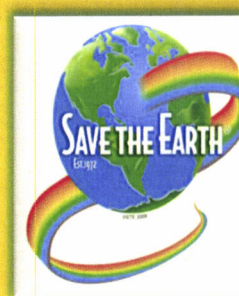
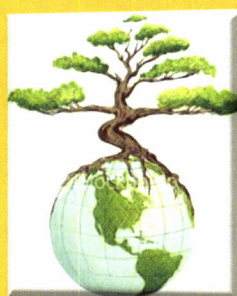
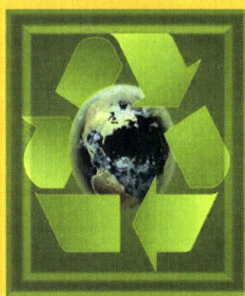




PUNJAB INDUSTRIAL ESTATES DEVELOPMENT AND MANAGEMENT COMPANY



ENVIRONMENTAL COMPLIANCE MANAGEMENT STANDARD OPERATING PROCEDURE (SOP) MANUAL 2014



**PUNJAB INDUSTRIAL ESTATES DEVELOPMENT & MANAGEMENT
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Environmental Compliance and Sustainability Assurance Policy Statement

The Punjab Industrial Estates Development and Management Company (PIEDMC) has established and will maintain this Environmental Compliance Management Standard Operating Procedure Manual (SOP) in the light of its **Environmental Policy** commitments, as stated below:

1. PIEDMC is committed to the pursuit of continual improvement, prevention of pollution, and environmental sustainability in its all industrial estates.
2. Ensure that the environmental impacts of constructional and operational activities of the industries are identified and comply with the **Punjab Environment Protection Amendment Act 7th March 2012** to proceed and to adopt appropriate environmental safeguards.
3. Strive to continuously improve the way we conduct business with the objective of performing work while minimizing the impact on the environment and ensuring compliance with the environmental laws and regulations.
4. Promote efficient use of materials and resources throughout our construction jobsites including water, electricity, raw materials and other resources
5. Develop and maintain appropriate emergency and spill response programs.
6. Integrate the consideration of environmental concerns and impacts into our decision making and activities.
7. Promote the environmental awareness of our corporate culture in order to ensure that the protection of the environment is an integral part of our collective activities.
8. Establish setup, acquire, run, manage and operate effluent treatment plants for protection, conservation, rehabilitation and improvement of environment.
9. Minimize waste through careful and efficient use of all materials and energy
10. Draw due importance to Environmental and Social (E&S) considerations in appraising and financing infrastructure projects to minimize adverse impacts and the risks to the environment
11. Apply the principles of continuous improvements in respect of air, water, noise and light pollution in our industrial estates
12. Ensure that all the employees understand our environment policy and confirm to the high standards it requires.
13. Address complaints about any breach of our Environmental Policy promptly and to the satisfaction of all concerned stakeholders.



Authorities, Roles and Responsibilities of Board of Managements and PIEDMC for the Implementation of Environment Compliance SOP Manual

PIEDMC is a section 42 company, incorporated under Companies Ordinance 1984. The Company is owned by the Government of Punjab and is run by a Board of Directors (BOD) comprising of 16 directors. Majority of them are private sector industrialists and the rest are ex-officio members, demonstrating PIEDMC as a successful example of Public-Private Partnership.

MISSION STATEMENT

To develop a chain of industrial estates in a dynamic and innovative manner by capitalizing on proposed & existing industrial and agricultural strengths of Punjab and Pakistan.

PIEDMC INDUSTRIAL ESTATES

Established Industrial Estates of PIEDMC with brief detail are as follows:

1. **Sundar Industrial Estate (SIE):**

Comprising of 1700 acres of land with the capacity of 721 industrial units out of which 250 units are in production and 250 are in construction phase approximately.

2. **Rehabilitation of Quaid-e-Azam Industrial Estate (QIE) Phase I and II:**

Spread over 565 acres, the project started in 1960s. It has 477 industrial plots varying in size from 1 kanal to 100 kanals. It is totally colonized.

3. **Rehabilitation of Multan Industrial Estate (MIE) Phase I**

MIE Phase-I comprising of 743 acres was developed & completed in 1980's whereas in 2004, the Government of Punjab (GoP) formally handed over MIE to Punjab Industrial Estates in order to revive industrial activity.

4. **Multan Industrial Estate Phase-II**

It is located adjacent to Phase-I, at a distance of approximately 17km south west of Multan city. Phase-II is spread over an area of 667 acres out of which 426 acres have been allocated for industrial plots creating 349 plots. The remaining area has been dedicated for amenities & infrastructure development.

In progress Industrial Estates of PIEDMC with brief detail are as follows:

1. **Rahim Yar Khan Industrial Estate (RIE)**

RYK Industrial Estate comprising of 458 acres of land has been started in 2012. RIE will have most modern infrastructure facilities comparable to any modern industrial estate



globally. Small & medium entrepreneurs are being focused. However, there are some bigger plots to accommodate large industrialists. Developments works are under process and environmental NOC has been obtained.

2. Bhalwal Industrial Estate (BIE)

Bhalwal Industrial Estate comprises 400 acres of land. Small & medium entrepreneurs were focused, hence majority of plots are around ½ acre to 1 acre in sizes. However, there are some bigger plots to accommodate large industry. Approximately 334.55 acres is under industrial plots and remaining area has been dedicated for services. Overall distribution/utilization is based on international standards and need assessment surveys. Developments works are under process and environmental NOC has been obtained.

3. Vehari Industrial Estate (VIE)

Vehari Industrial Estate comprises of 343 acres of land. Its external developments works are in planning and designing process.

4. Quaid-e-Azam Apparel Park (QAAP)

QAAP comprises of 1540 acres of land for garment industries. Nespak is hired consultant for the project. After considering plot sizes of other industrial estates, plots distribution of 0.5, 1, 2, more than 2 up to 10 and 25 acres size are being proposed. Keeping in view previous experiences of industrial estates, 70% of total area is planned to be under industrial plots and remaining 30% under infrastructure/ commercial, amenities etc.

BOARD OF MANAGERMENTS

Board of Managements have been established for *Sundar, Multan and Quaid-e-Azam Industrial Estates* of PIEDMC except Rahim Yar Khan, Bhalwal, and Vehari Industrial Estates of PIEDMC in which developments work is undergoing.

PIEDMC and BOMs Responsibilities over Environment Management SOP Manual

The Key *responsibility of PIEDMC* for this SOP is towards its implementation for environmental compliance and its principal mechanism for ensuring environmentally sound development activities. The main responsibilities of PIEDMC are as follows:

- PIEDMC is liable for the development, revision and making any amendment in the Environment Management SOP manual.
- PIEDMC has full authority to make this implemented in all of its estates with affectivity through its BOMs, the industrial estates where BOM is not yet established, PIEDMC's nominated site staff will be in the loop to apply it.



- The process of implementation and collaborative work for the environmental restoration and management through this SOP manual, will be supervised and monitored by PIEDMC

BOM's Responsibilities:

For the implementation of this SOP manual BOMs and Nominated Staff (in the estates where BOM's are not yet present) have the following responsibilities:

- All the BOMs will hire EO1 of minimum 2-3 years experience and with minimum qualification of M.Sc. Environmental Sciences or B.Sc. Env. Engineering.
- They must cooperate with PIEDMC for any non compliance of the SOP manual, for the fulfillment of every clause of the SOP manual, effectively, to perform any tasking/ meeting/activity, directed by PIEDMC and to share any inconvenience during implementation of this SOP manual



SOP-1: Baseline Environmental Screening and Approval of the Nature of Businesses of the Industrialists

1. **PURPOSE.** This SOP describes PIEDMC environmental screening process of customers (industrialists) application of land ownership for their respective nature of businesses, in accordance with the PIEDMC's Environmental Policy commitments and as per the PIEDMC Bylaws to restrict possible environmental impacts at a very initial stage.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **Environmental Review:**

The industrial estates/BOM's Marketing Team/Customer Service Officer shall:

- (i) Check the available **zoning** and prescribed zoning (by the interest of the customer itself) as per the nature of business of the applicant (industrialist). Customer must be facilitated in the nature of business specific zone if the land is available in the referred zone to minimize possible environmental impacts. Industrial estates that have not prescribed zoning must undergo the other review checks.
- (ii) Check the applicant's proposed nature of business in the **list of negative industries**. If the nature of proposed business is falling in the negative list of industries then the applicants must have to change the nature of business.

Appendix –C

The industrial estates/BOM's Environment Officer (EO1) shall:

- (iii) Check the **details of the proposed nature of business**, detail must be complete in the form of process flow description, list of chemicals shall be used with MSDS, type of the solid waste, liquid waste and smoke, fire extinguishers, health and safety measures, risk factors, and other extra certifications or documents if needed.
- (iv) **Recommendation** for the approval of applicants business after complete study would be based on the 1st opinion by the Industrial Estate/BOM-EO1 and the second opinion by the EO-PIEDMC, authorized for revision to the documents, as necessary. In case of the industrial estates where there is no



designated EO, customer service/marketing staff must communicate with EO PIEDMC.

- (v) Similar steps will be undertaken for the applicant with ***Change Nature of Business.***

b. Environmental Undertaking

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Check the approved applicant's unit via 2nd opinion by EO PIEDMC and give back to customer service staff for senior management approval for further process of environmental undertaking form the applicant on Stamp Paper.

The **Environmental Undertaking** format for chemical nature of industries and non chemical nature of industries are different. **Appendix-D**





SOP-2: No Objection Certificate (NOC)-EPD

1. **PURPOSE.** This SOP describes the obligation and affectivity of the NOC required by the industrialists form EPD that issues environmental permits/NOCs to facilities involved in industrial projects and activities to ensure that they implement necessary measures to protect the environment, promote sustainability, and improve the well being of workers during the construction, operation, and decommissioning phases of the facility. NOC should be obtained before construction can begin on a new facility or a new addition or modification to an existing facility and after starting a production.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

- a. **NOC - Construction Phase:**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Obtain the *list of the new approved applicants/industrialists* form marketing and customer services department of PIEDMC or BOMs whose nature of business has been approved and undertaking has been done and shall forward the copy to EO PIEDMC.
- (ii) Check and update the list of new approved applicants every month and write a letter to them for obtaining the NOC form EPD prior construction of their units.
- (iii) Convey the necessary information in hard or soft to the list of new approved applicants that is required to make a project report or related to submission of report to EPD.
- (iv) Update the list while keeping an eye or observation on the industrialists to whom letter has been forwarded for obtaining of NOCs.
- (v) Make the *list of the industries/units under construction*, whose construction is going on or completed without obtaining any NOC form EPD.
- (vi) Write a letter to all of the pending units for NOC processing of constructional phase, communicate them and convey the necessary information in hard or soft that is required to make a project report or related to submission of report to EPD.





- (vii) Update the list while keeping an eye or observation on the pending construction NOC cases to which letter has been forwarded for obtaining of NOCs.
- (viii) Check if the industrialist, whether a new approved applicant or the pending construction phase NOC case, is not responding at all, then with the permission of higher authority officials, ***last alarming or warning letter*** is to be sent to them with obligatory meeting within a defined notice period.

b. NOC - Production Phase:

The industrial estates/BOM Environment Officer 1(E01) shall:

- (i) Make the ***list of industries in production*** whose production is started without obtaining any NOC from EPD.
- (ii) Write a letter to all of the pending units for NOC processing of Production phase, communicate them and convey the necessary information in hard or soft that is required to make a project report or related to submission of report to EPD.
- (iii) Update the list while keeping an eye or observation on the pending construction NOC cases to which letter has been forwarded for obtaining of NOCs.
- (iv) Check if the industrialist of pending production phase NOC case is not responding at all, then with the permission of higher authority officials, ***last alarming or warning letter*** is to be sent to them with obligatory meeting within a notice period of one week only.

c. EIA/IEE

The industrial estates/BOM Environment Officer 1(E01) shall:

- (i) Communicate to the industrialists who have to obtain NOC that check what report the industrialist has to prepared according to his nature of business and cost of the project.
- (ii) Brief the industrialists that whether their project is under Schedule I or under Schedule II of Punjab Environment Protection Amendment Act 7th March 2012. Projects under ***Schedule I*** have to prepare ***IEE*** report for submission to EPD for NOC and projects under ***Schedule II*** have to prepare ***EIA*** report for submission to EPD for NOC. ***Schedule I and II*** are filed as ***Appendix-E***



d. Supporting Documents

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Provide the industrialists, the required supporting documents of **C** and **Schedule VII** in soft or hard to final submission with draft report to EPD for obtaining NOCs. **Schedule IV and VII** are filed as **Appendix- F**.

e. Public Hearings

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Track the record of the Public Hearings of EIA reports of the industrialists and must be appeared in the Public Hearings.

f. NOC Proof

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Keep the record of the copied NOC form each industry, that has obtained NOC form EPD
- (ii) Send the record of the obtained NOCs to EO-PIEDMC



SOP-3: Monitoring and Evaluation of Environmental Compliance

1. **PURPOSE.** This SOP describes the obligation and affectivity of the environmental monitoring and compliance of Punjab Environment Protection Amendment Act 7th March 2012, as required by EPD to ensure the environmental wellbeing after the industrial activities with multiple natures of business, on waste water, drinking water quality and ambient air quality as compared to NEQS.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **Environment Monitoring of the Estates:**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Hire the services of **EPA certified environmental labs** for the biannual environmental monitoring and evaluation of the estates environment.
- (ii) Design monitoring of drinking water, waste water, ambient air and waste water flow measurements.
- (iii) Arrange sample sources of the required parameters to be tested, in such a manner so that results could be compared with the previous year readings/values or with the biannual readings/values for assessing the degree of improvement or deterioration to the environment.
- (iv) Check the results of the monitoring, make a plan with Estate Engineer to monitor the changes, in drinking water or air pollution wherever possible, if the results are alarming. **Post Environmental Monitoring Initiatives** and the environmental monitoring results must be shared and discussed with EO-PIEDMC.
- (v) Submit the environment monitoring results of the estates to the EPA.

