200	100	200
	SS	100			
	Quantum of waste water generation	5 lit/kg of product processed	8 lit/kg of product processed	40 lit/kg of product processed	40 lit/kg of product processed
	To be achieved in three years				

		<p>**Not prescribed in case effluent is used for rubber plantation of their own. In other cases suitable limit, as necessary may be prescribed by the State Board.</p> <p>*** Not specificd.</p> <p>****These standards supersede the standards notified at serial No. 26 vide notification No. 5.0. 8(E),dated 3rd June, 1989.</p>	
59.	<p>Bagasse-fired Boilers</p> <p>(a)Step grate</p> <p>(b)Horse shoe/pulsating grate</p> <p>©Spreader stroker</p>	<p>Emissions</p> <p>Particulate matter</p> <p>Particulate matter</p> <p>Particulate matter</p> <p>Note :- In the case of horse. shoe and spreader stroker boilers, if more than one boiler is attached to a single stack, the Standard shall be fixcd based on add cd capacity of all the boilers connected with the stack</p>	<p>(Concentration in mg/l)</p> <p>250</p> <p>500 (12% CO₂)</p> <p>800 (12% CO₂)</p>
60.	<p>Man-made fibre industry(Semi-Synthetic).</p>	<p>Effluent</p> <p>pH</p> <p>Suspended Solids</p> <p>BODS at 20°C</p> <p>Zinc (as Zn)</p>	<p>(Concentrate in mg/l except for pH</p> <p>5.5-9.0</p> <p>100</p> <p>30</p> <p>1</p>

61.	Ceramic Industry	Emissions	(Concntration in mg/Nm3)
	A. Kilns		
	(a) Tunnel, Top Hat, Chamber	Particulate matter Fluoride Chloride Sulphur dioxide	150 10 100 ***
	(b) Down-draft	Particulate matter Fluoride Chloride Sulphur dioxide	1200 10 100 ***
	(c) Shuttle	Particulate matter Fluoride Chloride Sulphur dioxide	150 10 100 ***
	d) Vertical shaft Kiln	Particulate matter Fluoride 10	250 10
	(e) Tank furnace	Sulphur dioxide Particulate matter Fluoride Sulphur dioxide	** 150 10 **

	<p>B. Raw Material handling, Processing and operations</p> <p>(a) Dry raw material handling and processing operations</p> <p>(b) Basic raw material and processing operations</p> <p>(c) Other sources of air pollution generation</p> <p>C. Automatic Spray Unit</p> <p>(a) Dryers</p> <p>(i) Fuel fired dryers</p> <p>(ii) For heat recovery dryers</p> <p>(b) Mechanical finishing operation</p> <p>(c) Lime/Plasters of Paris manufacture</p> <p>Capacity : Upto 5T/day</p> <p>Above 5T/day</p> <p>more than 5T/day and up to 40T/day</p>	<p>Particulate matter</p> <p>processing operations</p> <p>Particulate matter</p> <p>Particulate matter</p> <p>Particulate matter</p> <p>Particulate matter</p> <p>Particulate matter</p> <p>Slack Height</p> <p>-do-</p> <p>-do-</p> <p>Particulate matter</p> <p>-do-</p> <p>Note: Oxygen reference level for particulate matter concentration calculations for Kilns mentioned at A(c) is 18% and for those at A(b), A(d), and A(e) is 8%.</p> <p>* All possible preventive measures should be taken to control pollution as far as practicable.</p> <p>** The standard for sulphur dioxide in terms of stack height limits for kilns with various capacities of coal consumed shall be as indicated below:-</p>	<p>150</p> <p>*</p> <p>*</p> <p>150</p> <p>*</p> <p>*</p> <p>A. Hood should be provided with a stack of 30 meter height from ground level (including Kiln height)</p> <p>$H = 14(Q)^{0.3}$</p> <p>Where Q is emission rate of SO₂ in Kg/jhr and H= Stack in metres</p> <p>500 mg/NM³</p> <p>150 mg/NM³</p>
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	<p>Coal Consumed per day</p> <p>Less than 8.5 MT</p> <p>More than 8.5 to 21MT</p> <p>More than 21 to 42MT</p> <p>More than 42 to 64 MT</p> <p>More than 64 to 104 MT</p> <p>More than 104 to 105 MT</p> <p>More than 105 to 126 MT</p> <p>More than 126 MT</p>	<p>Stack Height</p> <p>9 m</p> <p>12 m</p> <p>15 m</p> <p>18 m</p> <p>21 m</p> <p>24 m</p> <p>27 m</p> <p>30 m or using formula</p> <p>H-14 (Qg) 0.3 (whichever is more)</p> <p>Note: In this notification H-Physical height of the stack Qg-Emission of sulphur dioxide in Kg/hr. MT -Metric tones m-meters</p>	
62.	<p>Viscose Filament Yarn (Sub-sector of manmade fibre semi-Synthetic Industry)</p>	<p>Effluents</p> <p>pH</p> <p>Suspended solids</p> <p>BOO(3 days at 30 27°C)</p> <p>Zinc (as Zn)</p>	<p>(Concentration In mg/l except for pH)</p> <p>5.5-9.0</p> <p>100</p> <p>30</p> <p>5</p>

64.	Starch Industry(Maize products)	<p>Effluents:</p> <p>pH</p> <p>BOD (3 days at 27°C)</p> <p>Suspended Solids</p> <p>Wastewater discharge</p> <p>Note: The prescribed limits for BOD and suspended solids shall be made more stringent or less stringent depending upon the conditions and local requirements as mentioned below:</p> <p>(i) BOD shall be made stringent upto 30mg/l if the recipient fresh water body is a source for drinking water supply.</p> <p>(ii) BOD shall be allowed upto 350 mg/l for applying on land provided the land is designed and operated as a secondary treatment system with the requisite monitoring facilities. The drainage water from the land after secondary treatment has to satisfy a limit of 30mg/l of BOD and 10mg/l of nitrate expressed as N .The net addition to ground water quality should not be more than 3 mg/l of BOD and 10mg/l of nitrate expressed as "N"</p>	<p>Concentration not to exceed mg/ (except pH and waste water discharge)</p> <p>6.5-8.5</p> <p>150</p> <p>8 m³/tonne of maize Processed</p>
		<p>1. SI. No. 62 and entries relating thereto inserted by Rule 2(b) of the Environment (Protection)ThirdAmendment Rules, 1993 by G.S.R. No. 801 (E), dated 31.12.1993</p> <p>2. SI. No. 63 to 78 and entries relating thereto inserted by Rule 3 (a) of the Environment (Protection) (Amendment) Rules, 1996 by Notification G.S.R.176(E), dated 2.4.1996</p>	

		<p>(iii) BOD shall be allowed upto 350 mg/l for discharge into a town sewer, if such sewer leads to a secondary biological treatment system.</p> <p>(iv) Suspended solids shall be allowed upto 450 mg/l for discharge into a town sewer, if such sewer leads to a secondary biological treatment system.</p> <p>(v) In the event of bulking of sludge, the industry shall immediately apprise the respective State Pollution Control Board.</p>	
64.	<p>64. Beehive hard coke oven</p> <p>(i) New unit</p> <p>(ii) Existing units</p>	<p>Emission:</p> <p>Particulate matter (corrected to 6% CO₂)</p> <p>Hydrocarbons</p> <p>Particulate matter (corrected to 6% CO₂)</p> <p>Note: For control of emissions and proper dispensation of pollutants the following guidelines shall be followed:</p> <p>(i) Units set up after the publication of this notification shall be treated as new units.</p> <p>(ii) A minimum stack height of 20 meters shall be provide by each unit.</p> <p>(iii) Emissions from coke ovens shall be channelised through a tunnel and finally omitted through a stack. Damper adjustment techniques shall be used to have optimum heat utilization and also to control the emission of unburnt carbon particles and combustible flue gases.</p> <p>(iv) Wet scrubbing system or waste heat utilization for power generation or byproduct recovery systems should be installed preferably to achieve the prescribed standards.</p> <p>(v) After four years from the date of this notification, all the existing units shall comply with the standards prescribed for the new units.</p>	<p>150 mg/Nm³</p> <p>25 ppm</p> <p>350 mg/Nm³</p>

65.	<p>Briquette Industry(Coal)</p> <p>(i) Units having capacity less than 10 tonnes</p> <p>(ii) Units having capacity 10 tonnes or more</p>	<p>Emissions:</p> <p>Particulate matter (corrected to 6% CO₂)</p> <p>Particulate matter (corrected to 6% CO₂)</p> <p>Note: For control of emissions/and proper dispersal of pollutants, the following guidelines shall be followed by the industry :-</p> <p>(i) A minimum stack height of 20 metres shall be provided.</p> <p>(ii) All ovens shall be modified to single chimney multioven systems.</p> <p>(iii) Emissions from ovens shall be channelised through inbuilt draft stack. Optimum heat utilization technique shall be used.</p> <p>(iv) In case of units having capacity 10 tonnes and above, wet scrubbing system shall be provided to control air pollution.</p>	<p>350 mg/Nm³</p> <p>150 mg/Nm³</p>
66.	Soft Coke Industry	<p>Particulate matter (Corrected to 6% CO₂)</p> <p>Note: Wet scrubbing systems alongwith byproduct recovery system shall be provided.</p> <p>Guidelines for Emission Control to Improve Work Zone Environment (applicable for industries at serial numbers 64, 65 and 66):</p> <p>(a) Water used for quenching and wet scrubbing shall be recalculated and reused through catchpits.</p> <p>(b) Leakages in the oven shall be sealed by bentonite or by any suitable paste and by proper maintenance to avoid fugitive emission.</p> <p>Guidelines for Coal Handling and Crushing Plant (applicable to industries at serial numbers 64,65 and 66)</p>	350 mg/Nm ³

		<p>(a) Unloading of coal trucks shall be carried out with proper care avoiding dropping of the materials from height. It is advisable to moist the material by sprinkling water while unloading.</p> <p>(b) Pulverisation of coal shall be carried out in an enclosed place and water sprinkling arrangement shall be provided at coal heaps, crushing area and on land around the crushing unit.</p> <p>(c) Work area surrounding the plant shall be asphalted or concreted.</p> <p>(d) Green belt shall be developed along the boundary of the industry.</p> <p>(e) Open burning of coal to manufacture soft coke shall be stopped.</p>	
67.	Edible Oil & Vanaspati Industry	<p>Effluents:</p> <p>Temperature ambient temperature</p> <p>pH</p> <p>Suspended solids</p> <p>Oil & grease</p> <p>BOD(3 days at 27°C)</p> <p>COD</p> <p>Wastewater Discharge</p> <p>(i) Solvent extraction</p> <p>(ii) RefineryNanaspati</p> <p>(iii)Integrated unit of extraction & refinery/ Vanaspati</p> <p>(iv)Barometric cooling water/De-odoriser water</p>	<p>Not more than 5°C above of the recipient waterbody</p> <p>6.5-8.5</p> <p>150 mg/l</p> <p>20 mg/l</p> <p>100 mg/l</p> <p>200 mg/l</p> <p>2.0 cum/tonne of product (oil)</p> <p>2.0 cum/tonne of product (refined oilNanaspati)</p> <p>4.0 cum/tonne of refined Vanaspati product</p> <p>15.0 cum/tonne of refined oil/vanaspati</p>

		<p>Note (i) The above standards shall be applicable to waste water from processes and cooling.</p> <p>(ii) BOD shall be made stringent upto 30 mg/l if the recipient fresh water body is source of drinking water supply</p> <p>(iii) The standards for boiler emissions shall be applicable as prescribed under Schedule I of these rules.</p>	
68.	<p>Organic Chemicals manufacturing industry</p> <p>(a) Compulsory parameters</p> <p>(b) Additional parameters</p>	<p>Effluents:</p> <p>pH</p> <p>BOO(3 days at 27°C)</p> <p>Oil & Grease 10mg/l</p> <p>Bioassay test</p> <p>Nitrate(as N)</p> <p>Arsenic</p> <p>Hexavalent Chormium</p> <p>Total Chormium</p> <p>Lead</p> <p>Cyanide as CN</p> <p>Zinc</p> <p>Mercury</p> <p>Copper</p> <p>Nickel</p> <p>Phenolies as C6H3 OH</p> <p>Sulphide</p> <p>Note:</p> <p>(i) No limit for COD is prescribed but it shall be monitored. If the COD in a treated effluent is persistently greater than 250 mg/l, such industrial units are required to identify chemicals causing the same. In case these are found to be toxic as defined in</p>	<p>6.5-8.5</p> <p>100 mg/l</p> <p>10 mh/l</p> <p>Minimum 90% survival after 96 hours with at 100% effluent (mg/l)</p> <p>10</p> <p>0.2</p> <p>0.1</p> <p>1.0</p> <p>0.1</p> <p>0.2</p> <p>0.5</p> <p>0.01</p> <p>2.0</p> <p>2.0</p> <p>5.0</p> <p>2,0</p>

		<p>Hazardous Chemicals Rules, 1989 in Part I of Schedule-I, the State Boards in such cases may direct the industries to install tertiary treatment system stipulated time limit. This may be done on case to case basis.</p> <p>(ii) These standards are not applicable to small scale detergent (formulating units).</p> <p>(iii) The standards for boiler emissions shall be applicable as per the existing emission regulations.</p> <p>(iv) Industry covered under this group are haloaliphatics, plasticizers, aromatics (alcohols, phenols, esters, acids and salts, aldehydes and ketone), substituted aromatics, aliphatic (alcohols, esters, acids, aldehydes, ketones, amines and amides) and detergents.</p>	
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69.	Flour Mills	<p>Effluents:</p> <p>pH BOD (3 days at 27°C) Total Suspended Solids Oil & Grease Waste water discharge</p> <p>Note:</p> <p>(i) BOD shall be stringent upto 30 mg/l if the recipient freshwater body is a source for drinking water supply.</p> <p>(ii) BOD shall be allowed upto 350 mg/l for (applying on land, provided the land is designed and operated as a secondary treatment system with the requisite monitoring facilities. The drainage water from the land after secondary treatment has to satisfy a limit of 30 mg/l of BOD and 10 mg/l of nitrate expressed as "N". The net addition to ground water quality should not be more than 3mg/l of BOD and 10 mg/l of 3 nitrate expressed as "N".</p>	<p>6.5-8.5 100 mg/l 100mg/l 10mg/l 2 cubic metre per tonne of wheat processed</p>
		<p>(iii) BOD shall be allowed upto 350 mg/l for discharge into a town sewer, if such sewer leads to a secondary biological treatment system.</p> <p>(iv) Suspended solids shall be allowed upto 450mg/l for discharge into a town sewer, if such sewer leads to a secondary biological treatment system.</p>	

70.	Boilers(Small)	<p>Steam generation capacity (ton/hour)</p> <p>less than 2</p> <p>2 to less than 10</p> <p>10 to less than 15</p> <p>15and above</p> <p>* to meet the respective standards, cyclone/multi cyclone is recommended as control equipment with the boiler.</p> <p>**to meet the standard, bag filter/ESP is recommended as control equipment with the boiler.</p> <p>Note:</p> <p>(i) 12% of CO₂ correction shall be the reference value for particulate matter emission standards for all categories of boilers.</p> <p>(ii) These limits shall supercede the earlier limits notified under Schedule I at serial number 34 'of Environment(Protection)Act,1986 vide notification GSR 742(E), dated 30th August,1990.</p> <p>(iii) Stack Height for small Boilers.</p> <p>For the small boilers using coal or liquid fuels, the required stack height with the boiler shall be calculated by using the formula.</p> $H=14Q^{0.3}$	<p>Particulate emission(mg/Nm3) matters</p> <p>1200*</p> <p>800*</p> <p>600*</p> <p>150**</p>
		<p>Where H- Total stack height in metres from the ground level.</p> <p>Q=S₀₂ emission rate in kg/hr.</p> <p>In no case the stack height shall be less than 11 metres.</p> <p>Where providing all stacks are not feasible using above formula the limit of 400 mg/Nm³ for S₀₂ emission shall be met by providing necessary control equipment with a minimum stack height of 11 metres.</p>	

71.	71. Pesticides industry	<p>(i) Compulsory Parameters</p> <p>pH</p> <p>BOD (3 days at 27°C)</p> <p>Oil & Grease</p> <p>Suspended solids</p> <p>Bioassay test</p> <p>(ii) Additional Parameters mg/l</p> <p>(a) Heavy metal</p> <p>Copper</p> <p>Manganese</p> <p>Zinc</p> <p>Mercury</p> <p>Tin</p> <p>Any other like Nickel</p>	<p>mg/l except pH</p> <p>6.5-8.5</p> <p>100</p> <p>10</p> <p>100</p> <p>Minimum 90% survival of fish after 96 hours with 90% effluent and 10% dilution water.</p> <p>Test shall be carried out as per IS : 6502-1971.</p> <p>mg/l</p> <p>1.0</p> <p>1.0</p> <p>1.0</p> <p>0.01</p> <p>0.1</p> <p>shall not exceed 5 times the drinking water standards (BIS) individually.</p>
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	(b) Organics	
	Phenol & Phenolic Compounds as C ₆ H ₅ OH	1
	(c) Inorganics	
	Arsenic as AS	0.2
	Cyanide as CN	0.2
	Nitrate as NO ₃	50
	Phosphate as P	5.0
	(d) Specific pesticide	(microgram/litre)
	Benzene	
	Hexachloride	10
	DDT	10
	Dimethoate	450
	Copper oxychloride	9600
	Ziram	1000
	2,4D	400
	Paraquat	23000
	Propanil	7300
	Nitrofen	780
	Other/below mentioned Pesticides individually	100
Other pesticides:		
(i) Insecticides:		
Aluminium Phosphide	lindane	Phrethrum extract
Dichloroves	Malathion	Quinalphos
EDTC Mixer	Methyl-Bromide	Monocrotophos
Ethylene Dibromide	Nicotine Sulphate	Carbaryl
Ethion	Oxydemeton Methyl	Endosulfan
Fenitrothoron	Methyl Parathion	Fenvalerate
lime-sulphur	Phosphamidon	Phorate
Temephos		

(ii) Fungicides: Aureofungin , Barium Polysulphide Cuprous Oxide Ferbam Mancozeb Manab Nickel Chloride	Organomercurials (MEMC & PMA) Sulphur (Collodal), Wettable & Dust) Streptocycline Thiram Zenib Carbendazim Tridemorph	
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(iii) Rodenticides:
Comafuryl

Zinc Phosphide

(iv) Nematicides:
Metham N-Sodlum

(v) Weedicides
Fluchloralin Warfarin
Isoproturon
Butachlor Anilphos

(vi) Plant Growth Regulants :
Chloromequat Chloride
Nemphalene Acetic Acid

(vii) Any other pesticide not specified above

Note:

(1) Limits shall be complied with at the end of the treatment plant before any dilution.

(2) From the 'Additional Parameters' specified in 71 (ii), only the relevant (based on the raw-materials used and products manufactured) may be prescribed by the concerned State Board on a case to case basis .

(3) No limit for COD is prescribed. If the COD in a treated effluent is persistently more than 250 mg/l, such industrial units are required to identify the chemicals causing the same. In case, there are found to be toxic as defined in Schedule I of the Hazardous Chemicals Rules, 1989, the State Boards in such cases may direct the industries to install tertiary treatment, stipulating time limit. This may be done on a case to case basis.

(4) Solar evaporation followed by incineration is a recognized practice, provide the guidelines of solar evaporation as given below are followed.

Guidelines on solar evaporation system or wastewater from pesticide industry.

(i) Solar evaporation pans shall be constructed in such a way that the bottom is atleast one metre above the ground level.

(ii) Solar evaporation pans shall be leak proof and construction and designed as per IS:7290.

(iii) The solar evaporation pans shall be designed on the basis of evaporation rate matching to the out put of wastewater.

(iv) Wastewater must be pre-treated as below before subjecting to solar evaporation:

(a) Oil and grease and floating organics shall be removed so that the rate of evaporation is not affected.

(b) Acidic/Alkaline waste must be neutralised before solar evaporation to maintain pH in the range of 6.5 to 8.5.

(c) Toxic volatile matter shall be removed so as not to cause air pollution.'

(v) During the rainy season, storm water shall not be allowed to mix with process waste and enter the pans. The wastewater shall in no case outflow from the evaporation pans. Alternative arrangements shall be made to hold the wastewater in proper impervious tanks and if necessary, force evaporated.

(vi) In no circumstances, the liquid effluent shall be discharged without conforming to the minimal national standards or stored in a holding arrangement which is likely to cause pollution

(vii) The facility shall be protected from flood and storm to prevent embankments from erosion or any other damage which may render any portion inoperable.

(viii) The facility shall be protected from flood and storm to prevent embankments from erosion or any other damage which may render any portion irioperable.

(ix) Facilities shall be protective enclosure to keep wildlife, domestir. animals, unauthorized persons, etc. away.

72. Oil Drilling and Gas Extraction Industry

A. Standards for Liquid Effluent

1.0 On-Shore facilities(For Marine Disposal)

pH	5.5-9.0
Oil & Grease	10 mg/l
Suspended solids	100 mg/l
BOD(3 days at 27°C)	30 mg/l

Note:

(i) For on-shore discharge of effluents, in addition to the standards prescribed above, proper marine outfall has to be provided to achieve the individual pollutant concentration level in sea water below their toxicity limits as given below, within a distance of 50 metre from the discharge point, in order to protect the marine aquatic life:

Parameter	Toxicity limit,mg/l
Chromium as	Cr 0.1
Copper,as	Cu 0.05
Cyanide, as	CN 0.005
Fluoride,as	F 1.5
Lead, as	Pb 0.05
Mercury, as	Hg 0.01
Nickel, as	Ni 0.1
Zinc, as	Zn 0.1

(ii) Oil and gas drilling and processing facilities, situated on land and away from saline water sink, may opt either for disposal of treated water by on-shore disposal or by re-injection in abandoned well, which is allowed only below a depth of 1000 metres from the ground level. In case of re-injection in abandoned well the effluent have to comply only with respect to suspended solids and oil and grease 100 mg/l and 10 mg/l, respectively. For on-shore disposal, the permissible limits are given, below.

S.No Parameter On-shore discharge standards

(Not to exceed)

1. pH	5.5-9.0
2. Temperature	40°C
3. Suspended Solids	100 mg/l
4. Zinc	2 mg/l
5. BOD	30 mg/l
6. COD	100mg/l
7. Chlorides	600 mg/l
8. Sulphates	1000 mg/l
9. TDS	2100 mg/l
10. %Sodium	60 mg/l
11. Oil and Grease	10 mg/l
12. Phenolics	1.2 mg/l
13. Cyanides	0.2 mg/l
14. Fluorides	1.5 mg/l
15. Sulphides	2.0 mg/l
16. Chromium(Cr+6)	0.1 mg/l

17. Chromium (Total)	1.0 mg/l
18. Copper	0.2 mg/l
19. Lead	0.1 mg/l
20. Mercury	0.01 mg/l
21. Nickel	3.0 mg/l-

2.0 Off-shore facilities:

For off-shore discharge of effluents, the oil content of the treated effluent without dilution shall not exceed 40 mg/l for 95% of the observation and shall never exceed 100 mg/l. Three 8 -hourly grab samples are required to be' collected daily and the average value of oil and grease content of the three samples shall comply with these standards.

B. Guidelines for Discharge of Gaseous Emission:

1.0 DG Sets .

1.1 DG Sets at drill site as well as production station shall conform with the norm notified under the Environment(Protection) Act,1986

2.0 Elevated/ground flares .

2.1 Cold Venting of gases shall never be resor1ed to and all the gaseous emissions are to be flared.

2.2 All flaring shall be done by elevated flares except where there is any effect on crop production in adjoining areas due to the flaring. In such cases, one may adopt ground flaring.

2.3 In case of ground flare, to minimize the effects of flaring, the *flare* pit at Group Gathering Station(GGS)/Oil Collecting Station(OCS) and Group Collection Station(GCS) shall be made of RCC surrounded by a permanent wall (made of refractory brick) of minimum 5m height, to reduce the radiation and glaring effects in the adjoining areas.

2.4 A green belt of 100 m width may be developed around the flare after the refractory wall in case of ground flaring.

2.5 If the ground flaring with provisjon of green belt is not feasible, enclosed ground flare system shall be adopted, and be designed with proper enclosure height, t(9' meet the ground level concentration(GLC) requirement.

2.6 In case of elevated flaring, the minimum stack height shall be 30m. Height of the stack shall be such that the max. GLC never exceeds the prescribed ambient air quality limit.

3.0 Burning of effluent in the pits shall not be carried out at any stage

C. Guidelines for Disposal of Solid Waste:

1.0 Disposal of drill cuttings.

1.1. The drill cuttings shall be conveyed through a conveyor system to the disposal pit after proper washing.

1.2. No drill cuttings (of any composition) shall be disposed off-shore. For off-shore installation, drill cuttings separated from mud, shall be transported on-shore through supply vessels for secured land- fill disposal as per Ministry of Environment & Forests guidelines The site shall be approved by the concerned authority (State Government/State Pollution Control Board).

1.3. The disposal of drill cuttings (on-shore/off share) shall conform to the guidelines provided by the Ministry of Environment & Forest.

1.4. The secured land-fill pit shall be covered with a thick layer of local top soil provided with proper top slope, after drilling operation is over.

2.0 Disposal of drilling mud.

2.1 The unusable portion of the drilling mud(of any composition); after reclamation shall be disposed of only at a secured land-fill site approved by the concerned authority (State Government State Pollution Control Boards). The disposal of mud shall conform to the guidelines provided by the Ministry of Environment & Forests

under the Hazardous (Management and Handling)Rules,1989.

2.2 No mud(of any composition)shall be disposed off-shore. For off- shore installation, the unusable portion of the mud shall be brought back to the shore for disposal in a secured land-fill.

2.3 Only water-based mud system shall be used. Where oil-based muds are used, the muds, after they become unusable, shall be properly treated/incinerated, in a centralized treatment facility. In case of off-shore installation, these may be brought to the shore and treated.

3.0 Production stage solid waste disposal.

3.1 The dried sludge from wastewater treatment plant and other solid wastes at production stage shall be disposed in a secured land-fill.

3.2 In case oil content in the sludge is high, it shall be treated/incinerated and ash shall be disposed of in a land-fill.

73. Pharmaceuticals industry(Bulk Drugs) :

(i) Compulsory parameters	(mg/l except pH)
(ii) pH	6.5-8.5
(iii) Oil and Grease	10
(iv)BOD(3 days at 27°C	100
(v)Total suspended solids	100
(vi)Biossay test	90% survival after 96 hours in 100% effluent test shall be carried out as per IS:6582-1971.
(ii) Additional parameters	mg/l
Mercury	0.01
Arsenic	0.2
Chromium(Hexavalent)	0.1
Lead	0.1
Cyanide	0.1
Phenolics(C6HsOH)	1.0
Sulphides(as S)	2.0
Phosphate(as P)	5.0

Note:

(i) The limit of BOD (3 days at 27°C) shall be 30 mg/l if effluent is discharged directly to a fresh water body.

(ii) The additional parameters are applicable to bulk drug manufacturing depending upon the process and product.

(iii) No limit for COD is prescribed, but it shall be monitored. If the COD of the treated effluent is greater than 250 mg/l, such industrial units are required to identify chemicals causing the same. In case these are found to be toxic, as defined in the Hazardous Chemicals Rules, 1989 (Scheduled I),

the State Boards in such cases shall direct the industries to install tertiary treatment system within the stipulated time limit. This may be done on a

case-to-case basis.

74. Emission Standards for brick kilns:

I. Minimal National Emission Standards for Brick Kilns:

Size	Kiln capacity	Maximum limit for the concentration of particulate matter(mg/Ncu.m)
1	2	3
Small	Less than 15,000 bricks per day(less than 15 ft trench width)	1000
Medium	15,000-30,000 bricks per day (15-22 ft trench width)	750
Large	More than 30,000 bricks per day (more than 22 ft trench width)	750

Note: The above particulate matter emission limits are achievable by installing fixed chimney high draught kilns and/or setting chamber.

