Pakistan Environmental Protection Act, 1997

PAKISTAN ENVIRONMENTAL PROTECTION ACT, 1997

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SENATE SECRETARIAT
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No. F. 9(46)/97-Legis.- The following Acts of Majlis-e-Shoora (Parliament) received the assent of the Acting President on 3rd December, 1997 are hereby published for general information:

Act No. XXXIV OF 1997

An Act to provide for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and promotion of sustainable development

WHEREAS it is expedient to provide for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution, promotion of sustainable development, and for matters connected therewith and incidental thereto;

(1) Short title, extent and commencement.
(1) This Act, shall be called the Pakistan Environmental Protection Act, 1997
(2) It extends to the whole of Pakistan.
(3) It shall come into force at once.

2. Definitions.-In this Act, unless there is anything repugnant in the subject or context,-
(i) “adverse environmental effect” means impairment of, or damage to, the environment and includes-
(1) impairment of, or damage to, human health and safety or to biodiversity or property;
(2) pollution; and
(3) any adverse environmental effect as may be specified in the regulations;
(ii) “agricultural waste” means waste from farm and agricultural activities including poultry, cattle farming, animal husbandry residues from the use of fertilizers, pesticides and other farm/chemicals;
(iii) “air pollutant” means any substance that causes pollution of air and includes soot, smoke, dust particles, odour, light, electro-magnetic, radiation, heat, fumes, combustion exhaust, exhaust gases, noxious gases, hazardous substances and radioactive substances;
(iv) “biodiversity” or “biological diversity” means the variability among living organisms from all sources, including inter alia terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, including diversity within species, between species and of ecosystems;
(v) “Council” means the Pakistan Environmental Protection Council established under section 3;
(vi) “discharge” includes spilling, leaking, pumping, depositing, seeping, releasing, flowing out,
pouring, emitting, emptying or dumping;
(vii) “ecosystem” means a dynamic complex of plant, animal and micro-organism communities
and their non-living environment interacting as a functional unit;
(viii) “effluent” means any material in solid, liquid or gaseous form or combination thereof being
discharged from industrial activity or any other source and includes a slurry, suspension or
vapour;
(ix) “emission standards” means the permissible standards established by the Federal Agency or
a Provincial Agency for emission of air pollutants and noise and for discharge of effluent and
waste;
(x) “environment” means-
(a) air, water and land;
(b) all layers of the atmosphere;
(c) all organic and inorganic matter and living organisms;
(d) the ecosystem and ecological relationships;
(e) buildings, structures, roads, facilities and works;
(f) all social and economic conditions affecting community life; and
(g) the inter-relationships between any of the factors specified in sub-clauses (a) to (f);
(xi) “environmental impact assessment” means an environmental study comprising collection of
data, prediction of qualitative and quantitative impacts, comparison of alternatives, evaluation
of preventive, mitigatory and compensatory measures, formulation of environmental
management and training plans and monitoring arrangements, and framing of
recommendations and such other components as may be prescribed;
(xii) “Environmental Magistrate” means the Magistrate of the First Class appointed under
Section 24;
(xiii) “Environmental Tribunal” means the Environmental Tribunal constituted under section 20;
(xiv) “Exclusive Economic Zone” shall have the same meaning as in the Territorial Waters and
Maritime Zones Act, 1976 (LXXXII of 1976);
(xv) “factory” means any premises in which industrial activity is being undertaken;
(xvi) “Federal Agency” means the Pakistan Environmental Protection Agency established under
section 5, or any Government Agency, local council or local authority exercising the powers and
functions of the Federal Agency;
(xvii) “Government Agency” includes-
(a) a division, department, attached department, bureau, section, commission, board, office or
unit of the Federal Government or a Provincial Government;
(b) a developmental or a local authority, company or corporation established or controlled by
the Federal Government or Provincial Government; and
(c) a Provincial Environmental Protection Agency;
(d) any other body defined and listed in the Rules of Business of the Federal Government or a
Provincial Government.

(xviii) “hazardous substance” means-
(a) a substance or mixture of substances, other than a pesticide as defined in the Agricultural
Pesticides Ordinance, 1971 (II of 1971), which, by reason of its chemical activity or toxic,
explosive, flammable, corrosive, radioactive or other characteristics, causes, or is likely to
cause, directly or in combination with other matters an adverse environmental effect; and
(b) any substance which may be prescribed as a hazardous substance;
(xix) “hazardous waste” means waste which is or which contains a hazardous substance or which may be prescribed as hazardous waste and includes hospital waste and nuclear waste;

(xx) “historic waters” means such limits of the waters adjacent to the land territory of Pakistan as may be specified by notification under section 7 of the Territorial Waters and Maritime Zones Act, 1976 (LXXXII of 1976);

(xxi) “hospital waste” includes waste medical supplies and materials of all kinds, and waste blood, tissue, organs and other parts of the human and animal bodies, from hospitals, clinics and laboratories;

(xxii) “industrial activity” means any operation or process for manufacturing, making, formulating, synthesising, altering, repairing, ornamenting, finishing, packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal, or for mining, for oil and gas exploration and development, or for pumping water or sewage, or for generating, transforming or transmitting power or for any other industrial or commercial purpose;

(xxiii) “industrial waste” means waste resulting from an industrial activity;

(xxiv) “initial environmental examination” means a preliminary environmental review of the reasonably foreseeable qualitative and quantitative impacts on the environment of a proposed project to determine whether it is likely to cause an adverse environmental effect for requiring preparation of an environmental impact assessment;

(xxv) “local authority” means any agency set up or designated by the Federal Government or a Provincial Government, by notification in the official Gazette, to be a local authority for the purposes of this Ordinance;

(xxvi) “local council” means a local council constituted or established under a law relating to local government;

(xxvii) “motor vehicle” means any mechanically propelled vehicle adapted for use upon land whether its power of propulsion is transmitted thereto from an external or internal source, and includes a chassis to which a body has not been attached, and a trailer, but does not include a vehicle running upon fixed rails;

(xxviii) “municipal waste” includes sewage, refuse, garbage, waste from abattoirs, sludge and human excreta and the like;

(xxix) “National Environmental Quality Standards” means standards established by the Federal Agency under clause (e) of sub-section (1) of section 6 and approved by the Council under clause (c) of sub-section (1) of section 4;