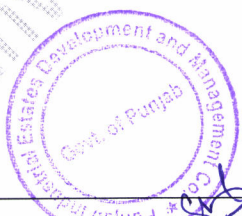
b. **Environment Monitoring of the Industries:**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Write a letter to all industrial units in production except the ware houses or where not applicable, to submit their results of Environmental Monitoring of drinking water, waste water and ambient air quality on quarterly basis.
- (ii) Keep track the seriousness of industrialists over the environment monitoring by reminder phone call or letter.



- (iii) Compare the results of the similar nature of business industries to conclude their commutative effects.
- (iv) Follow and list down the polluted industries after their results submission to manipulate their post environmental monitoring initiatives.
- (v) **Post Environmental Monitoring Initiatives** and the environmental monitoring results of the industries must be shared and discussed with EO-PIEDMC.
- (vi) Provision of septic tanks, retention tank and treatment plants for primary treatment of effluent be assured as per type of factory /industry.





SOP-4: Correcting and Preventing Deficiencies

1. **PURPOSE.** This SOP describes PIEDMC process for addressing actual and potential environmental compliance deficiencies, for taking corrective action and preventive action, and for promoting continual improvement. This SOP applies to environmental incidents and most kinds of deficiencies, including those that have been identified during formal monitoring or auditing events or those that arise informally.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **Periodic Checks/field visits of the Industries:**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Plan and carryout periodic visits of the industrial estate thrice in every week, mark and record the *site environmental issues*.
- (ii) Document the above information in the appropriate manner with date, time and address, sign this document, and maintain a copy in the document files of *Field Visits*.
- (iii) Conduct formal or informal root cause analysis of the site environmental issues and develop a corrective and preventive action plan, schedule completion of these actions and record with signs, the appropriate corrective action with the approval of the seniors.
- (iv) Share this information with EO-PIEDMC where needed.

b. **Environment Complaints :**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Take immediate action over the *environment complaint between the neighboring industries*.
- (ii) Visit the reporting person from the complainant industry, look into the matter, note down the adverse environmental issues, the complainant has, take photographs.
- (iii) Write down the letter of complaint and for meeting immediately, to the opponent industrialist, and give him a period of one week for the corrective or preventive action to be made.
- (iv) Send reminder letter if the removal of the cause still not has been done after one week notice period, and then the warning letter afterwards, that the estate has the right to file this complaint to EPA to take legal action.



- (v) Document the above information and correspondence of individual case, in the **Environment Complaint File** and copy must be sent to EO-PIEDMC.

c. **Environment Committee :**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) List down all the environment issues and disputes related to EPA environment officers and show cause notices and any other environmental inconvenience of the industrialist.
- (ii) Present all these issues as a member of Environment Committee to the nominated DOE and Environment Officer by EPA in a monthly meeting.
- (iii) File the record of the minutes of meeting and attendance of all the participants
- (iv) Keep the record and implementation controls over the decisions in the meeting.
- (v) Send all the correspondence to EO-PIEDMC for further regulation of the Environment Committee. **Environment Committee notification** is filed as **Appendix-G**

d. **Environment Training, Awareness seminars and Hiring:**

The PIEDMC Environment Officer (EO) shall:

- (i) Arrange the environmental trainings in coordination with EPA and other sponsoring government organizations, and send to the nominated environment officers/environment committee members of the estates for final approval and participation.
- (ii) Recommend the estates with prior approval, to have environment educational or awareness seminars for the general environmental awareness of the participating industrialists and their workers.
- (iii) Making provisions for staffing and/or procurement for the estates that don't have any environment officer to ensure that monitoring and evaluation plans are executed by personnel who are competent on basis of education, training, and experience.
- (iv) Send all the correspondence to EO-PIEDMC for further regulation of the Environment Committee.

e. **Nomination of Reporting Officer:**

The industrial estates/BOM Environment Officer 1(EO1) shall:



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(PIEDMC)



- (i) Write a letter to each industry for the nominating person, the industry would like to nominate one of its employees for any environment correspondence between an industry and estate's management.
- (ii) Make a list of such nominees with their contact persons and industry detail and keep this in record.
- (iii) Send all the correspondence to EO-PIEDMC for further regulation of the Environment Committee.



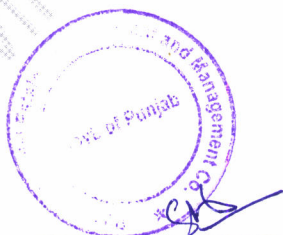


SOP-5: Completion Checks

1. **PURPOSE.** This SOP describes PIEDMC process for checking and evaluating the completion cases. This SOP applies to environmental fundamental checks and requirements in the industries tend to undergo for completion.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES:**

The industrial estates/BOM Environment Officer 1(EO1) shall:

- (i) Inform the EO-PIEDMC about completion case one or two days before time and no completion case shall be proceed without vetting of EO PIEDMC.
- (ii) Check all the required environmental aspects of the industry strictly.
- (iii) Check the obtained NOC from EPA, in case the industry don't show or don't have NOC, completion must not be granted in any case or be pending until the NOC issue will be resolved.
- (iv) Update the list of completion cases in every month and shared this information to EO-PIEDMC.





SOP-6: Environment Facilities Management

1. **PURPOSE.** This SOP describes PIEDMC process for maintaining the facilities related to physical environment and addressing actual and potential environmental practices and methodologies for promoting continual improvement and well being of given environment facilities.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **Drinking Water:**

The industrial estates/BOM Environment Officer 1(EO1)/Estate Management shall:

- (i) Ensure the physical integrity of distribution system (e.g. detection of leakages, pipe burst, and checking of illegal and unauthorized water connections.
- (ii) Conduct water sampling and laboratory testing at various points of water supply network and treatment system to get qualitative information of supplied water. (*see SOP 3 for reference also*)
- (iii) Maintaining all records regarding results of operational monitoring and verification
- (iv) Check Operation and maintenance of groundwater turbine and disinfection
- (v) Record keeping of all the results generating from operational monitoring and verification, and of significant incidents during operation
- (vi) Facilitate in Identifying the suitable drinking water treatment options and supply schemes
- (vii) Facilitate arrangement on Commissioning, operation and maintenance of drinking water system

b. **Waste Water Management :**

The industrial estates/BOM Environment Officer 1(EO1)/Estate Management shall:

- (i) Conduct wastewater flow monitoring and composite sampling of combined industrial effluent in SIE. (*see SOP 3 for reference also*)
- (ii) Conduct survey of industrial units regarding their types and production
- (iii) Develop and maintain wastewater database



- (iv) Enforce bye-laws at SIE; to remove heavy metals, Oil & Grease and caustic soda etc. by in-house treatment at source in the industries
- (v) Conduct wastewater audits of industries including sampling and testing of heavy metals in wastewater
- (vi) Facilitate industry and estate to implement water efficiency measures and technologies

c. **Plantation :**

The industrial estates/BOM Environment Officer 1(E01)/Estate Management/Horticulture Officer shall:

- (i) Facilitate plantation as per the list of Pollution controlling plants form EPD (*see Annexure H*)
- (ii) Plant the maximum number of plants according to the area of the estate and as per the EPA Regulations for plantation
- (iii) Maintain the soil nutritional and textural value.
- (iv) Ensure that each industry is planting a maximum numbers of pollution absorbing plants, with a proper landscape.
- (v) Maintain the maximum growth and number of plants each year and keep the proper record.
- (vi) Make effective plans for soil erosion.
- (vii) Maintain the green belts with flowers and grass
- (viii) Facilitate and arrange plantation drive and activities among the industrialists.

d. **Housekeeping and Sweeping of the Industrial Estates :**

The industrial estates/BOM Environment Officer 1(E01)/Estate Management shall:

- (i) Maintain regulatory requirements, hired effective and efficient industrial street sweeping services/company, to minimize pollutants in roadways
- (ii) Design and maintain a street sweeping schedules
- (iii) Evaluate the effectiveness of a street sweeping program to develop a written plan, schedule, and periodic re-evaluation for effective street sweeping
- (iv) **Design Street Cleaning Programme** in conjunction with labor, mechanical sweepers and water tankers, where appropriate to sweep or clean the streets.



e. **Dengue Control :**

The industrial estates/BOM Environment Officer 1(E01)/Estate Management shall:

- (i) Design **Anti Dengue Monitoring Team** for monitoring and evaluation of **Anti Dengue Programme** for further improvement in dengue intervention.
- (ii) **Make Action Plan** for field and industrial visits for vector breeding source reduction to clear all the areas.
- (iii) Plan and execute Awareness campaigns/ seminars/ Anti dengue walks.
- (iv) Define **Coordination Committees** in each estate for inspection, supervision and implementation over the designed action plan.
- (v) Check for timely **Anti Larva Spray, Fogging Spray**, and spread of **Dengue Larva Poison** at suspected areas.
- (vi) Check for **Dewatering and Cleaning Activity** daily.
- (vii) Prepare and maintain **Dengue Log Book**
- (viii) Share every **Anti Dengue Control Measures and Action Plans** with PIEDMC Admin Branch.





SOP-7: Environmental Compliance of Solid Waste Management

1. **PURPOSE.** This SOP describes PIEDMC process to address actual and potential environmental practices and methodologies for promoting continual improvement and well being of solid waste management facilities.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's estates with or without BOMs for the environmental activities over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **Solid Waste Management (SWM):**

The industrial estates/BOM Environment Officer 1(E01)/Estate Management shall:

- (i) Develop database for solid waste generated at SIE.
- (ii) Formulate bye-laws for effective solid waste management to abide local environmental legislative requirements and policies at SIE.
- (iii) Ensure that every industrial unit is responsible for handling and safe disposal of its construction & demolition waste
- (iv) Promote waste segregation at source by enforcing storage of solid waste into separate bins for organic (non-saleable i.e., waste needing disposal), inorganic (saleable i.e., reuse-able or recycle-able waste) and hazardous waste at the industrial unit level.
- (v) Conduct random monitoring of industrial units to ensure that the hazardous waste is managed properly.
- (vi) Ensure that the industrial units place their waste that requires disposal in bins for easy handling and collection
- (vii) Proportionately distribute the cost incurred on solid waste management in the operation and management (O&M) charges.
- (viii) Conduct quarterly inspections and audits for solid waste management practices at industrial unit level
- (ix) Promote the hiring of EPA approved contractor for proper handling and disposal of hazardous waste of industrial units
- (x) Levy penalties as decided by the estate management on the violators and disconnect the utility services in case of non-payment
- (xi) Arrange quarterly awareness raising campaigns among industries about solid waste management plan activities like environmental purchasing, use of recycled content products, waste reduction and recovery, improve material efficiency, sustainable consumption



SOP-8: Environmental Compliance of under developed Industrial Estates

1. **PURPOSE.** This SOP describes PIEDMC process to address the responsibilities of PIEDMC site staff or PDs to check and control the contractors to implement actual and potential site constructional practices and methodologies as per the Contact Document for promoting continual improvement in the work and well being of the labor involve.
2. **APPLICABILITY AND SCOPE.** This SOP applies to PIEDMC's under developing estates for the Contractor's working, over which the PIEDMC has control or influence.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **Safety Security Protection of the Environment:**

In the under developing industrial estates, Project Director's (PDs) under following sub clauses of Clause 19.1 of Project Contract Document shall check the contractor therein :

- (i) Have full regard of all persons entitled to be upon the site and keep the site (so far as the same is under his control) and the works (so far as the same are not completed or occupied by the Employer) in any orderly state appropriate to the avoidance of danger to such persons. (sub clause (a) of Clause 19.1)
- (ii) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the works or for the safety and convenience of the public or others. (sub clause (b) of Clause 19.1)
- (iii) Take all the responsible steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. (sub clause (c) of Clause 19.1)

b. **Employers Responsibility:**

In the under developing industrial estates, Project Director's (PDs) under following sub clauses of Clause 19.2 of Project Contract Document shall check the work therein :