II. Stack Height Regulation:

The following stack heights are recommended for optional dispersion of particulate matter :-

Kiln Capacity	Stack height
1	2
Less than 15,000 brick per day(less than 15 ft trench width)	Minimum stack height of 22m or, Induced draught fan operating with minimum draught of 50mm water Gauge with 12m stack

	height.
15,000-30,000 brick per day(15-22 ft trench width)	Minimum stack height 27 m in with gravitational settling chamber or Induced draught fan operating with minimum draught of 50mm water Gauge with 15 m stack height.
More than 30,000 brick per day(more than 22 ft. trench width)	Minimum stack height of 30 m with gravitational settling chamber or Induced draught fan operating with minimum draught of 50mm Water Gauge with 17 m stack height.

III. Existing moving chimney Bull's trench kilns shall be dispensed with by December 31, 1997 and no new moving chimney kilns shall be allowed to come up.

IV. Considering the immediate need to protect the top soil and to find ways for safe disposal/utilization of flyash, it is provided that from the 1st January, 1997 all brick manufacturing units within a radius of 50 kms from any thermal power plant, shall utilize flyash in optimal proportion for making bricks.

75. Soda Ash Industry (Solvay Process)

PARAMETER	MINAS (Recipient body specified)		
	Marine Brackish		Inland surface
pH	6.5-9	6.5-9	6.5-9
Temperature	45°C or less	45°C or less	45°C or less
Oil & Grease	2 mg/l	20mg/l	10 mg/l
Suspended Solids(SS)	500 mg/l	200 mg/l	100 mg/l
Ammoniacal nitrogen	5 mg/l	50 mg/l	30 mg/l
Bio-assay	96 hours 30% survival	96 hours 90% survival	96 hours 90% survival

Note :- MINAS for disposal in brackish and inland surface water are without any dilution.

Standards for Dual Process Soda Ash Plants

Parameter	MINAS	
	(Inland	Surface
Water)		
pH	6.5-8.0	
Ammoniacal nitrogen, as N(mg/l)	50	
Nitrate nitrogen, as N(mg/l)	10	
Cyanide, as CN(mg/l)	0.2	
Hexavalent chromium(mg/l)	0.1	
Total chromium(mg/l)	2.0	
Suspended solids(mg/l)	100	
Oil and Grease (mg/l)	10	

Note: The Standards are to be implemented by the industry in a time targeted schedule within two years. The progress on the time targeted implementation schedule shall be periodically submitted by the industry to the State Pollution Control Board and Central Pollution Control Board.

76. Emission Standard for SO₂ from Cupola furnace:

Standard for Sulphur Dioxide emission from Cupola Furnace:

Characteristics	Emission limit
Sulphur dioxide (SO ₂) emission	300 mg/Nm ³ at 12% CO ₂ corrections

To achieve the standard, foundries may install scrubber, followed by a stack six times the diameter of the Cupola beyond the charging door.

Note: In case due to some technical reasons, installation of scrubber is not possible, then value of SO₂ to the ambient air has to be effected through the stack height.

77. Specifications of Motor Gasoline for Emission Related Parameters:

	Characteristics	Requirement	Method of test No. ref. to P: of IS:1448

1.	Reid Vapour Pressure at 38°C,Kpa	35 to 70	P : 39
2.	Benzeno, Percent by volume,Max	5.0 ⁽¹⁾	P: 104
3.	Lead Content(as Pb)g/l,Max	0.15(low leaded)(2) 0.013 (unleaded)	P: 38
4.	Sulphur, percent by mass, Max	0.10 (unleaded) 0.20 (leaded)	P : 34
5.	Potential Gum, g/m3, Max	50	ASTM 373 : 8
6.	Gum (Solvent Washed)g/m3 Max	40	P : 29
7.	Oxygenates Content Ether (MTBE, ETBE) Alcohol, percent by volume, Max	15	
8.	Phosphorus	See Foot Note(3) ASTM D 3231	

(1) 3.0 percent by volume maximum in metro cities by 2000 AD.

(2) 0.15 g/l by 31st December, 1996 (for entire country). 0.013 g/l by 1st April 1995 (in four metro cities);

by 1st December,1998(for all State capitals/UTs and major metro cities) and by 1st April,2000 for the entire country.

(3) Phosphorous containing additives shall be absent.

Note:

(a) Above specifications applied to leaded as well as unleaded petrol except lead content,

(b) For new refineries coming up during or after 1997 the specification applicable by 2000 for existing refineries shall be applicable by 1997.

78. Specification of Diesel Fuel for Emission Related Parameters:

Sl.No.	Characteristics	Requirement	Method of Test Ref. To P : of IS : 1448
(i)	Density at 15° C, Kg/m ³	820 to 880 ⁽¹⁾	P : 32
(ii)	Cetane Number, Min	45° ⁽²⁾	P : 9
(iii)	Distillation 85 percent by volume	350	P : 18

	recovery at °C Max 95 percent by volume recovery at °C,Max	370	
(iv)	Sulphur, percent by mass	0.50 ⁽³⁾	P : 33

(1) 820 to 860 by 2000 AD

(2) 48 by 31st December,1998 (except in the refineries- Digboi, Gauhati and Bongaigaon Refineries & Petrochemicals Ltd.)

(3) (i) 0.50 percent by mass by 1st April 1996 in four metros and Taj Trapezium;

(ii) 0.25 percent by mass by 1st October,1996 in Taj Trapezium;

(iii) 0.25 percent by mass by 1st April,1996 throughout the country.

Note.

(a) Above specifications apply to HSD only.

(b) For new refineries coming during or after 1997 spAcification applicable by 2000 for existing refineries shall be applicable by 1997.

(c) 'P' refers to parts of IS : 1448".

S.No.	Industry	Parameter	Standard	
1[79	Coke oven plants (by product recovery type)	Fugitive Emissions Visible	5(PLD)*	10(PLD)*
		(a) Leakage from door type)	1 (PLL)*	1 (PLL)*
		(b) Leakage from charging lids 1	4(PLO)* 16	4(PLO)* 50
		(c) Leakage from AP Covers	(with HPLA)*	(with HPLA)*
		(d) Charging emission (Second/charge)		
	Stack Emission of Coke Oven		800	800
	(a) SO ₂ (mg/Nm ³)		500	500
	(b) Nox,(mg/ Nm ³)		50	50
	(c) SPM,(mg/Nm ³)		25	25
	(a) SPM emission during .			

charging (stack emissionmg/Nm3 (b) SPM emission during coke pushing (stack emission) gm/ton of coke Sulphur in Coke Oven gas used for (heating (mg/Nm3) Emission for - quenching operation: Particulate matter gm/MT of coke I. Sl. No. 79 and entries relating thereto inserted by the Environment (Protection) Amendment Rules 1997 vide GSR 63(E), dated 31.10.1997 produced Benzo-Pyrene (BOP) concentration in work zone air (ug/m) . -- Battery area (top of the battery) -- Other units in coke oven plant -- Ambient standards (ng/m3)			5 800 50 5 2 10	5 800 50 5 2 10
---	--	--	--	--

---For control of emissions and to maintain environmental quality in work zone area, the following guidelines shall be followed, namely:---

(i) New coke oven units shall follow any of the low-emission procedures, such as, coke dry cooling, non-recovery coke-ovens. Indirect Quenching Process, Jumbo coke oven reactor, Modified Wet Quenching System with appropriate environmental controls (e.g. baffles, filtering media, collection and treatment of residual water from quench tower and recycling; Use of process water as, quenching water shall not be permissible).

(ii) Effective pollution control measures (for e.g. extensive maintenance and cleaning of oven doors and frame seals, ascension pipes, charging holes and lids and other equipment; On-main charging system(HPLA); Luting charging holes with clay suspension; Modified guide/transfer car with emission control system etc.) shall be taken or reduce coal charging and coke(pushing emissions. The bleeder of the coke oven shall be flared.

(iii) In the case of existing coke ovens with wet quenching, the new procedures as in (i) and (ii) shall be adopted and emission standards achieved within four years (by 2001).

Note: Units set up after the publication of this notification shall be treated as new units.

*HPLA ---Aspiration through high pressure liquor injection in goose neck,

*PLD ---Percent leaking doors; *PLL-Percent leaking lids; *RLO---Percent leaking offtakes".

1[80.SPECIFICATIONS OF TWO-STROKE ENGINE OIL:

Specification	Standard	Test Procedure
Two-stroke engine oil grade	Minimum smoke	JASO-M342-92 for
JASO-FC as per	Index of 85.	JASO-FC and ASTM D-4857 for API TC
JASO M-345-93 specification And API TC as per specification No.ASTM D 4859		

The above specification shall be effective from the 1st day of April, 1999.

2[81.Battery manufacturing industry

(i) Lead Acid Battery Manufacturing Industries. Emission Stanadrds.

Source	Pollutant	Standards Conc.based (mg/Nm3)
Grid casting Lead	Lead	10
	Particulate matter	25
Oxide manufacturing	Lead	10
	Particulate matter	25
Paste mixing	Lead	10
	Particulate matter	25
Assembling	Lead	10
	Particulate matter	25
PVC Section	Lead	150

	Particulate matter	
--	--------------------	--

--To comply with the respective standards, all the emissions from abovementioned sources shall be routed through stack connected with hood and fan in addition to above, installation of control equipment viz. Bag filter/ventury scrubber, is also recommended.

- The minimum stack height shall be 30 m

Liquid Effluent Discharge Standards

Pollutants

Concentration based standards

pH	6.5-8.5
Suspended solids	50 mg/l
Lead	0.1 mg/l

1.S. No 80 and entries relating thereto inserted by the Environment (Protection) Amendment

Rules 1991 vide G.5.R 504(E), dated 20.8.1998

2. SI. No 81 to 87 and entries relating thereto inserted by the Environment (Protection) Amendment

Rules 1998 vide G.S.R 7 (1):. dated 22.12.1998

(ii) Dry Cell Manufacturing Industry: Emission Standards

Pollutant	Standards
	Concentration-based (mg/Nm ³)
Particulate matter	50
Manganese as Mn	5

- To Comply with the respective standards, all the emissions from above- mentioned sources shall be routed through stack connected with hood and fan. In addition to above, installation of control equipment viz. bag filter/ventury scrubber, is also recommended.

- The minimum stack height shall be 30m.

Effluent Standards

Pollutant standards	Concentration	Based
pH	6.5—8.5	
Total suspended solids	100 mg/l	

Manganese as Mn	2 mg/l	
Mercury as Hg	0.02 mg/l	
Zinc as Zn	5 mg/l	

82. Environmental Standards for Gas/Naphtha-based Thermal Power Plants

(i) Limit for emissions of NO_x

(a) For existing units--150ppm (v/v) at 15% excess oxygen.

(c) For new units with effect from 1.6.1999.

Total generation of gas turbine	Limit for Stack NO _x emission [v/v),at 15% excess oxygen]
(a) 400 MW and above	(i) 50 ppm for the units burning natural gas (ii) 100 ppm for the units burning naphtha.
(b) - Less than 400 MW but Upto 100 MW	(i) 75 ppm for the units burning natural gas. (ii) 100 ppm for the units burning naphtha
(c) Less than 100 MW	100 ppm for units burning natural gas or naphtha as fuel
(d) For the plants burning gas in a conventional boiler.	100 ppm

83. Standards/Guidelines for control of Noise Pollution from Stationary Diesel Generator(DG) Sets.

(A) Noise Standards for DG sets(15-500 KVA)

The total sound power level, L_w , of a DG set should be less than, $94+10 \log_{10}$ (KVA), dB(A), at the manufacturing stage, where KVA is the nominal power rating of a DG set. .

This level should fall by 5 dB(A) every five years, till 2007, i.e in 2002 and then in 2007.

(B) Mandatory acoustic enclosure/acoustic treatment of room for stationary DG sets (5 KVA and above).

Noise from the DG set should be controlled by providing an acoustic enclosure on by treating the room acoustically.

The acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB(A). Insertion Loss or for meeting the ambient noise standards, whichever is on the higher side(if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/acoustic treatment. Under such circumstances the performance may be checked for noise reduction upto actual ambient noise level, preferably, in the night time. The measurement for Insertion Loss may be done at different points at 0.5m from the acoustic enclosure/room, and then averaged.

The DG set should also be provided with proper exhaust muffler with Insertion Loss of minimum 25 dB(A).

(C) Guidelines for the manufacturers/users of DG sets (5KVA and above).

01. The manufacturer should offer to the user a standard acoustic enclosure of 25 dB(A) Insertion Loss and also a suitable exhaust muffler with Insertion Loss of 25 dB(A).

02. The user should make efforts to bring down the noise levels due to the DG set; outside his premises, within the ambient noise requirements by proper siting and control measures.

03. The manufacturer should furnish noise power levels of the unsilenced DG sets as per standard described under (A).

04. The total sound power level of a DG set, at the user's end, shall be within 2dB(A) of the total sound power level of the DG set, at the manufacturing stage, as prescribed under (A).

05. Installation of a DG set must be strictly in compliance with the recommendations of the DG set manufacturer.

06. A proper routing and preventive maintenance procedure for the DG set should be set and followed in consultation with the DG set manufacturer which would help prevent noise levels of the DG set from deteriorating with use.

84. TEMPERATURE LIMIT FOR DISCHARGE OF CONDENSER

(COOLING WATER FROM THERMAL POWER PLANT)

A. New thermal power plants commissioned after June 1,1999.

New thermal power plants, which will be using water from rivers/lakes./ reservoirs shall install cooling towers-irrespective location and capacity. Thermal power plants which will use sea water for cooling purposes, the condition below will apply.

B. New projects in coastal areas using sea water.

The thermal power plants using sea water should adopt suitable system to reduce water temperature at the final discharge point so that the resultant rise in the temperature of receiving water does not exceed 7°C over and above the ambient temperature of the receiving water bodies.

C. Existing thermal power plants.

Rise in temperature of condenser cooling water from inlet to the outlet of condenser shall not be more than 1 DoC.

D. Guidelines for discharge point:

1. The discharge point shall preferably be located at the bottom of the water body at mid-stream for proper dispersion of thermal discharge.
2. In case of discharge of cooling water into sea, proper marine outfall shall be designed to achieve the prescribed standards. The point of discharge may be selected in consultation with concerned State Authorities/NOI.
3. No cooling water discharge shall be permitted in estuaries or near ecologically sensitive areas such as mangrOVE'3, coral reefs/spawning and breeding grounds of aquatic flora and fauna.

85. ENVIRONMENTAL STANDARDS FOR COAL WASHERIES

1. Fugitive emission standards.

--- The difference in the value of suspended particulate matter, delta (Δ), measured between 25 and 30 metre from the enclosure of coal crushing plant in the downward and leeward wind direction shall not exceed 150 microgram per cubic meter. Method of measurement shall be High Volume Sampling and Average flow rate, not less than 1.1 m³ per minute, using upwind downwind method of measurement:

2. Effluent discharge standards

-- The coal washeries shall maintain the close circuit operation with zero effluent discharge:

If in case due to some genuine problems like periodic cleaning of the system, heavy rainfall etc. it become necessary to discharge the effluent to sewer land stream then the effluent shall conform to the following standards at the final outlet of the coal washery.

Sl. No	Parameter	Limits
1.	pH	5.5-9.0
2.	Total suspended solids	100 mg/l
3.	Oil & Grease	10 mg/l
4.	B.O.D (3 days 27 deg C)	30 mg/l
5.	COD	250 mg/l
6.	Phenolics	1.0 mg/l

3. Noise level standards

--- Operational/Working zone-not to exceed 85 d8(A) Leq for 8 hours exposure.

--- The ambient air quality standards in respect of noise as notified under Environmental (Protection)Rules,1986 shall be followed at the boundary line of the coal washery.

4. Code of practice for Coal Washery.

-- Water or Water mixed chemical shall be sprayed at all strategic coal transfer points such as conveyors, loading/unloading points etc. As far as practically possible conveyors, transfer points etc. shall be provided with enclosures.

- The crushers/pulverisers of the coal washeries shall be provided with enclosures, fitted with suitable air pollution control measures and finally emitted through a stack of minimum height of 30m. conforming particulate matter emission standard of 150 mg/Nm³ or provided with adequate water sprinkling arrangement.

-- Water sprinkling by using fine atomizer nozzle arrangement shall be provided on the coal heaps and on around the crushers/pulverisers.

-- Area, in and around the coal washery shall be pucca either asphalted or concreted.

-- Water consumption in the coal washery shall not exceed 1.5 cubic meter per tonne of coal.

The efficiency of the settling ponds of the water treatment system of the coal washery shall not be less than 90%.

-Green belt shall be developed along the road side, coal handling plants, residential complex, office building and all around the boundary line of the coal washery.

-- Storage bunkers, hoppers, rubber decks in chutes and centrifugal chutes shall be provided with proper rubber linings.

-- Vehicles movement in the coal washery area shall be regulated effectively to avoid traffic congestion. High pressure horn shall be prohibited. Smoke emission from heavy duty vehicle operating in the coal washeries should conform the standards prescribed under Motor Vehicle Rules, 1989.

86. WATER QUALITY STANDARDS FOR COASTAL WATERS MARINE OUTFALLS.

In a coastal segment marine water is subjected to several types of uses. Depending of the types of uses and activities, water quality criteria have been specified to determine its suitability for a particular purpose. Among the various types of uses there is one use that demands highest level of water quality/purity and that is termed a "designated best use" in that stretch of the coastal segment. Based on this, primary water quality criteria have been specified for following five designated best uses :-

Class	Designated best use
SW-1(See Table 1.1.)	Salt pans, Shell_fishing, Mariculture and Ecologically Sensitive Zone
SW-II (See Table 1.2)	Bathing, Contact Water Sports and Commercial fishing.
SW-III (See Table 1.3)	Industrial cooling, Recreation(non-contact) and Aesthetics

SW-IV (See Table 1.4)	Harbour
SW-V (See Table 1.5)	Navigation and Controlled Waste Disposal

The Standards alongwith rationale/remarks for various parameters for different - designated best uses, given in Table 1.1 to 1.5

TABLE 1.1
PRIMARY WATER QUALITY CRITERIA FOR CLASS SW-1 WATERS
(For Salt pans, Shell fishing, Mariculture and Ecologically Sensitive Zone)

S.No.	Parameter	Standards	Rationale/Remarks
1	2	3	4
1.	pH range	6.5---8.5	General broad range,Conductive for propagation of acquaitc lives is given. Value largely dependant upon soil-water interation.
2.	Dissolved Oxygen	5.0 mg/l or 60 per cent saturation value whichever is higher	Not less than 3.5 mg/l at any time of the year for protection of aqutic lives.
3.	Colour and Odour	No noticeable colour or offensive odour.	Specially caused by chemical compound like creosols, phenols, naptha pyridine benzene, toluene etc. causing visible colouration of salt crystal and faintin fish flesh.
4.	Floating Matters	Nothing obnoxious or detrimental for use purpose	Surfactants should not exceed an upper limit of 1.0 mg/l and the concentratic not to cause any visible foam.
5.	Suspended Solids	None from sewage or industrial waste origin	Settleable inert mattersnot in such concentration that would impair any usages specially assigned to this class.
6	Oil and Grease(including Petroleum Products)	0.1 mg/l	Concentration should not exceed 0.1 mg/l as because it has effect on fish eggs and larvae.
1[7.	Heavy Metals: Mercury (as Hg) Lead (as Pb) Cadmium (as Cd)	0.001 mg/l 0.001mg/l 0.01 mg/l	Values depend on : (i) Concentration insalt, fish and shell fish. (ii) Average per capitaconsumption per day. (iii)Minimum ingestion ratethat induces symptoms of resultin diseases.

Note: SW-1 is desirable to be safe and relatively free from hazardous chemicals, like pesticides, heavy metals and radionuclide concentrations. Their combined (synergistic or antagonistic) effects on health and aquatic lives are not yet clearly known. These chemicals undergo bio-accumulation, magnification and transfer to human and other animals through food chain. In areas where fisheries, salt pans are the governing considerations, and presence of such chemicals apprehended/reported, bioassay test should be performed following appropriate methods for the purpose of setting case specific limits.

TABLE 1.2
PRIMARY WATER QUALITY CRITERIA FOR CLASS SW-II WATERS
(For Bathing, Contact Water Sports and Commercial Fishing)

S.No.	Parameter	Standards	Rationale/Remarks
1	2	3	4
1.	pH range	6.5---8.5	Range does not cause skin or eye irritation and is also conducive for propagation of aquatic lives.
2.	Dissolved Oxygen	4.0 mg/l or 50 per cent saturation value whichever is higher	Not less than 3.5 mg/l at any time of the year for protection of aquatic lives.
3.	Colour and Odour	No noticeable colour or offensive odour.	Specially caused by colour or offensive chemical compound like odour, creosols, phenols, naphtha, benzene, pyridine, toluene etc. causing visible colouration of water and tainting of and odour in fish flesh.
4.	Floating Matters	Nothing objectionable or detrimental for use purpose	None in such concentration that would impair usages specially assigned to this
5.	Turbidity	30 NTU (Nephelometric Turbidity Unit)	Measured at 0.9 depth
6	Fecal Coliform	100/100 ml (MPN)	The average value not exceeding 200/100 ml in 20 per cent of samples in the year and in 3 consecutive samples in monsoon months
7.	Biochemical Oxygen	3 mg/l	Restricted for bathing (aesthetic quality of water). Also prescribed by IS: 2296-1974.

TABLE 1.3

**PRIMARY WATER QUALITY CRITERIA FOR CLASS SW-III WATERS
[For Industrial Cooling, Recreation (non-contact) and Aesthetics]**

S.No.	Parameter	Standards	Rationale/Remarks
1	2	3	4
1.	pH range	6.5---8.5	The range is conducive for propagation of aquatic species and restoring natural system.
2.	Dissolved Oxygen	3.0 mg/l or 40 per cent saturation value whichever is higher	To protect aquatic lives
3.	Colour and Odour	No noticeable colour or offensive odour.	None in such concentration that would impair usages specifically assigned to this class.
4.	Floating Matters	No visible, obnoxious floating debris, oil slick, scum.	As in (3) above
5.	Turbidity	30 NTU	Reasonably clear water for Recreation Aesthetic appreciation and Industrial Cooling purposes.
6.	Fecal Coliform	500/100 ml(MPN)	Not exceeding 1000/100ml in 20 percent of samples in the year and in 3 consecutive samples in monsoon months
7.	Dissolved Iron (as Fe)	0.5 mg/l or less	It is desirable to have the collective concentration dissolved Fe and Mn less or equal to 0.5 mg/l to avoid scaling effect.
* 8.	Dissolved Manganese(as Mn)	0.5 mg/l or less	

Standards included exclusively for Industrial Cooling purpose Other parameters same.

TABLE 1.4

PRIMARY WATER QUALITY CRITERIA FOR CLASS SW-IV WATERS

(For Harbour Waters)

S.No.	Parameter	Standards	Rationale/Remarks
1	2	3	4
1.	pH range	6.0---9.0	To minimize corrosive and scalin effect.
2.	Dissolved Oxygen	3.0 mg/l or 40 per cent saturation value whichever is higher	Considering bio degradation of oil andinhibition to oxygenproduction - thorough photosynthesls.
3.	Colour and Odour	No visible colour or offensive odour.	None from reactivechemicals which may corrode paints/ metallicsurfaces
4.	Floating materials, Oil, grease and scum(including Petroleum products)	10 mg/l	Floating matter 'Should befree from excessive livingorganisms which may clog or coat operative parts of marine vessels/euipment.
5.	Fecal Coliform	500/100 ml(MPN)	Not exceeding 1000/100ml in 20 per cent of samples in the year and in3 consecutive samples inmonsoon months
6.	Biochemical Oxygen Demand (3 days at 27°C)	5mg/l	To maintain waterrelatively free from pollution caused bysewage and other decom osable wastes.

TABLE 1.5

PRIMARY WATER QUALITY CRITERIA FOR CLASS SW-V WATERS

(For Navigation and Controlled Waste Disposal)

S.No.	Parameter	Standards	Rationale/Remarks
1	2	3	4
1.	pH range	6.0---9.0	As specified by New England Interstate

			Water Pollution Control Commission.
2.	Dissolved Oxygen	3.0 mg/l or 40 per cent saturation value whichever is higher	To protect aquatic lives
3.	Colour and Odour	None in such concentrations that would impair any usages specially assigned to this class.	As in (i) above
4.	Sludge deposits ,Solid refuse floating solids oil grease and scum	None except for such small amount that may result from discharge of appropriately treated sewage and or industrial wastes effluents.	As in (i) above
5.	Fecal Coliform	500/100 ml(MPN)	Not exceeding 1000/100ml in 20 per cent of samples in the year and in 3 consecutive samples in monsoon months

87. EMISSION REGULATIONS OR RAYON INDUSTRY

A. Existing Plants

Estimation of Uncontrolled Emission Quantity (EO) of CS₂ :

For VSF

EQ = 125 kg of CS₂/t of fibre

For VFY

EQ= 225 kg of CS₂ / t of fibre

Stack Height (H) requirement, m

Remarks

Where Q	-CS ₂ emission rate, kg/hr
VS	-stack exit velocity, m/sec.
D	-diameter of stack, m.
U	- annual average wind speed at top of stack, m/sec.

Multiple Stacks

1. If there are more than one stack existing in the plant, the required height of all stacks shall be based on the maximum emission rate in any of the stacks. In other

words, all the stacks carrying CS₂ emission shall be of same heights (based on the maximum emission rate).

2. Number of stacks shall not be increased from the existing number. However, the number of stacks may be reduced. The existing stacks may be rebuilt and if stacks are to be relocated condition 3 below; applies.

3. Spacing among the stacks (x) at the minimum shall be 3.0 H (in m). If distance, x, between two stacks is less than 3.0 H (in m), emission shall be considered as single point source and height of both the stacks shall be calculated considering all emission is going through one stack.

B. Ambient Air Quality Monitoring

The industry shall install three air quality monitoring stations for CS₂ and H₂S measurements in consultation with State Pollution Control Board (SPCB) to ensure attainment of WHO recommended ambient air quality norms (CS₂ = 100 ug/m³ and H₂S = 150 ug/m³, 24 = hr. average).

C. For new plants/expansion projects being commissioned on or after 1.6.1999. Permissible emission limits are

CS₂ = 21 kg/t of fibre
H₂S = 6.3 kg/t of fibre '

(Note: A and B above also apply to new plants/expansion projects).

88. Emission Standards for new generator sets (upto 19 kilowatt) run on petrol and kerosene with implementation schedule. .

The emission standards for portable generator sets run on petrol and kerosene shall be follows:-

A. From June 1,2000

Class	Displacement (CC)	CO(g/kw-hr)	HC+Nox(g/kw-hr)		
1.	<65	603	623	166	65
2.	>65≤99	-	623	-	36
3.	>99≤225	-	623	-	19.3

4.	>225	-	623	-	16.1
----	------	---	-----	---	------

B. From June 1,2001

Class	Displacement	CO(g/kw-hr)	Hc+ Nox(g/kw-hr)
1.	< 65	519	54
2.	>65< 225	519	30
3.	>99 < 225	519	16.1
4.	>225	519	13.4

Test method shall be as specified in SAE J 1088. Measurement mode shall be D1 cycle specified under ISO 8178 (Weighting Factor of 0.3 for 100 % load, 0.5 for 75% load and 0.2 for 50% load).

Following organizations shall test and certify the generator sets :-

(v) Automotive Research Association of India, Pune.

(vi) Indian Institute of Petroleum, Dehradun.

(vii) Indian Oil Corporation, R&D Centre, Faridabad.

(viii) Vehicle Research Development Establishment, Ahmedbagar.

These organizations shall submit the testing and certification details to the Central Pollution Control Board, annually. The Central Pollution Control Board may the experts in the field to oversee the testing.

89 . Noise standards for fire-crackers

A. (i) The manufacture, sale or of fire-crackers generating noise level exceeding 125 dB(AI) of 145dB(C) at 4 metres distance from, the point of bursting shall be prohibited.

(i) For individual fire-cracker constituting the series Uoined fire-crackers). the above mentioned limit be reduced by $5 \log_{10} (N)$ dB, where N= number of crackers joined together.

B. The broad requirements for measurement of noise from fire-crackers shall be-

(i) The measurements shall be made on hard concrete surface of minimum 5 metre diameter or equivalet.

(ii) The measurements shall be made in free field conditions i.e, there shall not be any reflecting surface upto 15 metre distance from the point of bursting.