(30) “noise” means the intensity, duration and character of sounds from all sources, and includes vibration;

(31) “nuclear waste” means waste from any nuclear reactor or nuclear plant or other nuclear energy system, whether or not such waste is radioactive;

(32) “person” means any natural person or legal entity and includes an individual, firm, association, partnership, society, group, company, corporation, co-operative society, Government Agency, non-governmental organization, community-based organization, village organization, local council or local authority and, in the case of a vessel, the master or other person having for the time being the charge or control of the vessel;

(33) “pollution” means the contamination of air, land or water by the discharge or emission of effluent or wastes or air pollutants or noise or other matter which either directly or indirectly or in combination with other discharges or substances alters unfavourably the chemical, physical, biological, radiational, thermal or radiological or aesthetic properties of the air, land or water or which may, or is likely to make the air, land or water unclean, noxious or impure or injurious, disagreeable or detrimental to the health, safety, welfare or property of persons or harmful to
biodiversity;

(xxxiv) “prescribed” means prescribed by rules made under this Act;

(xxxv) “project” means any activity, plan, scheme, proposal or undertaking involving any change in the environment and includes-
(a) construction or use of buildings or other works;
(b) construction or use of roads or other transport systems;
(c) construction or operation of factories or other installations;
(d) mineral prospecting, mining, quarrying, stone-crushing, drilling and the like;
(e) any change of land use or water use; and
(f) alteration, expansion, repair, decommissioning or abandonment of existing buildings or other
works, roads or other transport systems, factories or other installations;

(xxxvi) “proponent” means the person who proposes or intends to undertake a project;

(xxxvii) “Provincial Agency” means a Provincial Environmental Protection Agency established under section 8;

(xxxviii) “regulations” means regulations made under this Act;

(xix) “rules” means rules made under this Act;

(xl) “sewage” means liquid or semi-solid wastes and sludge from sanitary conveniences,
kitchens, laundries, washing and similar activities and from any sewerage system or sewage
disposal works;

(xli) “standards” means qualitative and quantitative standards for discharge of effluent and wastes and for emission of air pollutants and noise either for general applicability or for a particular area, or from a particular production process, or for a particular product, and includes the National Environmental Quality Standards, emission standards and other standards established under this Act and the rules and regulations;

(xlii) “sustainable development” means development that meets the needs of the present generation without compromising the ability of future generations to meet their needs;

(xliii) “territorial waters” shall have the same meaning as in the Territorial Waters and Maritime Zones Act, I 976 (LXXXII of 1976);

(xliv) “vessel” includes anything made for the conveyance by water of human beings or of goods; and

(xlv) “waste” means any substance or object which has been, is being or is intended to be,
discarded or disposed of, and includes liquid waste, solid waste, waste gases, suspended waste,
industrial waste, agricultural waste, nuclear waste, municipal waste, hospital waste, used
polyethylene bags and residues from the incineration of all types of waste.

3. Establishment of the Pakistan Environmental Protection Council.- (1) The Federal
Government shall, by notification in the official Gazette, establish a Council to be known as the
Pakistan Environmental Protection Council consisting of-

1

Prime Minister or such other person as the Prime Minister may nominate in this behalf.

Chairperson

2
Minister incharge of the Ministry or Division dealing with the subject of environment.

Vice Chairperson

3

Chief Ministers of the Provinces.

Members

4

Ministers Incharge of the subject of environment in the Provinces.

Members

5

Such other persons not exceeding thirty-five as the federal Government may appoint, of which at least twenty shall be non-officials including five representatives of the Chambers of Commerce and Industry and industrial associations and one or more representatives of the Chambers of Agriculture, the medical and legal professions, trade unions, and non-governmental organizations concerned with the environment and development, and scientists, technical experts and educationists

Members

6

Secretary to the Government of Pakistan, incharge of the Ministry or Division dealing with the subject of environment

Member/Secretary

(2) The Members of the Council, other than ex-officio members, shall be appointed in accordance with the prescribed procedure and shall hold office for a term of two years.
(3) The Council shall frame its own rules of procedure.
(4) The Council shall hold meetings, as and when necessary, but not less than two meetings, shall be held in a year.
(5) The Council may constitute committees of its members and entrust them with such functions as it may deem fit, and the recommendations of the committees shall be submitted to the Council for approval.
(6) The Council, or any of its committees, may invite any technical expert or representative of any Government Agency or non-governmental organization or other person possessing specialized knowledge of any subject for assistance in performance of its functions.
4. Functions and powers of the Council.- (1) The Council shall-
(a) co-ordinate and supervise enforcement of the provisions of this Act; and
(b) approve comprehensive national environmental policies and ensure their implementation within the framework of a national conservation strategy as may be approved by the Federal Government from time to time;
(c) approve the National Environmental Quality Standards;
(d) provide guidelines for the protection and conservation of species, habitats, and biodiversity in general, and for the conservation of renewable and non-renewable resources.
(e) co-ordinate integration of the principles and concerns of sustainable development into national development plans and policies;
(f) consider the National Environment Report and give appropriate directions thereon;
(2) The Council may, either itself or on the request of any person or organization, direct the Federal Agency or any Government Agency to prepare, submit, promote or implement projects for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, and the sustainable development of resources or to undertake research in any aspect of environment.

5. Establishment of the Pakistan Environmental Protection Agency.- (1) The Federal Government shall, by notification in the official Gazette, establish the Pakistan Environmental Protection Agency to exercise the powers and perform the functions assigned to it under this Act and the rules and regulations made thereunder.
(2) The Federal Agency shall be headed by a Director-General who shall be appointed by the Federal Government on such terms and conditions as it may determine.
(3) The Federal Agency shall have such administrative, technical and legal staff, as the Federal Government may specify, to be appointed in accordance with such procedure as may be prescribed.
(4) The powers and functions of the Federal Agency shall be exercised and performed by the Director-General.
(5) The Director-General may, by general or special order, delegate any of the powers and functions to staff appointed under sub-section (3).
(6) For assisting the Federal Agency in the discharge of its functions the Federal Government shall establish Advisory Committees for various sectors and appoint as members thereof eminent representatives of the relevant sector, educational institutions, research institutes and non-governmental organizations.