- (i) Have full regard to the safety of all persons entitled to be upon the site. (sub clause (a) of Clause 19.2)
- (ii) Keep the site in an orderly state appropriate to the avoidance if danger to such persons. (sub clause (b) of Clause 19.2)



c. Exceptions:

In the under developing industrial estates, Project Director's (PDs) under following sub clauses of Clause 22.2 of Project Contract Document shall check the contractor therein :

- (i) Death or of injury to persons or loss of or damage to property resulting from any act or neglect of the employer, his agents servants or the other contractors, not being employed by the contractor, or in respect of any claims, proceedings, damages, costs, charges, and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the contractor, his servants or agents, such part of the said injury or damage, as may be just equitable having regard to the extent of the responsibility of the employer, his servants or agents or other contractors for the injury or damage. (Sub clause (d) of Clause 22.2).

d. Safety of Engineers and Works

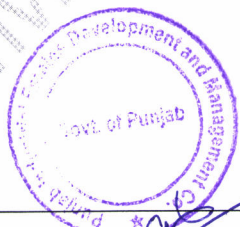
In the under developing industrial estates, Project Director's (PDs) under following Clause 19.1.1 of Project Contract Document shall check the contractor therein :

- (i) The contractor shall throughout the execution and completion be responsible to take all necessary precautions for the safety of employees on the work, and shall comply with all applicable safety laws and building codes to prevent accident or injury to persons on about or adjacent to the places, where the work is being performed. The contractor shall provide at work site before commencement of work, sufficient and in good working condition life saving equipments, first aid Kit etc. (Clause 19.1.1).

e. Lighting Works at Night

In the under developing industrial estates, Project Director's (PDs) under following Clause 19.4 of Project Contract Document shall check the contractor therein :

- (i) In the event of work being carried out at night, the contractor shall at his own cost provide and maintain good and sufficient light as will enable the work to proceed satisfactorily and without danger. The approaches to the site and the works where the night work is being carried out shall be sufficiently lighted. All arrangement adopted for such lighting shall be to the satisfaction of the engineers representative. (Clause 19.4).

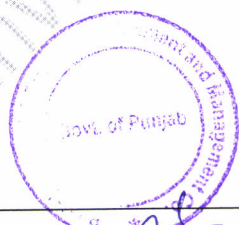




f. Reporting Requirement

All PDs/EOs (EO1) shall:

- (i) Check in case of any emergency and accident happened at site and shall report the whole incident to EO PIEDMC wherever needed.
- (ii) Fill the Accident/Emergency Report Form and send to EO PIEDMC (*see Annex-I*)
- (iii) Fill, keep the record and submit "Monthly Environment Monitoring Report Form" to EO-PIEDMC (*see Annex-J*)





SOP-9: Environmental Compliance Document Control and Record Keeping

1. **PURPOSE.** This SOP describes the process by which Board of Managements (BOMs) and PIEDMC controls relevant environmental documents, proceedings and maintains compliance related records.
2. **APPLICABILITY AND SCOPE.** This SOP applies to all documents associated with environmental corresponding documents and records, with the individual industry, estates and EPA over which the PIEDMC has control.
3. **DEFINITIONS.** See Appendix B: Glossary.
4. **RESPONSIBILITIES AND PROCEDURES**

a. **SOP Manual:**

The PIEDMC Environment Officer (EO) shall:

- (i) Coordinate, develop, issue, and control this SOP Manual. The SOP is a Controlled Document that can be used implemented and revised as needed and is available for access on the PIEDMC website and to the industrial Estates
- (ii) Respond to constructive suggestions for changes and/or improvement from document users if applicable.
- (iii) Provide the MS Word document and scanned signature page of all documents being submitted for CEO approval and/or those for the Record.

b. **Environmental Records:**

The industrial estates/BOM Environment Officer 1(EO1) and PIEDMC Environment Officer shall:

- (i) Prepare each file with individual environmental records e.g. Complaint File, Completion Case File, NOCs File, Environment Data, EPA, Site Inspection Visits, Environmental Mentoring, Trainings, Awareness activities, CETP and any new project etc.
- (ii) Keep the record of the regular data to be shared with EO PIEDMC
- (iii) Maintain the Record in Hard and Soft as well
- (iv) Sharing of the data and any record to other organization's officers must not be done without prior approval of the respective HOD
- (v) Keep the proper record of the Minutes of the Meetings



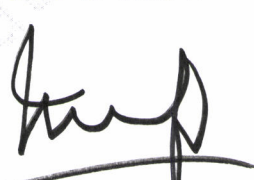
UNDERTAKING

I do hereby solemnly affirm and declare that I fully understand and accept the conditions contained in the Environmental Compliance Management Standard Operating Procedure (SOP) Manual 2014, and undertake to make it implement strictly in accordance with the said conditions in all the estates of PIEDMC. It may be revised and notified from time to time if needed.

Name and Designation: _____

Signature: _____

Dated: _____

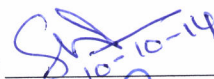

General Manager (Technical)
Punjab Industrial Estates
Development & Management Company
(NAVEED MUSHTAQ GILL)

14/11/14

Prepared By:

EO-PIEDMC

Signature and Date


10-10-14

Reviewed By:

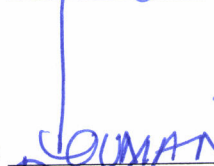
1. Chief Engineer (civil)

Signature and Date



2. Manager Technical

Signature and Date


MOHAMMAD

Approved By:

CEO PIEDMC

Signature and Date


Tarek



REFERENCES

1. Pakistan Environmental Protection Agency Regulations, 2000.
2. Punjab Environment Protection Amendment Act 7th March 2012.
3. Environment Compliance Management System SOP, USAID.
4. PEC/FIDIC conditions of contract 1992.



Appendix A: ACRONYMS

BOM	Board of Management
CPA	Corrective and Preventive Action
CETP	Combined Effluent Treatment Plant
E&S	Environment and Social
EPA	Environment Protection Agency
EPD	Environment Protection Department
EIA	Environmental Impact Assessment
EO	Environmental Officer
ECMS	Environmental Compliance Management System
IEE	Initial Environmental Examination
MIE-I & II	Multan Industrial Estate Phase I and II
NEQS	National Environmental Quality Standards
NOC	No Objection Certificate
O&M	Operational and Maintenance
PIEDMC	Punjab Industrial Estates Development and Management Company
QAAP	Quaid-e-Azam Apparel Park
QIE	Quaid-e-Azam Industrial Estate
RIE	Rahim Yar Khan Industrial Estate
SOP	Standard Operating Procedure
SIE	Sundar Industrial Estate
VIE	Vehari Industrial Estate





Appendix B: GLOSSARY

Applicants

Customers or industrialists who apply for land ownership.

Anti Dengue Monitoring Team

Anti Dengue Monitoring Team comprised of Estate Managers of all the industrial estates who will communicate and share their action plans with PIEDMC or apply the Anti Dengue activities plan to the estates, made by PIEDMC.

Anti Dengue Coordination Committees

Committees comprised of all the estates nominated environment committees members or may be the members authorized by competent authority at times, for the meetings and implementation of action plans for anti dengue activities.

Completion Checks

It is the procedure of inspection/ checking the industrial units by the members of the completion committee when they require Completion Certificate.

Change of Nature of Business

Change of applied nature of business an industrialist wants to change in the industrial estate.

Environmental Monitoring

Periodic inspection of the environmental parameters by the consultants e.g. Air, soil, drinking water and waste water to identify and monitor the source and level of pollution in them.

EPA Certified Labs

An Environmental Laboratory Certification Regulation 2000 has been notified whereby a network of ethnically sound laboratories is being established throughout the country. The certified laboratories will be authorized to test environmental samples and assist public and private sector to get their levels of emissions tested.

Environmental Complaints

Received complaints regarding uncontrolled pollution of air, water, solid waste etc from the neighboring industrialist to the estate management or from the estate management to the industrialist.



Environmental Committee Notification

Notification issued from the EPA for the nominated environment committee members comprised of District Officers Environment and the nominated members of PIEDMC from each industrial estate.

Field Visits

Periodic inspection and investigation of the industrial estates for multiple environmental tasks.

List of Negative Industries

List of selected nature of businesses that poses harmful impacts on environment, such businesses are not allowed in any estate of PIEDMC to be run by any industrialists.

Nominated Reporting Officer

Nominated person from each industry to remain in contact with estate management for environmental tasks or data collection

NO Objection Certificate

A formal part of the E&E Bureau's management system, which includes the organizational structure (roles, responsibilities, and authorities) and standard operating procedures (SOPs) that the Agency implements to fulfill its environmental compliance and sustainable development commitments.

New approved Applicants

New applied customers in PIEDMC whose nature of business has been approved after the environmental screening process.

Proposed Nature of Business

Nature of business a new applicant/ customer/ industrialist intend to be having in future industry.

Schedule I

List of projects requiring an Initial Environmental Examination (IEE) under Regulation 3 of Pakistan Environmental Protection Agency Regulations, 2000

Schedule II

List of projects requiring an Environmental Impact Assessment (EIA) under Regulation 4 of Pakistan Environmental Protection Agency Regulations, 2000.



Schedule IV

Application form which an applicant requires to submit with EIA/IEE to EPA under Regulation 8[(2)(a)] of Pakistan Environmental Protection Agency Regulations, 2000

Schedule VII

Undertaking which an applicant requires to submit with EIA/IEE to EPA under Regulation 13(2) of Pakistan Environmental Protection Agency Regulations, 2000.

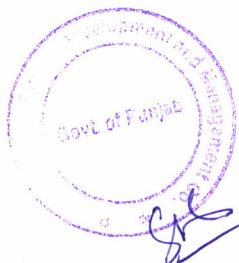
APPROVED LIST OF NEGATIVE INDUSTRIES

- Slaughter Houses
- Brick Kiln
- Livestock
- Poultry, Hatcheries and Protein making
- Sulphuric Acid Production
- Tanneries Metal Smelters
- Fertilizers
- Explosives
- Asbestos
- Hazardous Dyes Manufacturing
- Manufacturing of Inorganic Chemicals
- Stone Crushing and Pulverizing
- Hot Mix Plants
- Tobacco Industry and Others
- Cement

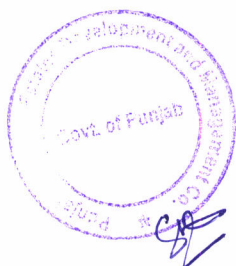


APPROVED LIST OF NEGATIVE INDUSTRIES

Sr. #	NEGATIVE INDUSTRIES	POSSIBLE IMPACTS
1.	SLAUGHTER HOUSES	PROCESS: In slaughterhouses: the animals are reared, fattened and transported to the slaughterhouses. After processing, the meat is stored before it is transported to retail outlets. The "preceding" activities produce manure etc. while for storage and transport (follow activities) cooling facilities are needed. This puts a heavy claim on energy sources. Discharge of the waste/ effluents, air emissions and organic solid waste production. Biodegradable Organic Compounds, Macro Nutrients and agro - industrial effluents are present in the water that is being discharged. IMPACTS: Air pollution may cause problems of various kinds: • Global warming, as a result of emissions of CO₂ • Changes in the ozone-layer, as a result of emissions of NO_x, CH₄, N₂O and CFC's • Acid rain, as a result of emissions of SO₂ and NH₃ • Health conditions • Dust Solid Waste By-products that are not used in any way will be referred to as solid waste. They must be dumped. • The following types of solid waste may be distinguished: - Toxic compounds. These compounds require special attention, e.g. special dumping grounds. - Organic compounds. These compounds may require attention under certain conditions because of hygienic reasons or because during decomposition ill odor or leaching problems may arise. - Non degradable compounds. These may be dumped at regular dumping grounds.