(iii) The measurement shall be made with an approved sound level metre

C. The Department of Explosive shall ensure implementation of these standards

Note: dB(A 1) : A-weighted impulse sound pressure level in decibel.

dB(C)pk: C - weighted peak sound pressure level in decibel

Footnote: The Principal Rules were published in the Gazette of India vide Notification No.8.0.844 (E), dated the19th November, 1986 and subsequently amended vide:

(1) S.O.82(E), dt. 16th February, 1987 (13) S.O.136(E),dt.9th February, 1990

(2) 8.0393 (E), dt 16th April, 1987; (14) G.S.R.742(E),dt.13th August, 1990 (3) 8.0.443(E),dt 18th April, 1987 (15) S.O.23(E),dt.16th January, 1991 (4) S.O.64(E),dt. 18th January, 1988 (16) S.O.80(E),dt. 8th February, 1991 (5) G.S.R.919(E),dt.12thSept., 1988 (17) S.O.114(E),dt.19th Februi.ry,1991 (6) S.O.8(E),dt. 3rd January 1989 (18) G.S.R.85(E),dt.20th February. 1991 (7) G.SR.913(E),dt. 24th October 1989 (19) G.S.R.93(E),dt 21h February, 1991 (8) S.O.914(E),dt. 24th October, 1989 (20) S.O.190(E),dt.18th March, 1991 (9) G.S.R.931(E),dt.2Th October, 1989 (21) S.O.416(E),dt. 20th June, 1991 (10) G.S.R.103(E),dt. 25thOec ,1989 (22) S.O.479(E), dt. 25th July, 1991 (11) S.O.12(E),dt. 8th January, 1999 (23) S.O.23(E),dt 9th January, 1992 (12) G.S.R.54(E),dt.5th February, 1990

APPENDIX A
FORM I
(See rule 7)
Notice of intention to have sample analysed

To

.....
.....

Take notice that it is intended to have analysed the sample of.....
which has been taken today, the day of.....
19..... from

(Name and designation of the person who takes the sample)

Specify the place where the sample is taken

(SEAL)

DATE

FORM II

(See rule 8)

MEMORANDUM TO GOVERNMENT ANALYST

From

.....
.....

To

The Government Analyst

.....
.....

The portion of sample described below is sent herewith for analysis under rule 6 of the Environment (protection) Rules, 1986.

The portion of the sample has been marked by me with the following mark:

Details of the portion of sample taken

Date.....

Name and designation of person who sends sample

(SE.AL)

FORM III
(See rule 8)
REPORT BY GOVERNMENT ANALYST

Report No

Date

I hereby certify that I..... Government Analyst duly appointed under section 13 of the Environment. (pmtection) Act. 1986 received on theday of 19..... from.....1..... a sample of for analysis .

The sample was in a condition fit for analysis as reported below:

I further certify that I have analysed the aforcMtioned sample on and declare result of the analysis to be as follows:

2.....
.....

The Condition of seals, fastening of sample on receipt was as follows:

.....
.....

Signed this.....day of.....
19.....

- 1. Here write the name of the officer/authority from whom sample was ontained
- 2. Here write full details of anlysis and refer to method of analysis

FORM- IV
(See rule 11)

FORM OF NOTICE

By registered post acknowledgement due

From (1)

Shri.. '

To

.....
.....

Notice under section 19(b) of the Environment (Protection) Act, 1986 Whereas an office under the Environment (Protection) Act, 1986 has been committed/is being committed by (2) I/we hereby give notice of 60 days under section 19(b) of the Environment (protection) Act, 1986 of my *lour* intention to file a complaint in the court against2) for violation of section of the Environment (Protection) Act, 1986.

In support of my/our notice, I am/we are enclosed the following documents(3) as evidence of proof of the Environment(Protection)Act,1986.

Signature(s)

Place.....

Dated

Explanation:

(1) In case the notice is given 'in the name of a Company, documentary evidence authorising the persons to sign the notice on behalf of the company shall be enclosed to this notice.

Company for this purpose means a company defined in explanation to sub- rule(6) of rule 4.

(2) Here give the name and address of the alleged offender. In case of a manufacturing/processing/operation unit, indicate the name/location/nature of activity etc. :-

(3) Documentary evidence shall include photograph/technical reports/health report of the area, etc. for enabling enquiry into the alleged violation/offence.

[No. 1(18)/86-PL]
T.N.Seshan, Secy

1[FORM-V]
(See rule 14)

Environmental Statement for the financial year ending the 31st March

PART-A

- 1.Name and address of the owner/occupier of the industry operation or process.
- 2.Industry category Primary-(STC Code) Secondary .-(SIC Code)
- 3.Production capacity .-Units
- 4.Year of establishment
- 5.Date of the last environmental statement submitted.

PART-B

Water and Raw Material Consumption

(1) Water consumption m³/d

Process

Cooling

Domestic

Name of products	Process water consumption per unit of product output. During the previous financial year During the Current Financial Year	
	1	2
1.		
2.		
3.		

1. Substituted by Rule 2(b) of the Environment(Protection)Amendment Rules,1993 notified vide G.S.R 345(E)

(ii) Raw material consumption

* Name of raw materials	Name of products	Consumption of raw materials per unit of output	
		During the previous financial year	During the current financial year

*** Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw materials used.**

PART-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

(I) Pollutants	Quantity of pollutants(mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of discharged variation from prescribed standards with reasons
(a) Water (b) Air			

PART-D

HAZARDOUS WASTES

(as specified under Hazardous Wastes/Management and Handling Rules,1989)

Hazardous Waster	Total Quantity (Kg.)	
	During the previous Financial year	during the current financial year

- (a) From process
- (b) From pollution control facilities.

PART-E

Solid Wastes

	Total Quantity	
	During the previous financial year	During the current financial year

- (a) From process
- (b) From pollution control facility
- (c) (1) Quantity recycled or re-utilised within the unit
- (2) Sold
- (3) Disposed

PART-F

Please specify the characterizations (in terms of composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

PART -G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

PART-H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

PART-I

Any other particulars for improving the quality of the environment.

[F.No.Q-15015/1/90-CP\]

MUKUL SANWAL, Jt, Secy.

1[SCHEDULE II]

(See rule 3)

General standards for discharge of effluents

Sl.No	Parameter	Standards			
		Inland surface water	Public sewers	Land for irrigation	Marine coastal areas
		(a)	(b)	(c)	(d)
1.	Colour and odour	See Note 1	--	See Note 1	See Note 1
2.	Suspended solids, mg/l, Max	100	600	20	(a) For process waste ; water-100 (b) For cooling water effluent-percent "above total suspended matter of influent cooling water.
3.	Particle size of suspended solids.	shall pass 850 micron IS Sieve			(a) Floatable solids, Max 3 mm (d)Settleable solids Max 850 microns.

4.	Dissolved solids (inorganic), mg/a, max.	2100	2100	2100	
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature °C, Max	Shall not exceed 40 in any section of the stream from the effluent outlet	45 at the point of discharge		45 at the point of discharge
7.	Oil and grease, mg/l, max	10	20	10	20
8.	Total residual chlorine, mg/l	1.0	--	--	1.0
9.	Ammonical nitrogen (as N), mg/l, Max. 1 Schedule II inserted vide G.S.R. 919(E) dt. 12-9-88. published in the Gazette No. 488 dt. 11.-9-88.	50	50	--	50
10.	Total Kjeldahl nitrogen (as N),mg/l Max	100	--	--	100
11.	Free Ammonia (as NH ₃), mg/l, Max.	5	--	--	5

12.	Biochemical oxygen demand (5 days at 20°C) Max.	30	350	100	100
13.	Chemical Oxygen demand, mg/l Max.	250	--	--	250
14.	Arsenic (as As), mg/l., Max.	0.2	0.2	0.2	0.2
15.	Mercury (As Hg), lng/l, Max.	0.01	0.01	--	0.01
16.	Lead (as Pb), mg/l, Max	0.1	1	--	1
17.	Cadmium (asCd),mg/l,Max.	2	1	--	2
18.	Hexavalent chromium (as Cr+6) mg/l Max	0.1	2	--	1
19.	Total chromium (as Cr), mg/l, Max.	2	2	--	2
20.	Copper (as Cu), mg/l, Max.	3	3	--	3
21.	Zinc (as Zn), mg/l, Max.	5	15	--	15
22.	Selenium (as Sc), mg/l, Max.	0.05	0.05	--	0.05
23.	Nickcl (as Ni), mg/l, Max.	3	3	--	5
24.	Boron (as B), mg/l Max.	2	2	2	--

25	Prcent sodium, Max. - -	--	60	60	--
26.	Residual sodium carbonate, mg/l, Max.	--	--	5	--
27.	Cynide (as CN), mg/l, Max.	0.2	2	0.2	0.2
28.	Chloride (as Cl), mg/l, Max.	1000	1000	600	--
29.	Fluoride (as F), mg/l, Max.	2	15	--	15
30.	Dissolved Phosphatcs (as P), mg/l, Max.	5	--	--	--
31.	Sulphate (as S04), mg/l, Max.	1000	1000	1000	---
32.	Sulphide (as S), mg/l, Max.	2	--	--	5
33.	Pesticidcs	Absent	Absent	Absent	Absent
34.	Phenolic compounds (as C6HSOH) mg/l, Max.	1	5	--	5
35	Radioactive materials: (a) Alpha emitters MC/ml., Max. (b) Beta emitters uc/ml. Max Note: - I. All efforts should be made to remove colour and unpleasant odour as far as practicable.	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁸ 10 ⁻⁷	10 ⁻⁷ 10 ⁻⁶

--	--	--	--	--	--

2.The standards mentioned in this notification shall apply to all effluents discharged such as industrial mining and mineral processing activities municipal sewage etc.

3.1[****]

2[SCHEDULE III]

(See rule 3)

AMBIENT AIR QUALITY STANDARDS IN RESPECT OF NOISE

Area Code	Category of Area	Limits in dB (A) Leq	Night Times
		Day Time	
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note:

1 . Day time is reckoned in between 6 a.m. and 9 p.m.

2. Nigh time is reckoned in between 9 p.m. and 6 a.m.

3. Silence zone is defined as areas upto 100 meters around such J:'~mises as hospitals, educational institutions and courts. The Silence zones are to be declared by the Competent Authority.

Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these zones.

4. Mixed categories of areas should be'declared as one of the four above mentioned categories by the Competent Authority and the corresponding standards shall apply.

1. Omitted by Rule 2 of the Environment(Protection)Fourth Amendment Rules,1992 vide Notification G.S.R 797(E)dated 01.01.1992 Gazette No. 396 dated 01.10.1992
2. Schedule III inserted G.S.R 1063(E)dated 26.12.89 published in the Gazette No. 643 dated 26.12.89

1[SCHEDULE IV
(See rule 3)

Standards for emission of smoke, vapour etc. from motor vehicles :-

(1) Every motor vchicls shall be manufactured and maintained in such condition and snall be so driven that smoke, visible vaour, grit, sparks, ashes, cinders or oily substance do not emit therefrom.

(2) On and from the 1st day of March 1990, every motor vehicle in use shall comply with the followmg standards :-

(a) Idling CO (Carbon monoxide) emission limit for all four wheeled petrol driven vehicles shall not exceed 3 per cent by volume;

(b) Idling CO emission limit. for all two and three wheeled petrol driven vehicles shall not exceed 4.5 per cent by volume;

(c) Smoke density for.all diesel driven vehicles snalJ be as follows :-

Method Test	Maximum smoke Density		
	Light absorption coefficient m-1	Bosch units	Harridge units
(a) Full load at a speed of 60% to 70% of maximum enginerated speed declared by the manufacturer	3.1	5.2	75
(b) Free acceleration	2.3	-	65

Method of Test

Maximum smoke density

	Light absorption coefficient m-l	Bosch units	Harridge-units
(a) Full load at a speed of 60% to 70% of maximum enginerated speed declared by the manufacturer	3.1	5.2	75
(b) Free acceleration	2.3	-	65

(3) On and from the 1 st day of April, 1991, all petrol driven vehicles shall be so manufactured that they comply with the mass emission standards as specified at Annexure 'I'. The breakdown of the operating cycle used for the test shall be as specified at Annexure 'II' and the reference fuel for all such tests shall be as specified in Annexure 'III' to this Schedule.

(4) On and from the 1st day of April, 1991, all diesel driven vehicles shall be so manufactured that they comply with the mass emission standards based on exhaust gas capacity as specified at Annexure 'IV' to this Schedule.

(5) On and from the 1st day of April, 1992, all diesel driven vehicles shall be so manufactured that they comply with the following levels of emission under the India., driving cycle :-

1. Schedule IV inserted vide G.S.R 54(E)dated 5.2.90 published in the gazette no.45 dated 5.2.90

Mass of Carbon Monoxide (CO)Maximum Grames per KWH	Mass of Hydroxy carbons (HC)maximum Grames per KWH	Mass of Nitrizen Oxides (NC)Maximum Grams per KWH
14	3.5	18

(6) Each molor vehicle manufactured onand after the dates specified in paragraphs (2), (3), (4) and (5) Shall be certified by the manufacturers to be conforming to the standards specified in the said paragrJphs and the manufacturers shall further certify that the components liable to effect the emission of gaseous pollutants are so designed, constructed and assembled as to enable the vehicle, in normal use,

despite the vibration to which it may be subjected, to comply with the provisions of the said paragraphs.

(7) Test for smoke emission level and carbon monoxide level for motor vehicles-

(a) Any officer not below the ranks of a sub-inspector of police or an inspector of motor vehicles, who has reason to believe that a motor vehicle is by virtue of smoke emitted from it or other pollutant like carbon monoxide emitted from it, is likely to, cause environmental pollution, endangering the health or safety of any other user of the road or the public, may direct the driver or any person incharge of the vehicle to submit the vehicle for undergoing a test to measure the standard or black smoke or the standard of any of the other pollutants.

(b) The driver or any person incharge of the vehicle shall upon demand by any officer referred to in sub-paragraph (a), submit the vehicle for testing for the purpose of measuring the standard of smoke or the levels of other pollutants or both.

(c) The measurement of standard of smoke shall be done with a smoke meter of a type approved by the State Government and the measurement of other pollutants like carbon monoxide shall be done with instruments of a type approved by the State Government.

ANNEXURE-I
(See paragraph 3)

MASS EMISSION STANDARDS FOR PETROL DRIVEN VEHICLES

1. Type Approval Tests: ,
Two and Three Wheeler Vehicles

Reference Mass, R (Kg)	CO (g/km)	HC (g/kln)
R < 150	12	8
150 < R < 350	12 + 18(R-150)/200	8 + 4(R-150)/200
R > 350	30	12

Light Duty Vehicles:

Reference Mass rw (Kg)	CO (g/km)	HC (g/km)
1	2	3
Rw ≤ 1020	14.3	2.0
1020 < rws ≤ 1250	16.5	2.1
1250 < rw ≤ 1470	18.8	2.1

1470<rw≤1930	20.7	2.3
1700<rw≤1930	22.9	2.5
1930<rw≤2150	24.9	2.7
Rw>2150	27.1	2.9

**2. Conformity of production Tests:
Two and Three Wheeler Vehicles :**

Reference Mass rw (Kg)	CO (g/km)	HC (g/km)
1	2	3
R-150	15	10
150<R<350	15+ 25(R-150)/200	10+ 5(R-150)/200
R>350	40	15

Light Duty vehicles:

Reference Mass rw (Kg)	CO (g/km)	HC (g/km)
1	2	3
rw≤1020	17.3	2.7
1020<rw≤1250	19.7	2.7
1250<rw≤1470	22.5	2.8
1470<rw≤1930	24.9	3.0
1700<rw≤1930	27.6	3.3
1930<rw≤2150	29.9	3.5

Rw>2150	32.6	3.7
---------	------	-----

For any of the pollutants referred to above of the three results obtained may exceed the limits specified for the vehicles by not more than 10 per cent.

Explanation: Mass emission standards refers to the gm of Pollutants emitted per Km. run of the vehicle as determined by a chassis dynamometer test using the Indian Driving Cycle.

ANNEXURE-II

(See Paragraph 3)

BREAKDOWN OF THE OPERATING CYCLE, USED FOR THE TESTS

No. of Operation	Acceleration (m/acc ²)	Speed (Km/h)	Duration of each operation(s)	Cumulative time(s)
1.	2.	3.	4.	5.
01. Idling	-	--	16	16
02. Acceleration	0.65	0—14	6	22
03. Acceleration	0.56	14-22	4	26
04. Deceleration	--0.63	22-13	4	30
05. Steady speed	-	13	2	32
06. Acceleration	0.56	13—23	5	37
07. Acceleration	0.44	23-31	5	42
08. Deceleration	--0.56	31-25	3	45
09. Steady speed	--	25	4	49
10. Deceleration	-0.56	25-21	2	51
11. Acceleration	0.45	21-34	8	59
12. Acceleration	0.32	34-42	7	66
13. Deceleration	0.46	42-37	3	69
14. Steady speed -		37	7	76
15. Deceleration	--0.42	37-34	2	78
16. Acceleration	0.32	34-42	7	85
17. Deceleration	--0.46	42-27	9	94
18. Deceleration	-0.52	27-14	7	101
19. Deceleration	--0.56	14-00	7	108

ANNEXURE III
(See Paragraph 3)

REFERENCE FUEL FOR TYPE AND PRODUCTION CONFORMITY TESTS

S.No	Characteristics	Requirements		Method of test (ref of P: or IS : 1448*)
1	2	3	4	5
1.	Colour. visual	Orange	Red	--
2.	Copper-strip corrosion for 3 hours at 50°C.	Not worse than No.1		P:15 (1968)
3.	Density at 15°C	Not limited but to be reported		P: 10(1967)
4.	Distillation: (a) Initial boiling point * Methods for test for petroleum and its products. (b) Recovery up to 20 °C percent by volume min. (c) Recovery upto 125°C 50 per cent by volume (d) Recovery upto 130°C per cent by volume (e) Final boiling point, max (f) Residue per cent by volume Max.	Not limited but to be reported 10 50 90 215°C 2		P: 18 (1967)
5.	Octane number (Research method) Max.	87	94	P: 27 (1960)
6.	Oxidation Stability in minutes, Min.	360	360	P : 28 (2966)
7.	Residue on evdporation mg/100 ml. Max.	4.0	4.0	P: 29 (1960); (Air-jat solvent

				washed)
8.	Sulphur. total. percent by weight Max.	0.25	0.20	P: 34 (1966)
9.	Lead content (as Pb), g/l Max.	0.56	0.80	P: 37 (1967) or P: 38 (1967)
10.	Reid vapour pressure at 38 degree C. kg./cm ³ Max	0.70	0.70	P : 39 (1967)

ANNEXURE IV

(See paragraph 4)

LIMIT VALUES OF EXHAUST GAS CAPACITY APPLICABLE

FOR DIESEL DRIVEN VEHICLES

THE ENGINE TESTS AT STEADY SPEED

Nominal Flow G(l/s)	Absorption Coefficient (Km-1)	Nominal Flow G(l/s)	Absorption Coefficient (K9-1)
42	2	120	1.20
45	1.91	125	1.17
50	1.82	130	1.15
55	1.75	135	1.11
60	1.68	140	1.09
65	1.61	145	1.07
70	1.56	150	1.05
75	1.50	155	1.04
80	1.46	160	1.02
85	1.41	165	1.01
90	1.38	170	1.00
95	1.34	175	0.99
100	1.31	180	0.97
105	1.27	185	0.96
110	1.25	190	0.95
115	1.22	195	0.93
		>200	

1. Annexure IV inserted vide G.S.R 54(E) dated 5.2.90 published in the Gazette No. 45 dated 5-2-90

1 [SCHEDULE V]

(See rule 12)

S.No	Place at which the discharge of any environmental Pollutant intimated in excess of prescribed standards occurs or is apprehended to occur	Authoritics or agencies to be intimated	Appointed under
1	2	3	4
1.	Factories as defined under the Factories Act, 1948- (a) owned by Central Government and engaged in carrying out the purposes of the Atomic Energy Act, 1962;	(i) Atomic Energy Regulatory Board (AERB) (ii) The Ministry of Environment and Forests.	The Atomic Energy Act, 1962
2.	(b) Factories other than those mentioned in paragraph (a)	(i) The Chief Inspector of Factories (ii) The Inspector of Factories having local jurisdiction (iii) The Ministry of Environment and Forests.	The Factories Act, 1948 -do-
3.	Mine as defined under the Mines and Minerals (Regulation and Development) Act, 1957	(i) The Controller General, Indian Bureau of Mines	The Mines and Minerals (Regulation and Development) Act, 1957

1. Schedule II relating to rule 1:1. re-numbered as Schedule V vide G.S.R 422(E) dated 19.05.1993, published in the Gazette No. 174 dated 19.05.1993

Entires relating to S.No. 2 corrected in terms of S.O.64(E) published in Gazette No. 42 dt.18.01.1988 and coeigendum No. GS.R. 434(E) dt. 07.04.1988 published in the Gazette No. 181 dt. 07.04.1988.

Principa Rules published vide S.O. No. 844(E) dated the 19th Novmber, 1986. Amcnding Rule

published vide S.O.No. 82(E) dated the 16th Fcbruary, 1987; S.O. 393(E) datcd the 16th April, 1987; S.O 443(E) dated the 28th April, 1987; S.O. 64(E) dated the 18th January, 1988; G.S.R. 919(E) dated the 12th September, 1988; S.O 8(E) dated the 3rd January, 1989; G.S.R. 913(E) dated the 24th October, 1989; S.O. 914(E) dated the 24th October, 1989; G.S.R.

1063 dated the 26th Derember, 1989; S.O.12(E) dated the 8th January, 1990 and G.S.R. 54(E)-dated 5th February, 1990.

(Footnote at the end of Notification No. G.S.R. 742(E) dated the 30th August, 1990 published in

the Gazette No. 365 dated August 30, 1990)

S.No	Place at which the discharge of any environmental Pollutant intimated in excess of prescribed standards occurs or is apprehended to occur	Authoritics or agencies to be intimated	Appointed under
1	2	3	4
		(ii) regional Controller of : Mines; having , Local jurisdiction (iii) The Ministry of - Environment and Forests.	
3.	Port as defined under the Indian Ports Act,1908	(i) Conservator of Ports (ii) The Ministry of - Environment and Forcsts.	The Indian Ports Act,1908 --
4.	Plantation as defined under the Plantation Labour Act,1951	(i) The Chief Inspector of Plantations (ii) The Ministry of Environment and Forests	-do— ---
5.	Motor Vehicles as defined under the Motor vehicles Act,1939	(i)State Trasport Authority (ii)Regional Transport Authority having regional jurisdictions (iii)The Ministry of Environment and Forests	The Motor Vehicles Act, 1939 -do- ---
6.	Ship as defined under the Merchant Shipping Act,1958	(i)Director General of Shipping (ii)Surveyor having jurisdictions (iii)The Ministry of Environment and Forests	The merchant Shipping Act,1958 -do-

1 [SCHEDULE - VI]

(See rule 3A)

General Standards for discharge of environment pollutants Part-A :Effluents

S.No	Parameter	Standards			
		Inland surface water	Public Sewers	Land irrigation	Marine coastal areas
1	2	A	B	C	D
1.	Colour and odour	See 6 of Annexure-I	---	See 6 of Annexure-I	See 6 of Annexure-I
2.	Suspended solids	100	600	200	(a) For process waste water-100 (b) For cooling water effluent 10 per cent above total suspended matter of influent
3.	Particular size of suspended solids	Shall pass 850 micron IS Sieve			(a) Floatable solids, max. 3 mm b)Settleable solids,max 850 microns
4.	***	*	---	***	---
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	shall not exceed 5°C above the receiving water temperature			shall not exceed 5°C above the receiving water temperature
7.	Oil and grease mg/l Max.	10	20	10	20
8.	Total residual chlorin mg/l Max.	1.0	--	--	1.0

9.	Ammonical nitrogen (as N), mg/l Max.	50	50	--	50
1. Schedule VI inserted by Rule 2(d) of the Environment (Protection) Second Amendment Rules, 1993 notified vide G.S.R. 422(E) dated 19.05.1993, published in the Gazette No. 174 dated 19.05.1993.					
10.	Total Kjeldahl nitrogen (as NH ₃): mg/l, Max	100	---	---	100
11.	Free ammonia (as NH ₃) mg/l, max.	5	---	---	5
12.	Biochemical oxygen demand (5 days at 20°C), mg/l max.	30	350	100	100
13.	Chemical Oxygen demand, mg/l Max.	250	---	---	250
14.	Arsenic (as As), mg/l max.	0.2	0.2	0.2	0.2
15.	Mercury (As Hg), mg/l Max.	0.01	0.01	---	0.01
16.	Lead (as Pb) mg/l, Max.	0.1	1	---	2
17.	Cadmium(as Cd) mg/l, Max.	2	1	---	2
18.	Hexavalent chromium. (as O+6), mg/l, Max.	0.1	2	---	2
19.	Total chromium (as Cr) mg/l, Max	2	2	---	2
20.	Copper (as Cu) mg/l, Max.	3	3	---	3

21.	Zinc (as Zn) mg/l, Max.	5	15	---	15
22.	Selenium (as Sc.) mg/l, Max.	0.05	0.05	---	0.05
23.	Nickel (as Ni) mg/l, Max	3	3	---	5
24.	***	*	*	*	*
25.	***	*	*	*	*
26.	***	*	*	*	*
27.	Cyanide (as CN), mg/l Max.	0.2	2	0.2	0.2
28.	***	*	*	*	*
29.	Fluoride (as F) mg/l Max.	2	15	---	15
30.	Dissolved phosphates(as P), mg/l Max.	5	---	---	---
31.	***	*	*	*	*
32.	Sulphide (as S) mg/l Max.	2	---	---	5
33.	Phenoile compounds(as C ₆ H ₅ OH) mg/l max.	1	5	---	5
34.	Radioactive materials: (a) Alpha emitter micro curie/ml (b) Beta emitter micro curie/ml	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁸ 10 ⁻⁷	10 ⁻⁷ 10 ⁻⁶
35.	Bio-assay test	90%survival of fish after 96 hours in 100% effluent	90%survival of fish after 96 hours in 100% effluent	90%survival of fish after 96 hours in 100% effluent	90%survival of fish after 96 hours in 100% effluent
36.	Manganese (as Mn),	2 mg/l	2 mg/l		2 mg/l

37.	Iron (as Fe).	3 mg/l	3 mg/l		3mg/l
38.	Vanadium (as V)	0.2mg/l	0.2mg/l		0.2mg/l
39.	Nitrate Nitrogen . mg/l	10mg/l	---	---	20mg/l
40.	***	*	*	*	*

2. Omitted by Rule 2 (d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No. G.s.R. 801 (E) dated 31.12.1993

Waste Water Generation Standards Part-B

S.No	Industry	Quantum
1.	Integrated Iron & Steel	1.6 m3/tonne of finished steel ,
2.	Sugar	0.4 m3/tonne of cane crushed
3.	Pulp & Paper Industries (a) Larger pulp & paper (i) Pulp & paper (ii) Viscose Staple Fibre (iii) Viscose Filament Yam. (b) Small pulp & paper: i) Agro-residue based paper produced (ii) Waste paper based	175 m3/tonne of paper produced. 150 m3/tonne of product 500 m3/tonne of product 150 m3/tonne of paper produced 50 m3/tonne of paper produced
4.	Fennentation Industries: (a) Maltry (b) Brewery (c) Distillery	3.5 m3/tonne of grain produced 0.25 m3/KL of beer produced 12 m3/KL of alchol produced
5.	Caustic Soda (a) Membrane cell process (b) Mercury cell process	1 m3 /tonne of caustic soda produced excluding cooling tower blowdown

		4 m ³ /tonne of caustic soda produced (mercury bearing) 10% blowdown permitted for cooling tower
6.	Textile Industries: Man-made fibre (i) Nylon & Polyester (ii) Viscose rayon	120 m ³ /tonne of fibre produced 150 m ³ /tonne of product
7.	Tanneries	28 m ³ /tonne of raw hide
8.	Starch, Glucose and related products	8 m ³ /tonne of maize crushed
9.	Dairy	3 m /KL of Milk
10.	Natural rubber processing industry	4 m ³ /tonne of rubber
11.	Fertilizer (a) Straight nitrogenous fertilizer (b) Straight phosphatic fertilizer (SSP & TSP) 0.5 m ³ /tonne of SSPffSP (c) Complex fertilizer	5 m ³ /tonne of urea or equivalent produced Standards of nitrogenous and phosphatic fertilizers are applicable depending on the primary product.
1.	Load based standards Part-C Oil Refinery Industry:	
	Parameter processed	Quantum in kg/1000 tonnes of crude
	Oil & grease	10.00
	Phenol	0.70
	BOD	10.50
	Suspended solids	14.00
	Sulphide	0.35

2.	Large Pulp & Paper, News Print/Rayon garde plants , of capacity above 24000 tonne/Annum Parameter . Total Organic Chloride (TOCI)	Quantum. 2 kg/tonne of product.