6. Functions of the Federal Agency.- (1) The Federal Agency shall-
(a) administer and implement this Act and the rules and regulations made;
(b) prepare, in co-ordination with the appropriate Government Agency and in consultation with the concerned sectoral Advisory Committees, national environmental policies for approval by the Council;
(c) take all necessary measures for the implementation of the national environmental policies approved by the Council;
(d) prepare and publish an annual National Environment Report on the state of the environment;
(e) prepare, establish and revise the National Environmental Quality Standards with approval of the Council:
Provided that before seeking approval of the Council, the Federal Agency shall publish the proposed National Environmental Quality Standards for public opinion in accordance with the
prescribed procedure; and
(f) ensure enforcement of the National Environmental Quality Standards;
(g) establish standards for the quality of the ambient air, water and land, by notification in the
official Gazette in consultation with the Provincial Agency concerned:
Provided that-
i. different standards for discharge or emission from different sources and for different areas
and conditions may be specified;
ii. (ii) where standards are less stringent than the National Environmental Quality Standards
prior approval of the Council shall be obtained;
iii. (iii) certain areas, with the approval of the Council, may exclude from carrying out specific
activities, projects from the application of such standards;
(h) co-ordinate environmental policies and programmes nationally and internationally;
(i) establish systems and procedures for surveys, surveillance, monitoring, measurement,
examination, investigation, research, inspection and audit to prevent and control pollution, and
to estimate the costs of cleaning up pollution and rehabilitating the environment in various
sectors;
(j) take measures to promote research and the development of science and technology which
may contribute to the prevention of pollution, protection of the environment, and sustainable
development;
(k) certify one or more laboratories as approved laboratories for conducting tests and analysis
and one or more research institutes as environmental research institutes for conducting
research and investigation for the purposes of this Act.
(l) identify the needs for and initiate legislation in various sectors of the environment;
(m) render advice and assistance in environmental matters including such information and data
available with it as may be required for carrying out the purposes of this Act:
Provided that the disclosure of such information shall be subject to the restrictions contained
in the proviso to sub-section (3) of section 12;
(n) assist the local councils, local authorities, Government Agencies and other persons to
implement schemes for the proper disposal of wastes so as to ensure compliance with the
standards established by it;
(o) provide information and guidance to the public on environmental matters;
(p) recommend environmental courses, topics, literature and books for incorporation in the
curricula and syllabi of educational institutions;
(q) promote public education and awareness of environmental issues through mass media and
other means including seminars and workshops;
(r) specify safeguards for the prevention of accidents and disasters which may cause pollution,
collaborate with the concerned person in the preparation of contingency plans for control of
such accidents and disasters, and co-ordinate implementation of such plans;
(s) encourage the formation and working of non-governmental organizations, community
organizations and village organizations to prevent and control pollution and promote sustainable
development;
(t) take or cause to be taken all necessary measures for the protection, conservation,
rehabilitation and improvement of the environment, prevention and control of pollution and
promotion of sustainable development; and
(u) perform any function which the Council may assign to it.

(2) The Federal Agency may-
(2) undertake inquiries or investigation into environmental issues, either of its own accord or
upon complaint from any person or organization;
(3) request any person to furnish any information or data relevant to its functions;
(4) initiate with the approval of the Federal Government, requests for foreign assistance in
support of the purposes of this Act and enter into arrangements with foreign agencies or
organizations for the exchange of material or information and participate in international
seminars or meetings;
(5) recommend to the Federal Government the adoption of financial and fiscal programmes,
schemes or measures for achieving environmental objectives and goals and the purposes of this
Act, including-
(a) incentives, prizes awards, subsidies, tax exemptions, rebates and depreciation allowances;
and
(b) taxes, duties, cesses and other levies;

(6) establish and maintain laboratories to help in the performance of its functions under this Act
and to conduct research in various aspects of the environment and provide or arrange
necessary assistance for establishment of similar laboratories in the private sector; and
(7) provide or arrange, in accordance with such procedure as may be prescribed, financial
assistance for projects designed to facilitate the discharge of its functions.

7. Powers of the Federal Agency.- Subject to the provisions of this Act, the Federal Agency
may-
(a) lease, purchase, acquire, own, hold, improve, use or otherwise deal in and with any
property both moveable and immovable;
(b) sell, convey, mortgage, pledge, exchange or otherwise dispose of its property and assets;
(c) fix and realize fees, rates and charges for rendering any service or providing any facility,
information or data under this Act or the rules and regulations;
(d) enter into contracts, execute instruments, incur liabilities and do all acts or things necessary
for proper management and conduct of its business;
(e) appoint with the approval of the Federal Government and in accordance with such
procedures as may be prescribed, such advisers, experts and consultants as it considers
necessary for the efficient performance of its functions on such terms and conditions as it may
decide fit;
(f) summon and enforce the attendance of any person and require him to supply any
information or document needed for the conduct of any enquiry or investigation into any
environmental issue;
(g) enter and inspect and under the authority of a search warrant issued by the Environmental
Court or Environmental Magistrate, search at any reasonable time, any land, building, premises,
vehicle or vessel or other place where or in which. there are reasonable grounds to believe that
an offence under this Act has been, or is being, committed;
(h) take samples of any materials, products, articles or substances or of the effluent, wastes or
air pollutants being discharged or emitted or of air, water or land in the vicinity of the discharge
or emission;
(i) arrange for test and analysis of the samples at a certified laboratory;
(j) confiscate any article used in the commission of the offence where the offender is not known
or cannot be found within a reasonable time:
(k) Provided that the power under clauses (f), (h), (I) and (j) shall be exercised in accordance
with the provisions of the Code of Criminal Procedure, 1898 (Act V of 1898). or the rules made
under this Act and under the direction of the Environmental Court or Environmental Magistrate;
and
(l) establish a National Environmental Co-ordination Committee comprising the Director-General as its chairman and the Director Generals of the Provincial Environmental Protection Agencies and such other persons as the Federal Government may appoint as its members to exercise such powers and perform such functions as may be delegated or assigned to it by the Federal Government for carrying out the purposes of this Act and for ensuring inter provincial co-ordination in environmental policies.