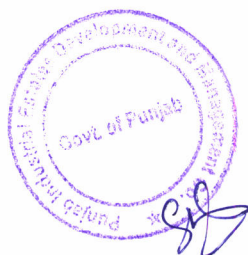
		Waste Water: The discharge of biodegradable organic compounds (BOC's) may cause a strong reduction of the amount of dissolved oxygen, which in turn may lead to reduced levels of activity or even death of aquatic life. • Macro-nutrients (N, P) may cause eutrophication of the receiving water bodies. Excessive algae growth and subsequent dying off and mineralization of these algae, may lead to the death of aquatic life because of oxygen depletion. • Agro-industrial effluents may contain compounds that are directly toxic to aquatic life (e.g. tannins and chromium in tannery effluents; un-ionized ammonia).
2.	BRICK KILN	Raw materials involved: Natural clay minerals, including kaolin and shale, make up the main body of brick. Small amounts of manganese, barium, and other additives are blended with the clay to produce different shades, and barium carbonate is used to improve brick's chemical resistance to the elements. Many other additives have been used in brick, including byproducts from papermaking, ammonium compounds, wetting agents, flocculants (which cause particles to form loose clusters) and deflocculents (which disperse such clusters). Some clays require the addition of sand or grog (pre-ground, pre-fired material such as scrap brick). Processes Involved: Grinding, Sizing, Extrusion, Coating, drying, Firing, Setting, and Packing. IMPACTS: Air Pollution from brick kilns Emission of huge quantity of toxic elements from brick kilns is causing serious health hazards. The brick kilns emit toxic fumes containing suspended particulate matters rich in carbon particles and high concentration of carbon monoxides and oxides of sulphur (SOx) that are harmful to eye, lungs and throat. Most of the contents of air pollutants are as follows: • These air pollutants stunt the mental and physical growth of children. According to the data, the primary source of SOx — the major pollutants in the air — is



		traffic vehicles (55.8%), followed by brick manufacturing industry (28.8%). And the primary source of NOx (nitrogen oxides) pollutants is also traffic vehicle (54.5%) and brick manufacturing industry (8.8%). It is one of the important sources of carbon dioxide emission. • Hydrocarbons and carbon monoxide due to incomplete combustion of fuel. • Sulphur oxides, concentration of which mainly depends on the amount of sulphur present in the coal and is significant where high sulphur content coal is used • Dust pollution generated during removal and laying down of ash layer on the top of the kiln and also due to blowing of ash stacked on the top and sides of the kiln.
3.	LIVESTOCK	Livestock are domesticated animals raised in an agricultural setting to produce commodities such as food, fiber and labor. Livestock are generally raised for profit. Raising animals is a component of modern agriculture. IMPACTS: • It is Identified that agriculture, including cows, as the major source of nitrate pollution in more than 100,000 square miles of polluted groundwater. • High levels of nitrates in drinking water also increase the risk of methemoglobinemia, or "blue-baby syndrome," which can kill infants. • Animal waste contains disease-causing pathogens, such as <i>Salmonella</i>, <i>E. coli</i>, <i>Cryptosporidium</i>, and fecal coliform, which can be 10 to 100 times more concentrated than in human waste. More than 40 diseases can be transferred to humans through manure. • Nutrients in animal waste cause algal blooms, which use up oxygen in the water, contributing to a "dead zone" in water bodies resulting in less oxygen to support aquatic life. • Ammonia, a toxic form of nitrogen released in gas form during waste disposal, can be carried more than



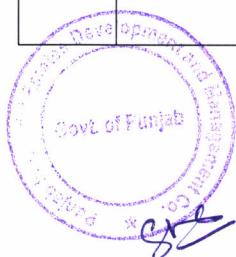
		300 miles through the air before being dumped back onto the ground or into the water, where it causes algal blooms and fish kills.
4.	POULTRY, HATCHERIES AND PROTEIN MAKING	Industrial poultry farms raise chickens on feeds that have been formulated to maximize chicken growth and weight gain. However, these feed formulations often include medically important pharmaceutical drugs whose overuse by the poultry industry represents a threat to human health. Farms often use low doses of antibiotics to get their chickens to market weight faster. IMPACTS: • Odor generation is the major issue. • The Fecal Waste may be left to rot in huge lagoons or sprayed over crop fields; both of these disposal methods result in runoff that contaminates the soil and water and kills fish and other wildlife. The concentration of parasites, bacteria, and chemical contaminants in animal excrement can wreak havoc on the ecosystems affected by farm runoff and can sicken people who live near these farms. The arsenical compounds in the drug may break down into inorganic arsenic, a toxin that can produce skin lesions, respiratory irritation, and several types of cancer in exposed persons, and may leach into local water supplies or remain in chicken tissue after slaughter. • Low dose antibiotic use in food animals has been linked to the development of antibiotic resistant bacterial strains. People infected with these strains have an increased risk of complications or death because these bacteria may have developed resistance to one or more of the limited number of antibiotic classes used on humans.
5.	SULPHURIC ACID PRODUCTION	The major derivative of sulphur is sulphuric acid (H ₂ SO ₄), one of the most important elements used as an industrial raw material. Sulphur is also used in batteries, detergents, fungicides, manufacture of fertilizers, gun power, matches and fireworks. Other applications are making corrosion-resistant concrete which has great strength and is forst resistant, for solvents and in a host of other products of the chemical and pharmaceutical industries.



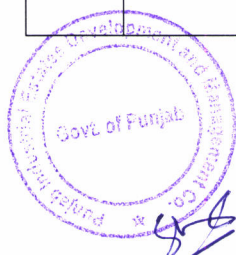
		IMPACTS: Sulfuric acid exists as particles and/or droplets in the air if released into the atmosphere. It dissolves when it is mixed with water. It has a moderate acute (short-term) toxicity on aquatic life. Sulfuric acid is very corrosive and would badly burn any plants, birds or land animals exposed to it. Extremely bad health effects to the human if inhaled or exposed.
6.	TANNERIES	PROCESS: In tanneries the hides from the slaughter house needs to be stored. To prevent spoilage, they should be pickled and preservatives should be added. The methods used to process hides will to some extent determine the durability of the produced leather. The production of more durable leather leads to smaller quantities of leather waste. Chrome tanned leather and leather products contain about 2-3% of dry weight chromium. Worn out leather products, such as shoes and jackets, are frequently dumped at municipal dumping places. EFFECTS/IMPACTS: Air pollution may cause problems of various kinds: • Global warming, as a result of emissions of CO₂ • Changes in the ozone-layer, as a result of emissions of NO_x, CH₄, N₂O and CFC's • Acid rain, as a result of emissions of SO₂ and NH₃ • Health conditions • Dust Solid Waste By-products that are not used in any way will be referred to as solid waste. They must be dumped. • The following types of solid waste may be distinguished: - Toxic compounds. These compounds require special attention, e.g. special dumping grounds. - Organic compounds. These compounds may require attention under certain conditions because of hygienic reasons or because during decomposition ill odor or leaching problems may arise. - Non degradable compounds. These may be



		dumped at regular dumping grounds. Waste Water: The discharge of biodegradable organic compounds (BOC's) may cause a strong reduction of the amount of dissolved oxygen, which in turn may lead to reduced levels of activity or even death of aquatic life. • Macro-nutrients (N, P) may cause eutrophication of the receiving water bodies. Excessive algae growth and subsequent dying off and mineralization of these algae, may lead to the death of aquatic life because of oxygen depletion. • Agro-industrial effluents may contain compounds that are directly toxic to aquatic life (e.g. tannins and chromium in tannery effluents; un-ionized ammonia).
7.	METAL SMELTERS	Process Involved: Metal processing plants and smelters are facilities that extract various metals from ore to create more refined metal products. Metals include copper, nickel, lead, zinc, silver, cobalt, gold, cadmium, etc. Smelting specifically involves heating the ore with a reducing agent such as coke, charcoal or other purifying agents. Primary smelting processes mine ore and concentrates, whereas secondary smelting processes recover scrap. IMPACTS: Air Pollution The principal sources of pollution caused by smelting are contaminant-laden air emissions and process wastes such as wastewater and slag. The principal sources of pollution caused by smelting are contaminant-laden air emissions and process wastes such as wastewater and slag. Soil pollution and water pollution Metals accumulate in the soil and loss of vegetation occurs, surface runoff, water bodies contamination, life risks to the aquatic habitat. Solid Waste Contamination of heavy metals.
8.	FERTILIZERS	Fertilizer is any organic or inorganic material of natural or synthetic origin (other than liming materials) that is added to a soil to supply one or more plant nutrients essential to the growth of plants. IMPACTS: Air pollution during processing fertilizer industry, chemical and other fumes of the acids used resulting in unpleasant odor and serious health effects. Human Health Pesticides can be entering the human body in three ways, flow directly by mouth, and infiltrate by skin, and breathing. Moreover, pesticides also bring a lot of issues to the



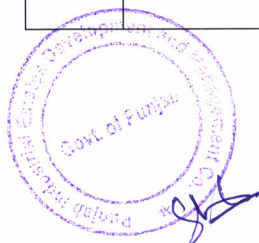
		people who digest the chemical fertilizers, for example, skin cancer. Waste Water Pollution, chemical spillage and surface runoff results in waste water pollution Solid Waste contaminated solid waste generated from the industry Dust Particles Dust particles and particulate matters generated during the processes involved.
9.	ASBESTOS	Asbestos was used in a wide variety of building materials and building components manufacturing industry. IMPACTS: • Asbestos on exposure and when its fibers inhaled results in asbestosis because it is highly Carcinogenic. • Water used for washing in the process of manufacturing materials made of asbestos results in waste water contamination.
10.	EXPLOSIVES	There are many types of explosives which are toxic to some extent. Manufacturing inputs can also be organic compounds or hazardous materials that require special handling due to risks (such as carcinogens). The decomposition products, residual solids or gases of some explosives can be toxic, whereas others are harmless, such as carbon dioxide and water. Examples of harmful by-products are: • Heavy metals, such as lead, mercury and barium from primers (observed in high volume firing ranges). • Nitric oxides from TNT. • Perchlorates when used in large quantities. IMPACTS: • Fire and Life Threats. • The Environmental Impact resulting from such particles like ammonium nitrate, a chemical used in the manufacture of explosives and predominately as an ingredient in agricultural fertilizer would disperse these gritty fragments throughout the environment. • Health Effects • Air pollution because of formation of chemical vapors
11.	HAZARDOUS DYES MANUFACTURING	IMPACTS: • The main environmental problems associated with this industry are typically those associated with water body



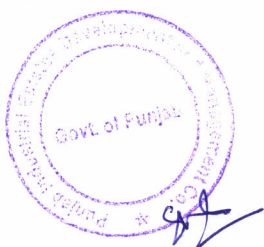
		pollution caused by the discharge of untreated effluents. Other environmental issues of equal importance are air emission, notably Volatile Organic Compounds (VOC)'s and excessive noise or odour as well as workspace safety. • Significant sources of air emissions include resin finishing and drying operations, printing, dyeing, fabric preparation, and wastewater treatment plants. Hydrocarbons are emitted from drying ovens and from mineral oils in high-temperature drying/curing. These processes can emit formaldehyde, acids, softeners, and other volatile compounds. • The aquatic toxicity of wastewater varies considerably among production facilities. The sources of aquatic toxicity can include salt, surfactants, ionic metals and their metal complexes, toxic organic chemicals, biocides and toxic anions.
	MANUFACTURING OF INORGANIC CHEMICALS	Chemical manufacturing segments are Basic chemicals; synthetic materials, including resin, synthetic rubber, and artificial and synthetic fibers and filaments; agricultural chemicals, including pesticides, fertilizer, and other agricultural chemicals; paint, coating, and adhesives; cleaning preparations, including soap, cleaning compounds, and toilet preparations; and other chemical products. IMPACTS: • Fire and Life Threats. • The Chemicals emitted more than 1.5 million tons of criteria air pollutants, of which more than 80 percent were carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen oxides (NO_x).
	STONE CRUSHING AND PULVERIZING	IMPACTS: • Size reduction, size classification and transfer operations have the potential to emit process and fugitive dust. • Respiratory Effects • Particulate Matter



	HOT MIX PLANTS	IMPACTS: • Hot mix chemical Plants result in fugitive dust, visible emissions. • Fire and Life threats • Respiratory disorders
	TOBACCO INDUSTRY AND OTHERS	From beginning to end, the process used by manufacturers to turn tobacco seeds into packaged cigarettes is energy intensive and destructive to the planet. A productive cigarette making machine can use in excess of 4 miles of paper per hour just to roll them, this does not include the packaging. One tree is wasted for every 300 cigarettes produced. The amount of energy and water needed to produce tobacco products, and with soil depletion and chemical wastage added on top of that, the enormous strain on the environment of production is apparent. IMPACTS: • Cigarette butts are a huge source of litter on land, along shorelines and in waterways. • Cigarette butts are not biodegradable. The paper and Tobacco in cigarette butts are biodegradable, but filters (most of which are made of cellulose acetate, a form of plastic) are not.
	CEMENT	IMPACTS: • Cement manufacture causes environmental impacts at all stages of the process. These include emissions of airborne pollution in the form of dust, gases, noise and vibration when operating machinery and during blasting • Cement manufacturing releases CO₂ in the atmosphere both directly when calcium carbonate is heated, producing lime and carbon dioxide, and also indirectly through the use of energy if its production involves the emission of CO₂. The cement industry produces about 5% of global man-made CO₂ emissions, of which 50% is from the chemical process, and 40% from burning fuel. The amount of CO₂ emitted by the cement industry is nearly 900 kg of CO₂ for every 1000 kg of cement produced. • The raw materials used, the high-temperature calcinations process of limestone and clay minerals can



		release in the atmosphere gases and dust rich in volatile heavy metals ,i.e., thallium, cadmium and mercury are the most toxic. Heavy metals (Tl, Cd, Hg,) are often found as trace elements in common metal sulfides (pyrite (FeS₂), zinc blende (ZnS), galena (PbS) present as secondary minerals in most of the raw materials.
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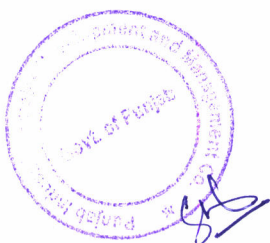
Environmental Undertaking

I, _____, Director / Chief Executive of

M/s. _____,

hereby undertake as follows:

- a) I will obtain NOC from Environment Protection Department as per Ordinance of Pakistan Environmental Protection (PEPA), Act, 1997 under Section 12.
- b) I will obey Pakistan Environmental Protection Act (PEPA) 1997 as per PIEDMC bye Laws.
- c) I will be responsible to make strict implementation of given precautionary measures as given in the provided MSDS (for spillage, leakage, instability of chemicals) in accordance to the nature of chemicals dealing by my industry (IPA, TOULENE, MEK, XYLENE, NAPTHA).
- d) I will be liable to provide essential personal protective equipments and to ensure the Occupational Safety and Health administration to all the workers of my industry.
- e) I will be liable to make sure all effective measures, materials (no. of functional fire extinguisher) and training provided to avoid any fire hazard as per the given information in PIEDMC byelaws.