GENERAL EMISSION STANDARDS PART -D

1. Concentration Based Standards

Sl.No	Parameter	Standard Concentration not to exceed (in mg/Nm ³)
1.	Particulate Matter (PM)	150
2.	Total Fluoride	25
3.	Asbestos	4 Fibres/sc and dust should not be more than 2mg/Nm ³
4.	Mercury	0.2
5.	Chlrine	15
6.	Hydrochloric acid vapour and mist	35
7.	***	*
8.	Sulphuric acid mist	50
9.	Carbon monoxide	1 % max.(v/v)
10.	***	*
11.	Lead	10 mg/Nm ³

12.	***	*
-----	-----	---

II. Equipment based standards

2 [For dispersal of sulphur dioxide, in minimum stack height limit is accordingly prescribed as below.]

Sl.No	Parameter	Standard	
1.	1. Sulphur dioxide (i) Power generation capacity: --500 MW and more --200/210 MW and above to less than 500 MW --less than 200/210 MW	Stack-height limit in metre ' 275 220 $H=14(Q)^{0.3}$	
2.	Steam generation capacity --Less than 2tonne/h --2 to 5 tonne/h	Less than 8.5 MT 8.5 to 21MT	9 12
	5 to 10 tonne/h --10 to 15 tonne/h --15 to 20 tonne/h --20 to 25 tonne/h --25 to 30 tonne/h --More than 30 tonne/h	21to 42 MT 42to 64 MT 64to 104 MT 104to 105 MT 105to 126 MT More than 126MT of using Formula $H=14(Q)^{.3}$	15 18 21 24 27 30

Note: H-Physical height of tile stack in metre

Q-,Emission rate of SO₂ in kg/hr

III. Load /Mass Based Standards

S.No	Industry	Parameter	Standard
1.	Fertiliser (Urea) Commissioned Prior to 1.1.82	Particulate Matter (PM)	2 kg/tonne of product
	Commissioned after to 1.1.82	Particulate Matter (PM)	0.5 kg/tonne of product
2.	Copper ,Lead and Zinc Smelter/converter	Sulphur dioxide	4kg/tonne of concentrated (10%) acid produced
3.	Nitric-Acid	Oxides of Nitrogen	3kg/tonne of weak acid (before concentration) produced
4.	Sulphuric Acid	Sulphur dioxide	4 kg/tonne of concentrated (100%) acid produced
5.	Coke Oven	Carbon monoxide	3 kg/tonne of coke produced

6. Oil Refineries

(a) For the oil refineries, the following standards shall be applicable

Process	Parameter	Standard
Distillation (Atmospheric plus vacuum)	Sulphur dioxide	0.25 kg/tonne of feed in this Process
Catalytic cracker	-do-	2.5 Kg/MT of feed in this Process
Sulphur Recovery Unit - 1 (b) ***	do-	120 Kg/MT of Sulphur in the feed

1. Omitted by Rule 2 (i) (vii) of the Environment (protection) Third Amendment Rules, 1993 vide G.S.R. SOI (E) dated 31.12.1993.

7. Aluminium Plants:

(i) Anode Bake Oven Total Fluoride		0.3 Kg/MT of Aluminium
(ii) Pot room		
(a) VSS	-do-	4.7 Kg/MT of Aluminium
(b) HSS	-do-	6 Kg/MT of Aluminium
(c) PBSW	-do-	2.5 Kg/MT of Aluminium
(d) PBCW	-do-	1.0 Kg/MT of Aluminium

Note:

VSS = Vertical Stud Soderberg
HSS = Horizontal Stud Soderberg
PBSW = Pre Backed Side Work
PBCW = Pre Backed Centre Work

8. Glass Industry :

(a) Furnace Capacity

(i) Up in the product draw Particulate matter 2 Kg/hr ca capacity of 60 MT/Day

(ii) Product draw capacity -do- 0.8 Kg/MT of Product drawn more than 60 MT/Day

*** NOISE STANDARDS PART -E**

A. Noise Limits for Automobiles (Free Field Distance at 7.5 Metre in dB(A) at the manufacturing Stage

(a) Motorcycle, Scooters & Three Wheelers	80
(b) Passenger Cars	82
(c) Passenger or Commercial vehicles upto 4 MT	85
(d) Passenger or Commercial vehicles above 4 MT and upto 12 MT	89
(e) Passenger or Commercial vehicles exceeding 12MT	91

B. Domestic appliances and construction equipments at the manufacturing stage to be achieved by 31st December, 1993.

(a) Window Air Conditioners of 1 ton to 1.5 ton	68
(b) Air Coolers	60
(c) Refrigerators	46
(d) Diesel generator of domestic purposes	85-90
(e) Compactors (rollers), Front Loaders, Concrete mixers, Cranes (moveable), Vibrators and Saws	75

* Standards notified at S.No 46 on page 304 may also be referred

ANNEXURE -I

(For the purposes of Parts-A, B and C)

The State Boards shall following guide-lines in enforcing the standards specified under schedule VI: -

1. the waste waters and gases are to be treated with the best available technology (BAT) in order to achieve the prescribed standards.
2. the industries need to be encouraged for recycling and reuse, of waste materials as far as practicable in order to minimize the discharge of wastes into the environments.
3. the industries are to be encouraged for recovery of biogas, energy and reusable materials.
4. while permitting the discharge of effluent and emission into the environment, State Boards have to take into account the assimilative capacities of the receiving bodies, especially water bodies so that quality of the intended use of the receiving waters is not affected. Where such quality is likely to be effected discharges should not be allowed into water bodies.
5. the Central and State Boards shall put emphasis on the implementation of clean technologies by the industries in order to increase fuel efficiency and reduce the generation of environmental pollutants.
6. All efforts should be made to remove colour and unpleasant odour as far as practicable.
7. The standards mentioned in the Schedule shall also apply to all other effluents discharged such as industrial mining, and mineral processing activities and sewage.
8. the limit given for the total concentration of mercury in the final effluent of caustic soda industry, is for the combined effluent from (a) Cell house, (b) Brine Plant, (c) Chlorine handling (d), hydrogen handling and (e) hydro chloric acid plant.
9. I[(a)...(f)]
10. All effluents discharge including from the industries such as cotton textile, composite wollen mills, synthetic rubber, small pulp & paper, natural rubber; petrochemicals, tanneries, point dyes, slaughter houses, food & fruit processing and dairy industries into surface waters shall conform to the BOD limit specified above, namely,

30mg/l. For discharge an effluent having a BOD more than 30 mg/l, the standards shall conform to those given, above for other receiving bodies, namely, sewers, coastal waters, and land for irrigation.

11. 1 [***.....]

12. In case of fertilizer industry the limits in respect of chromium and fluoride shall be complied with at the outlet of chromium and fluoride removal units respectively.

13. In case of pesticides :

(a) The limits should be complied with at the end of the treatment plant before dilution.

(b) Bio-assay test should be carried out with the available species of fish in the receiving water, the COD limits to be specified in the constant conditions should be correlated with the BOD limits.

(c) In case metabolites and isomers of the Pesticides in the given list are found in significant concentration, standards should be prescribed for these also in the same concentration as the individual pesticides.

(d) Industries are required to analyze pesticides in waste water by advanced analytical methods such as GLC/HPLC.

2[14. The chemical oxygen demand, s (COD) concentration in a treated effluent, if observed to be persistently greater than 250 mg/l before disposal to any receiving body (public sewer, land for irrigation, inland surface water and marine coastal areas), such industrial units are required to identify chemicals causing the same. In case these are found to be toxic as defined in the Schedule I of the Hazardous Rules 1989 the State Board in such cases shall direct the industries to install tertiary treatment stipulating time limit.

15. Standards specified in Part A of Schedule -VI for discharge of effluent into the public sewer shall be applicable only if such sewer leads to a secondary treatment including biological treatment system, otherwise the discharge into sewers shall be treated as discharge into inland surface waters].

1.Omitted by Rule 2(k)(vii)of the Environment (Protection)Third Amendment Rules,1993 vide G.S.R 801(E)dated 31.12.1993

2.Inserted by Rule 2(k)(ix),ibid

ANNEXURE-II

(For the purpose of Part-D)

The States Boards shall follow the following guidelines in enforcing the standards specified under Schedule VI:

(a) In case of cement plants, the total dust (from all sections) shall be within 400 mg/Nm and 250 mg/Nm for the plants upto 200 l/d and more than 200 t/d capacities respectively.

(b) In respect of calcination process (e.g. Aluminium Plants) Kilns. and step Grate Bagasse fired-Boilers. Particulate Matter (PM) emissions shall be within 250 mg/Nm³.

(c) In case of thermal power plants commissioned prior to 1-1- 1982 and having generation capacity less than 62.5 MW, the PM emission shall be within 350 mg/Nm³.

(d) In case of Lime Kilns of capacity more than 5t/day and upto 40t/day, the PM emission shall be within 500 mg/Nm³.

(e) In case of horse shoe/pulsating Grate and Spread Stoker Bagasse- fired-Boilers, the PM emission shall be within 500 (12% CO₂) and 800 (12% CO₂) mg/Nm³ respectively. In respect of these boilers, if more than attached to a single stack, the emission standard shall be fixed, based on added capacity of all the boilers connected with the stack.

(1) In case of asbestos dust, the same shall not exceed 2mg/Nm³

(g) In case of the urea plants commissioned after 1-1-92, coke ovens and lead glass units, the PM emission shall be within 50 mg/Nm³.

(h) In case of small boilers of capacity less than 2tons/hr. and between 2 to 5 tons/hr, the PM emissions shall be within 1000 and 1200 mg/Nm³.

(i) In case of integrated Iron & Steel Plants, PM emission upto 400 mg/Nm³ shall be allowed during oxygen lancing.

(j) In case of stone crushing units, the suspended PM contribution value at a distance of 40 meters from a controlled, isolated as well as from a unit located in cluster should be less than 600 micrograms/Nm³.¹ [* * *] These units must also adopt the following pollution control measures:-

(i) Dust containment cum suppression system for the equipment;

(ii) Construction of wind breaking walls;

(iii) Construction of the metalled roads within the premises;

(iv) Regular cleaning and wetting of the ground within the premises;

(v) Growing of a green belt along the periphery.

(k) In case of Ceramic industry, from the other sources of pollution, such as basic raw material and processing operations, heat recovery dryers, mechanical finishing operation, all possible preventive measures should be taken to control PM emission as far as practicable.

2. The total fluoride emission in respect of Glass and Phosphatic Fertilizers shall not exceed 5 mg/Nm³ and 25mg/NM³ respectively.

2[3. In case of copper, lead and zinc smelting, the off-gas may, as far as possible, be utilised for manufacturing sulphuric acid.]

3[4. In case of cupolas (Foundries) having capacity (melting rate) less than 3 tonne/hour, the particulate matter emissions shall be within 450 mg, iNm³. In these cases it is essential that stack is constructed over the cupolas beyond the charging door and the emissions are directed through the stack, which should be at least six times the diameter of cupola. In respect of Arc Furnaces and Induction Furnaces, provision has to be made for collecting the fumes before discharging the emissions through the stack.]

**[No. Q-150 17 /24/89-CPW]
MUKUL SANWAL, It. Secy.**

1. Omitted by Rule 2(i)(iii) of the Environment (Protection) Third Amendment Rules 1993 vide G.S.R 801(E) dated 31.12.1993

2. Substituted by Rule 2(i)(i), ibid

3. Added by Rule 2(i), ibid

**1 [SCHEDULE VII
[See Rule (38)]
National Ambient Air Quality Standards(NAAQS)**

Pollutant	Time weighted Average	Concentration of Ambient Air			
		Industrial Area	Residential Rural and Other area	Sensitive Area	Method of Measurement
1	2	3	4	5	6
Sulphur Dioxide (SO ₂)	Annual Average* 24 hrs**	80 µg/m ³ 120 µg/m ³	60 µg/m ³ 80 µg/m ³	15 µg/m ³ 30 µg/m ³	-Improved West and Gacke Method - Ultraviolet fluorescence
Oxides of Nitrogen as NO ₂	Annual Average* 24 hrs**	80 µg/m ³ 120 µg/m ³	60 µg/m ³ 80 µg/m ³	15 µg/m ³ 30 µg/m ³	-Jacob Hochheister modified (Na-Arsentire) method -Gas Phase Chemiluminescence
Suspended Particulate matter(SPM)	Annual Average* 24 hrs**	360 µg/m ³ 500 µg/m ³	140 µg/m ³ 200 µg/m ³	70 µg/m ³ 100 µg/m ³	High Volume sampling(avg flow rate not less than 1.1m ³ /minute)
Respirable Particulate Matter (Size less than 80 µm)(RMP)	Annual Average* 24 hrs**	120 µg/m ³ 150 µg/m ³	60 µg/m ³ 100 µg/m ³	50 µg/m ³ 75 µg/m ³	Respirable particulate matter sampler
Lead (Pb)	Annual Average* 24 hrs**	1 µg/m ³ 1.5 µg/m ³	0.75 µg/m ³ 1.00 µg/m ³	0.50 µg/m ³ 0.75 µg/m ³	AAS method after sampling using EPM 2000 or equivalent filter paper
Carbon Monoxide	8 hrs*** 1 hr	5.0mg/m ³ 10.0mg/m ³	2.0mg/m ³ 4.0mg/m ³	1.0mg/m ³ 2.0mg/m ³	Non dispersive infrared Spectroscopy

1.Inserted by Rule 5(b)of the Environment(Protection)Rules,1996 published by G.S.R 176(E)dated 2.4.1996

* Annual Arithmetic mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval.

** 24 hourly/8 hourly values shall be met 98% of the time in a year. 2% of the time, it may exceed but not on two consecutive days.

Note: 1. National Ambient Air Quality Standard: The levels of a air quality necessary with an adequate margin of safety, to protect the public health, vegetation and property.

2. Whenever and wherever two consecutive values exceeds the limit specified above for the respective category, it shall be considered adequate, reason to institute regular/continuous monitoring and further investigations.

[File No.Q 15017/24/89(PW)]

Sd/-
N.Bagchi, Adviser

Note:- The principal rules were published in. the Gazette of India vide Number S.O.844(E), dated the 19th November,1986 and sub subsequently amended vide S.O.433(E) dated 18th April 1987,S.O.64(E) dated the 18th January,1988, S.O.8(E) dated the 3rd Januray,1989, S.O.190(E) dated the 15th March 1989, G.S.R.913(E) dated the 24th October,1989, S.O.12(E), dated the 8th January,1990, GSR 742(E), dated 30th August 1990, S.O.23(E), dated the 16th January,1991, GSR 93(E), dated the 21st February,1991 , GSR 95(E) dated the 12th February,1992, GSR329(E) dated the 13th March,1992, GSR 475(E), dated the s5th May,1992, GSR 797(E) dated the 1 st October,1992, GSR 386(E), dated the 28th April,1993, GSR 422(E), dated the 19th May 1993 and GSP 801(E), dated the 31st December,1993.

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests & Wildlife)

(New Delhi, the 6th January, 1989)

NOTIFICATION under Section 3(2) (v) of Environment (Protection) Act, 1986 and Rule 5(3) (d) of Environment (protection) Rules, 1986, Prohibiting Industries in Murud-janjira Area in the Raigarh District of Maharashtra.

S.O. No. 20(E).-Whereas a notification under sub-rule (3) of rule 5 of the Environment (protection) Rules, 1986, inviting objections against the imposition of prohibition on the location of all industries in Murud-Janjira area in Raigarh distlict of Maharashtra was published vide No. S.O. 851(E), dated the 7th September, 1988;

And Whereas all objections received have been duly considered by trle Central Government;

Now, therefore, in exer~se of the powers conferred by clause (d) of sub-rule (3) of Rule 5 of the said rules, the Centraf Government hereby prohibits location of all industries, carrying on of operations or processes in a belt of one kilometre from the high tide mark from the Revdanda Creek (lat 19° 35") upto Devgarh Point (near

Shrivardhan) (lat 18° ,0 ') as well as in one kilometre belt along the banks of the Rajpuri Creek upto Mhasia, except those industries, operations of processes which are in connection with the promotion and development of Tourism and those which are permitted by the Central Government after examining the environment impact.

[File No. J-19011/30/86-IA].

SUDHA SHROTRIA, Under Secy.

Published in the Gazette No. 465 dt. 28-7-89.

MINISTRY OF ENVIRONMENT & FORESTS

(Department of Environment, Forests & Wildlife)

(New Delhi, the 1 st February, 1989)

NOTIFICATION

NOTIFICATION under Section 3(2) (v) of Environment (protection) Act, 1986 and Rule 5(3) (d) of Environment (Protection) Rules, 1986, Restricting location of industries, mining operations and other development activities in the Doon Valley in Uttar Pradesh.

S.O. No. 102(E).-Whereas notification under sub-rule (3) of rule 5 of the Environment (protection) Rules, 1986, inviting objections against the imposition of restriction on location of industries, mining operation and other developmental activities in the Doon Valley, in Uttar Pradesh was published vide No. S.O. 9Z3(E), dated the 6th October, 1988;

And Whereas all objections received have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by clause (d) of sub-rule (3) of Rule 5 of the said rules, the Central Government hereby imposes restrictions on the following activities in Doon Valley, bounded on the North by Mussorie ridge. in the North-East by Lesser Himalayan range, on the South-West by Shivalik ranges, river Ganga in the South-East and river Yamuna in the North-West, except those activities which are permitted by the Central Government for examining the environmental impacts.

(i) Location, setting of industrial units-It has to be as per guidelines, given in the annexure or guidelines as may be issued from time to time by the Ministry of Environment & Forests, Government of India.

(ii) Mining-Approval of the Union Ministry of Environment & Forests must be obtained before starting any mining activity.

(iii) Tourism-It should as per Tourism Development Plan (TDP), to be prepared by the State Department of Tourism and duly approved by the Union Ministry of Environment & Forests.

(iv) Grazing-As per the plan to be prepared by the State Government and duly approved by the Union Ministry of Environment & Forests.

(v) Land Use-As per Master Plan of development and Land Use Plan of the entire area, to be prepared by the State Government and approved by the Union Ministry of Environment & Forests.

[No. J-20012/38/86-IA]

K. P. GEETHAKRISHNAN, Secy

ANNEXURE

Guidelines for permitting, restricting industrial units in the Doon Valley area Industries will be classified under Green, Orange and Red Categories, as shown below for the purpose of permitting/restricting such industrial units in the Doon Valley from the environmental and ecological considerations :

CATEGORY GREEN

LIST OF INDUSTRIES IN APPROVED INDUSTRIAL AREAS WHICH MAY BE DIRECTLY CONSIDERED FOR ISSUE OF NO OBJECTION CERTIFICATE WITHOUT REFERRING TO (MINISTRY OF ENVIRONMENT & FORESTS) (IN CASE OF DOUBTS REFERENCE WILL BE MADE TO MINISTRY OF ENVIRONMENT & FORESTS).

1. All such non-obnoxious and non-hazardous industries employing upto 100 persons. The obnoxious and hazardous industries are those using inflammable, explosive, corrosive or toxic substances.

2. All such industries which do not discharge industrial effluents of a polluting nature and which do not undertake any of the following processes:

Electroplating;

Galvanising;

Bleaching;

Degreasing;

Phosphating;

Dyeing;

Pickling, tanning;

Polishing;

Cooking of fibres and Digesting;
Designing of Fabric;
Unhairing, Soaking, delimiting and baling of hides
Washing of fabric;
Trimming, Puling, juicing and blanching of fruits and vegetables;
Washing of equipment and regular floor washing, using of considerable cooling water; Separated milk, buttermilk and whey;
Stopping and procesing of grain;
Distillation of alcohol, stillage and evaporation;
Slaughtering of animals, rendering of bones, washing of meat;
Juicing of sugar cane, extraction of sugar, Fillration, centrifugation, distillation;
Pulping and fermcnling of coffee beam;
Processing of fish;
Filter back wash in D.M. Plants exceeding 20 K.I. per day capacity;
Pulp making, pulp processing and paper making Cocking of coal washing of blast furnace flue gases;
Stripping of oxides;
Washing of used sand by hydraulic discharge;
Washing of latex etc;
Solvent extraction

3. All such industries which do not use fuel in their manufacturing process or in any subsidiary process and which do not emit fugitive emissions of a diffused nature.

Industries not satisfying anyone of the three critaria are recommended to be referred to Ministry of Environment & Forests.

The following industries appear to fall in non-hazardous, non-obnoxious and non-polluting category, subject to fulfilment of above three conditions:

- 1 . Atta-chakkies
2. Rice Mullors
3. Iceboxes
- 4 . Dal mills
5. Groundnut decortinating (dry)

6. Chilling
7. Tailoring and garment making
8. Apparel making
9. Cotton and woollen Hosiery
10. Handloom weaving
11. Shoe lace manufacturing
12. Gold and silver thread and sari work
13. Gold and silver smithy
14. Leather foot wear and leather products excluding tanning & hide processing
15. Manufacture of mirror from sheet glass and photo-frame
16. Musical instruments manufacturing
17. Sports goods
18. Bamboo and cane products (only dry operations)
19. Card Board and paper products (Paper & pulp manufacture excluded)
20. Insulation and other coated papers (paper & pulp manufacture excluded)
21. Scientific and Mathematical instruments
22. Furniture (Wooden and Steel)
23. Assembly of domestic electrical Appliances
24. Radio assembling
25. Fountain pens
26. Polythene plastic and P. V .C. goods through extrusion/moulding
27. Surgical gauges and bandages
28. Railway sleepers (only concrete)
29. Cotton spinning and weaving
30. Rope (cotton and plastic)
31. Carpetweaving
32. Assembly of Air coolers
33. Wires pipes-extruded shapes from metals
34. Automobile servicing & repair station.
35. Assembly of Bicycles baby carriages and other small non-motorized vehicles
36. Electronics equipment (assembly)
37. Toys

38. Candles
39. Carpentry-excluded saw mill
40. Cold storage (small scale)
41. Restaurants
42. Oil-ginning/expelling (non-hydrogenation and no refining)
43. Ice cream.
44. Mineral water
46. Manufacture of Steel units & suit cases
47. Paper pins & U-clips ;
48. Block making for printing;
49. Optical frames

CATEGORY ORANGE

LIST OF INDUSTRIES THAT CAN BE PERMITTED IN THE DOON VALLEY WITH PROPER ENVIRONMENTAL CONTROL ARRANGEMENT.

1. All such industries which discharge some liquid effluents (below 500 kl/day) that can be controlled with suitable proven technology.
2. All such industries in which the daily consumption of coal/fuel is less than 24 mt/day and the particular emissions from which can be controlled with suitable proven technology.
3. All such industries employing not more than 500 persons.

The following industries with adoption of proven pollution control technology subject to fulfilling the above three conditions fall under this category :

1. Lime manufacture-pending decision on proven pollution control device and Supreme Courts decision on quarrying;
2. Ceramics;
3. Sanitaryware;
4. Tyres and tubes
5. Refuse incineration (controlled);
6. Hour-mills;
7. Vegetable oils including solvent extracted oils;
8. Soap without steam boiling process and synthetic detergents formulation;
9. Steam generating plants;
10. Manufacture of office and house-hold equipment and appliances involving use of fossil fuel combustion;
11. Manufacture of machineries and machine tools and equipments;
12. Industrial gases (only) Nitrogen, Oxygen and (CO₂);
13. Miscellaneous glassware without involving use of fossil-fuel combustion;
14. Optical glass;
15. Laboratory ware
16. Petroleum storage & transfer facilities;
17. Surgical and medical products including & probabilities of latex products;
18. Foot-wear (Rubber);
19. Bakery products. Biscuits & Confectioners;
20. Instant tea/coffee; coffee processing;

21. Malted food;
22. Manufacture of power driven pumps, compressors refrigeration units, fire fighting equipment etc.;
23. Wire drawing (cold process) & bailing straps;
24. Steel furniture, fasteners etc.;
25. Plastic processed goods;
26. Medical & surgical instruments;
27. Acetylcne (synthetic);
28. Glue & Gelatine;
29. Potassium permanganse;
30. Metalic sodium;
31. Photographic films,papers & photographic chemicals;
32. Surface coating industries;
33. Fragrances, fragours & food additives;
34. Plant nutrients (only manure);
35. Aerated water/soft drink.;

Note :-

(a) Industries falling within the above identified list shall. be assessed by the State Pollution Control Board and referred to the Union Department of Environment for consideration, fore according No Objection Certificate.

(b) The total number of fuel burning industries that shall be permitted in the Valley will be limited by 8 tonnes per day or Sulphur Dioxides from all sources. (This corresponds to 400 tonnes per day Coal with 1 % sulphur).

(c) Sitting of Industrial areas should be based on sound criteria.

CATEGORY RED

C. LIST OF INDUSTRIES THAT CANNOT BE PERMITTED IN THE DOON VALLEY

1. All those industries which discharge effluents of a polluting nature at the rate of more than 500 kl/day and for which the natural course for sufficienr dilution is not available, and effluents from which cannot be controlled with suitable technology.
2. All such industries employing more than 500 persons/day.

3. All such industries in which the daily consumption of coal fuel is more than 24 mt/day.

The following industries appear to fall under this category covered by all the points as above:

1. Ferrous and non-ferrous metal extraction, refining, casting, forging, alloy making processing etc.;
2. Dry Coal Processing/Mineral processing industries like Ore sintering beneficiation, pollution etc.;
3. Phosphate rock processing plants;
4. Cement plants with horizontal rotary kilns;
5. Glass and glass products involving use of coal;
6. Petroleum refinery;
7. Petro-chemical industries;
8. Manufacture of lubricating oils and greases;
9. Synthetic rubber manufacture;
10. Coal, oil, wood or nuclear based thermal power plants;
11. Vanaspathi, hydrogenated vegetable oils for industrial purposes;
12. Sugar mills (White and Khandari);
13. Craft paper mills;
14. Coke oven by products and coal tar distillation Products;
15. Alkalies;
16. Caustic soda;
17. Potash;
18. Electro-thermal product (artificial, abrasives, Calcium carbide etc.);
19. Phosphorous and its compounds;
20. Acids and their salts (organic & inorganic);

21. Nitrogen compounds (Cyanides, cyanamides and other nitrogen compounds);
22. Explosive (including industrial explosives, detonators & fuses);
23. Phthalic anhydride;
24. Processes involving chlorinated hydrocarbon;
25. Chlorine, fluorine, bromine, iodine & their compounds;
26. Fertilizer industry;
27. Paper board and straw board;
28. Synthetics fibres;
29. Insecticides, fungicides, herbicides & pesticides (basic manufacture & formulations);
30. Basic drugs; ,
31. Alcohol (Industrial or potable);
32. Leather industry including tanning and processing;
33. Coke making, coal liquification and fuel gas making industries;

34. Fibre glass production and processing;
35. Manufacture of pulp-wood pulp, mechanical or chemical (including dissolving pulp);
36. Pigment dyes and their intermediates;
37. Industrial carbons (including graphite electrodes, anodes, midge electrodes, graphite blocks, graphite crucibles, gas carbons, activated carbon, synthetic diamonds, carbon black, channel black, lamp black etc.);
38. Electro-chemicals (other than those covered under Alkali group);
39. Paints, enamels & varnishes;
40. Polypropylene;
41. Polyvinyl chloride;
42. Cement with vertical shaft kiln technology pending certification of proven technology on pollution control;
43. Chlorates, perchlorates & peroxides;
44. Polishes
45. Synthetic resin & plastic products.

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests and Wildlife)
NOTIFICATION
New Delhi, the 30th January, 1990

NOTIFICATION UNDER SECTION 6(2)(D) OF THE ENVIRONMENT (PROTECTION) ACT, 1986, READ WITH RULE 13 OF THE ENVIRONMENT (PROTECTION) RULES, 1986 FOR THE PROHIBITION AND RESTRICTION ON THE HANDLING OF HAZARDOUS SUBSTANCE IN DIFFERENT CASES.