8. Establishment, powers and functions of the Provincial Environmental Protection Agencies.-
(1) Every Provincial Government shall, by notification in the official Gazette, establish an Environmental Protection Agency, to exercise such powers and perform such functions as may be delegated to it by the Provincial Government under sub-section (2) of section 26.
(2) The Provincial Agency shall be headed by a Director-General who shall be appointed by the Provincial Government on such terms and conditions as it may determine.
(3) The Provincial Agency shall have such administrative, technical and legal staff as the Provincial Government may specify, to be appointed in accordance with such procedure as may be prescribed.
(4) The powers and functions of the Provincial Agency shall be exercised and performed by the Director-General.
(5) The Director General may, by general or special order, delegate any of the powers and functions to staff appointed under sub-section (3).
(6) For assistance of the Provincial Agency in the discharge of its functions, the Provincial Government shall establish Sectoral Advisory Committees for various sectors and appoint members from amongst eminent representatives of the relevant sector, educational institutions, research institutes and non-governmental organizations.

9. Establishment of the Provincial Sustainable Development Funds.- (1) There shall be established in each Province a Sustainable Development Fund.
(2) The Provincial Sustainable Development Fund shall be derived from the following sources, namely:-
(a) grants made or loans advanced by the Federal Government or the Provincial Governments;
(b) aid and assistance, grants, advances, donations and other non-obligatory funds received from foreign governments, national or international agencies, and non-governmental organizations; and
(c) contributions from private organizations and other persons.
(3) The Provincial Sustainable Development Fund shall be utilized in accordance with such procedure as may be prescribed for-
(a) providing financial assistance to the projects designed for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, the sustainable development of resources and for research in any aspect of environment; and
(b) any other purpose which in the opinion of the Board shall help achieve environmental objectives and the purposes of this Act.

10. Management of the Provincial Sustainable Development Fund.- (1) The Provincial Sustainable Development Fund shall be managed by a Board known as the Provincial Sustainable Development Fund Board consisting of-
Chairman, Planning and Development Board/Additional Chief Secretary Planning and Development Department

Chairperson

2

such officers of the Provincial Governments, not exceeding six, as the Provincial Government may appoint including Secretaries incharge of the Finance, Industries and Environment Departments

Members

3

such non-official persons not exceeding ten as the Provincial Government may appoint including representatives of the Provincial Chamber of Commerce and Industry, non governmental organizations, and major donors.

Members

4

Director-General of the Provincial Agency

Member/Secretary

(2) In accordance with such procedure and such criteria as may be prescribed, the Board shall have the power to-
(a) sanction financial assistance for eligible projects;
(b) invest moneys held in the Provincial Sustainable Development Fund in such profit-bearing Government bonds, savings schemes and securities as it may deem suitable; and
(c) take such measures and exercise such powers as may be necessary for utilization of the Provincial Sustainable Development Fund for the purposes specified in sub-section (3) of section 9.

(3) The Board shall constitute committees of its members to undertake regular monitoring of projects financed from the Provincial Sustainable Development Fund and to submit progress reports to the Board which shall publish an Annual Report incorporating its annual audited accounts and performance evaluation based on the progress reports.

11. Prohibition of certain discharges or emissions.- (1) Subject to the provisions of this Act and the rules and regulations no person shall discharge or emit or allow the discharge or emission of any effluent or waste or air pollutant or noise in an amount, concentration or level which is in excess of the National Environmental Quality Standards or, where applicable, the standards established under sub-clause (I) of clause (g) of sub-section (1) of section 6.
(2) The Federal Government may levy a pollution charge on any person who contravenes or fails to comply with the provisions of sub-section (1), to be calculated at such rate, and collected in accordance with such procedure as may be prescribed.
(3) Any person who pays the pollution charge levied under sub-section (2) shall not be charged with an offence with respect to that contravention or failure.
(4) The provisions of sub-section (3) shall not apply to projects which commenced industrial activity on or after the thirtieth day of June, 1994.

12. Initial environmental examination and environmental impact assessment.- (1) No proponent of a project shall commence construction or operation unless he has filed with the Government Agency designated by Federal Environmental Protection Agency or Provincial Environmental Protection Agencies, as the case may be, or, where the project is likely to cause an adverse environmental effects an environmental impact assessment, and has obtained from the Government Agency approval in respect thereof.
(2) The Government Agency shall subject to standards fixed by the Federal Environmental Protection Agency-
(a) review the initial environmental examination and accord its approval, or require submission of an environmental impact assessment by the proponent; or
(b) review the environmental impact assessment and accord its approval subject to such conditions as it may deem fit to impose, require that the environmental impact assessment be re-submitted after such modifications as may be stipulated or reject the project as being contrary to environmental objectives.
(3) Every review of an environmental impact assessment shall be carried out with public participation and no information will be disclosed during the course of such public participation which relates to-
(a) trade, manufacturing or business activities, processes or techniques of a proprietary nature, or financial, commercial, scientific or technical matters which the proponent has requested should remain confidential, unless for reasons to be recorded in writing, the Director General of the Federal Agency is of the opinion that the request for confidentiality is not well-founded or the public interest in the disclosure outweighs the possible prejudice to the competitive position of the project or its proponent; or
(b) international relations, national security or maintenance of law and order, except with the consent of the Federal Government; or
(c) matters covered by legal professional privilege.
(4) The Government Agency shall communicate its approval or otherwise within a period of four months from the date the initial environmental examination or environmental impact assessment is filed complete in all respects in accordance with the prescribed procedure, failing which the initial environmental examination or, as the case may be, the environmental impact assessment shall be deemed to have been approved, to the extent to which it does not contravene the provisions of this Act and the rules and regulations.
(5) Subject to sub-section (4) the appropriate Government may in a particular case extend the aforementioned period of four months if the nature of the project so warrants.
(6) The provisions of sub-sections (1), (2), (3), (4) and (5) shall apply to such categories of projects and in such manner as may be prescribed.
(7) The Government Agency shall maintain separate registers for initial environmental examination and environmental impact assessment projects, which shall contain brief particulars of each project and a summary of decisions taken thereon, and which shall be open to inspection by the public at all reasonable hours and the disclosure of information in such registers shall be subject to the restrictions specified in sub-section (3).
13. Prohibition of import of hazardous waste.- No person shall import hazardous waste into Pakistan and its territorial waters, Exclusive economic Zone and historic waters.