- f) I will be liable to provide proof of proper safety exit plan of my industry.
- g) I will implement all the necessary measures and treatment before any discharge to the Environment.
- h) I will assure that any discharges from my industry will not be hazardous in any regard to the Sundar Industrials Estate Infrastructure.
- i) I will be liable to pay environmental degradation cost (Penalty) to PIEDMC if the information, material used and documents provided by me, are found to be falsified.
- j) I will be Liable to provide Environmental Monitoring Reports, when asked by the PIEDMC.
- k) I will be liable to any strict actions if there would be any non - compliance of environmental legislation.
- l) I will be liable to mention the cost of my unit.

For M/s _____

Name & Designation



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Environmental Undertaking

I, _____, Director / Chief Executive of

M/s. _____,

hereby undertake as follows:

- a) I will obtain NOC from Environment Protection Department as per Ordinance of Pakistan Environmental Protection (PEPA), Act, 1997 under Section 12.
- b) I will obey Pakistan Environmental Protection Act (PEPA) 1997 as per PIEDMC bye Laws.
- c) I will be responsible to make strict implementation of all precautionary measures as given in the provided MSDS.
- d) I will be liable to provide essential personal protective equipments and to ensure the Occupational Safety and Health administration to all the workers of my industry.
- e) I will be liable to make sure all effective measures, materials (no. of functional fire extinguishers) and training provided to avoid any fire hazard as per the given information in PIEDMC byelaws.
- f) I will be liable to provide proof of proper safety exit plan of my industry.



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- g) I will implement all the necessary measures and treatment before any discharge to the Environment.
- h) I will assure that any discharges from my industry will not be hazardous in any regard to the Sundar Industrials Estate Infrastructure.
- i) I will be liable to pay environmental degradation cost (Penalty) to PIEDMC if the information, material used and documents provided by me, are found to be falsified.
- j) I will be Liable to provide Environmental Monitoring Reports, when asked by the PIEDMC.
- k) I will be liable to any strict actions if there would be any non - compliance of environmental legislation.
- l) I will be liable to mention the cost of my unit.

For M/s _____

Name & Designation



**PAKISTAN ENVIRONMENTAL PROTECTION AGENCY (REVIEW OF IEE
AND EIA) REGULATIONS, 2000**

S.R.O. 339 (1)/2001. - In exercise of the powers referred by section 33 of the Pakistan Environmental Protection Act, 1997 (XXXIV of 1997), Pakistan Environmental Protection Agency, with the approval of the Federal Government is pleased to make the following Rules, namely : -

1. Short title and commencement

(1) These regulations may be called the Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2000.

(2) They shall come into force at once.

2. Definitions

(1) In these regulations, unless there is anything repugnant in the subject or context -

(a) "Act" means the Pakistan Environmental Protection Act, 1997 (XXXIV of 1997);

(b) "Director-General" means the Director-General of the Federal Agency;

(c) "EIA" means an environmental impact assessment as defined in section 2(xi);

(d) "IEE" means an initial environmental examination as defined in section 2(xxiv); and

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

(2) All other words and expressions used in these regulations but not defined shall have the same meanings as are assigned to them in the Act.

3. Projects requiring an IEE

A proponent of a project falling in any category listed in Schedule I shall file an IEE with the Federal Agency, and the provisions of section 12 shall apply to such project.

4. Projects requiring an EIA

A proponent of a project falling in any category listed in Schedule II shall file an EIA with the Federal Agency, and the provisions of section 12 shall apply to such project.

5. Projects not requiring an IEE or EIA

- (1) A proponent of a project not falling in any category listed in Schedules I and II shall not be required to file an IEE or EIA:

Provided that the proponent shall file –

- (a) an EIA, if the project is likely to cause an adverse environmental effect;
 - (b) for projects not listed in Schedules I and II in respect of which the Federal Agency has issued guidelines for construction and operation, an application for approval accompanied by an undertaking and an affidavit that the aforesaid guidelines shall be fully complied with.
- (2) Notwithstanding anything contained in sub-regulation (1), the Federal Agency may direct the proponent of a project, whether or not listed in Schedule I or II, to file an IEE or EIA, for reasons to be recorded in such direction:
- Provided that no such direction shall be issued without the recommendation in writing of the Environmental Assessment Advisory Committee constituted under Regulation 23.
- (3) The provisions of section 12 shall apply to a project in respect of which an IEE or EIA is filed under sub-regulation (1) or (2).

6. Preparation of IEE and EIA

- (1) The Federal Agency may issue guidelines for preparation of an IEE or an EIA, including guidelines of general applicability, and sectoral guidelines indicating specific assessment requirements for planning, construction and operation of projects relating to particular sector.
- (2) Where guidelines have been issued under sub-regulation (1), an IEE or EIA shall be prepared, to the extent practicable, in accordance therewith and the proponent shall justify in the IEE or EIA any departure therefrom.

7. Review Fees

The proponent shall pay, at the time of submission of an IEE or EIA, a non-refundable Review Fee to the Federal Agency, as per rates shown in Schedule III.

8. Filing of IEE and EIA

- (1) Ten paper copies and two electronic copies of an IEE or EIA shall be filed with the Federal Agency.

- (2) Every IEE and EIA shall be accompanied by –
 - (a) an application, in the form prescribed in Schedule IV; and
 - (b) copy of receipt showing payment of the Review Fee.

9. Preliminary scrutiny

- (1) Within 10 working days of filing of the IEE or EIA, the Federal Agency shall –
 - (a) confirm that the IEE or EIA is complete for purposes of initiation of the review process; or
 - (b) require the proponent to submit such additional information as may be specified; or
 - (c) return the IEE or EIA to the proponent for revision, clearly listing the points requiring further study and discussion.
- (2) Nothing in sub-regulation (1) shall prohibit the Federal Agency from requiring the proponent to submit additional information at any stage during the review process.

10. Public participation

- (1) In the case of an EIA, the Federal Agency shall, simultaneously with issue of confirmation of completeness under clause (a) of sub-regulation (1) of Regulation 9, cause to be published in any English or Urdu national newspaper and in a local newspaper of general circulation in the area affected by the project, a public notice mentioning the type of project, its exact location, the name and address of the proponent and the places at which the EIA of the project can, subject to the restrictions in sub-section (3) of section 12, be accessed.
- (2) The notice issued under sub-regulation (1) shall fix a date, time and place for public hearing of any comments on the project or its EIA.
- (3) The date fixed under sub-regulation (2) shall not be earlier than 30 days from the date of publication of the notice.
- (4) The Federal Agency shall also ensure the circulation of the EIA to the concerned Government Agencies and solicit their comments thereon.
- (5) All comments received by the Federal Agency from the public or any Government Agency shall be collated, tabulated and duly considered by it before decision on the EIA.

- (6) The Federal Agency may issue guidelines indicating the basic techniques and measures to be adopted to ensure effective public consultation, involvement and participation in EIA assessment.

11. Review

- (1) The Federal Agency shall make every effort to carry out its review of the IEE within 45 days, and of the EIA within 90 days, of issue of confirmation of completeness under Regulation 9.
- (2) In reviewing the IEE or EIA, the Federal Agency shall consult such Committee of Experts as may be constituted for the purpose by the Director-General, and may also solicit views of the sectoral Advisory Committee, if any, constituted by the Federal Government under sub-section (6) of section 5.
- (3) The Director-General may, where he considers it necessary, constitute a committee to inspect the site of the project and submit its report on such matters as may be specified.
- (4) The review of the IEE or EIA by the Federal Agency shall be based on quantitative and qualitative assessment of the documents and data furnished by the proponent, comments from the public and Government Agencies received under Regulation 10, and views of the committees mentioned in sub-regulations (2) and (3) above.

12. Decision

On completion of the review, the decision of the Federal Agency shall be communicated to the proponent in the form prescribed in Schedule V in the case of an IEE, and in the form prescribed in Schedule VI in the case of an EIA.

13. Conditions of approval

- (1) Every approval of an IEE or EIA shall, in addition to such conditions as may be imposed by the Federal Agency, be subject to the condition that the project shall be designed and constructed, and mitigatory and other measures adopted, strictly in accordance with the IEE/EIA, unless any variation thereto have been specified in the approval by the Federal Agency.
- (2) Where the Federal Agency accords its approval subject to certain conditions, the proponent shall –
 - (a) before commencing construction of the project, acknowledge acceptance of the stipulated conditions by executing an undertaking in the form prescribed in Schedule VII;

- (b) before commencing operation of the project, obtain from the Federal Agency written confirmation that the conditions of approval, and the requirements in the IEE/EIA relating to design and construction, adoption of mitigatory and other measures and other relevant matters, have been duly complied with.

14. Confirmation of compliance

(1) The request for confirmation of compliance under clause (b) of sub-regulation (2) of Regulation 13 shall be accompanied by an Environmental Management Plan indicating the measures and procedures proposed to be taken to manage or mitigate the environmental impacts for the life of the project, including provisions for monitoring, reporting and auditing.

(2) Where a request for confirmation of compliance is received from a proponent, the Federal Agency may carry out such inspection of the site and plant and machinery and seek such additional information from the proponent as it may deem fit:

Provided that every effort shall be made by the Federal Agency to provide the requisite confirmation or otherwise within 15 days of receipt of the request, with complete information, from the proponent.

(3) The Federal Agency may, while issuing the requisite confirmation of compliance, impose such other conditions as the Environmental Management Plan, and the operation, maintenance and monitoring of the project as it may deem fit, and such conditions shall be deemed to be included in the conditions to which approval of the project is subject.

15. Deemed approval

The four-month period for communication of decision stipulated in sub-section (4) of section 12 shall commence from the date of filing of an IEE or EIA in respect of which confirmation of completeness is issued by the Federal Agency under clause (a) of sub-regulation (1) of Regulation 9.

16. Extension in review period

Where the Federal Government in a particular case extends the four-month period for communication of approval prescribed in sub-section (5) of section 12, it shall, in consultation with the Federal Agency, indicate the various steps of the review process to be taken during the extended period, and the estimated time required for each step.

17. Validity period of approval

(1) The approval accorded by a Federal Agency under section 12 read with Regulation 12 shall be valid, for commencement of construction, for a period of three years from the date of issue.

(2) If construction is commenced during the initial three year validity period, the validity of the approval shall stand extended for a further period of three years from the date of issue.

(3) After issue of confirmation of compliance, the approval shall be valid for a period of three years from the date thereof.

(4) The proponent may apply to the Federal Agency for extension in the validity periods mentioned in sub-regulations (1), (2) and (3), which may be granted by the Federal Agency in its discretion for such period not exceeding three years at a time, if the conditions of the approval do not require significant change:

Provided that the Federal Agency may require the proponent to submit a fresh IEE or EIA, if in its opinion changes in location, design, construction and operation of the project so warrant.

18. Entry and inspection

(1) For purposes of verification of any matter relating to the review or to the conditions of approval of an IEE or EIA prior to, during or after commencement of construction or operation of a project, duly authorized staff of the Federal Agency shall be entitled to enter and inspect the project site, factory building and plant and equipment installed therein.

(2) The proponent shall ensure full cooperation of the project staff at site to facilitate the inspection, and shall provide such information as may be required by the Federal Agency for this purpose and pursuant thereto.

19. Monitoring

(1) After issue of approval, the proponent shall submit a report to the Federal Agency on completion of construction of the project.

(2) After issue of confirmation of compliance, the proponent shall submit an annual report summarizing operational performance of the project, with reference to the conditions of approval and maintenance and mitigatory measures adopted by the project.

(3) To enable the Federal Agency to effectively monitor compliance with the conditions of approval, the proponent shall furnish such additional information as the Federal Agency may require.