S.D. 108(E).-Whereas a notification under clause (iii) of sub-rule (2) of rule 13 of the Environment (Protection), Rules 1986, inviting objections from the concerned quarters within a period of sixty days from the date of publication of the said notification, against government's intention for the imposition of prohibition on benzidine-based dyes and its salts, was published in the Ministry of Environment and Forests, S.O. No. 881 (E), dated the 31st October, 1989.

And whereas no objection was received within the said period of sixty days;

Now, therefore, in exercise of the powers conferred by clause (iv) of sub-rule (2) of rule 13 of the said rules, the Central Government hereby prohibits and restricts the use of benzidine-based dyes and its salts in the dying and colour processing industries. All dyes and dye-intermediates containing benzidine and its derivatives shall be prohibited for "handling". The use of benzidine-based dyes, also called as benzidine-azo dyes, shall be required to be discontinued within three years from the date of issue of this notification.

Published in Gazette No. 52 dt. 30-1-90.

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 26th March, 1997

PROHIBITION ON THE HANDLING OF AZODYES

S.O.243(E). - Whereas a draft notification proposing imposition of Prohibition on the Handling of Azodyes was published vide the notification of the Government of India in the Ministry of Environment & Forests Number S.O.292(E). Dated 29.3.1996 inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of the period of sixty days from the date on which the copies of Gazette containing the said notification are made available to the public;

And whereas copies of the said Gazette were made available to the public on the 26th April, 1996;

And whereas the objections and suggestions received from the public on the said draft within the said period of sixty days were duly considered by the Central Government;

And whereas the Central Government is of the opinion that the azodyes specified in the Schedule appended to this notification are cancer-causing and are detrimental to human health and it is, therefore, considered necessary to prohibit the handling of these. Azodyes;

Now, therefore, in exercise of the powers conferred by the clause (d) of sub-section (2) of Section 6 of the Environment (Protection) Act, 1986 (29 of 1986) read with rule 13 of the Environment (Protection) Rules, 1986, the Central Government hereby" prohibits the handling of azodyes specified in the Schedule appended to this notification and the processes incidental thereto in the course of which these substances are formed or, carried on throughout India. "

The prohibition on the handling of azodyes specified in the Scledule to this notification shall come into force on the expiry of a period of ninety days from the date of issue of this notification.

The prohibition on the handling of azodyes shall apply to the whole of India.

SCHEDULE LIST OF AZODYES

S.No	Colour Index Generic Number	Colour Index Number
1.	Acid Red 4	14710
2.	Acid Red 5	149095
3.	Acid Red 24	16140
4.	Acid Red 26	16150
5.	Acid Red 73	27290
6.	Acid Red 114	23635
7.	Acid Red 115	27200
8.	Acid Red 116	26660
9.	Acid Red 128	24125
10.	Acid Red 148	2665
11.	Acid Red 150	27190
12.	Acid Red 158	20530
13.	Acid Red 167	-
14.	Acid Red 264	18133
15.	AcidRed 265	18129
16.	Acid Violet 12	-
17.	Acid Red 420	18075
18.	Acid Brown 415	-
19.	Acid Black 131	-
20.	Acid Black 132	-
21.	Acid Black 209	-

22.	Basic Red 111	-
23.	Basic Red 42	-
24.	Basic Brown 4	21010
25.	Develo er 14=Oxidation Base 20	76035
26.	Direct Yellow 48	23660
27.	Direct Orange 6	23375
28.	Director Orange 7	23380
29.	Direct Orange 10	23370
30.	Direct Orange 108	29173
31.	Direct Red 2	23500
32.	Direct Red 7	24100
33.	Direct Red 21	23560
34.	Direct Red 22	23565
35.	Direct Red 24	29185
36.	Direct Red 26	29190
37.	Direct Red 39	23630
38.	Direct Red 46	23050
39.	Direct Red 62	29175
40.	Direct Red 67	23505
41.	Direct Red 72	29200
42.	Direct Violet 21	23520
43.	Direct Blue 1	24410
44.	Direct Blue 3	23705
45.	Direct Blue 8	24140
46.	Direct Blue 9	24155
47.	Direct Blue 10	24340
48.	Direct Blue 14	23850
49.	Direct Blue 15	24400
50.	Direct Blue 22	24280
51.	Direct Blue 25	23790
52.	Direct Blue 35	24145.
53.	Direct Blue 53	23860-
54.	Direct Blue 76	24411
55.	Direct Blue 151	24175
56.	Direct Blue 160	-
57.	Direct Blue 173	-
58.	Direct Blue 192	-
59.	Direct Blue 201	-
60.	Direct Blue 215	24115
61.	Direct Blue 295	23820

62.	Direct Green 85	30387
63.	Direct Blue 222	30368
64.	Direct Black 91	30400
65.	Direct Black 154	-
66.	Disperse Yellow 7	26090
67.	Disperse Yellow 23	26010
68.	Disperse Yellow 56	-
69.	Disperse Orange 149	-
70.	Disperse Red 151	26130

[F. NO. 17/3/95-HSMJ]
VIJAY SHARMA, Jt. Secretary

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests and Wildlife)
NOTIFICATION

New Delhi, the 9th February, 1990

Notification under section 3(2) (v) of the Environment (protection) Act, 1986 and rule 5(3) (a) of the Environment (Protection) Rules, 1986 prohibiting storage of chemicals in Antop Hill in Bombay.

S.O. 136 (E).-Whereas a notification under sub-rule (3) or rule 5 of the Environment (Protection) Rules, 1986 (Herein after referred to as the said rules) inviting objections against the imposition of prohibition on storage of chemicals in Antop Hill in Bombay was published vide S.O. 852(E), dated the 7th September, 1988;

And whereas an order under clause (d) or sub-rule (3) or rule 5 of the said rules could not be issued within 120 days of the notification under clause (a) or sub-rule (3) of rule 5 of the said rules because of the matter being subjudice under Writ Petition 12179/85, namely, M.C. Mehta v/s Union of India and Others in the Supreme Court of India and Writ Petition 3381 of 1987 in the Bombay High Court; .

And whereas the Honourable Supreme Court in its order dated 5-12-1989 directed the Government of India in the Ministry of Environment and Forests to consider objection received in response to the notification No. S.O. 852(E) dated the 7th September, 1988 and take decision without having any objection in respect of the fact that the matter is pending in that Court;

And whereas 138 objections were received which included 133 against and 5 for the prohibition;

And whereas 5 representations received in support of prohibition included suggestions by M/s Mount Steward Tea Estate, Bombay to develop Antop Hill Warehousing area into a semi wholesale Kirana Market and not for storage of hazardous chemicals. The Save Bombay Committee Cities inappropriates of the complex in densely populated area and warned against the consequences of hazards in case of explosion or accident. The Institution of Industrial Managers India, the members of the Cooperative Housing Society Ltd. of the Bank of India and the Bombay Environmental Action Group have expressed the same views. However, the Save Bombay Committee have no objection to the storing of non-hazardous chemicals;

And whereas of the 133 representations against the prohibition the institutional ones are from:-

- (i) Secretary, Department of Environment, Government of Maharashtra,
- (ii) Antop.Hill Warehousing Company Ltd., through its solicitors (AHCW),
- (iii) The Municipal corporation of Water Bombay,
- (iv) The Indian Chemicals Manufacturers Association,

- (v) The Indian Merchants Chamber, and
- (vi) The Chemical and Alkali Merchant Association.

The rest of the representation against the prohibition were by individual traders who have booked offices or godown space in the warehouse complex. The representations from the traders are similar in nature and cite financial loss and need for storage spaces as the basis for opposing the notification. The main thrust of the views of the Government of Maharashtra and the Municipal Corporation of the Greater Bombay is that no environment pollution is likely by the storing of non-hazardous chemicals at Antop Hill Warehousing Company Ltd. (AHWC) complex. Such chemicals do not generate noxious gases or liquids in any manner injurious to environment. It is also emphasised the instrumentation conditions have been envisaged for storage of chemicals and the licence granted by the Municipal Corporation of Greater Bombay to the AHWC will be conditional with safeguards for safety. The AHWC gave the genesis of the Warehousing Complex at the Antop Hills and highlighted the various construction features like the electrical fittings, *pre* protection features etc. The government of Maharashtra was anxious to remove the storage of chemicals from the congested residential and commercial areas of the Bombay city measures primarily to shift the chemical storage from Greater Bombay which are highly congested and selected after detailed studies conducted by the Government of Maharashtra and the Municipal Corporation of Greater Bombay. The usual land reclamation investment had been undertaken by the Government of Maharashtra and the Municipal Corporation of the Greater Bombay during 1975- 79. The AHWC then obtained the approval of the Chief Fire Officer of the Municipal Corporation of the Greater Bombay, Chief Controller of Explosives, Government of India, Nagpur and other concerned authorities/departments. The AHWC claims that they have given the complete list of safety measures incorporated in planning based on the stipulation imposed by the Chief Fire Officer and the Chief Controller of Explosives, Government of India in Writ Petition No. 12179/85, namely, M.C. Mehta versus Union of India and others in the Supreme Court of India. The AHWC also contested further that the storage is only for chemicals in their original packed condition and not meant for any bulk storage or repacking or storing of any gases/carcinogenic substances or explosives and that the total quantity of chemicals to be stored in the complex at any one time is not more than 500 metric tonnes. Another main objection of AHWC was that the notification could not be issued since the matter was subjudice in another Writ Petition No. 3381 of 1987 pending in Bombay High Court. The Indian Chemical Manufacturers Association, the Indian Merchants Chamber and the Chemical and Alkali Merchant Association presented the same arguments.

And whereas it is difficult to conceive how the AHWC could ensure that only authorised chemicals would be stored in the individual godowns. It is also not clear how the traders storing different types of chemicals needings segregation would manage to store all these chemicals in the godowns allotted to them. In the pattern of trade in general and the chemical trade in particular the inherent nature of a trader is to keep his business information to himself. Considering that each business space for storage/office will be under the individual control of each trader and no single body could take full responsibility for safe storage of chemicals by over a thousand individual firms dealing in different quantities of chemicals at different rates of turn over, different different suppliers and widely varying terms of trade and methods of business, the AHWC or any other body will find it impossible to exercise complete control over the storage of chemicals belonging to a large number of individual trades in the same complex. There is no safety system to control flammability,

toxicity, corrosivity, reactivity, instability and oxidizing nature of several hazardous chemicals, Public interest demands that under no circumstances should hazardous chemicals be allowed to be stored at the site in question:

And whereas the Government of Maharashtra appointed a committee headed by Dr. R.K Garg to look into the pros and cons of the use of Antop Hill Warehousing complex for the purpose of storage of hazardous and non-hazardous chemicals. The Committee has gone into all the detail. and visited the site to' conduct site inspection at length. The Committee has concluded, among other things, that storage of hazardous chemicals at this site would make this storage a major hazard installation. The Committee suggested shifting of the storage of hazardous chemicals to different site. The same Committee later prepared a list of chemicals which could be stored in the proposed warehousing complex along with the quantities that could be stored. The 55 chemicals listed by the Garg Committee in this context along with permissible quantity for storage are listed as per Annexure;

And whereas now all objections received have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by clause (d) of sub-rule (3) of rule 5 of the said rules, the Central Government hereby imposes prohibition and restrictions that hazardous chemicals as defined in clause (c) of rule 2 of the Manufacture, Storage and Import Hazardous Chemicals Rules, 1989, not being a chemical in the quantity mentioned in Annexure shall be stored in Antop Hill Warehousing Complex and that the storage of approved chemical shall be regulated in accordance with the recommendations of the Garg Committee.

ANNEXURE

Chemicals, with quantity, that can be stored at the Warehousing Complex, Wadala

1. Activated bleaching earth	2 te
2. Aluminium sulphate	50 te
3. Anhydride butile	25 te
4. Aspirin powder	10 te
5. Barium sulphate	15 te
6. Basic chrome sulphate	2 te
7. Bitumen	10 te
8. Borax.	100te
9. C.M.C. (Carboxy Methyl cellulose)	5 te

10. Calcium chloride	100te
11. Calcium fluoride	3 te
12. Calcium oxide	75 te
13. Calcium sulphate	75 te
14. China Clay	25 te
15. Citric acid	100te
16. ' Copper sulphate	6 te
17. Cream of tartar	5 te
18. Dipotassium phosphate	1te
19. Disodium phosphate	2te
20. Fatty alcohols	1.5 te
21. Ferric chloride	
22. Glass Wool	2 te
23. Glauber salt	175 te
24. Glucose liquid	25 te
25. Hillo suspension	50 te
26. Lactic acid	20 te
27. Lactose	250 te
28. Lithoponc.	105 te
29. Magnesium chloride	10 te
30. Magnesium oxide	2 te
31. Mannitol	5 te
32. Mono sodium glutamate	3 te
33. Oleic acid	2 te
34. Potash alum	80 te
35. Potassium bicarbonate	25 te
36. Potassium chloride	45 te

37. Pectin	10 te
38. polysorbate..	5 te
39. Salicylic acid	200 te
40. Sodium acetate	5 te
41. Sodium alginate	25 te
42. Sodium bicarbonate	150 te
43. Sodium Carbonate	150 te
44. Sodium chloride	75 te
45. Sorbitol	100 le
46. Stearic acid	10 te
47. Talcum Powder	50 te
48. Tamarind seed	50 te
49. Tannin extract	10 te
50. Tartaric acid	50 te
51. Titanium dioxide	100 te
52. Tapioca	25 te
53. Trisodium phosphate	50 te
54. Wax	35te

55. Zinc oxide

50te

[F .No. 1800 11/5/87-HSMD]
K.MADHA V A SARMA, Add. Secy.

Published in the gazette No. 76 dated 9.2.90

MINISTRY OF ENVIRONMENT & FORESTS

(Department of Environment, Forests and Wildlife)

NOTIFICATION

New Delhi, the 19th February, 1991

Notification under Section 3(1) and section 3(2) (v) of the Environment (Protection) Act, 1986 and rule 5(3) (d) of the Environment (Protection) Rules, 1986 declaring Coastal Stretches as Coastal Regulation Zone (CRZ) and Regulating Activities in the CRZ

S.O.114(E).- Whereas a Notification under Section 3(1) and Section 3(2) (v) of the Environment (Protection) Act, 1986 inviting objections against the declaration of Coastal Stretches as Coastal Regulation Zone (CRZ) and imposing restrictions on industries, operations and processes in the CRZ was published vide S.O. No. 944 (E). dated 15th December, 1990.

And whereas all objections received have been duly considered by the Central Government.

Now, therefore, in exercise of the powers conferred by Clause (d) of sub- rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 and all other powers vesting in its behalf of, the Central Government hereby declares the coastal stretches of seas, bays, estuaries, creeks, rivers and backwaters which are influenced by tidal action (in the landward side) , upto 500 meters from the High Tide Line (HTL) and the land between 'the Low Tide Line and the HTL of Coastal Regulation Zone; and imposes" with effect from the date of this Notification, the following restrictions on the setting up and expansion of industries, operations or processes etc. in the said Coastal Regulation Zone (CRZ). 1[For the purposes of this notification, the High Tide Line means the line on the land upto which-the highest water line reaches during the spring tide. The high tide line shall be demarcated uniformly in all parts the country by the demarcating authority or authorities so authorised by the Central Government, in accordance with the general guidelines issued in this regard.

Note - The distance from the High Tide Line shall apply to both sides in the case of rivers, creeks and back waters and may be modified on a case by case basis for reasons to be recorded while preparing the Coastal Zone Management Plans. However, this distance shall not be less than 50 metres or the width of the creek, river or back-water whichever is less. The distance upto which development along rivers, creeks and back-waters is to be regulated shall be governed by the distance upto which the tidal effect of sea is experienced in rivers, creeks or back-waters, as the case may be, and should be clearly identified in the Coastal Zone Management Plans.

Prohibited Activities

The following activities are declared as prohibited within the Coastal Regulation Zone namely:

(i) Setting up of new industries and expansion of existing industries, except those directly related to water front or directly needing foreshore facilities;

(ii) Manufacture or handling or storage or disposal of hazardous substances as specified in the Notifications of the Government of India in the Ministry of Environment & Forests No. S.O. 594(E), dated 28th July, 1989.. S.O. 966 (E), dated 27th November, 1989 and GSR 1037(E) dated 5th December, 1989; except

transfer of hazardous substances from ships to ports, terminals and refineries and vice versa, in the port areas;

Provided that Government of India in the Ministry of Surface Transport, on a case to case basis, may permit storage of the petroleum products as specified in Annexure - III appended to this notification within the existing port limits of existing ports and harbours and 'in those areas of ports that have not been - classified as CRZ-I subject to implementation of safety regulations including guidelines issued by Oil Safety Directorate in the Government of India, Ministry of Petroleum and Natural Gas after ensuring proper location of site and availability of necessary equipment to meet the safety norms and the exigencies arising due to any accident or spillage.

(iii) Setting up and expansion of fish processing units including warehousing (excluding hatchery and natural fish drying in permitted areas);

Provided that existing fish, processing units for modernisation purposes may utilise twenty five per cent additional plinth area required for additional equipment and pollution control measures only subject to existing Floor Space Index/Floor Area Ratio norms and subject to the condition that the additional plinth area shall not be towards seaward side of existing unit and also subject to the approval State Pollution Control Board or Pollution Control Committee.

iv) Setting up and expansion of units/mechanism for disposal of waste and effluents, except facilities required for discharging treated effluents into the water course with

approval under the Water (Prevention and Control of Pollution) Act, 1974; and except for storm water drains;

v) Discharge of untreated wastes and effluents from industries, cities or towns and other human settlements. Schemes shall be implemented by the concerned authorities for phasing out the existing practices, if any, within a reasonable time period not exceeding three years from the date of this notification.

vi) Dumping of city or town waste for the purposes of landfilling or otherwise; the existing practice, if any, shall be phased out within a reasonable time not exceeding three years from the date of this Notification.

vii) Dumping of ash or any wastes from thermal power stations;

viii) Land reclamation, bunding or disturbing the natural course of sea water except those required for construction of ports, harbours, jetties, wharves, quays, slipways, bridges and sea-links and for other facilities that are essential for activities permissible under the notification or for control of coastal erosion and maintenance or clearing of waterways, channels and ports or for prevention of sandbars or for tidal regulations, storm water drains or for structures for prevention of salinity ingress and sweet water recharge;

ix) Mining of sand, rocks and other substrata material, except those rare minerals not available outside the CRZ areas;

1[Provided that in the Union Territory of the Andaman and Nicobar Islands, mining of sand may be permitted by the Committee which shall be constituted by the Lieutenant Governor of the Andaman and Nicobar Islands consisting of Chief Secretary; Secretary, Department of Environment; Secretary, Department of Water Resources; and Secretary, Public Works Department; Committee may permit mining of sand from non-degraded areas for construction purposes from selected sites, in a regulated manner on a case to case basis, for a period up to the 30th day of September, 2000. The quality of the sand mined shall not exceed the essential requirements for completion of construction works including dwelling units, shops in respect of half yearly requirements of 1999-2000 and 2000-2001 annual plans.. The permission of mining of sand may be given on the basis of the mining plan for such sites in such quantity which shall not have adverse impacts on the environment.]

1.Inserted by Notification No.S.O.73(E)dated 31.1.1997

(x) Harvesting or drawal of ground water and construction of mechanisms therefore within 200 m of HTL; in the 200 m to 500m zone it shall be permitted only when done manually through ordinary wells for drinking, horticulture, agriculture and fisheries;

1[Provided that drawal of ground water is permitted, where no other source of water is available and when done manually through ordinary wells or hand pumps, for drinking and domestic purposes, in the zone between 50 to 200 m from High Tide Line in case of seas, bays and estuaries and within ,200m. or the CRZ, whichever is less, from High Tide Line in case of rivers, creeks and backwaters subject to such restrictions, as may be deemed necessary, in areas affected by sea water intrusion,

that may imposed be imposed by an authority designated by State Government\Union Territory Administration.]

1.Inserted by Notification No.S.O.73(E)dated 31.1.1997

(xi) construction activities in ecologically sensitive areas as specified in Annexure -I of this Notification.

(xii) any construction activity between the Low Tide Line and High Tide Line, except facilities for carrying treated effluents and waste water discharges into the sea, facilities for carrying sea water for cooling purposes, oil, gas and similar pipelines and facilities essential activities permitted under this Notification; and -

(xiii) dressing or altering of sand duens, hills natural features including landscape charges for beautification, recreational and other such purpose, except as permissible under the Notification.

3. Regulation of Permissible Activities:

All other activities, except those prohibited in para 2 above, will be regulated as under:

(1) Clearance shall be given for any activity within the Coastal Regulation Zone only if it requires water front and foreshore facilities.

(2) The following activities will require environmental clearance from the Ministry of Environment & Forests, Government of India, namely: -

(i) Construction activities related to Defence requirements for which foreshore facilities are essential (e.g. slipways, jetties etc.); except for classified operational component of defence projects for which a separate, procedure shall be followed. (Residential buildings, office buildings,,' hospital complexes, workshops shall not come within the definition of operational requirements except in very special cases and hence shall not normally be permitted in the CRZ).

(ii) Operational constructions for ports and harbours and light houses and constructions for activities such as jetties, wharves, quays and slipways;

Provided that for expansion or modernisation of existing ports and harbours including fishing harbours operational constructions for ports and harbours and construction of jetties, wharves, quays, slipways, Single Point Mooring and Single Buoy Mooring and for reclamation of facilities essential for operational requirements of ports and harbours in areas within the existing po11 limits, except the areas classified as category CRZ-I (i), shall require environmental clearance from Government of India

in the Ministry of Surface Transport, which shall take decision on these activities on the basis of Environmental Impact Assessment Report;

Provided further that reclamation for commercial purposes such as shopping and using complexes, hotels and entertainment activities shall not be permissible.

(iii) Thermal power plants (only foreshore facilities for transport of raw materials facilities for in-take of cooling water and outfall for discharge of treated waste water/cooling water); and

(iv) All other activities with investment exceeding rupees five crores except those activities which are to be regulated by the concerned authorities at the State/Union Territory level in accordance with the provisions of paragraph 6, sub-paragraph (2) of Annexure 1 of the notification.

(3) (i) The coastal States Union Territory administrations shall prepare, within a period of one year from the date of this Notification, Coastal Zone Management Plans identifying and classifying the CRZ areas within their respective territories in accordance with the guidelines given in Annexure -I and II of the Notification and obtain approval (with or without modifications) of the Central Government in the Ministry of Environment & Forests;

(ii) Within the framework of such approved plans, all development and activities within the CRZ other than those covered in para 2 and para 3(2) above shall be regulated by the State Government, Union Territory Administration or the local authority as the case may be in accordance with the guidelines given in Annexures -I and II of the Notification; and

(iii) In the interim period till the Coastal Zone Management Plans mentioned in para 3(3) (i) above are prepared and approved, all developments and activities within the CRZ shall not violate the provisions of this Notification. State Governments and Union Territory Administrations shall ensure adherence to these regulations and violations, if any, shall be subject to the provisions of the Environment (Protection) Act, 1986.

4. Procedure for monitoring and enforcement:

The Ministry of Environment & Forests and the Government of State or Union Territory and such other authorities at the State or Union Territory levels, as may be designated for this purpose, shall be responsible for monitoring and enforcement of the provisions of this notification within their respective jurisdictions.

N.K-150 19/1/84/IA-III(Vol.II)

R.RAJAMANI, Secy.

ANNEXURE-I

COASTAL AREA CLASSIFICATION AND DEVELOPMENT REGULATIONS

Classification of Coastal Regulation Zone:

6(1) For regulating development activities, the coastal stretches within 500 metres of High Tide Line on the landward side are classified into four categories, namely:

Category I (CRZ-I)

(i) Areas that are ecologically sensitive and important, such as national parks/marine parks, sanctuaries, reserve forests, wildlife habitats, mangroves, corals/coral reefs, areas close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty/historically/heritage areas, areas rich in genetic diversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time.

(ii) Area between the Low Tide Line and the High Tide Line.

Category II (CRZ-II)

The areas that have already been developed upto or close to the shore-line. For this purpose, "developed area" is referred to as that area within the municipal limits or in other legally designated urban areas which is already substantially built up and which has been provided with drainage and approach roads and other infrastructural facilities, such as water supply and sewerage mains.

Category - III (CRZ-III) :

Areas that are relatively undisturbed and those which do not belong to either Category-I or II. These will include coastal zone in the rural areas (developed and undeveloped) and also areas within Municipal limits or in other legally designated urban areas which are not substantially built up.

Category-IV (CRZ-IV)

Coastal stretches in the Andaman & Nicobar, Lakshadweep and small islands, except those designated as CRZ-I, CRZ-II or CRZ-III.

Norms for Regulation of Activities.

6(2) The development or construction activities in different categories of CRZ area shall be regulated by the concerned authorities at the State/Union Territory level, in accordance with the following norms:

CRZ-I

No new construction shall be permitted within 500 metres of the High Tide Line. No construction activity, except as listed under 2(xii), will be permitted between the Low Tide Line and the High Tide Line.

Provided that construction of dispensaries, schools, public rain shelters, community toilets, bridges, roads, jetties, water supply, drainage, sewerage which are required for traditional inhabitants of the Sunderbans Bio-sphere reserve area, West Bengal, may be permitted, on a case to case basis, by an authority designated by the State Government.

CRZ-II

(i) Building shall be permitted only on the landward side of the existing road (or roads proposed in the approved Coastal Zone Management Plan of the area) or on the landward side of existing authorised structures. Buildings permitted on the landward side of the existing and proposed roads/existing authorised structures shall be subject to the existing local town and Country Planning Regulations including the existing norms of Floor Space Index/Floor Area Ratio.

Provided that no permission for construction of buildings shall be given on landward side of any new roads (except roads proposed in the approved Coastal Zone Management Plan) which are constructed on the seaward side of an existing road.

(ii) Reconstruction of the authorised buildings to be permitted subject to the existing FSI/FAR norms and without change in the existing use.

(iii) The design and construction of building shall be consistent with the surrounding landscape and local architectural style.

CRZ - III

(i) The area upto 200 metres from the High Tide Line is to be earmarked as 'No Development Zone'. No construction shall be permitted within this zone except for repairs of existing authorised structures not exceeding existing FSI, existing plinth area and existing density and for permissible activities under the notification including facilities essential for such activities. An authority designated by the State Government/Union Territory Administration may permit construction of facilities for water supply, drainage and sewerage for requirements of local inhabitants. However, the following uses may be permissible in this zone- agriculture, horticulture, gardens, pastures, parks, play fields, forestry and salt manufacture from sea water.

(ii) Development of vacant plots between 200 and 500 metres of High Tide Line in designated areas of CRZ-III with prior approval of Ministry of Environment & Forests(MEF) permitted for construction of hotels/beach resorts for temporary

occupation of tourists/visitors subject to the conditions as stipulated in the guidelines at Annexure-II.

(iii) Construction/reconstruction of dwelling units between 20 and 500 metres of the High Tide Line permitted so long it is within the ambit of traditional rights and customary use such as existing fishing villages and gothans. Building permission for such construction/reconstruction will be subject to the conditions that the total number of dwelling unit shall not be more than twice the number of existing unit, total covered area on all floors shall not exceed 33 per cent of the plot size; the overall height of construction shall not exceed 9 metres and construction shall not be more than 2 floors (ground floors plus not floor).

Construction is allowed for permissible activities under the notification including facilities essential for such activities. An authority designated by State Government/Union Territory Administration may permit construction of public rain shelters, community toilets, water supply, drainage, sewerage, roads and bridges. The said authority may also permit construction of schools and dispensaries for local inhabitants of the area for those panchayats the major part of which falls within CRZ if no other areas is available for construction of such facilities.

(iv) Reconstruction/alterations of an existing authorised building permitted subject to (i) to (iii) above.

CRZ-IV

Andaman & Nicobar Islands:

- (i) No new construction of buildings shall be permitted within 200 metres of the HTL;
- (ii) The buildings between 200 and 500 meters from the High Tide Line shall not have more than 2 floors, (ground floor and 1st floor) the total covered area on all floors, shall not be more than 50 per cent of the plot size and the total height of construction shall not exceed 9 metres;
- (iii) The design and construction of buildings shall be consistent with the surrounding landscape and local architectural style.
- (iv) (a) Corals from the beaches and coastal waters shall not be used for construction and other purposes;
- (b) sand may be used from the beaches and coastal waters, only for construction purpose upto 30th day of September ,2000 and thereafter it shall not be used for construction and other purposes].
- (v) Degrading and underwater blasting in and around coral formations shall not be permitted; and
- (vi) However, in some of the Islands, coastal stretches may also be classified into categories CRZ-I or II or III with the prior approval of Ministry of Environment & Forests and in such designated stretches, the appropriate regulations given for respective categories shall apply .