14. Handling of hazardous substances.- Subject to the provisions of this Act, no person shall generate, collect, consign, transport, treat, dispose of, store, handle or import any hazardous substance except-
(a) under a licence issued by the Federal Agency and in such manner as may be prescribed; or
(b) in accordance with the provisions of any other law for the time being in force, or of any international treaty, convention, protocol, code, standard, agreement or other instrument to which Pakistan is a party.

15. Regulation of motor vehicles.- (1) Subject to the provisions of this Act, and the rules and regulations, no person shall operate a motor vehicle from which air pollutants or noise are being emitted in an amount, concentration or level which is in excess of the National Environmental Quality Standards, or where applicable the standards established under clause (g) of sub-section (1) of section 6.
(2) For ensuring compliance with the standards mentioned in sub-section (1), the Federal Agency may direct that any motor vehicle or class of vehicles shall install such pollution control devices or other equipment or use such fuels or undergo such maintenance or testing as may be prescribed.
(3) Where a direction has been issued by the Government Agency under subsection (2) in respect of any motor vehicles or class of motor vehicles, no person shall operate any such vehicle till such direction has been complied with.

16. Environmental protection order.- (1) Where the Federal Agency or a Provincial Agency is satisfied that the discharge or emission of any effluent, waste, air pollutant or noise, or the disposal of waste, or the handling of hazardous substances, or any other act or omission is likely to occur, or is occurring, or has occurred, in violation of the provisions of this Act, rules or regulations or of the conditions of a licence, and is likely to cause, or is causing or has caused an adverse environmental effect, the Federal Agency or, as the case may be, the Provincial Agency may, after giving the person responsible for such discharge, emission, disposal, handling, act or omission an opportunity of being heard, by order direct such person to take such measures that the Federal Agency or Provincial Agency may consider necessary within such period as may be specified in the order.
(2) In particular and without prejudice to the generality of the foregoing power, such measures may include-
(a) immediate stoppage, preventing, lessening or controlling the discharge, emission, disposal, handling, act or omission, or to minimize or remedy the adverse environmental effect;
(b) installation, replacement or alteration of any equipment or thing to eliminate, control or abate on a permanent or temporary basis, such discharge, emission, disposal, handling, act or omission;
(c) action to remove or otherwise dispose of the effluent, waste, air pollutant, noise, or hazardous substances; and
(d) action to restore the environment to the condition existing prior to such discharge, disposal, handling, act or omission, or as close to such condition as may be reasonable in the circumstances, to the satisfaction of the Federal Agency or, Provincial Agency.
(3) Where the person, to whom directions under sub-section (1) are given, does not comply therewith, the Federal Agency or Provincial Agency may, in addition to the proceedings initiated against him under this Act, the rules and regulations, itself take or cause to be taken such measures specified in the order as it may deem necessary and may recover the reasonable costs of taking such measures from such person as arrears of land revenue.

17. Penalties.- (1) Whoever contravenes or fails to comply with the provisions of sections 11, 12, 13 or section 16 or any order issued thereunder shall be punishable with fine which may extend to one million rupees, and in the case of a continuing contravention or failure, with an additional fine which may extend to one hundred thousand rupees for every day during which such contravention or failure continues: Provided that if contravention of the provisions of section 11 also constitutes contravention of the provisions of section 15, such contravention shall be punishable under sub-section (2) only.

(2) Whoever contravenes or fails to comply with the provisions of section 14 or 15 or any rule or regulation or conditions of any licence, any order or direction, issued by the Council or the Federal Agency or Provincial Agency, shall be punishable with fine which may extend to one hundred thousand rupees, and in case of continuing contravention or failure with an additional fine which extend to one thousand rupees for every day during which such contravention continues.

(3) Where an accused has been convicted of an offence under sub-sections (1) and (2), the Environmental Court and Environmental Magistrate, as the case may be, shall, in passing sentence, take into account the extent and duration of the contravention or failure constituting the offence and the attendant circumstances.

(4) Where an accused has been convicted of an offence under sub-section (1) and the Environmental Court is satisfied that as a result of the commission of the offence monetary benefits have accrued to the offender, the Environmental Court may order the offender to pay, in addition to the fines under sub-section (1), further additional fine commensurate with the amount of the monetary benefits.

(5) Where a person convicted under sub-sections (1) or sub-section (2) had been previously convicted for any contravention under this Act, the Environmental Court or, as the case may be, Environmental Magistrate may, in addition to the punishment awarded thereunder-

(a) endorse a copy of the order of conviction to the concerned trade or industrial association, if any, or the concerned Provincial Chamber of Commerce and Industry or the Federation of Pakistan Chambers of Commerce and Industry;

(b) sentence him to imprisonment for a term which may extend to two years;

(c) order the closure of the factory;

(d) order confiscation of the factory, machinery, and equipment, vehicle, material or substance, record or document or other object used or involved in contravention of the provisions of the Act: Provided that for a period of three years from the date of commencement of this Act the sentence of imprisonment shall be passed only in respect of persons who have been previously convicted for more than once for any contravention of sections 11, 13, 14 or 16 involving hazardous waste;

(e) order such person to restore the environment at his own cost, to the conditions existing prior to such contravention or as close to such conditions as may be reasonable in the circumstances to the satisfaction of the Federal Agency or, as the case may be, Provincial Agency; and

(f) order that such sum be paid to any person as compensation for any loss, bodily injury, damage to his health or property suffered by such contravention.
(6) The Director-General of the Federal Agency or of a Provincial Agency or an officer generally or specially authorised by him in this behalf may, on the application of the accused compound an offence under this Act with the permission of the Environmental Tribunals or Environmental Magistrate in accordance with such procedure as may be prescribed.

(7) Where the Director-General of the Federal Agency or of a Provincial Agency is of the opinion that a person has contravened any provision of Act he may, subject to the rules, by notice in writing to that person require him to pay to the Federal Agency or, as the case may be, Provincial Agency an administrative penalty in the amount set out in the notice for each day the contravention continues; and a person who pays an administrative penalty for a contravention shall not be charged under this Act with an offence in respect of such contravention.