20. Cancellation of approval

(1) Notwithstanding anything contained in these Regulations, if, at any time, on the basis of information or report received or inspection carried out, the Federal Agency is of the opinion that the conditions of an approval have not been complied with, or that the information supplied by a proponent in the approved IEE or EIA is incorrect, it

shall issue notice to the proponent to show cause, within two weeks of receipt thereof, why the approval should not be cancelled.

(2) If no reply is received or if the reply is considered unsatisfactory, the Federal Agency may, after giving the proponent an opportunity of being heard:

(i) require the proponent to take such measures and to comply with such conditions within such period as it may specify, failing which the approval shall stand cancelled; or

(ii) cancel the approval.

(3) On cancellation of the approval, the proponent shall cease construction or operation of the project forthwith.

(4) Action taken under this Regulation shall be without prejudice to any other action that may be taken against the proponent under the Act or rules or regulations or any other law for the time being in force.

21. Registers of IEE and EIA projects

Separate Registers to be maintained by the Federal Agency for IEE and EIA projects under sub-section (7) of section 12 shall be in the form prescribed in Schedule VIII.

22. Environmentally sensitive areas

(1) The Federal Agency may, by notification in the official Gazette, designate an area to be an environmentally sensitive area.

(2) Notwithstanding anything contained in Regulations 3, 4 and 5, the proponent of a project situated in an environmentally sensitive area shall be required to file an EIA with the Federal Agency.

(3) The Federal Agency may from time to time issue guidelines to assist proponents and other persons involved in the environmental assessment process to plan and prepare projects located in environmentally sensitive areas.

(4) Where guidelines have been issued under sub-regulation (3), the projects shall be planned and prepared, to the extent practicable, in accordance therewith and any departure therefrom justified in the EIA pertaining to the project.

23. Environmental Assessment Advisory Committee

For purposes of rendering advice on all aspects of environmental assessment, including guidelines, procedures and categorization of projects, the Director-General shall constitute an Environmental Assessment Advisory Committee comprising –

(a) Director EIA, Federal Agency ... Chairman

- (b) One representative each of the Provincial Agencies ... Members
- (c) One representative each of the Federal Planning Commission and the Provincial Planning and Development Departments ... Members
- (d) Representatives of industry and non-Governmental organizations, and legal and other experts ... Members

24. Other approvals

Issue of an approval under section 12 read with Regulation 12 shall not absolve the proponent of the duty to obtain any other approval or consent that may be required under any law for the time being in force.

SCHEDULE I
(See Regulation 3)

List of projects requiring an IEE

A. Agriculture, Livestock and Fisheries

1. Poultry, livestock, stud and fish farms with total cost more than Rs.10 million
2. Projects involving repacking, formulation or warehousing of agricultural products

B. Energy

1. Hydroelectric power generation less than 50 MW
2. Thermal power generation less than 200 KW
3. Transmission lines less than 11 KV, and large distribution projects
4. Oil and gas transmission systems
5. Oil and gas extraction projects including exploration, production, gathering systems, separation and storage
6. Waste-to-energy generation projects

C. Manufacturing and processing

1. Ceramics and glass units with total cost more than Rs.50 million
2. Food processing industries including sugar mills, beverages, milk and dairy products, with total cost less than Rs.100 million
3. Man-made fibers and resin projects with total cost less than Rs.100 million
4. Manufacturing of apparel, including dyeing and printing, with total cost more than Rs.25 million
5. Wood products with total cost more than Rs.25 million

D. Mining and mineral processing

1. Commercial extraction of sand, gravel, limestone, clay, sulphur and other minerals not included in Schedule II with total cost less than Rs.100 million
2. Crushing, grinding and separation processes

3. Smelting plants with total cost less than Rs.50 million

E. Transport

1. Federal or Provincial highways (except maintenance, rebuilding or reconstruction of existing metalled roads) with total cost less than Rs.50 million
2. Ports and harbor development for ships less than 500 gross tons

F. Water management, dams, irrigation and flood protection

1. Dams and reservoirs with storage volume less than 50 million cubic meters of surface area less than 8 square kilometers
2. Irrigation and drainage projects serving less than 15,000 hectares
3. Small-scale irrigation systems with total cost less than Rs.50 million

G. Water supply and treatment

Water supply schemes and treatment plants with total cost less than Rs.25 million

H. Waste disposal

Waste disposal facility for domestic or industrial wastes, with annual capacity less than 10,000 cubic meters

I. Urban development and tourism

1. Housing schemes
2. Public facilities with significant off-site impacts (e.g. hospital wastes)
3. Urban development projects

J. Other projects

Any other project for which filing of an IEE is required by the Federal Agency under sub-regulation (2) of Regulation 5

D. Transport

1. Airports
2. Federal or Provincial highways or major roads (except maintenance, rebuilding or reconstruction of existing roads) with total cost of Rs.50 million and above
3. Ports and harbor development for ships of 500 gross tons and above
4. Railway works

E. Water management, dams, irrigation and flood protection

1. Dams and reservoirs with storage volume of 50 million cubic meters and above or surface area of 8 square kilometers and above
2. Irrigation and drainage projects serving 15,000 hectares and above

F. Water supply and treatment

Water supply schemes and treatment plants with total cost of Rs.25 million and above

G. Waste Disposal

1. Waste disposal and/or storage of hazardous or toxic wastes (including landfill sites, incineration of hospital toxic waste)
2. Waste disposal facilities for domestic or industrial wastes, with annual capacity more than 10,000 cubic meters

H. Urban development and tourism

1. Land use studies and urban plans (large cities)
2. Large-scale tourism development projects with total cost more than Rs.50 million

I. Environmentally Sensitive Areas

All projects situated in environmentally sensitive areas

J. Other projects

1. Any other project for which filing of an EIA is required by the Federal Agency under sub-regulation (2) of Regulation 5.
2. Any other project likely to cause an adverse environmental effect

SCHEDULE IV
[See Regulation 8(2)(a)]

Application Form

1.	Name and address of the proponent		
2.	Description of the project		
3.	Location of the Project		
4.	Objectives of the Project		
5.	IEE/EIA attached?	IEE/EIA : Yes/No	
6.	Have alternative sites been considered and reported in IEE/EIA?	Yes/No	
7.	Existing Land use		
8.	Is basic site data available, or has it been measured?	(only tick yes if the data is available in the IEE/EIA) Meteorology (including rainfall) Ambient Air quality Ambient water quality Groundwater quality	<u>Available</u> Yes/No Yes/No Yes/No Yes/No
9.	Have estimates of the following been reported?	Water Balance Solid waste disposal Liquid waste treatment	<u>Estimated</u> Yes/No Yes/No Yes/No <u>Reported</u> Yes/No Yes/No Yes/No
10.	Source of power		
11.	Labor Force (number)	Construction: Operation:	

Verification: I do solemnly affirm and declare that the information given above and contained in the attached IEE/EIA is true and correct to the best of my knowledge and belief.

Date _____

SCHEDULE VII
[See Regulation 13(2)]

Undertaking

I, (-----) as proponent for (-----) do hereby solemnly affirm and declare that I fully understand and accept the conditions contained in the approval accorded by the Federal Agency bearing tracking no. _____ dated _____, and undertake to design, construct and operate the project strictly in accordance with the said conditions and the IEE/EIA.

Date _____

Witnesses

(1)

(2)

**PUNJAB INDUSTRIAL ESTATES
(CEO Secretariat)**

November 4th, 2013

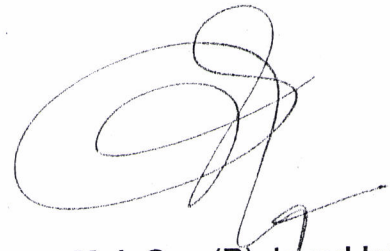
INTER OFFICE MEMO

To: Technical Wing
Marketing and Admin Wing
Finance Wing

Subject: **Environmental Compliance / Approval**

All plots being sold in all industrial estates of PIEDMC will continue to be routed through EO for environmental approval/comments in future as well. Please ensure that hazardous industries are not permitted.

Please ensure compliance.



**Maj. Gen (R) Javed Iqbal
Chief Executive Officer**

C.C:- Environment Officer ✓



GOVERNMENT OF THE PUNJAB
ENVIRONMENTAL PROTECTION AGENCY
NATIONAL HOCKEY STADIUM FEROZEPUR ROAD,
LAHORE



No.PA/D(EIA)/EPA/PIEDMC/2013

Dated 08/11/2013

To



The General Manager (Technical),
PIEDMC, Lahore

Subject:

**FORMULATION OF JOINT ENVIRONMENT COMMITTEES - EPA
AND PIEDMC**

Kindly refer to your letter No.PIE/ENV/2553 dated 04.03.2013 on
the subject.

2. I am directed to intimate that following officers of the
Environmental Protection Agency will be the members of the Joint
Environment Committees:

- i) The District Officer (Environment), Lahore for SIE & QIE.
- ii) The District Officer (Environment), Multan for MIE.
- iii) The District Officer (Environment), Rahim Yar Khan for RIE.

DIRECTOR (EIA)

No. & Date Even:

A copy is forwarded to the following for kind information and
request to participate in the meetings of Joint Environment Committee
regularly for the solution of the environmental problems of the Industrial
Estates:

- i) The District Officer (Environment), Lahore.
- ii) The District Officer (Environment), Multan.
- iii) The District Officer (Environment), Rahim Yar Khan.

DIRECTOR (EIA)

C.C:

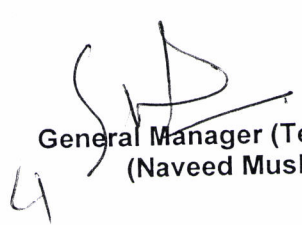
The Director General, EPA, Punjab, Lahore

PIE/ENV/2553
4th March, 2013

Mr. Farooq Hameed Sheikh,
Director General
Environment Protection Agency (EPA)
Gate No. 8, National Hockey Stadium
Lahore.

Subject: Formulation of Joint Environment Committee- EPA and PIEDMC

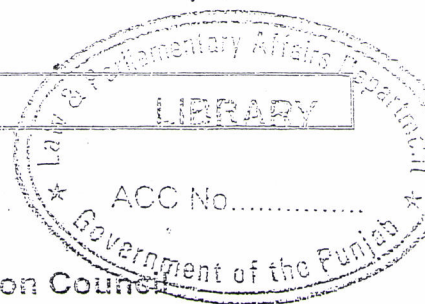
1. As per the "Environment Review Meeting", held on 4th Feb, 2013 at 1:30PM at Sundar Industrial Estate (SIE), PIEDMC Head Office, Sundar, it was mutually decided between the officials of Punjab Industrial Estate Development and Management Company (PIEDMC) and Environment Protection Agency (EPA), to formulate a "Joint Environment Committee" that will work jointly in all the Estates of PIEDMC.
2. The nominated list of the members from PIEDMC for this **Committee** shall be as follows :
 - a. Mr. Bhadur Ali Khan, Env. Officer, SIE Contact # 03334582911
 - b. Muhammad Shahid, Estate Engineer, QIE Contact # 03340079008
 - c. Mr. Amir Toufeeq, Manager Construction, MIE Phase I & II, Contact # 03224004333.
 - d. Mr. Sheir Muhammad, Project Director, RIE Contact # 030273357356
3. The Secretary of this Committee will be Saadia Salman, Env. Officer, PIEDMC.
4. Please nominate the sites officers from EPA, as a member of this Joint Committee.


General Manager (Technical)
(Naveed Mushtaq Gill)

C.C: PS to CEO
GM-Tech-PIEDMC
Deputy Director EIA, EPA Punjab
Estate Manager BOM-SIE
Estate Manager BOM-QIE
PD-MIE Phase I & Phase II
PD-RIE

THE PUNJAB ENVIRONMENTAL PROTECTION ACT, 1997
(XXXIV OF 1997)

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33. Power to make regulations
34. Repeal, savings and succession

attested

Ruqiyah

RUQIYA UMBREEN
Law Officer/Prosecutor
Environmental Protection Agency
Punjab, Lahore.

SCHEDULE

for the protection, conservation, rehabilitation and improvement of the
for the prevention and control of pollution, and promotion of sustainable
development,

EAS It is expedient to provide for the protection, conservation,
and improvement of the environment, prevention and control of
promotion of sustainable development, and for matters connected
incidental thereto;

hereby enacted as follows:

title, extent and commencement.— (1) This Act shall be called the
Environmental Protection Act, 1997.

It extends to the whole of ²[the Punjab].

It shall come into force at once.

definitions.— In this Act, unless there is anything repugnant in the subject or

(i) "adverse environmental effect" means impairment of, or damage to, the
environment and includes:

- (a) impairment of, or damage to, human health and safety or to
biodiversity or property;
- (b) pollution; and
- (c) any adverse environmental effect as may be specified in the
regulations;

(ii) "agriculture 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, odor, light, electro-magnetic
radiation, heat, fumes, combustion exhaust, exhaust gases, noxious
gases, hazardous substance 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
eco-systems;

(v) "Council" means the ³[Punjab] 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

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);

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;

Environmental Magistrate means the Magistrate of the First Class appointed under section 24;

Environmental Tribunal means the Environmental Tribunal constituted under section 20;

[*****]

Factory means any premises in which industrial activity is being undertaken.