Lakshdweep and small Islands:

- (i) For permitting construction of buildings and distance from the High Tide Line shall be decided depending on the size of the Islands. This shall be laid down for each Island, in consultation with the experts and with approval of the Ministry of Environment & Forests, keeping in view the land use requirements for specific purposes vis- a-vis local conditions including hydrological aspects erosion and ecological sensitivity.
- (ii) The buildings within 500 meters from the HTL shall not have more (than 2 floors, (ground floor, and 1st floor) the total covered area on all floors shall not be more than 50 per cent of the plot size and the total height of construction shall not exceed 9 metres;
- (iii) The design and construction of buildings shall be consistent with the Sit surroundings landscape and local architectural style.
- (iv) Corals and sand from the beaches and coastal waters shall not be used for construction and other purposes.
- (v) Degrading and underwater blasting in and around coral formations shall not be permitted; and
- (vi) However, in some of the Islands, coastal stretches may also be classified into categories CRZ-I or II or III, with the prior approval to the Ministry of Environment &

Forests and in such designated stretches, the appropriate regulations given for respective Categories shall apply.

ANNEXURE -II

Guidelines for Development of Beach Resorts/Hotels in the Designated areas of CRZ-III for Temporary Occupation of Tourist/Visitors, with prior approval of the Ministry of Environment & Forests.

7(1) Construction of beach resorts/hotels with prior approval of the MEF in the designated areas of CRZ-III for temporary occupation of tourists/visitors shall be subject to the following conditions: .

(i) The project proponent shall not undertake any construction within 200 metres in the land-ward side from the High Tide Line and within the area between the Low Tide and High Tide Lines:

Provided that the Central Government may, after taking into account geographical features and overall Coastal. Zone Management Plans, and for reasons to be recorded in writing, permit any construction subject to such conditions and restrictions as it may deem fit;

(ia) live fencing and barbed wire fencing with vegetative cover may be allowed around private properties subject to the condition that such fencing shall in no way hamper public access to the beach;

(ib) no flattening of sand dunes shall be carried out;

(ic) no permanent structures for sports facilities shall be permitted except construction of goal posts, net posts and lamp posts

(id) construction of basements may be allowed subject to the condition that no objection certificate is obtained from the State Ground Water Authority to the effect that such construction will not adversely affect free flow of ground water in that area. The State Ground Water Authority shall take into consideration the guidelines Issued by the Central Government before granting such no objection certificate.

EXPLANATION: Though no construction is allowed in the no development zone for the purpose of calculation of FSI, the area of entire plot including the portion which falls within the no development zone shall be taken into account".

(ii) the total plot size shall not be less than 0.4 hectares and the total covered area on all floors shall not exceed 33 per cent of the plot size i.e. the FSI shall not exceed 0.33. The open area shall be suitably landscaped with appropriate vegetal cover.

(iii) The construction shall be consistent with the surrounding landscape and local architectural style;

(iv) The overall height of construction upto highest ridge of the roof, shall not exceed 9 metres and the construction shall not be more than 2 floors (ground floor plus one upper floor);

(v) Ground water shall not be tapped within 200 m of the HTL; within the 200 metres 500 metre zone it can be tapped only with the concurrence of the Central/State Ground Water Board;

(vi) Extraction of sand, leveling or digging of sandy stretches except for structural foundation of building swimming pool shall not be permitted within 500 metres of the High Tide Line.

(vii) The quality of treated effluents, solids wastes, emission and noise levels etc. from the project area must conform to the standards laid down by the competent authorities including the Central/State Pollution Control .

(viii) Necessary arrangements for the treatment of the effluents and solid wastes must be made, It must be ensured that the untreated effluent and solid wastes are not discharged onto the water or on the beach; and no effluent, solid waste shall be discharged on the beach.

(ix) To allow public access to the beach, atleast a gap of 20 metres width shall be provided between any two hotels/beach resorts; and in no case shall gaps be less than 500 metres apart; and

(x) If the project involves diversion of forest land for non-forest purposes, clearance as required under the Forests (Conservation) Act, 1980 shall be obtained. The requirements of other Central and State laws as applicable to the project shall be met with.

(xi) Approval of the State/Union Territory Tourism Department shall be obtained,

7(2) In ecologically sensitive areas (such as marine parks, mangroves, coral reefs, breeding and spawning grounds of fish, wildlife habitats and such other areas as may notified by the Central/State Government/Union Territories) construction of beach resorts/hotels shall not be permitted, .

ANNEXURE – III

(See paragraph 2, sub-paragraph (ii)]

LIST OF PETROLEUM PRODUCTS PERMITTED FOR STORAGE IN PORT AREAS

- (i) Crude Oil
- (ii) Liquefied Petroleum Gas (iii) Motor Spirit (iv) Kerosene
- (v) Aviation: Fuel
- (vi) High Speed Diesel (vii) Lubricating Oil
- (viii) Butane: (ix) Propane
- (x) Compressed Natural Gas (xi) Naptha
- (xii) Furnace Oil
- (xiii) Low Sulphur Heavy Stock.

**MINISTRY OF ENVIRONMENT & FORESTS
ORDER**

New Delhi, the 26th November, 1998

S.O.No. 991(E)- In exercise of the powers conferred by sub-sections (I) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as said Act) and in supersession of the Order of the Government of India in the Ministry of Environment & Forests number J-17011/18/96-IA-III dated 13th August, 1998, except as respects things done or omitted to be done before such supersession, the Central Government hereby constitutes an authority to be known as the National Coastal Zone Management Authority(hereinafter referred to as the Authority) consisting of the following persons, for a period of two years, with effect from the date of publication of this Order in the Official Gazette, namely: -

I. Additional Director (Impact Assessment) Ministry of Environment & Forests	Chairman
2. Chief Town Planner, Ministry of Urban Affairs and Employment, New Delhi	Member
3. Director General (Tourism) Ministry of Tourism New Delhi	Member
4. Fisheries Development Commissioner Ministry of Agriculture	Member
5. Joint Secretary (Ports) Ministry of Surface Transport New Delhi	Member
6. Director, National Institute of Oceanography, Panjim, Goa	Member
7. Director, Central Marine Fisheries Research Institute Cochin	Member
8. Father Thomas Kocherry	Member

Coordinator
World Forum of Fish Harvesters and
Fish Workers (WFF)
Valiathura, Thiruvananthapuram

9. Shri Hal Mane Member

President, Ratnagiri District

Fishmen's Association, Ratangiri Maharashtra

10. Shri Shiva Kashinath Naik Member

Sarpanch Shioroda
Kerwadi, Tehsil Vengurla District Sindhudurg
Maharashtra -- 1

11. Shri Rajaram Gadhekar Member

Mukteshwar Sansthan

Apoogaon, Malad (West) Mumbai

12. Deputy Secretary, Impact Assessment Member Secretary

Ministry of Environment & Forests New Delhi

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas, namely: -

(i) Co-ordination of actions by the State Coastal Zone Management Authorities and the Union Territory Coastal Zone Management Authorities under the said Act and the rules made thereunder, or under any other which is relatable to the objects of the said Act.

(ii) Examination of the proposals for changes and modifications in classification of Coastal Regulation Zone areas in the Coastal Zone Management Plans received from the State Coastal Zone Management Authorities and the Union Territory

Coastal Zone Management Authorities, and making specific recommendations to the Central Government therefor.

(iii)(a) Review of cases involving violations of the provisions of the said Act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act and, if found necessary, issue directions under section 5 of the said Act

(b) Review of cases under (iii) (a) either suo-moto or on the basis of the complaint made by an individual, or a representative body, or an organisation functioning in the field of environment.

(iv) File complaints, under section 19 of the said Act in cases of non-compliance of the directions issued by it under sub-paragraph (iii) (a) of paragraph II of the Order.

(v) To take action under section 10 of the said Act to verify the facts. concerning the issues arising from sub-paragraphs (i), (ii) and (iii) of paragraph II of the Order.

III. The Authority shall provide technical assistance and guidance to the concerned State Government, Union Territory Governments/Administrations, the State Coastal Zone Management Authorities, the Union Territory Coastal Zone Management Authorities, and other institutions/organizations as may be found necessary, in matters relating to the protection and improvement of the coastal environment.

IV. The Authority shall examine and accord its approval to area specific management plans, integrated Coastal Zone Management plans and modifications thereof Zone Management plans and modifications thereof submitted by the State Coastal Zone Management Authorities and the Union Territory Coastal Zone Management Authorities.

V. The Authority may advise the Central Government on policy, planning, research and development, setting up of Centres of Excellence and funding, in matters relating to Coastal Regulation Zone Management.

VI. The Authority shall deal with all environmental issues relating to Coastal Regulation Zone which may be referred to it by the Central Government.

VII. The Authority shall furnish report of its,activities and the activities of the State Coastal Zone Management Authorities and Union Territory Coastal Zone Management Authorities at least once in six months to the Central Governments.

VIII. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

IX. The Authority shall have its headquarters at New Delhi.

X. Any matter specifically not falling within in scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

K.ROY PAUL,Addl. Secy.

**MINISTRY OF ENVIRONMENT & FORESTS
ORDER**

New Delhi, the 26th November, 1998

S.O.No. 992(E)- In exercise of the powers conferred by sub-sections (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Andaman & Nicobar Islands Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years, with effect from the date of publication of this order in the Official Gazette, namely: -

1. Chief Secretary Chairman

Andaman and Nicobar Administration

Andaman and Nicobar Islands , Port Blair

2. Sh.W.G.Thambudurai Member

Chief Engineer & Administrator

Andaman Lakshadweep Harbour

Works Ministry of Surface Transport Port Blair

Secretary. Member

Department of Environment

Andaman & Nicobar Islands Port Blair

4. Director Member

Department of Fisheries Port Blair

5. Director Member

Central Agriculture Research Institute Port Blair

6. Dr.P.S.N.Rao

Member

Botanical Survey of India Port Blair

7. Conservator of Forests

MemberSecretary

Andaman & Nicobar Islands .

Port Blair

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas of the Union Territory of the Andaman and Nicobar Islands, namely: -

(i) Examination of proposals for changes/modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Andaman and Nicobar Islands Administration, and making specific recommendations to the National Coastal Zone Management Authority therefore.

(ii) (a) Inquiry into cases of alleged violations of the provisions of the said Act and the rules made thereunder, or any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act, insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said Act and the rules made thereunder or under any other law which is relatable to the objects of the said Act, and if found necessary, referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph 2 may be taken up suo-moto, or on the basis of complaint made by an individual, or an representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said in cases of non-compliance of the directions issued by it under sub-paragraphs (i) and (ii) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i), and (ii) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Andaman and Nicobar Islands

Administration, the National Coastal Zone Management Authority or the Central Government.

V. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area-specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval. .

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Andaman & Nicobar Islands.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Port Blair.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

[F.No.1701 f/18/96-IA-III]

K.ROY PAUL, Addl. Secy.

**MINISTRY OF ENVIRONMENT & FORESTS
ORDER**

New Delhi, the 26th November, 1998

S.O.No. 993(E)- In exercise of the powers conferred by sub-section (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Andhra Pradesh Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a

period of two years, with effect from the date of publication of this order in the Official Gazette, namely: -

- | | |
|--|------------------|
| 1. Principal Secretary
Environment, Forests and Science
and Technology, Government of Andhra
Pradesh, Hyderabad | Chairman |
| 2. Secretary
Department of Revenue
Government of Andhra Pradesh Hyderabad
Director Member National Remote Sensing
Agency Hyderabad | Member |
| 4. Dr.M.Balu Rao
Retired Principal, College of
Fisheries ANGR Agriculture University | Member |
| 5. Dr.A.V.Raman
Head of the Department of
Zoology College of Science and
Technology Andhra University, Waltair | Member |
| 6. Member Secretary
Andhra Pradesh Pollution Control
Board HUDA Complex, Hyderabad | Member |
| 7. Director
Shore Area Development Authority Hyderabad | Member Secretary |

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in areas of the State of Andhra Pradesh, namely:-

- (i) Examination of proposals for changes/modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Andhra Pradesh State Government and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii)(a) Inquiry into cases of alleged violations of the provisions of the said Act and the rules made thereunder, or any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act, insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said Act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and if found necessary, referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (b) of paragraph II may either be taken up suo-moto, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said Act in cases of non-compliance of the directions issued by it under sub-paragraphs (i) and (ii) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i), and (ii) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the State Government, Andhra Pradesh, the National Coastal Zone Management Authority or the Central Government.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (ii), (a) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Tamil Nadu State Government, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area-specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation.. and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Tamil Nadu.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Chennai.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall dealt with by the statutory authorities concerned.

[F.No.17011/I8/96-IA-III]
K.ROY PAUL, Addl. Secy.

MINISTRY OF ENVIRONMENT & FORESTS

ORDER

New Delhi, the 26th November, 1998

S.O. 995 (E) - In exercise of the powers conferred by sub-section (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Goa Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely :-

- | | |
|--|----------|
| 1. Secretary
Department of Environment Panjim | Chairman |
| 2. Chief Town Planner
Town and Country Planning Offic, Panjim | Member |
| 3. Shri Ashok Kumar
Regional Controller of Mines
Indian Bureau of Mines Panjim | Member |
| 4. Director
Department of Tourism Panjim | Member |
| 5. Dr. Arvinda Untawale
National Institute of Oceanography Dona Paula | Member |
| 6. Prof. Leela Bhosle
Head of Department
University of Kolhapur | Member |
| 7. Director
Secretary Department of Science,
Technology and Environment Panjim | Member |

II. The Authority shall have the power to take the following measures for protecting and - improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas of the State of Goa, namely :-

(i) Examination of proposals or changes/ modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Goa State Government and making specific recommendations to the National Coastal Zone Management Authority therefore.

(ii) (a) Inquiry into cases of alleged violations of the provisions of the said Act and/or the rules made thereunder, or under any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of Cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and, if found necessary referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may be taken up suo-moto, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said Act in cases of non-compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action ,under section 10 of the said Act to ,verify the facts concerning the issues arising from sub-paragraphs (I) and (II) of paragraph II of this order.

III. The Authority shall deal with environmental issues relating to coastal relation Zone which may be referred to it by the Goa State Government, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Goa.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI .The Authority shall have its headquarters at Panaji.

XII Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

[F.No. 17011/18/96-IA-III]

K.ROY PAUL, Addl. Secy.

MINISTRY OF ENVIRONMENT & FORESTS

ORDER

New Delhi, the 26th November, 1998

S.O. 996 (E) - In exercise of the powers conferred by sub-sections (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Pondicherry Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely :-

1. Secretary Department of Environment Pondicherry	Chairman
2. Director Department of Fisheries	Member
3. Chief Town Planner Town and Country Planning Department Pondicherry *	Member
4. Dr. R. Mahadevan National Institute of Ocean Technology Indian Institute of Technology Chennai	Member

5. Dr. L. Kannan

Director

Centre for Advanced Studies in
Marine Biology, Anamalai University

6. Member Secretary,

Member Secretary

Pondicherry Pollution Control Committee,
Pondicherry .

The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas of the Union Territory of Pondicherry, namely :-

(i) Examination of proposals or changes/ modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Pondicherry Administration and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii)(a) Inquiry into cases of alleged violations of the provisions of the said Act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of Cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable', to the objects of the said Act, and, if found necessary referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii)-(a) and (ii) (b) of paragraph II may be taken up *suo-moto*, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said Act in cases of non-compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Pondicherry Administration, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Pondicherry.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Pondicherry.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

[F.No. 170II/18/96-IA-III]

K.ROY PAUL, Addl. Secy.

**MINISTRY OF ENVIRONMENT & FORESTS
ORDER
New Delhi, the 26th November, 1998**

S.O. 997 (E) - In exercise of the powers conferred by sub-sections (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the West Bengal Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years, with effect from the date of publication of this Order in the Official Gazette, namely :-

1. Secretary Chairman

Department of Environment Calcutta

2. Director Member

Department of Fisheries
Government of West Bengal Calcutta.

3. Principal Member

Chief Conservator of Forests Department of Forests
Government of West Bengal

4. Sh. Anil Varun Biswas Member

Centre for Study for Man and Environment,
Department of Geology, University of Calcutta

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the West Bengal State Government, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of West Bengal.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Calcutta.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

[F .No. 170II/18/96-IA-III]

K.ROY PAUL, Addl. Secy.

MINISTRY OF ENVIRONMENT & FORESTS

ORDER

New Delhi, the 26th November, 1998

S.O. 998 (E) - In exercise of the powers conferred by sub-section (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Daman and Diu Islands Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely :-

I. Secretary Chairman

Daman and Diu, Dadar and Nagar Haveli Secretariat, Moti Daman

3. Chief Conservator of Forests Member

Moti Daman

4. Director Member

Space Application Centre

Ahmedabad .

5. Director Member

Central Institute of Fisheries Education Mumbai

6. Member Secretary Member Secretary

Pollution Control Committee Moti Daman

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas of the Union Territory of Daman and Diu, namely :-

(i) Examination of proposals or changes/ modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Daman and Diu Administration and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii)(a) Inquiry into cases of alleged violations of the provisions of the said Act and/or the rules made thereunder, or under any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act, insofar as such directions are not inconsistent with any

direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of Cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and, if found necessary, referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may be taken up *suo-moto*, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said Act in cases of non- compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Daman and Diu Administration, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Daman and Diu. such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of Cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and, if found necessary, referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may be taken up *suo-moto*, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said Act in cases of non- compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Daman and Diu Administration, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Daman and Diu.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Moti Daman.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

[F .No. 17011 /I8/96-IA-III]

K.ROY PAUL, Addl. Secy.

MINISTRY OF ENVIRONMENT & FORESTS ORDER

New Delhi, the 26th November, 1998

S.0.999 (E) - In exercise of the powers conferred by sub-section (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 or 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Gujarat Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely

1. Secretary Chairman

Environment & Forests Department

Government of Gujarat

2. Commissioner Member

Department of Industries Government of Gujarat

3. Principal Chief Conservator of Forests & Wild Life Member

Gandhi Nagar

4. 'Prof. Nikhil Desai Member

Department of Geology

M.S. University of Geology

Vadodara

5. Sh. K.B. Jain Member

Director

Centre for Environment and Planning

Technology School of Architecture

Ahmedabad

6. Prof. Anil Gupta Member

Indian Institute of Management Ahmedabad

Department of Environment Gujarat *

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution of coastal areas of the State of Gujarat, namely :-

(i) Examination of proposals for changes/ modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Gujarat State Government and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii) (a) Inquiry into cases of alleged violations of the provisions of the said Act and/or the rules made thereunder, or under any other law for the time being in force which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act insofar as such 'directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and, if found necessary referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may be taken up suo-moto, or on the basis of complaint made by an individual, or li representative body, or an organisation.

*Note: * Though it is not mentioned in original notification, may be read as such*

(iii) Filing complaints, under section 19 of the said Act in cases of non- compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III. Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the State Government of Gujarat, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area-specific management plans for such identified areas.

V. Authority shall identify coastal areas highly erosion/degradation, and formulate area-specific management identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV,V,VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Gujarat.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Gandhi Nagar.

XII. Any matter specifically not Authority as so constituted concerned.

MINISTRY OF ENVIRONMENT & FORESTS

ORDER

New Delhi, the 26th November, 1998

S.0.1000 (E) - In exercise of the powers conferred by sub-section (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Karnataka Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely :-

- | | |
|---|----------|
| 1. Secretary
Department of Forests, Ecology and Environment
Government of Karnataka | Chairman |
| 2. Director
Department of Industries
Government of Karnataka | Member |
| 3. Member Secretary
Karnataka State Pollution Control Board | Member |
| 4. Father Saldanha
Professor, Department of
Botany St. Joseph's College Bangalore | Member |
| 5. Prof. T.R.C. Gupta, | Member |

Head of Department
Department of Aquatic Sciences
College of Fisheries
University of Agricultural Sciences
Mangalore

6. Prof. D.K. Subramanian Member

Department of Computer Sciences
Indian Institute of Sciences Bangalore

7. Director Member Secretary

Environment Technical Cell
Department of Forest Ecology & Environment
Government of Karnataka .
Bangalore .

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Karnataka.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Bangalore.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

[F.No. 17011/18/96-IA-III]

K.ROY PAUL, Addl. Secy.

MINISTRY OF ENVIRONMENT & FORESTS ORDER
New Delhi, the 26th November, 1998

S.O.No. 1001(E)- In exercise of the powers conferred by sub-section (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Kerala Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years, with effect from the date of publication of this order in the Official Gazette, namely: -

- | | |
|---|----------|
| 1. Secretary
Department of Health & Family
Welfare Government of Kerala | Chairman |
| 2. Secretary
Department of Revenue
Government of Kerala | Member |
| 3. Member Secretary.
Kerala State Pollution Control Board - | Member |
| 4. Dr.M.Baba
Director
Central for Earth Science and Studies
Thiruvananthapuram | Member |
| 5. Director
Central Marine. Fisheries Research
Institute, Cochin | Member |

6. Prof. Balakrishnan Nair

Member

Emeritus Scientist

Swati, Residence Road, Thycaud '

Thiruvananthapuram

7. Director

Member Secretary

Science, Technology and Environment

Government of Kerala

I. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in areas of the State of Kerala namely: -

(i) Examination of proposals for changes/modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Kerala State Government and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii) (a) Inquiry into cases of alleged violation of the provisions of the said Act and the rules made thereunder or any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act, insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said Act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and if found necessary, referring such cases, with comment, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may either be taken up suo-moto, or on the basis of complaint made by an individual, or an representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said in cases of non-compliance of the directions issued by it under sub-paragraphs (i) and (ii) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i), and (ii) of paragraph II of the Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the State Government of Kerala the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area-specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Kerala.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Thiruvananthapuram.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall dealt with by the statutory authorities concerned.

[F .No.170 11 / 18/96-IA-III]

K.ROY PAUL,Addl.Secy

MINISTRY OF ENVIRONMENT & FORESTS ORDER.
New Delhi, the 26th November, 1998

S.O.No. 1002(E)- In exercise of the powers conferred by sub-sections (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Lakshadweep Islands Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years, with effect from the date of publication of this order in the Official Gazette, namely: -

- | | |
|--|----------|
| 1. Administrator Cum Secretary
(Environment) Kavaratti | Chairman |
| 2. Deputy Conservator of Forests
Kavaratti | Member |
| 3. Superintending Engineer

Public Works Department Kavartti | Member |

4. Dr. R. Ramachandran	Member
Center for Earth Science Studies Thiruvananthapuram	
5. Director	Member
Central Marine Fisheries Research Institute Cochin .	
6. Sh. W. G. Thambudurai	Member
Chief Engineer & Administrator Andaman Lakshadweep Harbour Works Ministry of Surface Transport Port Blair	
7. Member Secretary	Member Secretary
Pollution Control Committee *	
Lakshadweep	

*Note: * May be read as Committee instead of Board*

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in areas of the Union Territory of Lakshadweep namely: -

(i) Examination of proposal for changes/modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Lakshadweep Islands Administration and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii) (a) Inquiry into cases of alleged violations of the provisions of the said Act and the rules made thereunder or any other law which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act, insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said Act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and if found necessary, referring such cases, with comment, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may either be taken up suo-moto, or on the basis of complaint made by an individual, or an representative body, or an organization.

(iii) Filing complaints, under section 19 of the said in cases of non-compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of the Order.

III. The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Lakshadweep Islands Administration, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area-specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Lakshadweep Islands.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Mumbai.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall dealt with by the statutory authorities concerned.

K.ROY PAUL, Addl. Secy.

MINISTRY OF ENVIRONMENT & FORESTS

ORDER

New Delhi, the 26th November, 1998

S.O.1003 (E) - In exercise of the powers conferred by sub-sections (1) and (3) of section 3 of the Maharashtra Coastal Zone Management Authority Act, 1998 (No. 10 of 1998), the Central Government hereby constitutes an authority to be known as the Maharashtra Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely :-

- | | |
|--|------------------|
| 1. Secretary | Chairman |
| Department of Environment Government of Maharashtra | |
| 2. Secretary | Member |
| Department of Revenue and Forests,
Mumbai Government of Maharashtra | |
| 3. Secretary | Member |
| Urban Department
Government of Maharashtra | |
| 4. Dr. Leela Bhosele | Member |
| Department of Botany Kolhapur University Kolhapur | |
| 5. Dr. A.D. Diwan | Member |
| Central Institute of Fisheries Education Versoa;
Mumbai | |
| 6. Dr. R.P. Gupta | Member |
| Indian Institute of Technology Mumbai | |
| 7. Member Secretary | Member Secretary |
| Maharashtra State Pollution Control Board Mumbai | |

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas of the State of Maharashtra, namely :-

(i) Examination of proposals for changes/ modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Maharashtra State Government and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii) (a) Inquiry into cases of alleged violations of the provisions of the said Act and the rules made thereunder, or under any other law for the time being in force which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and, if found necessary referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and (ii) (b) of paragraph II may be taken up suo-moto, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the said Act in cases of non-compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III, The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Maharashtra State Government, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Maharashtra.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Mumbai.

XIII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

F.No. 17011/18/96-IA-III

K.ROY PAUL, Addl. Secy.

**MINISTRY OF ENVIRONMENT & FORESTS
ORDER**

New Delhi, the 26th November, 1998

S.O. 1004 (E) - In exercise of the powers conferred by sub-sections (1) and (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby constitutes an authority to be known as the Orissa Coastal Zone Management Authority (hereinafter referred to as the Authority) consisting of the following persons, for a period of two years with effect from the date of publication of this Order in the Official Gazette, namely :-

- | | |
|---|------------------|
| 1. Principal Secretary | Chairman |
| Science, Technology and Environment and Forests wing
Orissa Secretariat, Bhubaneswar | |
| 2. Member Secretary | Member |
| Orissa State Pollution Control Board Bhubaneswar | |
| 3. Officer-in-charge | Member |
| Central Marine Fisheries Research Institute Research
Station, Bhubaneswar | |
| 4. Prof. Mrs. Hejmadi | Member |
| Vice Chancellor
Sambalpur University | |
| 5. Sh. S.S. Das | Member |
| Joint Director
Directorate of Mining and Geology Bhubaneswar | |
| 6. Sh. R.C. Das | Member |
| Sarana House, 337, Louise Road Bhubaneswar | |
| 7. Director | Member Secretary |
| Science, Technology and Environment
and Forests Wing, Orissa Secretariat Bhubaneswar | |

II. The Authority shall have the power to take the following measures for protecting and improving the quality of the coastal environment and preventing, abating and controlling environmental pollution in coastal areas of the State of Orissa, name~

(i) Examination of proposals for changes/ modifications in classification of Coastal Regulation Zone areas and in the Coastal Zone Management Plan (CZMP) received from the Orissa State Government and making specific recommendations to the National Coastal Zone Management Authority therefor.

(ii) (a) Inquiry into cases of alleged violations of the provisions of the said Act and the rules made thereunder, or under any other law for the time being in force which is relatable to the objects of the said Act and, if found necessary in a specific case, issuing directions under section 5 of the said Act, insofar as such directions are not inconsistent with any direction issued in that specific case by the National Coastal Zone Management Authority or by the Central Government;

(b) Review of cases involving violations of the provisions of the said act and the rules made thereunder, or under any other law which is relatable to the objects of the said Act, and, if found necessary referring such cases, with comments, for review to the National Coastal Zone Management Authority;

Provided that the cases under sub-paragraphs (ii) (a) and ,(ii) (b) of paragraph II may be taken up suo-moto, or on the basis of complaint made by an individual, or a representative body, or an organisation.

(iii) Filing complaints, under section 19 of the 'sald .Act in cases of non- compliance of the directions issued by it under sub-paragraph (ii) (a) of paragraph II of this Order.

(iv) To take action under section 10 of the said Act to verify the facts concerning the issues arising from sub-paragraphs (i) and (ii) of paragraph II of this Order.

III The Authority shall deal with environmental issues relating to Coastal Regulation Zone which may be referred to it by the Orissa State Government, the National Coastal Zone Management Authority or the Central Government.