(8) The provisions of sub-sections (6) and (7) shall not apply to a person who has been previously convicted of offence or who has compounded an offence under this Act who has paid an administrative penalty for a contravention of any provision of this Act.

18. Offences by bodies corporate.- Where any contravention of this Act has been committed by a body corporate, and it is proved that such offence has been committed with the consent or connivance of, or is attributed to any negligence on the part of, any director, partner, manager, secretary or other Officer of the body corporate, such director, partner, manager, secretary or other officer of the body corporate, shall be deemed guilty of such contravention along with the body corporate and shall be punished accordingly:

Provided that in the case of a company as defined under the Companies Ordinance, 1984 (XLVII of 1984), only the Chief Executive as defined in the said Ordinance shall be liable under this section.

Explanation.- For the purposes of this section, “body corporate” includes a firm, association of persons and a society registered under the Societies Registration Act, 1860 (XXI of 1860), or under the Co-operative Societies Act, 1925 (VII of 1925).

19. Offences by Government Agencies, local authorities or local councils.- Where any contravention of this Act has been committed by any Government Agency, local authority or local council, and it is proved that such contravention has been committed with the consent or connivance of, or is attributable to any negligence on the part of, the Head or any other officer of the Government Agency, local authority or local council, such Head or other officer shall also be deemed guilty of such contravention along with the Government Agency, local authority or local council and shall be liable to be proceeded against and punished accordingly.

20. Environmental Tribunals.- (1) The Federal Government may, by notification in the official gazette, establish as many Environmental Tribunals as it consider necessary and, where it establishes more than one Environmental Tribunals, it shall specify territorial limits within which, or the class of cases in respect of which, each one of them shall exercise jurisdiction under this Act.

(2) An Environmental Tribunal shall consist of a Chairperson who is, or has been, or is qualified for appointment as, a judge of the High Court to be appointed after consultation with the Chief Justice of the High Court and two members to be appointed by the Federal Government of which at least one shall be a technical member with suitable professional qualifications and experience; in the environmental field as may be prescribed.

(3) For every sitting of the Environmental Tribunal, the presence of the Chairperson and not less than one Member shall be necessary.

(4) A decision of an Environmental Tribunal shall be expressed in terms of the opinion of the
majority of its members, including the Chairperson, or if the case has been decided by the Chairperson and only one of the members and there is a difference of opinion between them, the decision of the Environmental Tribunal shall be expressed in terms of the opinion of the Chairperson.

(5) An environmental Tribunal shall not, merely because of a change in its composition, or the absence of any member from any sitting, be bound to recall and reheat any witness who has given evidence, and may act on the evidence already recorded by, or produced, before it.

(6) An Environmental Tribunal may hold its sittings at such places within its territorial jurisdiction as the Chairperson may decide.

(7) No act or proceeding of an Environmental Tribunal shall be invalid by reason only of the existence of a vacancy in, or defect in the constitution of, the Environmental Tribunal.

(8) The terms and conditions of service of the Chairperson and members of the Environmental Tribunal shall be such as may be prescribed.

21. Jurisdiction and powers of Environmental Tribunals.- (1) An Environmental Tribunal shall exercise such powers and perform such functions as are, or may be, conferred upon or assigned to it by or under this Act or the rules and regulations made thereunder.

(2) All contravention punishable under sub-section (1) of section 17 shall exclusively be triable by an Environmental Tribunal.

(3) An Environmental Tribunal shall not take cognizance of any offence triable under sub-section (2) except on a complaint in writing by—
(a) the Federal Agency or any Government Agency or local council; and
(b) any aggrieved person, who has given notice of not less than thirty days to the Federal Agency, or the Provincial Agency concerned, of the alleged contravention and of his intention to make a complaint to the Environment Tribunal.

(4) In exercise of its criminal jurisdiction, the Environmental Tribunals shall have the same powers as are vested in Court of Session under the Code of Criminal Procedure, 1898 (Act V of 1898).

(5) In exercise of the appellate jurisdiction under section 22 the Environmental Tribunals shall have the same powers and shall follow the same procedure as an appellate court in the Code of Civil Procedure, 1908 (Act V of 1908).

(6) In all matters with respect to which no procedure has been provided for in this Act, the Environmental Tribunal shall follow the procedure laid down in the Code of Civil Procedure, 1908 (Act V of 1908).

(7) An Environmental Tribunal may, on application filed by any officer duly authorised in this behalf by the Director-General of the Federal Agency or of Provincial Agency, issue bailable warrant for the arrest of any person against whom reasonable suspicion exist, of his having been involved in contravention punishable under sub-section (1) of Section 17: Provided that such warrant shall be applied for, issued, and executed in accordance with the provisions of the Code of Criminal Procedure, 1898 (Act V of 1898): Provided further that if the person arrested executes a bond with sufficient sureties in accordance with the endorsement on the warrant he shall be released from custody, failing which he shall be taken or sent without delay to the officer in-charge of the nearest police station.

(8) All proceedings before the Environmental Tribunal shall be deemed to be judicial proceedings within the meaning of section 193 and 228 of the Pakistan Penal Code (Act XLV of 1860), and the Environmental Tribunal shall be deemed to be a court for the purpose of section 480 and 482 of the Code of Criminal Procedure, 1898 (Act V of 1898).
(9) No court other than an Environmental Tribunal shall have or exercise any jurisdiction with respect to any matter to which the jurisdiction of an Environmental Tribunal extends under this Act, the rules and regulations made thereunder.

(10) Where the Environmental Tribunal is satisfied that a complaint made to it under sub-section (3) is false and vexatious to the knowledge of the complainant, it may, by an order, direct the complainant to pay to the person complained against such compensatory costs which may extend to one hundred thousand rupees.

22. Appeals to the Environmental Tribunal.- (1) Any person aggrieved by any order or direction of the Federal Agency or any Provincial Agency under any provision of this Act, and rules or regulations may prefer an appeal with the Environmental Tribunal within thirty days of the date of communication of the impugned order or direction to such person.
(2) An appeal to the Environmental Tribunal shall be in such form, contain such particulars and be accompanied by such fees as may be prescribed.