Government means Government of the Punjab.]

Government Agency includes-

- (a) a department, an attached department or any other office of the Government; and
- (b) a development authority, local authority, company or a body corporate established or controlled by the Government;]

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;

Hazardous waste means waste which is or which contains a hazardous substance or which may be prescribed as hazardous substance or which may be prescribed as hazardous waste, and includes hospital waste and nuclear waste;

[*****]

- (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 ⁹[Government] by notification in the official Gazette to be a local authority for the purposes of this Act;
- (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) ¹⁰[*****];
- (xxx) "noise" means the intensity, duration and character of sounds from all sources, and includes vibration;
- (xxxi) "nuclear waste" means waste from any nuclear reactor or nuclear plant or other nuclear energy system, whether or not such waste is radioactive;
- (xxxii) "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;
- (xxxiii) "pollution" means the contamination of air, land or water by the discharge or emission of effluents 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

attested
RUQIYA UMBREEN
Law Officer/Prosecutor
Environmental Protection Agency
Punjab, Lahore.

"project" means any activity, plan, scheme, proposal or undertaking involving any change in the environment and includes:-

- (a) construction by 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;

i) "proponent" means the person who proposes or intends to undertake a project;

(xvii) "Provincial Agency" means the Provincial Environmental Protection Agency established under the Act, or any Government Agency, local council or local authority exercising the powers and functions of the Provincial Agency];

(vii-a) "Punjab Environmental Quality Standards" mean the standards prepared by the Provincial Agency and approved by the Council];

(ii) "regulations" means regulations made under the Act;

(x) "rules" means rules made under this Act;

"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;

"standards" means qualitative and quantitative standards for discharge of effluents 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 ¹⁴[Punjab] Environmental Quality Standards, emission standards and other standards established under this Act and the rules and regulations made there under;

"sustainable development" means development that meets the needs of the present generation without compromising the ability of future generations to meet their needs;

¹⁵[*****];

(7) "vessel" includes anything made for the conveyance by water of human beings or of goods; and

"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.

Establishment of the ¹⁸[Punjab] Environmental Protection Council.— ¹⁷[(1)
The Government shall, by notification in the official Gazette, establish a
Council to be known as the Punjab Environmental Protection Council
consisting of—

- i) Chief Minister of the Punjab; or such other Chairperson
person as nominated by the Chief Minister;
- ii) Minister Incharge of the Environment Vice Chairperson
Protection Department;
- iii) such other persons not exceeding thirty five Members
as the Government may appoint, of which at
least twenty five shall be non-official including
at least three Members of the Provincial
Assembly of the Punjab, five representatives
of the Chambers of Commerce and Industry
and one or more representatives of the
Chambers of Agriculture, Medical and legal
profession, trade unions and non-
governmental organizations concerned with
the environment and sustainable
development, and scientists, technical
experts and educationalists; and
- iv) Secretary to the Government, Environment Member/Secretary]
Protection Department.

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Environmental Protection Agency
Punjab, Lahore.

(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
period of three 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
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.

Functions and powers of the Council.—(1) The Council shall---

- (a) co-ordinate and supervise enforcement of the provisions of this Act;
- (b) approve comprehensive ¹⁸[Punjab] environmental policies and ensure
their implementation within the framework of a ¹⁹[Punjab] conservation
strategy as may be approved by the ²⁰[Government] from time to time;
- (c) approve the ²¹[Punjab] 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) coordinate integration of the principles and concerns of sustainable development into ²²[Punjab] development plans and policies; and
- (f) consider the ²³[Punjab] Environment Report and give appropriate directions thereon.

(2) The Council may, either itself or on the request of any person or organisation, direct the ²⁴[Provincial 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.

Establishment of the ²⁵[Provincial] Environmental Protection Agency.—

(1) The Government shall, by notification in the official Gazette, establish the Provincial Environmental Protection Agency to exercise the powers and perform the functions assigned to it under this Act, the rules and the regulations].

(2) The ²⁷[Provincial Agency] shall be headed by a Director General, who shall be appointed by the ²⁸[Government] on such terms and conditions as it may determine.

(3) The ²⁹[Provincial Agency] shall have such administrative, technical and legal staff as the ³⁰[Government] may specify, to be appointed in accordance with such procedure as may be prescribed.

(4) The powers and functions of the ³¹[Provincial Agency] shall be exercised and performed by the Director-General.

(5) The Director-General may, by general or special order, delegate any of these powers and functions to staff appointed under sub-section (3).

(6) For assisting the ³²[Provincial Agency] in the discharge of its functions, the ³³[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 ³⁴[Provincial Agency].—(1) The ³⁵[Provincial Agency] shall—

²² Word "National" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²³ Word "National" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²⁴ Words "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²⁵ Words "Pakistan" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²⁶ Sub-section (1) substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²⁷ Words "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²⁸ Words "Federal Government" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

²⁹ Words "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

administer and implement the provisions of this Act and the rules and regulations made thereunder;

prepare, in coordination with the appropriate Government Agency and in consultation with the concerned sectoral Advisory Committees, ³⁸[-----] environmental policies for approval by the Council;

take all necessary measures for the implementation of the ³⁷[-----] environmental policies approved by the Council;

prepare and publish an annual ³⁹[Punjab] Environmental Report on the state of the environment;

prepare or revise, and establish the ³⁹[Punjab] Environmental Quality Standards with approval of the Council:

Provided that before seeking approval of the Council, the ⁴⁰[Provincial Agency] shall publish the proposed ⁴¹[Punjab] Environmental Quality Standards for public opinion in accordance with the prescribed procedure; and

ensure enforcement of the ⁴²[Punjab] Environmental Quality Standards;

(g) establish standards for the quality of the ambient air, water and land, by Notification in the Official Gazette];

co-ordinate environmental policies and programmes nationally and internationally;

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;

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;

(i) 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;

identify the needs for, and initiate legislation in various sectors of the environment;

render advice and assistance in environmental matters, including such information and data available with its 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;

"National" omitted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of

"National" omitted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of

"National" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of

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;

provide information and guidance to the public on environmental matters;

recommend environmental courses, topics, literature and books for incorporation in the curricula and syllabi of educational institutions;

promote public education and awareness of environmental issues through mass media and other means, including seminars and workshops;

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;

encourage the formation and working of non-governmental organizations, community organizations and village organizations to prevent and control pollution and promote sustainable development;

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 ⁴⁴[Provincial Agency] may---

(a) undertake inquiries or investigation into environmental issues, either of its own accord or upon complaint from any person or organisation;

(b) request any person to furnish any information or data relevant to its functions;

(c) initiate with the approval of the ⁴⁵[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;

(d) recommend to the ⁴⁶[Government] the adoption of financial and fiscal programmes, schemes or measures for achieving environmental objectives and goals and the purposes of this Act including:-

(i) incentives, prizes awards, subsidies, tax exemptions, rebates and depreciation allowances;

(ii) taxes, duties, cesses and other levies;

(e) 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

(f) provide or arrange, in accordance with such procedure as may be prescribed, financial assistance for projects designed to facilitate the discharge of its functions.

Powers of the ⁴⁷[Provincial Agency].— Subject to the provisions of this Act, ⁴⁸[Provincial Agency] may---

- (a) lease, purchase, acquire, own, hold, improve, use or otherwise deal in and with any property both movable 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 made thereunder;
- (d) enter into the 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 ⁴⁹[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 deem 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 Tribunal 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 effluents, 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;

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 Tribunal or Environmental Magistrate; and

- ⁵⁰[(k) establish the Punjab Environmental Coordination Committee comprising the Director General as its convener and such other members as the Government may appoint to exercise such powers and perform such functions as may be delegated or assigned to it by the Government for carrying out the purposes of this Act.]

⁵¹[*****].

Establishment of the Provincial Sustainable Development Funds.— ⁵²[(1) There shall be established a Provincial Sustainable Development Fund].

(2) The Provincial Sustainable Development Fund shall be derived from following sources, namely:-

- (a) grants made or loans advanced by the ⁵³[Government or the Federal Government];

- (b) aid and assistance, grants, advances, donations and other non-obligatory funds received from foreign governments, ⁵⁴[punjab] 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 specified 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.**—⁵⁵[(1) The Provincial Sustainable Development Fund shall be managed by a Board known as the Provincial Sustainable Development Fund Board consisting of-

- (i) Chairman, Planning and Development Board; Chairperson
- (ii) Such officers of the Government, not Members exceeding six, as the Government may appoint including Secretaries incharge of the Finance, Industries and Environment Departments;
- (iii) such non-official persons not exceeding Members ten as the Government may appoint including representatives of the Chamber of Commerce and Industry, non-governmental organizations and major donors; and
- (iv) 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

Environmental Quality standards or where applicable, the standards
prescribed under sub-clause (i) of clause (g) of sub-section (1) of section 6.

(2) The ⁵⁷[Government] may levy a pollution charge on any person who
violates or fails to comply with the provisions of sub-section (1) to be calculated
at a 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 provision of sub-section (3) shall not apply to projects, which
commenced industrial activity on or after the thirtieth day of June, 1994.

**Initial environmental examination and environmental impact
assessment.**— (1) No proponent of a project shall commence construction or
operation unless he has filed with the ⁵⁸[Provincial Agency] an initial environmental
examination or where the project is likely to cause an adverse environmental effect,
an environmental impact assessment, and has obtained from the ⁵⁹[Provincial
Agency] approval in respect thereof.

(2) The ⁶⁰[Provincial Agency] shall:-

(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
public participation which relates to---

(i) 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 ⁶¹[Provincial 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

(ii) International relations, ⁶²[punjab] security or maintenance of law and
order, except with the consent of the ⁶³[Government]; or

(iii) matters covered by legal professional privilege.

(4) The ⁶⁴[Provincial Agency] shall communicate its approval or otherwise
within a period of four months from the date the initial environmental examination or

word "National" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV

word "Federal Government" substituted by the Punjab Environmental Protection (Amendment) Act,
(XXXV of 2012)

word "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act,
(XXXV of 2012)

word "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act,
(XXXV of 2012)

word "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act,

Environmental impact assessment is filed complete in all respects in accordance with the prescribed procedure, failing which the initial environmental examination or, as 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 rules and regulations made thereunder.

Subject to sub-section (4) the ⁶⁵[Government] may in a particular case extend the aforementioned period of four months if the nature of the project so requires.

The provisions of sub-section (1), (2), (3), (4), and (5) shall apply to all categories of projects and in such manner as may be prescribed.

The ⁶⁶[Provincial Agency] shall maintain separate Registers for initial environmental examination and environmental impact assessment project, 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. The disclosure of information in such Registers shall be subject to the restrictions specified in sub-section (3).

Prohibition of import of hazardous waste.— No person shall import any hazardous waste into the Punjab.]

Handling of hazardous substances.— Subject to the provisions of this Act, no person shall generate, collect, consign, transport, treat, dispose of, store, handle or use any hazardous substance except:-

- (a) under a licence issued by the ⁶⁸[Provincial 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.

Regulation of motor vehicles.— (1) subject to the provisions of this Act and rules and regulations made thereunder, no person shall operate a motor vehicle which emits air pollutants or noise in an amount, concentration or level which is in excess of the ⁶⁹[Punjab] Environmental quality standards, or where no standards are established under clause (g) of sub-section (1) of section 6.

(2) For ensuring compliance with the standards mentioned in sub-section (1) the ⁷⁰[Provincial 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 ⁷¹[Provincial Agency] under sub-section (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.

Environmental protection order.— ⁷²(1) Where the Provincial Agency is satisfied that the discharge or emission of any effluent, waste, air pollutant or noise, or the handling of waste, or handling of hazardous substance, or any other act or omission is likely to occur, or is occurring, or has occurred, in violation of any provision of this Act, rules

Words "Federal Government" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

Words "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

Section 13 substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

Words "Federal Agency" substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012)

3. **Power to make regulations.**— (1) For carrying out the purposes of this Act, the ⁹⁶[Provincial Agency] may, by notification in the official Gazette and with the approval of the ⁹⁷[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, advisors, 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 filling, 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 Act 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.

⁹⁸[*****]

SCHEDULE

(See section 31)

1. International Plant Protection Convention, Rome, 1951.
2. Plant Protection Agreement for the South-East Asia and Pacific Region (as amended), Rome, 1956.
3. Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in South-West Asia (as amended). Rome 1963

Convention on Wetlands of International Importance Especially as Waterfowl Habitat. Ramsar, 1971 and its amending Protocol, Paris, 1982.

Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention), Paris, 1972.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973.

Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 1979.

Convention on the Law of the Sea, Montego Bay, 1982.

Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985.

Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 and amendments thereto.

Agreement on the Network of Aquaculture Centres in Asia and the Pacific, Bangkok, 1988.

Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal, Basel, 1989.

Convention on Biological Diversity, Rio De Janeiro, 1992.