IV. The Authority shall identify ecologically sensitive areas in the Coastal Regulation Zone, and formulate area - specific management plans for such identified areas.

V. The Authority shall identify coastal areas highly vulnerable to erosion/degradation, and formulate area-specific management plans for such identified areas.

VI. The Authority shall identify economically important stretches in the Coastal Regulation Zone and prepare Integrated Coastal Zone Management Plans for the same.

VII. The Authority shall submit the plans prepared by it under paragraphs IV, V, VI above and modifications thereof to the National Coastal Zone Management Authority for examination and its approval.

VIII. The Authority shall ensure compliance of all specific conditions that are laid down in the approved Coastal Zone Management Plan of Orissa.

IX. The Authority shall furnish report of its activities at least once in six months to the National Coastal Zone Management Authority.

X. The foregoing powers and functions of the Authority shall be subject to the supervision and control of the Central Government.

XI. The Authority shall have its headquarters at Bhubaneswar.

XII. Any matter specifically not falling within the scope and jurisdiction of the Authority as so constituted shall be dealt with by the statutory authorities concerned.

**F .No. 170II/18/96-IA-III
K.ROY PAUL, Addl. Secy.**

MINISTRY OF ENVIRONMENT AND FORESTS NOTIFICATION

New Delhi, the 12th February, 1999

S.0.104 (E).- Whereas by notification of the Government of India in the Ministry of Environment & Forests number S.O.1001 (E), dated the 26th November, 1998 (hereinafter referred to as the said notification, the Central Government constituted an authority to be known as the Kerala Coastal Zone Management Authority (hereinafter referred to as the said Authority).

And whereas, the State Government of Kerala had drawn attention of the Central Government to the need to modify the composition of the said Authority;

And whereas, the matter has been examined by the Government of India in the Ministry of Environment and Forests;

And whereas, the Central Government is of the opinion that the said notification should be amended.

2. Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (3) and (4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in paragraph of the said notification, namely: -

(i) For the words "Secretary, Department of Health and Family Welfare" the words "Chairman, Science, Technology and Environment Department and Ex-Officio Secretary to the" shall be substituted;

(ii) For the words "Department of Revenue" the words "Department of Fisheries" shall be substituted;

(iii) For the words "Central for Earth Sciences and Studies" the words "Centre for Earth Science Studies" shall be substituted;

(iv) For the words "Central" the word "Central" shall be substituted;

(v) For the word "Member Secretary, Kerala State Pollution Control Board" the words "Secretary, Local Government" shall be substituted.

**[No. Z-17011/18/98-IA-III]
V. RAJAGOPALAN, Jt. Secy.**

In the said Order, in para 1,

(i) in serial number 1, for the words "Secretary, Department of Environment, Panjim", the words "Chief Secretary to Government of Goa, Panjim, Goa" shall be substituted;

(ii) in serial number 2, for the words "Chief Town Planner, Town and Country Planning Office, Panjim" the words "Principal Chief Conserator of Forests, Panjim", shall be substituted;

(iii) in serial number 3, for the words "Shri Ashok Kumar, Regional Controller of Mines, Indian Bureau of Mines, Panjim", shall be substituted;

(iv) in serial number 7, for the words "Director, Department of Science, Technology and Environment - Member Secretary" the following shall be substituted, namely;

"Shri Jose Elmano Coelho Perreira, E-21, Father Agenlo Road, Goa, - Member"

(v) After serial number 7, the following shall be inserted, namely, 8 "Shri Manohar Panikar, MLA, Panjim, Panjim, Goa, - Member", 9. "Secretary, Department of Environment, Government of Goa, Panjim, - Member";

10. "Director, Department of Science, Technology and Environment,- Member Secretary".

**[F.No. J. 17011/18/96-IA.III]
V. RAJAGOPALAN, Jt. Secy.**

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 12th April, 2001 .

S.O. 329 (E) - Whereas by the notification of the Governnient of India in the Ministry of Environment and Forests number. S.O. 114 (E), dated the 19th February, 1991 (hereinafter referred to as the saiq notification), the Central Government declared Coastal Stretches as Coastal Regulation Zone (CRZ) and restrictions were imposed on the setting up and expansion of industries, operations and processes in the said zone;

And whereas objections raised by the petitioner in the High Court of Delhi in civil petition No.4198/98 relating to delegation of powers have been duly considered by the Central Government;

And whereas issues relating to deletion of powers have been examined by the Central Government in the Ministry of Environment and Forests;

And whereas the Central Government has also considered the requirement of projects relating to Department of Atomic Energy and pipelines, conveying system including transmission lines and other facilities essential for activities permissible under the notification in the CRZ areas;

And whereas the Central Government deems it necessary to harmonise the existing provisions of the notification;

And whereas the Central Government is of the opinion that it is necessary and expedient in the public interest to amend the said notification;

And whereas sub-rule (4) of rule 5 of the Environment (Protection) Rules, 1986 provides that, "Notwithstanding anything contained in sub-rule (3), whenever it appears to the Central Government that it is in public interest to do so, it may dispense with the requirement of notice under clause (a) of sub-rule (3) of the said rules;"

And whereas the Central Government is of the opinion that it is in public interest to dispense with the requirement of notice under clause (a) sub-rule (3) of rule 5 for amending the said notification.

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rules (3) and (4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments In the aforesaid notification.

2. in the said Notification, in paragraph 2, -

1. for sub-paragraph (i), the following shall be substituted, namely:-

"(i) setting up of new industries and expansion of existing industries, except (a) those directly related to water , front or directly needing foreshore facilities and (b) Projects of Department of Atomic Energy;"

(2) in sub-paragraph (ii), for the existing proviso, the following shall be substituted, namely :-

"Provided that, facilities for receipt and storage of petroleum products and Liquefied Natural Gas as specified in Annexure-III appended to this notification and facilities for regasification of Liquefied Natural Gas, may be permitted within the said Zone in areas not classified as CRZ-I (i), subject to implementation of safety regulations including guidelines issued by the Oil Industry Safety Directorate in the Government of India, Ministry of Petroleum and Natural Gas and guidelines issued by the Ministry of Environment and Forests and subject to such further terms and conditions for implementation of ameliorative and restorative measures in relation to the environment as may be stipulated by the Government of India in the Ministry of Environment and Forests;"

(3) for sub-paragraph (viii), the following shall be substituted, namely: -

"(viii) Land reclamation, bunding or disturbing the natural course of sea water except those required for construction or modernisation or expansion of ports, harbours, jetties, wharves, quays, slipways, bridges and sea-links and for other facilities that are essential for activities permissible under the notification or for control of coastal erosion and maintenance or clearing of water ways, channels and ports or for prevention of sandbars or for tidal regulators, storm water drains or for structures for prevention of salinity ingress and sweet water recharge.

provided that reclamation for commercial purposes such as shopping and housing complexes, hotels and entertainment activities shall not be permissible;"

4. for sub-paragraph (ix) the following shall be substituted, namely: -

"(ix) Mining-of sands, rocks and other substrata materials, except (a) those rare minerals not available outside the CRZ areas and (b) exploration and extraction' of Oil and Natural Gas;

5. for sub-paragraph (xi), the following shall be substituted, namely: -

" construction activities in CRZ -I except as specified in Annexure -I of this notification;"

3. in paragraph 3, in sub-paragraph (2), -

1. for sub-clause (i), the following sub-clause shall be substituted, namely: -

"(i) Construction activities related to projects of Department of Atomic Energy or Defence requirements for which foreshore facilities are essential such as. slipways, jetties, wharves, quays; except for classified operational component of defence projects for which a separate procedure shall be followed. (Residential buildings, office buildings, hospital complexes, workshops shall not come within the definition of operational requirements except in very special cases and hence shall not normally be permitted in the CRZ);"

2. for sub-clause (ii), the following sub-clause shall be substituted, namely: -

"(ii) Operational constructions for ports and harbours and light houses and constructions for activities such as jetties, wharves, quays and slipways, pipelines, conveying systems including transmission lines";

3. in sub-clause (ii) existing provisos shall be omitted.

3. in Annexure-I, in paragraph 6, in sub-paragraph (2),-

1. Under heading CRZ-I, the following shall be substituted, namely:-

"No new construction shall be permitted in CRZ- I except (a) Projects relating to Department of Atomic Energy and (b) Pipelines, conveying systems including transmission lines and (c) facilities that are essential for activities permissible under CRZ-I. Between the L TL and the HTL ,activities as specified under paragraph 2 (xii) may be permitted. In addition, between LTL and HTL in areas which are not ecologically sensitive and important, the following may be permitted: (a) Exploration and extraction of Natural Gas, (b) activities as specified under proviso of sub-paragraph (ii) of paragraph 2, and (c) Construction of dispensaries, schools, public rain shelters, community toilets, bridges, roads, jetties, water supply, drainage, sewerage which are required for traditional inhabitants of the Sunderbans Bio-sphere reserve area, West Bengal, on a case to case basis, by the West Bengal State Coastal Zone Management Authority" .

3. In Annexure-III

(I) in the heading, for the words "Port Areas", the words "Coastal Regulation Zone except CRZ 1- (i)" shall be substituted.

1. after item (xiii)the following shall be inserted at the end, namely:-

(xiv) Liquefied Natural Gas (LNG)"

6. Environmental clearances, accorded by the Ministry of Surface Transport from 9th July 1997 till the publication of this notification are valid .All proposals for environmental clearance pending with the Ministry of Surface Transport stand transferred to Ministry of Environment and Forests from the date of publication of this notification,

(F. No. H-11011/6/97-IA-III)

Dr. V. Rajagopalan

Joint Secretary to the Government of India

Foot Note - The principal notification was published in the Gazette of India vide number .S.O. 114(E), dated, the 19th February, 1991 and subsequently amended vide: -

i. S.O. 595 (E) dated 18th August, 1994

ii. S.O. 73 (E) dated 31st January, 1997

iii. S.O. 494 (E) dated 9th July, 1997

iv. S.O. 334 (E) dated 20th April, 1998

v. S.O. 873 (E) dated 30th September, 1998

vi. S.O.1122(E')dated29thDecember, 1998

vii. S.O. 730 (E) dated 4th August, 2000

MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests and Wildlife)

NOTIFICATION

New Delhi, the 20th June, 1991

S.O. 416(E).-Whereas a notification under Clause (v) of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986, inviting objections from the concerned quarters within a period of sixty days from the date of publication of the said notification, against Govt.'s intention to declare Dahanu Taluka, District Thane (Maharashtra) as an ecologically fragile area and to impose restrictions on the setting up of industries which have detrimental effect on the environment was published vide S.O. NO. 80(E), dated 8th February, 1991 and Corrigendum (S.O. 147(E) issued on 27th February, 1991). And whereas certain objections were received from Environmental Action Groups of Dahanu & Bombay, individuals of Dahanu, Govt. of Maharashtra, Dahanu Industries Association Dahanu Taluka Krushak Samaj etc. These objections were duly considered and accordingly certain modifications have been incorporated in this notification.

NOTIFICATION

In exercise of powers conferred by clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986, the Central Government, in consultation with the Government of Maharashtra, after considering the need for protecting the ecologically sensitive Dahanu Taluka, and to ensure that the development activities are consistent with principles of environmental protection and conservation, hereby declare Dahanu Taluka, District Thane (Maharashtra) as an ecologically fragile area and to impose restrictions on the setting up of industries which have detrimental effect on the environment.

The location for siting of industries and industrial units shall be in conformity with the Guidelines given in the Annexure.

However, the industrial projects already approved or in existence in the said Taluka before the date of issue of this notification, will not be affected by this notification. The existing industries shall have to conform to the statutory standards. '

The Government of Maharashtra will prepare a Master Plan or Regional Plan for the Taluka based on the existing land use of Dahanu Taluka within a period of 1 year from the date of this notification and get the plan approved by the Ministry of Environment & Forests. This Master Plan or Regional Plan will clearly demarcate all the existing green areas, orchards, tribal area and other environmentally sensitive areas. No change of existing land use will be permitted for such areas in the Master Plan or Regional Plan for the Taluka. A buffer zone of 25 kms. should be kept free of industries around the outer periphery of Dahanu Taluka for which provision may be made in the Master Plan. The total area within the Dahanu Taluka for location of permissible industries will be restricted to a maximum of 500 acres within the

industrial areas marked in the Master Plan. The industrial units will be located at sites that are environmentally acceptable.

Industries which are using chemicals above the limits/quantities as prescribed in the Environment (protection) Act and Rules for hazardous chemicals, notified by the Government of India. should be considered hazardous industries. Hazardous waste may be disposed off in the identified areas after taking precautionary measures. The disposal areas have to be prescribed, carefully monitored and enforced and the site(s) will be identified in the Master Plan and will be, as far as possible, within the premises of the 500 acres area identified for the industrial estate.

The Government of Maharashtra will constitute a monitoring Committee to ensure the compliance of the conditions mentioned in the notification, in which local representatives may be included.

No. J-13011/2487-IA

R. RAJAMANI, Secy.

ANNEXURE

GUIDELINES FOR PERMITTING/RESTRICTING INDUSTRIES AND INDUSTRIAL UNITS IN THE DAHANU TALUKA, THANE DISTRICT IN MAHARASHTRA.

Industries will be classified under three categories, viz. Green, Orange and Red as shown below for the purpose of permitting/restricting such industrial activities in Dahanu Taluka on the basis of environmental and ecological considerations. In case of doubts as to the category in which the industry falls, a reference shall be made to the Ministry of Environment & Forests, Government of India, and such industry will not be permitted until cleared by the Ministry of Environment & Forests, Govt. of India. Expansion/modernisation of existing industries falling in green and orange categories only would be considered on merit. Some restriction in Volume of waste water generated, i.e. 2 to 3 CMD may be imposed for certain type of small scale units falling under Green or Orange categories.

GREEN CATEGORIES

List of industries that can be considered by the Maharashtra Government agencies for approval/rejection in approved industrial area without prior approval of the Ministry of Environment & Forests, Government of India (provided that all the following conditions are satisfied);

1. Only those industries that are non-obnoxious and non-hazardous will be permitted. (Obnoxious and hazardous industries include those using inflammable, explosive, corrosive or toxic substances)

2. Only those industries that do not discharge industrial effluents of a polluting nature will be permitted.

Note :-Industries that undertake any of the following processes or process of similar nature shall be regarded as industries that discharge industrial effluents of a polluting nature namely :-

Electroplating

Galvanizing

Bleaching

Degreasing

Phosphating

Dyeing

Pickling

Tanning

Polishing .

Cooking of fibres.

Digesting of hides.

Digesting of fabrics.

Removal of hair, soaking delimiting and washing of fabric.

Distillation of alcohol, stillage evaporation.

Crushing of sugarcane, filtration, centrifugation, distillation for extraction of sugar.

Manufacture of charcoal.

Canning and processing of fruits and vegetables .

including production of Jam, Jelly, Sauce etc.

Filtering backwash in D.M. Plants ;

Pulp making pulp processing and paper making ;

Coking of coal ;

Stripping of oxides ;

Washing of used sand by hydraulic discharge

Solvent extraction.

3. Only those industries that do not use coal in their manufacturing process will be permitted.

4. Only those industries that do not emit fugitive emissions of a diffused nature will be permitted.

Note :- (1) Some of the industries that ordinarily fall in the non-obnoxious, non-hazardous and non-polluting category, subject to fulfillment of above conditions are :-

Rice Mills, Dal Mills, Grain Mills (for production of flour);

Manufacture of Supari and masala grinding;

Groundnut decorating (dry);

Chilling Plant and cold storage;

Ice making;

Preserving and processing of fish, crustaceous and similar foods;

Manufacture of milk and dairy products such as butter, ghee etc.;

Book binding;

Engraving etching, block making;

Manufacture of structural stone goods, stone dressing and polishing (stone crushing/stone quarrying will not be permitted);

Manufacture of metal building component such as grills, gates, doors and window frames, water tanks, wire nets, etc. (use of coal not permitted);

Tool sharpening works;

Repairs of electrical appliances;

Manufacture of push carts, hand carts, bullock carts, etc;

Manufacture of jewellery and related articles (no power to be used);

Repair of Watches, Clocks and Jewellery;

Manufacture of bidis;

Handlooms, Powerlooms;

Embroidery and the making of laces and fringes;

Manufacture of made up textile goods such as, curtains, mosquito nets, mattresses, bedding material, pillow cases, bags, etc.;

Ready-made garments and Apparel making (dry processing);
Cotton and woolen hosiery (dry processing);
flandloom weaving;
Manufacture of leather foot wear and leather products (excluding tanning and hide processing);
Shoe lace manufacturing;

Manufacture of mirrors and photoframes;

Manufacture of musical instruments;

Manufacture of sports goods;
Manufacture of bamboo and cane products (dry operations only);
Manufacture of cardboard and paper products (Paper and pulp manufacture excluded);
Insulation and other coated papers (Paper and pulp manufacture excluded);
Manufacture of scientific and mathematical instruments;
Assembly of domestic electrical and electronic appliances;
Manufacture of writing instruments (pens, pencils, etc.);
Extrusion moulding of polythene, plastic and PVC goods;
Manufacture of surgical gauzes and bandages;
Manufacture of concrete railway sleepers;
Cotton spinning and weaving (dry processes only);
Manufacture of ropes(cotton, jute, plastic);
Carpet weaving;
Manufacture of wires and pipes (non-asbestos);
Extrusion of metal;
Assembly of electric and electronic equipment;
Coir industries;
Toys;
Wax candles and agarbatis;
Oil- ginning and expelling (no hydrogenation and no refining);
Manufacture of ice-cream;
Manufacture of mineral water;
Manufacture of trunks and suitcases;
Manufacture of stationary items (except paper and inks);

Manufacture of optical frames;
Manufacture of office and household furniture and appliances.both steel and wood;
Manufacture of machinery and machine tools and equipment (small-scale);
Wire drawing (cold process), Wire Nails, Baling straps; Processing if instant Coffee/tea;
Glassware using fuel other than coal/coke;
Optical Glass;
Laooratoryware;
Bakery products, biscuits and confcctionery;
Flour mills (excluding Roller flour mills);
(2) The inclusion of industries in this list is for convenience and if in a given case they do not fall in the above category they will be treated as in the Orange or Red Categories.

ORANGE CATEGORY

List of industries that can be permitted in Dahanu Taluka with proopr environmental assessment and adequate Pollution Control Measures in sites that have been approved by the Ministry of Environment & Forests, Government of India.

Ceramics;
Preservation of meat and canning;
Manufacture of building materials, such as bricks tiles, blocks, pipes.etc. from fly ash generated from the approved/existing power plants;
Sanitryware;
Vegetable oils including solvent extrcted oils;
Soap (without steam boiling process); "
Formulation. of synthetic detergents (non-phosphatic);
Steam generating plants (without coal/coke);
Manufacture of industrial gases (only Nitrogen, oxygen and CO₂);
Surgical and Medical products, excluding prophylactics and latex products;
Rubber Foot wear;
Malt foods;
Manufacture of pumps compressors, refrigeration units and fire fighting equipment; medical and surgical instruments;
Fragranccs, flavours and food additives;
Organic plant nutrients;

Aerated waters/soft drinks;

Industries falling within the above category with an outlay exceeding Rs. 3 crores will have to be referred to the Ministry of Environment & Forests, Government of India for consideration.

industries falling within the above category with an outlay not exceeding Rs. 3 crores shall be granted environmental clearance by the State Government Environment Deptt. and the MPCB.

RED CATEGORY

List of industries that cannot be permitted in Dahanu Taluka

The illustrative list of industries that fall within this category include :-

Metallurgical industries including foundries and alloy making processes;

Coal and other mineral processing industries;

Cement Plants;

Industries based on the use of coal/coke Refineries;

Petrochemical industries;

Synthetic Rubber Manufacture;

Thermal and nuclear power plant;

Manufacture of vanaspati, hydrogenated vegetable oils for industrial purpose;

Sugar Mills;

Manufacture of by-products of coke ovens and coal tar distillation products;

Alkalis and acids;

Electro-thermal products (such as artificial abrasives, calcium carbide, etc.);

Phosphorus and its compounds;

Nitrogen compounds; Explosives;

Fire-crackers;

Phthalic anhydride;

Processes involving chlorinated hydrocarbons;

Chlorine, fluorine, bromine, iodine and their compounds;

Chemical fertilizers

Synthetic fibres and rayon;

Manufacture and formulation of synthetic pesticide/insecticides/bactericides/fungicides etc.;

Basic drugs;

Alcohol;

Slaughterhouse;

Tanning and processing of animal, skins, hides, leather, etc.;

Plastic or latex industry including manufacturing of Balloon;

Making of coke, liquifaction of coal, Manufacture of fuel gas;

Fire glass production or processing;

Dyes and their intermediates;

Industrial carbon and carbon products;

Electro-chemicals and their product;

Paint, enamels and varnishes;

Poly vinyl chloride; Polypropylene;

Chlorates, perchlorides and peroxides;

Polishes;

Synthetic resins;

Plastics;

Asbestos;

Stone Crushing Units.

Note :- The case of industries which do not fall in any of the above mentioned three categories, decision in regard to their classification will be taken by the State Government for those projects having an outlay not exceeding Rs. 3 crores and for other reference is to be made to the Ministry of Environment & Forests, Government of India.

Published in the Gazette No. 359 dated 20-6-91

THE ENVIRONMENT IMPACT ASSESSMENT NOTIFICATION, 1994

Government of India

Ministry of Environment & Forests New Delhi

MINISTRY OF ENVIRONMENT & FORESTS NOTIFICATION ON

Environmental impact Assessment of Development Projects

New Delhi, the 27th January, 1994 (as amended on 04.05.1994)

I. S.O. 60(E) - Whereas a notification under clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 inviting objections from the public within sixty days from the date of the publication of the said notification, against the intention of the Central Government to impose restrictions and prohibitions on the expansion and modernization of any activity or new projects being undertaken in any part of India unless environmental clearance has been accorded by the Central Government or the State Government in accordance with the procedure specified in that notification was published as S.O. No. 80(E) dt. 28th January, 1993;

And whereas all objections received have been duly considered;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby directs that on and from the date of publication of this notification in the Official Gazette expansion or modernization of any activity (if pollution load is to exceed the existing one) or a new project listed in Schedule 1 of this notification shall not be undertaken in any part of India unless it has been accorded environmental clearance by the Central Government in accordance with the procedure hereinafter specified in this notification.

2. Requirements and procedure for seeking environmental clearance of projects;

I. (a) Any person who desires to undertake any new project or the expansion or modernisation of any existing industry or project listed in Schedule 1 shall submit an application to the Secretary, Ministry of Environment and Forests, New Delhi.

The application shall be made in the Form specified in Schedule II of this notification and shall be accompanied by a project report which shall, inter-alia include an Environmental Impact Assessment Report ¹[Environment Management Plan and details of public hearing as specified in Schedule IV] prepared in accordance with the guidelines issued by the Central Government in the Ministry of Environment & Forests from time to time.

1.Substituted by Notification No. S.O.318(E) dated 10.4.1997

(b) Cases rejected due to submission of insufficient or inadequate data and plans may be reviewed as and when submitted with complete data and plans. Submission of incomplete data or plans for the second time would itself be a sufficient reason for the impact assessment agency to reject the case summarily.

II. In case of the following site-specific projects; -

(a) mining;

(b) pit-head thermal power stations;

(c) hydro-power, major irrigation projects and/or their combination including flood control;

(d) Ports and harbours (excluding minor ports);

(e) Prospecting and exploration of major minerals in areas above 500 ha. ;

The project authority will intimate the location of the project site to the Central Government in the Ministry of Environment & Forests while initiating any investigation and surveys. The Central Government in the Ministry of Environment & Forests will convey a decision regarding suitability or otherwise of the proposed site within a maximum period of thirty days. The said site clearance shall be granted for a sanctioned capacity and shall be valid for a period of five years for commencing the construction, operation or mining.

III(a) The reports submitted with the application shall be evaluated and assessed by the impact Assessment Agency, if deemed necessary it may consult a Committee of Experts, having a composition as specified in Schedule-III of , this Notification. The Impact Assessment-Agency (IAA) would be the Union Ministry of Environment and Forests. This--(committee of Experts mentioned above shall be constituted by the .IAA or such other body under the Central Government authorized by the IAA in this regard.

(b) The said Committee of Experts shall have full right of entry and inspection of the site or, as the case may be, factory premises at any time prior to, during or after the commencement of the operations relating to the project

1[(C) The Impact Assessment Agency shall prepare a set of recommendations" based on the technical assessment of documents and data, furnished by the project authorities and supplemented by data 'collected during visits of sites of factories, if undertaken, and details of/public hearing.

The Assessment shall be completed within a period of ninety days from receipt of the requisite documents and data from the project authorities and completion of public hearing and decision conveyed within thirty days thereafter.

1.Substituted by Notification No. S.O318(E)dated 10.4.1997

The clearance granted shall be valid for a period of five years for commencement of the construction of operation of the project

III A No construction work, preliminary or otherwise, relating to the setting up of the project may be undertaken till the environmental and/or site clearance is obtained.

IV. In order to enable the Impact Assessment Agency to monitor effectively the implementation of the recommendations and conditions subject to which the environmental clearance has been given, the project authorities concerned shall submit a half-yearly report to the Impact Assessment Agency. Subject to the public interest, the Impact Assessment Agency, shall make compliance reports publicly available.

V. If no comments from the Impact Assessment Agency are received within the time limit, the project would be deemed to have been approved as proposed by project authorities.

3. Nothing contained in this Notification shall apply to:

(a) any item falling under entry nos.3, 18 and 20 of the Schedule-I to 'be located or proposed to be located in the areas covered by the Notification S.O.No.102(E), dt.1st February,1989; S.O.114(E), dt.20th February,1991, S.O.No.416(E) dt.20th July,1991 and S.O.No.319(E), dt.7th May, 1992.

(b) any item falling under entry nos. 1,2,3,4,5,7,9,10,12,13,14, 16,17,19,21.26 and 27 of Schedule -I if the investment is less than Rs.50 crores.

(c) any item reserved for Small Scale Industrial sector with investments less than Rs.1 Crore.

4. Concealing factual data or submission of false, misleading data reports, decisions or recommendations would lead to the project being rejected. Approval, if granted earlier on the basis of false data would also be revoked. Misleading and wrong information will cover the following:

- False information
- False

- Engineered reports
- Concealing of factual data
- False recommendations or decisions

(No.Z- 1 20 13/4/89-IA.,I)

R.RAJMANI, Secy.

SCHEDULE-I (See paras 1 and 2)

LIST OF PROJECTS REQUIRING ENVIRONMENT CLEARANCE FROM THE CENTRAL GOVERNMENT

1. Nuclear Power and related projects such as Heavy Water Plants, nuclear fuel complex, rare earths
2. River Valley projects including hydel power, major irrigation and their combination/ including flood control.
3. Ports, Harbours, Airports (except minor ports and harbours).
4. Petroleum Refineries including crude and product pipelines.
5. Chemical Fertilizers (Nitrogenous and Phosphatic other than single super phosphate).
6. Pesticides (Technical)
7. Petrochemical complexes (Both Olefinic and Aromatic) and Petro- chemical intermediates such as OMT, Caprolactam, LAB etc. and production of basic plastics such as LOPE, HOPE, PP, PVC.
8. Bulk drugs and pharmaceuticals.
9. Exploration for oil and gas and their production, transportation and storage.
10. Synthetic Rubber
11. Asbestos and Asbestos products
12. Hydro cyanic acid and its derivatives.
13. (a) Primary metallurgical industries(such as production of Iron and Steel, Aluminum, Copper, Zinc, Lead and Ferro Alloys)
- (b) Electric arc furnaces (Mini Steel Plants).
14. Chlor-alkali industry.
15. Integrated plant complex including manufacture of resins and basic raw material required in the manufacture of paints
16. Viscose Staple fiber and filament yarn.

17. Storage batteries integrated with manufacture of oxides of lead and lead antimony alloy,

18. All tourism project between 200m - 500 meters of High Tide Line or at locations with an elevation of more than 1000 meters with investment of more than Rs.5crores.

1[19. Thermal Power Plants]

20. Mining project (major minerals) with leases more than 5 hectares.

21. Highway Projects 2[except projects relating to improvement work including widening and strengthening of roads with marginal land acquisition along the .. existing alignments provided it does not pass through ecologically sensitive areas such as National Parks, Sanctuaries, Tiger reserves, Reserve forests.]