23. Appeals from orders of the Environmental Tribunal.- (1) Any person aggrieved by any final order or by any sentence of the Environmental Tribunal passed under this Act may, within thirty days of communication of such order or sentence, prefer an appeal to the High Court.
(2) An appeal under sub-section (1) shall be heard by a Bench of not less than two Judges.

24. Jurisdiction of Environmental Magistrates.- (1) Notwithstanding anything contained in the Code of Criminal Procedure, 1898 (Act V of 1898), or any other law for the time being in force, but subject to the provisions of this Act, all contravention punishable under sub-section (2) of section 17 shall exclusively be triable by a judicial Magistrate of the first class as Environmental Magistrate especially empowered in this behalf by the High Court.
(2) An Environmental Magistrate shall be competent to impose any punishment specified in sub-sections (2) and (4) of section 17.
(3) An Environmental Magistrate shall not take cognizance of an offence triable under sub-section (I) except on a complaint in writing by-
(a) the Federal Agency, Provincial Agency, or Government Agency or a local council; and
(b) any aggrieved person.

25. Appeals from orders of Environmental Magistrates.- Any person convicted of any contravention of this Act or the rules or regulations by an Environmental Magistrate may, within thirty days from the date of his conviction, appeal to the Court of Sessions whose decision thereon shall be final.

26. Power to delegate.- (1) The Federal Government may, by notification in the official Gazette, delegate any of its or of the Federal Agency’s powers and functions under this Act and the rules and regulations to any Provincial Government, any Government Agency, local council or local authority.
(2) The Provincial Government may, by notification in the official Gazette, delegate any of its or of the Provincial Agency’s powers or functions under this Act and the rules and regulations to any Government Agency of such Provincial Government or any local council or local authority in the Province.
27. Power to give directions.- In the performance of their functions under this Act-
(a) the Federal Agency and Provincial Agencies shall be bound by the directions given to them
in writing by the Federal Government; and
(b) a Provincial Agency shall be bound by the directions given to it in writing by the Provincial
Government.

28. Indemnity.- No suit, prosecution or other legal proceedings shall lie against the Federal or
Provincial Governments, the Council, the Federal Agency or Provincial Agencies, the Director-
Generals of the Federal Agency and the Provincial Agency, members, officers, employees,
experts, advisers, committees or consultants of the Federal or Provincial Agencies or the
Environmental Tribunal or Environmental Magistrates or any other person for anything which is
in good faith done or intended to be done under this Act or the rules or regulations made
thereunder.

29. Dues recoverable as arrears of land revenue.- Any dues recoverable by the Federal Agency
or Provincial Agency under this Act, or the rules or regulations shall be recoverable as arrears of
land revenue.

30. Act to override other laws.- The provisions of this Act shall have effect notwithstanding
anything inconsistent therewith contained in any other law for the time being in force.

31. Power to make rules.- The Federal Government may, by notification in the official Gazette,
make rules for carrying out the purposes of this Act including rules for implementing the
provisions of the international environmental Agreements, specified in the Schedule to this Act.

32. Power to amend the Schedule.- The Federal Government may, by notification in the official
Gazette, amend the Schedule so as to add any entry thereato or modify or omit any entry
therein.

33. Power to make regulations.- (1) For carrying out the purposes of this Act, the Federal
Agency may, by notification in the official Gazette and with the approval of the Federal
Government, make regulations not inconsistent with the provisions of this Act or the rules made
thereunder.
(2) In particular and without prejudice to the generality of the foregoing power, such
regulations may provide for-
(a) submission of periodical reports, data or information by any Government agency, local
authority or local council in respect of environmental matters;
(b) preparation of emergency contingency plans for coping with environmental hazards and
pollution caused by accidents, natural disasters and calamities;
(c) appointment of officers, advisers, experts, consultants and employees;
(d) levy of fees, rates and charges in respect of services rendered, actions taken and schemes
implemented;
(e) monitoring and measurement of discharges and emissions;
(f) categorization of projects to which, and the manner in which, section 12 applies;
(g) laying down of guidelines for preparation of initial environmental examination and
environmental impact assessment and Development of procedures for their filing, review and
approval;
(h) providing procedures for handling hazardous substances; and
(i) installation of devices in, use of fuels by, and maintenance and testing of motor vehicles for control of air and noise pollution.

34. Repeal, savings and succession.- (1) The Pakistan Environmental Protection Ordinance 1983 (XXXVII of 1983) is hereby repealed.
(2) Notwithstanding the repeal of the Pakistan Environmental Protection Ordinance, 1983 (XXVII of 1983), any rules or regulations or appointments made, orders passed, notifications issued, powers delegated, contracts entered into, proceedings commenced, rights acquired liabilities incurred, penalties, rates, fees or charges levied, things done or action taken under any provisions of that Ordinance shall, so far as they are not inconsistent with the provisions of this Act be deemed to have been made, passed, issued, delegated, entered into, commenced, acquired, incurred, levied, done or taken under this Act.
(3) On the establishment of the Federal Agency and Provincial Agencies under this Act, all properties, assets and liabilities pertaining to the Federal Agency and Provincial Agencies established under that Ordinance shall vest in and be the properties, assets and liabilities, as the case may be, of the Federal Agency and Provincial Agency established under this Act.

SCHEDULE (See section 31)

2. Plant Protection Agreement for the South-East Asia and Pacific Region (as amended), Rome, 1956.
5. Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention), 1972.

National Environmental Quality Standards (NEQS)

NATIONAL ENVIRONMENTAL QUALITY STANDARDS
FOR MUNICIPAL AND LIQUID INDUSTRIAL EFFLUENTS
(mg/l, UNLESS OTHERWISE DEFINED)
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Existing standard</th>
<th>Revised Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature or Temperature Increase*</td>
<td>= &lt;30°C</td>
<td>= &lt;30°C</td>
</tr>
<tr>
<td>pH value</td>
<td>6-10</td>
<td>6-9</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand (BOD)5 at 200°C(1)</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD) (1)</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Parameter</td>
<td>Value 1</td>
<td>Value 2</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Total suspended solids (TSS)</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Total dissolved solids (TDS)</td>
<td>3500</td>
<td>3500</td>
</tr>
<tr>
<td>Grease and oil</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Phenolic compounds (as phenol)</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Chloride (as Cl?)</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>SC***</td>
<td>Fluoride (as F?)</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Cyanide (as CN?) total</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>An-ionic detergents (as MBAs) (2)</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Sulphate (SO??)₄</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>SC***</td>
<td></td>
<td>Sulphide (S?)</td>
</tr>
<tr>
<td>Substance</td>
<td>Value</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Ammonia (NH₃)</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Pesticides (3)</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Cadmium (4)</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Chromium (trivalent and hexavalent) (4)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Copper (4)</td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>
1.0
1.0
1.0
1.0
1.0

Total Toxic metals
2.0
2.0
2.0
2.0
2.0
2.0

Zinc
5.0
5.0
5.0
5.0
5.0
5.0

Arsenic (4)
1.0
1.0
1.0
1.0
1.0

Barium (4)
1.5
1.5
1.5
1.5
1.5
<table>
<thead>
<tr>
<th>Element</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>Manganese</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>Boron (4)</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>Chlorine</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Explanations:**
1. Assuming minimum dilution 1:10 on discharge, lower ratio would attract progressively stringent standards to be determined by the Federal Environmental Protection Agency. By 1:10 dilution means, for example that for each one cubic meter of treated effluent, the recipient water body should have 10 cubic meter of water for dilution of this effluent.
2. Modified Benzene Alkyl Sulphate; assuming surfactant as biodegradable.
3. Pesticides include herbicides, fungicides, and insecticides.
4. Subject to total toxic metals discharge should not exceed level given at S.No.25.
5. Applicable only when and where sewage treatment is operational and BOD5=80 mg/l is achieved by the sewage treatment system.
6. Provided discharge is not at shore and not within 10 miles of mangrove or other important estuaries.

* The effluent should not result in temperature increase of more than 3°C at the edge of the zone where initial mixing and dilution take place in the receiving body. In case zone is not defined, use 100 meters from the point of discharge.
** The value for industry is 200 mg/l
*** Discharge concentration at or below sea concentration (SC)

Note:
1. Dilution of liquid effluents to bring them to the NEQS limiting values is not permissible through fresh water mixing with the effluent before discharging into the environment.
2. The concentration of pollutants in water being used will be subtracted from the effluent for calculating the NEQS limits.

National Environmental Quality Standards (NEQS)

NATIONAL ENVIRONMENTAL QUALITY STANDARDS FOR MOTOR VEHICLE EXHAUST & NOISE

PARAMETER

STANDARDS
(Maximum permissible limit)

MEASURING METHOD

1

Smoke

40% or 2 on the Ringleman Scale During engine acceleration mode

To be compared with Ringleman Chart at a distance of 6 meters or more.

2

Carbon Monoxide.

Emission Standards:
New Vehicle = 4.5%
Used Vehicle = 6%
Under idling conditions: non-despersive infrared detection through gas analyzer.

3

Noise

85db(A)

Sound meter at 7.5 meter from the source.

National Environmental Quality Standards (NEQS)

NATIONAL ENVIRONMENTAL QUALITY STANDARDS FOR INDUSTRIAL GASEOUS EMISSION (mg/Nm³, UNLESS OTHERWISE DEFINED)

Parameter

Source of Emission

Existing Standards

Revised Standard

Smoke

Smoke opacity not to exceed

Scale 40% or 2 Ringlemann

40% or 2 Ringlemann Scale or equivalent smoke number

Particulate matter(1)

(a) Boilers and furnaces:
    (i) Oil fired
    (ii) Coal fired
    (iii) Cement Kilns

300
500
200

300
500
300
(b) Grinding, crushing, clinker coolers and related processes, metallurgical processes, converters, blast furnaces and cupolas

500
500

Hydrogen Chloride
Any
400
400

Chlorine
Any
150
150

Hydrogen fluoride
Any
150
150

Hydrogen sulphide
Any
10
10

Sulphur Oxides (2)(3)
Sulfuric acid/Sulphonic acid plants 400
5000

Other Plants except power Plants operating on oil and coal
<table>
<thead>
<tr>
<th>Substance</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>1700</td>
</tr>
<tr>
<td>Lead</td>
<td>Any</td>
</tr>
<tr>
<td></td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>800</td>
</tr>
<tr>
<td>Mercury</td>
<td>Any</td>
</tr>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Any</td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Arsenic</td>
<td>Any</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Copper</td>
<td>Any</td>
</tr>
</tbody>
</table>
Antimony
Any
20
20
Zinc
Any
200
200

Oxides of Nitrogen (3)

Nitric acid manufacturing unit
400
3000

Other plants except power plants operating on oil or coal:
Gas fired
Oil fired
Coal fired
400
—
—
400
600
1200

Explanations:
1. Based on the assumption that the size of the particulate is 10 micron or more.
2. Based on 1% sulphur content in fuel oil. Higher content of sulphur will cause standards to be pro-rated.
3. In respect of emissions of sulphur dioxide and nitrogen oxides, the power plants operating on oil and coal as fuel shall in addition to National Environmental Quality Standards (NEQS)
specified above, comply with the following standards:

A. Sulphur Dioxide
Sulphur Dioxide Background levels Microgram per cubic meter (ug/m3)

Background Air Quality(SO2 Basis)

Annual Average

Max. 24-hours Interval

Criterion I Max. SO2 Emission (Tons/Day per Plant)

Criterion II Max. allowable ground level increment to ambient (ug/m3) (One year Average)

Moderately Polluted*
Low
High
Very Polluted**

50
100
>100

200
400
>400

500
100
100

For intermediate values between 50 and 100 µg/m3 linear interpolations should be used.
** No projects with sulphur dioxide emissions will be recommended.

B. Nitrogen Oxide

Ambient air concentrations of nitrogen oxides, expressed as NO2, should not exceed the following:
Annual Arithmetic Mean 100 µg/m³
(0.05 ppm)

Emission levels for stationary source discharges, before mixing with the atmosphere, should be maintained as follows:

For fuel fired steam generators, as Nanogram (10⁻⁹ gram) per joule of heat input:
- Liquid fossil fuel 130
- Solid fossil fuel 300
- Lignite fossil fuel 260

Note: Dilution of gaseous emissions to bring them to the NEQS limiting value is not permissible through excess air mixing/blowing before emitting into the environment.