22. Tarred Roads in Himalayas and/or Forest areas.

23. Distilleries

24. Raw Skins and Hides

25. Pulp, paper and newsprint

26. Dyes

27. Cement

28. Foundries (individual)

29. Electroplating

30. Mining of major minerals with lease area more than 5 hectares

SCHEDULE-II
(See Sub-para I (a) of Para 2)
APPLICATION FORM

1. (a) Name and Address of the project proposed:

(b) Location of the Project:

Name of the place:

District, Tehsil :

Latitude/Longitude:

Nearest Airport/Railway Station:

(c) Alternate sites examined and the reasons for selecting the proposed site:

(d) Does the site conform to stipulated land use as per local land use plan:

2.Objectives of the project:

1. Notification No 319(E) dated 10.4.1997 requiring clearance from the State Govt. referred on page No.428 onwards
2. Substituted by Notification S.O.318(E) dated 10.4.1997

3(a) Land Requirement:

Agriculture Land:

Forest land and Density of vegetation: Other (specify):

- (b) (i) land use in the Catchment/within 10 Kms. radius of the proposed site:
- (ii) Topography of the area indicating gradient, aspects and altitude;
- (iii) Erodability classification of the proposed land;
- (c) Pollution sources existing in 10 Km radius and their impact on quality of air, water & land:
- (d) Distance of the nearest National Park/Sanctuary Biosphere Reserve/Monuments/heritage site/Reserve Forest:
- (e) Rehabilitation plan for quarries/borrow areas:
- (f) Green belt plan:

- (g) Compensatory afforestation plan:

4. Climate and Air Quality:

- Q (a) Windrose at site:
- (b) Max./Min./Mean annual temperature
- (c) Frequency of inversion:
- (d) Frequency of cyclones/tornadoes/cloud burst:
- (e) Ambient air quality data:
 - (1) Nature & concentration of emission of SPM, Gas (CO, CO₂, NO_x, CH_n etc.) from the project.

5. Water balance:

- (a) Water balance at site:
- (b) Lean season water availability:
- (c) Source to be tapped with competing users (River, Lake, Ground, Public supply);
- (d) Water Quality:
- (e) Changes observed in quality and quantity of ground water in the last 15 years and present charging and extraction details:
 - (t) (i) Quantum of waste water to be released with treatment details
 - (ii) Quantum of quality of water in the receiving body before and after disposal of solid Waste:
 - (iii) Quantum of waste water to be released on land and type of land.

- (g) (i) Details -reservoir quality with necessary Catchment Treatment Plan;

(ii) Command Area Development Plan

6. Solid Wastes

- (a) Sources of noise and vibrations
- (b) Ambient noise level:
- (c) Noise and Vibration control measures proposed:
- (d) Subsidence problem if any with control measures:

8. Power requirement indicating source of supply: Complete environmental details to be furnished separately, if captive power unit proposed:

9. Peak labour force to be deployed giving details of:

- Endemic health problems in the area due to water
- water/air/soil borne diseases:
- Health care system existing and proposed:

10. (a) Number of village and population to be displaced;

(b) Rehabilitation Master Plan:

11. Risk Assessment Report and Disaster Management Plan:

12. (a) Environmental Impact Assessment Report prepared as per
- (b) Environment Management Plan: guidelines of MOEF
- (c) Detailed Feasibility Report: issued from time to time
- (d) Duly filled in questionnaire

13. Details of Environmental Management Cell:

I hereby give an undertaking that the data and information given above are true to the best of my knowledge and belief and I am aware that if any part of the data/information submitted is found to be false or misleading at any stage, the project be rejected and the clearance given, if any, to the project is likely to be revoked at our risk and cost.

Signature of the applicant with name and full address

Date:

Given under the seal of organisation on behalf of

Place:

Whom the applicant is signing

In respect to item for which data are not required or is not available 3S per the declaration of project proponent, the project would be considered on that b:L..is.

SCHEDULE-III
(See Sub-para III(a) of Para 2)
**COMPOSITION OF THE EXPERT COMMITTEES FOR ENVIRONMENTAL
IMPACT ASSESSMENT**

1. The Committees will consist of experts in the following:
 - (i) Eco-System Management "
 - (ii) Air/Water Pollution Control
 - (iii) Water Resource Management
 - (iv) Flora/Fauna Conservation and Management
 - (v) Land Use Planning
 - (vi) Social Sciences/Rehabilitation
 - (vii) Project Appraisal
 - (viii) Ecology
 - (ix) Environmental Health
 - (x) Subject Area Specialists
 - (xi) Representatives of NGOs/Persons Concerned with Environmental issues.
2. The Chairman will be an outstanding and experienced ecologist or environmentalist or technical professional with wide managerial experience.
3. The representative of IAA will act as Member Secretary.
4. Chairman and members will serve in their individual capacities except those specifically nominated as representatives.
5. The membership of a Committee shall not exceed 15.

1[SCHEDULE IV
(See sub-para 1 of para 2)
Procedure for Public Hearing

(1) Process of Public Hearing: - Whoever apply for environmental clearance of projects, shall submit to the concerned State Pollution Control Board twenty sets of the following documents namely: -

- (i) An executive summary containing the salient features of the projects both in the English as well as local language.

1.Added by Notification S.O 318(E)dated 10.4.1997

(ii) From XIII prescribed under Water (Prevention and Control of Pollution) Rules, 1975 where discharge of sewage, trade effluents, treatment of water in any form, is required.

(iii) Form I prescribed under Air (Prevention and Control of Pollution) Union Territories Rules, 1983 where discharge of emissions are involved in any process, operation or industry.

(iv) Any other information or document which is necessary in the opinion of the Board for this final disposal of the application.

(2) Notice of Public Hearing: -

(i) The State Pollution Control Board shall cause a notice for environmental public hearing which shall be published in at least two newspapers, widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned. State Pollution Control Board shall mention the date, time and place of public hearing. Suggestions, views, comments and objections of the public shall be invited within thirty days from the date of publication of the notification.

(ii) All person including bona fide residents, environmental groups and others' located at the project site/ sites of displacement/ sites likely to be affected can participate in the public hearing. They can also make oral/written suggestions to the State pollution Control Board.

Explanation: - For the purpose of the paragraph person means: -

(a) any person who is likely to be affected by the grant of environmental clearance.

(b) any persons who owns or has control over the project with respect to which an application has been submitted for environmental clearance.

(c) any association of persons whether incorporated or not likely to be affected by the project and/or functioning in the field of environment;

(d) any local authority within any part of whose local limits is within the neighbourhood, wherein the project is proposed to be located.

(3) Composition of public hearing panel: - The composition of the Public Hearing Panel may consist of the following, namely:-

(i) Representative of State Pollution Control Board;

(ii) District Collector or his nominee;

(iii) Representative of Department of the State Government dealing with the subject;

(iv) Representative of Department of the State Government dealing with the Environment;

(v) Not more than three representatives of the local bodies such as J Municipalities or panchayats;

(vi) Not more than three senior citizens of the area nominated by the District Collector.

(4) Access to the Executive Summary: - The concerned persons shall be provided access to the Executive Summary of the Project at the following places namely: -

- (i) District Collector Office;
- (ii) District Industry Centre;
- (iii) In the Office of the Chief Executive Officers of Zila Parishad or Commissioner of the Municipal Corporation/Local body as the case may be;
- (iv) In the head office of the concerned State Pollution Control Board and its concerned Regional Office;
- (v) In the concerned Department of the State Government dealing with the subject of environment.

EXPLANATORY NOTE REGARDING THE IMPACT ASSESSMENT

NOTIFICATION DATED 27TH JANUARY, 1994

1. Expansion and modernization of existing projects.

A project proponent is required to seek environmental clearance for a proposed expansion/modernization activity if the resultant pollution load is to exceed the existing levels. The words "Pollution Load" will in this context cover emissions, liquid and solid or semi-solid wastes generated. A project proponent may approach the concerned State Pollution Control Board (SPCB) for certifying whether the proposed modernization/expansion activity as listed in Schedule-I to the notification is likely to exceed the existing pollution load or not. If it is certified that no increase is likely to occur in the existing pollution load due to the proposed expansion or modernization, the project proponent will not be required to seek environmental clearance, but a copy of such certificate issued by the SPCB will have to be submitted to the Impact Assessment Agency (IAA) for information. The IAA will however, reserve the right to review such cases in the public interest if material facts justifying the need for such review come to light.

2. Availability of Summary Feasibility Report, EIA/EMP Report etc. to concerned parties or groups

The Project proponent will have to submit an executive summary incorporating in brief the essence of project details and findings of environmental impact assessment study which could be made available to concerned parties or environmental groups on request.

3. Clarification about concerned parties or environmental groups

The concerned parties or environmental groups will be the bonafide residents located or around the project site or site of displacement or site of alleged adverse environmental impact.

The concerned parties or environmental groups will be the bonafide residents located at or around the project site or site of displacement or site of alleged adverse environmental impact.

Public Hearing

4. Public hearings could be called for in case of projects involving large displacement or having severe environmental ramifications.

5. Requisite information required for site clearance/project clearance.

(a) Site Clearance.

Site clearance will be given *for* site specific project as mentioned in para-2(ii) of the notification. Project proponents will be required to furnish information according to the environment; appraisal questionnaires for site clearance, as may be prescribed by the IAA from time to time. Additional information whenever required by the IAA will be communicated immediately to the project proponents who will then be required to furnish the same within the time frame specified.

(b) Project clearance:

In addition to the application form as mentioned in Schedule-II to the notification, project proponents are required to furnish the following information for environment appraisal.

(i) EWEMP report (20 copies):

(ii) Risk Analysis report (20 copies): however, such report" is normally not required for a particular category of project, project proponents can state so accordingly, but the IAA's decision in this regard will be final:

(iii) NOC from the State Pollution Control Board:

(iv) Commitment regarding availability of water and electricity from the competent authority:

(v) Summary of Project report/feasibility report (one copy):

(vi) Filled in questionnaire (as prescribed by the IAA from time to time) for environmental appraisal of the project:

(vii) Comprehensive rehabilitation plan, if more than 1000 people are likely to be displaced, otherwise as summary plan would be adequate.

As a Comprehensive EIA report will normally take at least one year for its preparation, project proponents may furnish Rapid EIA report to the IAA based on one season data (other than monsoon), for examination of the project Comprehensive EIA report may be submitted later, if so asked for by the IAA.

The requirement of EIA can be dispensed with by the IAA, in case of project which are unlikely to cause significant impacts on the environment. In such cases, project proponents will have to furnish full justification for such exemption for submission of EIA. Where such exemption is granted project proponents may be asked to furnish such additional information as may be required.

6. Submission of insufficient or inadequate data

Regarding cases liable to be rejected due to inadequacy of data, it is clarified that the IAA will make such rejection within 30 days from the date of submission of the proposal. While rejecting a proposal due to insufficient or inadequate data after the first evaluation, the IAA may also stipulate additional requirement of information/clarification for impact assessment purposes if deemed essential due to the specific nature of location of the proposed project whose data as prescribed is not available the IAA can examine the project on the basis of available data.

7. Application Form

(i) In order to remove any hardship to the project proponent in providing any information, the project proponent may, where some information is not available or would cause inordinate delay, mention this in their application form. The IAA may consider the project proposal based on the information available.

(ii) Quality and quantity of ground water

If 15 years data on the quantity and quality variation of ground water is not available with the concerned Department or Authorities, the project proponent may mention this accordingly in the application form prescribed in Schedule-II to the notification. Further, in case of projects where ground water is not to be used and effluent are not to be discharged on the land, the requirement of ground water variation data for the previous 15 years will be dispensed with.

(iii) A project proponent may write the words not Applicable while filling the application form as mentioned in Schedule-II to the notification in respect of times which are not relevant for the purposes of the proposed project.

8. Exemption for projects already initiated

For projects listed in Schedule-I to the notification in respect of which the required land has been acquired and all relevant clearances of the State Government including NOC from the respective State Pollution Control Board have been obtained before 27th January, 1994 a project proponent will not be required to seek environmental clearance from the IAA. However, those units who have not as yet commenced production will inform the IAA.

ENVIRONMENT IMPACT ASSESSMENT IN RELATION TO THE

THERMAL POWER PLANTS

NOTIFICATION New Delhi, the 10th April, 1997

S.O.319(E).- In exercise of the powers conferred by section 23 of the Environment Protection Act, 1986 (29 of 1986) (hereinafter referred to as the said Act), the Central Government hereby directs that the powers conferred on it by sub-section (1) of section 3

of the said Act to take measures for protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution be exercisable also by the State Government as notified in the notification of the Government of India in the Ministry of Environment and Forests No. S.O. 60(E) dated 21st January, 1994 in relation to the Thermal Power Plants specified in Schedule -1 annexed to this notification subject to the conditions and limitations specified in Schedule annexed to this notification.

SCHEDULE-I

CATEGORY OF THERMAL POWER PLANTS REQUIRING ENVIRONMENTAL CLEARANCE FROM THE STATE GOVERNMENT.

1.Co-generation Captive Plants

(i) Co-generation Plants All Co-generation plants irrespective of the installed capacities

(ii) Captive Power Plants Upto 250 MW (both coal and gas/naphtha based) coming up separately and not along the main industry Utility Projects:

II. Utility Projects

(i) Coal based plants upto 500 MW using fluidized bed technology subject to the sensitive areas restrictions.

(ii) Coal based Power Plants upto 250 MW using conventional technologies.

(iii) Gas/Naphtha based plants upto 500 MW./

Note: Any project proposed to be located within the radius of twenty five km boundary of reserved forests. ecologically sensitive areas which may include National Parks, Sanctuaries, Biosphere Reserves, critically polluted area and within fifty kms of inter-state boundary shall require environment clearance from the Central Government.

SCHEDULE –II

Procedure for seeking environment clearance of projects.

1. (1) Any persons who desires to establish a thermal power plant of any category mentioned in Schedule -I, shall submit an application to the Department of the State Government dealing with the subject of Environment.

(2) The application shall be made in the Form 'A' specified in Schedule II annexed to this notification and shall be accompanied by a the detailed project report which shall, inter alia, include an Environmental Impact Assessment Report and an Environmental Management Plan prepared in accordance with the guidelines issued by the State Department of Environment from time to time.

(3) Cases rejected due to submission of insufficient or inadequate data and Action Plans may be reviewed as and when submitted with complete data and Action Plans. Submission of incomplete data for the second time would itself be a sufficient reason for the State Government to reject the case summarily.

2. In case of the pit-head thermal power plants, the applicant shall intimated the location of the project site to the State Government while initiating any investigation and surveys. The State Government will convey a decision regarding suitability or otherwise of the proposed site within a maximum period of thirty days. The said site clearance will be granted for a sanctioned capacity and it will be valid for a period of five years for commencing the construction or operation of the project.

3 (1) The applicant shall obtain no objection Certificate from the concerned Pollution Control Board. The State Pollution Control Board shall issue No Objection Certificate to establish only after completing public hearing as specified in Schedule -IV annexed to this notification.

(2) The reports submitted with the application, and No Objection Certificate from the State Pollution Control Board shall be evaluated and assessed by the State Government, in consultation with a Committee of experts which shall be constituted by the State Government as specified in Schedule -III appended to this notification.

(3) The said Committee of experts shall have full right of entry and inspection of the site, or as the case may be, factory premises at any time prior to, during or after the commencement of. the operation relating to the plant.

(4) The State Government Department dealing with the subject of Environment shall prepared a set of recommendations based on technical assessment of documents and data furnished by the applicant supplemented by data collected during visits to sites, if undertaken and interaction with affected population and environment groups, if necessary.

(5) The assessment shall be completed within a period of *ninety days* from the receipt of the requisite documents and data from the applicant and decision conveyed within thirty days thereafter.

(6) The environmental clearance granted shall be valid for a period of five years for commencement of the construction or operation of the projec..

4. Concealing factual data or submission of false, misleading data or reports, decisions or recommendations would lead to the project being rejected. Approval, if granted, earlier on the basis of false data, can also be revoked.

(FORM -A)

APPLICATION FORM

I. (a) Name and Address of the project proposed

(b) Location of the project:

(c) Name of the Place:

District, Tehsil :

Latitude/Longitude:

Nearest Airport/Railway Station:

(c) Alternate sites examined and the reasons for selecting the proposed site:

(e) Does the site conform to stipulated land use as per local land use plan:

2. Objectives of the projects:

3. (a) Land Requirement: Agriculture Land:

Forests land and Density of vegetation other (specify):

(b) (i) Land use in the Catchments/within 10 kms. radius of the proposal site:

(ii) Topography of the area indicating gradients, aspects and altitude.

(iii) Erodibility classification of the proposed land:

(c) Pollution sources existing in 10 km radius and their impact on quality of air, water and land:

(d) Distance of the nearest National Park/Sanctuary/Biosphere Reserve/Monuments/heritage site/ Reserve Forests:

(e) Rehabilitation plan for quarries /borrow areas:

(f) Green belt plan:

(g) Compensatory afforestation plan:

4. Climate and Air Quality

(a) Windrose at site:

(b) MaxiMin/Mean annual temperature:

(c) Frequency of inversion:

- (d) Frequency of cyclones/tornadoes/cloud burst:
- (e) Ambient air quality data:
- (f) Nature and concentration of emission of SPM. Gas (CO, CO₂, NO₂ CHn etc.) from the project.

5. Water balance:

- (a) Water balance at site:
- (b) Lean season water availability : Water Requirement:
- (c) Source to be tapped with competing users (River, Lake, Ground, Public supply) :
- (d) Water Quality.

(e) Changes observed in quality and quantity of ground water in the last 15 years and present charging and extraction details :

(f) (i) Quantum of waste water to be release with treatment details

(ii) Quantum of quality of water in the receiving body before and af ~r disposal of solid wastes:

(iii) Quantum of waste water to be released on land and type of land:

- (g) (i) Details of reservoir water quality with necessary Catchment Treatment Plan:
- (ii) Command Area Development Plan:

6. Solid Waste:

- (a) Nature and quantity of solid wastes generated:
- (b) Solid waste disposal method:

7. Noise and Vibrations:

- (a) Sources of Noise and Vibrations
- (b) Ambient noise level:
- (c) Noise and Vibration control measures proposed:
- (d) Subsidence problem if any with control measures:

8. Power requirement indicating sources of supply: Complete environmental details to be furnished separately, if captive power unit ph)posed. :

9. Peak labour force to be deployed giving details of:

Endemic health problems in the area due to waste water/air/soil borne diseases:
Health care system existing and proposed:

10. (a) Number of villages and population to be displaced: (b) Rehabilitation Master Plan:

11. Risk Assessment Report and Disaster Management Plan:

12. (a) Environment Impact Assessment: (b) Environment Management Plan:

(C) Detailed Feasibility Report :

(d) Duly filled in questionnaire:

Report prepares as per guidelines issued by the Central Government in the MOEF from time to time.

13. Details of Environmental Management Cell:

I hereby give an undertaking that the data and information given above are true-to-be best of my knowledge and belief and I am aware that if any part of the data/information submitted is found to be false or misleading at any stage, the project be rejected and the clearance given, if any, to the project is likely to be revoked at our risk and cost.

Signature of the applicant
With name and full address Given under the seal of Organization
On behalf of whom the applicant is signing

Date:

Place:

In respect to item for which data are not required or is not available as per the declaration of project proponent, the project would be considered on that basis.

SCHEDULE-III

[See Sub para (2), Para (3) of Schedule -II]

COMPOSITION OF THE EXPERT COMMITTEES FOR ENVIRONMENTAL IMPACT ASSESSMENT

I. The Committees will consist of experts in the following disciplines:

- (i) Eco-System Management
- (ii) Air/Water Pollution Control
- (iii) Water Resources Management
- (iv) Flora/Faunaconservation management .
- (v) Land Use Planning

- (vi) Social Science/Rehabilitation
- (vii) Project Appraisal
- (viii) Ecology
- (ix) Environmental health
- (x) Subject Area Specialists
- (xi) Representatives of NGOs/persons concerned with environmental issues.

2. The Chairman will be an outstanding and experienced ecologist or environmentalist or technical professional with wide managerial experience in the relevant development sector.

3. The representative of Impact Assessment Agency will act as a Member-Secretary.

4. Chairman and Members will serve in their individual capacities except those specifically nominated as representatives.

5. The Membership of a Committee shall not exceed 15.

SCHEDULE -IV

[See para 3, subparagraph (2) of Schedule - II]

PROCEDURE FOR PUBLIC HEARING

(1) Process of Public Hearing: - Whoever apply for environmental clearance of projects, shall submit to the concerned State Pollution Control Board twenty sets of the following documents namely: -

(i) An Executive summary containing the salient features of the project both in English as well as local language.

(ii) Form XIII prescribed under Water (Prevention and Control of Pollution) Rules, 1975 where discharge of sewage, trade effluents, treatment of water in any form, is required.

(iii) Form I prescribed under Air (Prevention and Control of Pollution) Union Territories Rules, 1983 where discharge of emissions are involved in any process, operation or industry.

(iv) Any other information on document which is necessary in the opinion of the Board for their final disposal of the application.

(2) Notice of Public Hearing:- (1) The State Pollution Control Board shall cause a notice for environmental public hearing which shall be published in at least two newspapers widely circulated in the region around *the* project, one of which shall be in the vernacular language of the locality concerned. State Pollution Control Board

shall mention the date, time and place of public hearing. Suggestions, views, comments and objections of the public shall be invited within thirty days from the date of publication of the notification.

(ii) All persons including bonafide residents, environmental groups and other located at the project site/sites of displacement/sites likely to be affected can participate in the public hearing. They can also make oral/written suggestions to the State Pollution Control Board.

Explanation: - For the purpose of the' paragraph person means: -

(a) any person who is likely to be affected by the grant of environmental clearance;

(b) any persons who owns or has control over the project with respect to which an application has been submitted for environmental clearances;

(c) any associations of persons whether incorporated or likely to be affected by the project and/or functioning in the field of environment;

(d) any local authority within any part of whose local limits in within the neighbourhood, wherein the project is proposed to be located.

(3) Composition of public hearing panel: - The composition of the Public Hearing Panel may consist of the following namely :-

(i) Representative of State Pollution Control Board ;

(ii) District Collector or his nominee;

(iii) Representative of State Government dealing with the subject of power;

(iv) Representative of Department of the State Government dealing with the Environment;

(v) Not more than three representatives of the local bodies such as Municipalities or Panchayats;

(vi) Not more than three senior citizens of the area nominated by the District Collector.

(4) Access to the Executive Summary: - The concerned persons shall be provided access to the Executive Summary of the Project at the following places namely: -

(i) District Collector Office;

(ii) District Industry Centre;

(iii) In the Office of the Chief Executive Officers of Zila Parishad or Commissioner of the Municipal Corporation/Local Body as the case may be ;

(iv) In the head office of the concerned State Pollution Control Board and its concerned Regional Office;

(v) In the concerned Department of the State Government dealing with the subject of environment .

[No.Z-120 13/4/89-I.A.I]

R.K.Khwaja, Jt.Secretary

MINISTRY OF ENVIRONMENT AND FORESTS NOTIFICATION .

New Delhi, the 1 st July, 2003

G.S.R.520(E).-In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986 namely :-

1. (1) These rules may be called the. Environment (Protection) Amendment Rules, 2003

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment(Protection) Rules, 1986, in Schedule 1,

(a) in serial number 94 relating **to NOISE LIMIT FOR GENERATOR SETS RUN WITH DIESEL**

(i) in paragraph 1, for the words, letters and figures "the 1st July, 2003", at both the places, the words, letters and figures" the 1st July, 2004" shall' respectively be substituted;

(ii) in paragraphs 3,3.1 and 3.2, for the word, letters and figures "1st July, 2003", the word/letters and figures "1st July, 2004" shall respectively be substituted;

(b) in serial number 95 relating to **EMISSION LIMITS FOR NEW DIESEL.. ENGINES (UP TO 800 KW) FOR GENERATOR SETS (GENSETS) APPLICA TIONS**

(i) for paragraph 1 and the TABLE relating thereto, the following shall be substituted, namely: -

" 1. Emission Limits

The emission limits for new diesel engines upto 800 kW for gensets applications shall be as given in the Table below:

TABLE

Capacity of diesel engines	Date of implementation	Emission Limits (g/kw-hr)for				Smoke Limit (light absorption coefficient, m ⁻¹)(at full load)	Test Cycle	
		Nox	HC	CO	PM		Torque%	Weighting factors
Upto 19 kw	1.7.2004	9.2	1.3	3.5	0.3	0.7	100	0.05
							75	0.25
>19 upto 176 kw	1.1.2004	9.2	1.3	5.0	0.5	0.7	50	0.30
		9.2	1.3	3.5	0.3	0.7	25	0.30
>176 upto 800 kw	1.7.2004	9.2	1.3	3.5	0.3	0.7	10	0.10

Note I-

The diesel engine manufacturers in the category of engines upto 19 kW, who are unable to meet the emission limits fixed for such diesel engines for gensets

applications vide the notification of the Government of India, in the Ministry of Environment and Forests number G.S.R. 371 (E) dated 17 th May, 2002 (herein referred to as the said notification), may avail the benefit of extension of time provided under this notification subject to the condition that every such manufacturer shall submit

(i) an affidavit to the Central Pollution Control Board or the respective State Pollution Control Boards or Committees where they are located to the effect that the specified emission limits shall be complied with by them as per the extended date of implementation given hereinabove for that category of engines without seeking further extension of time (ii) a bank guarantee of Rs. 50,000 (Rupees Fifty thousand) which in case of non compliance shall stand forfeited,

Note II- The diesel engine manufacturers in the category of engines of more than 19 kW and upto 800 kW, who are unable to meet the emission limits fixed for such diesel engines for gensets applications vide the said notification may avail the benefit of extension of time provided under this notification subject to the condition that every such manufacturer shall submit (i) an affidavit to the Central Pollution Control Board or the respective State Pollution Control Boards or Committees where they are located to the effect that the specified emission limits shall be complied with by them as per the extended date of implementation given hereinabove for that category of engines without seeking further extension of time and (ii) a bank guarantee for an amount of Rs. 10,00,000/-(Rupees ten lakhs) per parent engine model which in case of non compliance shall stand forfeited.

Note III:- The diesel engine manufacturers in the category of engines of more than 176 kW and upto 800 kW shall, in addition to the conditions specified in Note II above, also give an affidavit to the Central Pollution Control Board or to the respective State Pollution Control Boards or Committees where they are located to the effect that they shall develop either individual or a common test facility and get the same approved by the certification agencies mentioned in paragraph 8 of serial number 95 of Schedule I. "

(c) in paragraph 6, for the figures and letters "20 kW", the figures and letters "19 kW" shall be substituted.

[F. No. Q.15022/2/2001-CPAJ].

B. VISWANATH. Jt. Secy.

C.

Note:- The principal rules were published in the Gazette of India vide number 'S.O.844(E) 19th November, 1986 and subsequently amended vide S.O.433(E)

dated 18th April, 1987, S.O.64(E) dated 18th January, 1988, SO.3(E) dated 3rd January, 1989, S.O.190(E) dated 15th March, 1989, G.S.R.913(E) dated the 24th October, 1989, S.O.12(E) dated the 8th January, 1990, G.S.R. 742 (E) dated the 30th August, 1990, S.O. 23(E) dated the 16th January, 1991, G.S.R. 93(E) dated the 21st February, 1991 G.S.R. 95(E) dated the 12th February, 1992, G.S.R. 329(E) dated the 13th March,1992, G.S.R. 475(E) dated the 5th May, 1992, G.S.R. 797(E) dated the 1 st October, 1992, G.S.R. 386(E) dated the 28th April, 1993, G.S.R. 422(E) dated the 19th May, 1993, G.S.R. 801(E) dated the 31st December, 1993, G.S.R. 176(E) dated' the 3rd April, 1996, G.S.R. 631(E) dated the 31st October, 1997, G.S.R. 504(E) dated the 20th, August, 1998, G.S.R. 7(E) dated the 2nd January, 1999, G.S.R. 682(E) dated the 5th October,1999, G.S.R. 742(E) dated the 25th September, 2000, G.S.R. 72(E) dated the 6th February, 2001, G.S.R. 54(E) dated the 22nd January, 2002, G.S.R. 371(E) dated the 17 th May, 2002, G.S.R. 489(E) dated the 9th July, 2002, S.O. 1088(E) dated the 11th October, 2002 and G.S.R. 849(E) dated the 30th December, 2002.