United Nations Framework Convention on Climate change, Rio De Janeiro, 1992.

attested

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THE PUNJAB ENVIRONMENTAL PROTECTION (AMENDMENT) ACT 2012

(XXXV OF 2012)

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TEXT

THE PUNJAB ENVIRONMENTAL PROTECTION (AMENDMENT) ACT 2012
(XXXV OF 2012)

[18th April, 2012]

An
Act

to amend the Pakistan Environmental Protection Act, 1997.

Preamble.— Whereas it is expedient to amend the Pakistan Environmental Protection Act, 1997 (XXXIV of 1997) for purposes hereinafter appearing;

It is enacted as follows:—

Short title and commencement.— (1) This Act may be cited as the Punjab Environmental Protection (Amendment) Act 2012.

(2) It shall come into force at once.

Amendments in Act XXXIV of 1997.— In the Pakistan Environmental Protection Act, 1997 (XXXIV of 1997), hereinafter referred to as the said Act—

- (a) for the words "Federal Government", wherever occur, the word "Government" shall be substituted;
- (b) for the words "Federal Agency", wherever occur, the words "Provincial Agency" shall be substituted; and
- (c) for the word "National", wherever occurs, the word "Punjab" shall be substituted.

Amendments in section 1 of Act XXXIV of 1997.— In the said Act, in section 1—

- (a) in sub-section (1), for the word "Pakistan", the word "Punjab" shall be substituted; and
- (b) in sub-section (2), for the word "Pakistan", the words "the Punjab" shall be substituted.

Amendments in section 2 of Act XXXIV of 1997.— In the said Act, in section 2—

- (a) in clause (v), for the word "Pakistan", the word "Punjab" shall be substituted;
- (b) in clause (ix), for the words "Federal Agency or a Provincial Agency", the words "Provincial Agency" shall be substituted;
- (c) clause (xiv) shall be omitted;
- (d) for clause (xvi), the following shall be substituted:—

"(xvi) "Government" means Government of the Punjab;"

- (e) for clause (xvii), the following shall be substituted:—

"(xvii) "Government Agency" includes—

- (a) a department, an attached department or any other office of the Government; and

- (b) a development authority, local authority, company or a body corporate established or controlled by the Government;"

(f) clause (xx) shall be omitted;

(g) in clause (xxv), for the words "Federal Government or a Provincial Government", the word "Government" shall be substituted;

(h) clause (xxix) shall be omitted;

(i) for clause (xxxiv), the following shall be substituted:-

"(xxxiv) "prescribed" means prescribed by the rules or regulations;"

(j) for clause (xxxvii), the following shall be substituted:-

"(xxxvii) "Provincial Agency" means the Provincial Environmental Protection Agency established under the Act, or any Government Agency, local council or local authority exercising the powers and functions of the Provincial Agency;"

(k) after clause (xxxvii), the following clause (xxxvii-a) shall be inserted:-

"(xxxvii-a) "Punjab Environmental Quality Standards" mean the standards prepared by the Provincial Agency and approved by the Council;" and

(l) clause (xliii) shall be omitted.

Amendments in section 3 of Act XXXIV of 1997.— In the said Act, in section 3—

(a) in the marginal heading, for the word "Pakistan", the word "Punjab" shall be substituted; and

(b) for sub-section (1), the following shall be substituted:-

"(1) The Government shall, by notification in the official Gazette, establish a Council to be known as the Punjab Environmental Protection Council consisting of—

(i) Chief Minister of the Punjab; or such other person as nominated by the Chief Minister; Chairperson

(ii) Minister Incharge of the Environment Protection Department; Vice Chairperson

(iii) such other persons not exceeding thirty five as the Government may appoint, of which at least twenty five shall be non-official including at least three Members of the Provincial Assembly of the Punjab, five representatives of the Chambers of Commerce and Industry and one or more representatives of the Chambers of Agriculture, Medical and legal profession, trade unions and non-governmental organizations concerned with the environment and sustainable development, and scientists, technical experts and educationalists; and

(iv) Secretary to the Government, Environment Member/Secretary"

Amendments in section 5 of Act XXXIV of 1997.— In the said Act, in section 5—

- (a) in the marginal heading, for the word "Pakistan", the word "Provincial" shall be substituted; and
- (b) for sub-section (1), the following shall be substituted:-

"(1) The Government shall, by notification in the official Gazette, establish the Provincial Environmental Protection Agency to exercise the powers and perform the functions assigned to it under this Act, the rules and the regulations."

Amendment in section 6 of Act XXXIV of 1997.— In the said Act, in section in sub-section (1)—

- (a) in clauses (b) and (c), the word "national" shall be omitted; and
 - (b) clause (g) be substituted as under—
- "(g) establish standards for the quality of the ambient air, water and land, by notification in the official Gazette;"

Amendment in section 7 of Act XXXIV of 1997.— In the said Act, in section for clause (k), the following shall be substituted:-

"(k) establish the Punjab Environmental Coordination Committee comprising the Director General as its convener and such other members as the Government may appoint to exercise such powers and perform such functions as may be delegated or assigned to it by the Government for carrying out the purposes of this Act."

Omission of section 8 of Act XXXIV of 1997.— In the said Act, section 8 shall be omitted.

Amendments in section 9 of Act XXXIV of 1997.— In the said Act, in section 9—

- (a) for sub-section (1), the following shall be substituted:-

"(1) There shall be established a Provincial Sustainable Development Fund."; and
- (b) in sub-section (2), in clause (a), for the words "Federal Government or the Provincial Governments", the words "Government or the Federal Government" shall be substituted.

Amendment in section 10 of Act XXXIV of 1997.— In the said Act, in section 10, for sub-section (1), the following shall be substituted:-

"(1) The Provincial Sustainable Development Fund shall be managed by a Board known as the Provincial Sustainable Development Fund Board consisting of—

- (i) Chairman, Planning and Development Board; Chairperson

(ii) Such officers of the Government, not exceeding six, as the Government may appoint including Secretaries incharge of the Finance, Industries and Environment Departments; Members

(iii) such non-official persons not exceeding ten as the Government may appoint including representatives of the Chamber of Commerce and Industry, non-governmental organizations and major donors; and Members

(iv) Director General of the Provincial Agency. Member/Secretary

2. Substitution of section 13 of Act XXXIV of 1997.— In the said Act, for section 13, the following shall be substituted:-

"13. Prohibition of import of hazardous waste.— No person shall import hazardous waste into the Punjab."

16- Amendments in section 16 of Act XXXIV of 1997.— In the said Act, in section

(a) for sub-section (1), the following shall be substituted:-

"(1) Where the Provincial Agency is satisfied that the discharge or emission of any effluent, waste, air pollutant or noise, or the disposal of waste, or handling of hazardous substance, or any other act or omission is likely to occur, or is occurring, or has occurred, in violation of any provision of this Act, rules or regulations or of the conditions of a license, or is likely to cause, or is causing, or has caused an adverse environmental effect, 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 as the Provincial Agency may consider necessary within such period as may be specified in the order.";

(b) in sub-section (2), in clause (d), for the words and comma "Federal Agency or, Provincial Agency", the words "Provincial Agency" shall be substituted; and

(c) in sub-section (3), for the words "Federal Agency or Provincial Agency", the words "Provincial Agency" shall be substituted.

14. Amendments in section 17 of Act XXXIV of 1997.— In the said Act, in section 17-

(a) in sub-section (1), for the words "one million", the words "five million" shall be substituted;

(b) in sub-section (2)-

(i) for the words "Federal Agency or Provincial Agency", the words "Provincial Agency" shall be substituted; and

(ii) for the words "one hundred thousand", the words "five hundred thousand" shall be substituted;

- (c) in sub-section (5), in clause (e), for the words and commas "Federal Agency or, as the case may be, Provincial Agency", the words "Provincial Agency" shall be substituted;
- (d) in sub-section (6), for the words "Federal Agency or of a Provincial Agency", the words "Provincial Agency" shall be substituted; and
- (e) in sub-section (7)—
 - (i) for the words "Federal Agency or of a Provincial Agency", the words "Provincial Agency" shall be substituted; and
 - (ii) for the words and commas "Federal Agency or, as the case may be, Provincial Agency", the words "Provincial Agency" shall be substituted.

5. **Amendment in section 20 of Act XXXIV of 1997.**— In the said Act, in section for sub-section (4), the following shall be substituted:-

"(4) A decision of an Environmental Tribunal shall be expressed in terms of the opinion of the majority, 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."

Amendments in section 21 of Act XXXIV of 1997.— In the said Act, in section

- (a) in sub-section (3), in clause (b), for the words and comma "Federal Agency, or the Provincial Agency concerned", the words "Provincial Agency" shall be substituted; and
- (b) in sub-section (7), for the words "Federal Agency or of Provincial Agency", the words "Provincial Agency" shall be substituted.

7. **Amendment in section 22 of Act XXXIV of 1997.**— In the said Act, in section 22, in sub-section (1), for the words "Federal Agency or any Provincial Agency", the words "Provincial Agency" shall be substituted.

8. **Amendment in section 24 of Act XXXIV of 1997.**— In the said Act, in section 24, in sub-section (3), in clause (a), for the words and comma "Federal Agency, Provincial Agency", the words "Provincial Agency" shall be substituted.

19. **Substitution of section 26 of Act XXXIV of 1997.**— In the said Act, for section 26, the following shall be substituted:-

"26. Power to delegate.— The Government may, by notification in the official Gazette, delegate any of its or of the Provincial Agency's powers or functions under this Act, the rules or the regulations to any Government Agency, local council or local authority."

20. **Substitution of section 27 of Act XXXIV of 1997.**— In the said Act, for section 27, the following shall be substituted:-

"27. Power to give directions.— In the performance of its functions, the Provincial Agency shall be bound by the directions given to it in writing by the Government."

21. Substitution of section 28 of Act XXXIV of 1997.— In the said Act, for section 28, the following shall be substituted:-

"28. Indemnity.— No suit, prosecution or other legal proceedings shall lie against the Government, the Council, the Provincial Agency, the Director General of the Provincial Agency, members, officers, employees, experts, advisors, or consultants of the Provincial Agency or the Environmental Tribunal, an Environmental Magistrate or any other person for anything which is in good faith done or intended to be done under this Act or the rules or the regulations."

22. Amendment in section 29 of Act XXXIV of 1997.— In the said Act, in section 29, for the words "Federal Agency or Provincial Agency", the words "Provincial Agency" shall be substituted.

23. Amendment in section 34 of Act XXXIV of 1997.— In the said Act, in section 34, sub-section (3) shall be omitted.

The Gazette



of Pakistan

EXTRAORDINARY
PUBLISHED BY AUTHORITY

ISLAMABD, SUNDAY, AUGUST 29, 1993

PART-II

Statutory Notification (S.R.O)

GOVERNMENT OF PAKISTAN

MINISTRY OF ENVIRONMENT, LOCAL GOVERNMENT AND
RURAL DEVELOPMENT

NOTIFICATION

Islamabad, the 24th August 1993

S.R.O. 742 (I)/93. – In pursuance of the powers conferred by clause (d) of section 6 of the Pakistan Environmental Protection Ordinance, 1983 (XXXVII of 1983), the Pakistan Environmental Protection Agency, with the prior approval of the Pakistan Environmental Protection Council, hereby establishes the National Environmental Quality Standards as contained in the Annexes to this notification.

2. These National Environmental Quality Standards relating to municipal and liquid industrial effluents (Annex I), industrial gaseous emissions (Annex II) and motor vehicle exhaust and noise (Annex III), shall come into force with immediate effect, except in the case of industrial units to which the following schedule shall apply:

Existing industrial units i.e. those units already in production	01 July, 1996
New industrial units i.e. those units that will come into production or after 30 th June, 1994	01 July, 1994

NATIONAL ENVIRONMENTAL QUALITY STANDARDS FOR MUNICIPAL
AND LIQUID INDUSTRIAL EFFLUENTS (mg/L, UNLESS OTHERWISE
DEFINED)

S No	Parameter	Standards
1.	Temperature	40° C
2.	pH value (acidity/basicity)	6-10pH
3.	5-days Biochemical Oxygen Demand (BOD) at 20 °C	80 mg/L
4.	Chemical Oxygen Demand (COD)	150 mg/L
5.	Total Suspended Solids	150 mg/L
6.	Total Dissolved Solids	3500 mg/L
7.	Oil and Grease	10 mg/L
8.	Phenolic compounds (as phenol)	0.1 mg/L
9.	Chloride (as Cl ⁻)	1000 mg/L
10.	Fluoride (as F ⁻)	20 mg/L
11.	Cyanide (as CN ⁻)	2 mg/L
12.	An-ionic detergents ⁽²⁾ (as MBAS) ⁽⁵⁾	20 mg/L
13.	Sulphate (SO ₄ ²⁻)	600 mg/L
14.	Sulphide (S ²⁻)	1.0 mg/L
15.	Ammonia (NH ₃)	40 mg/L
16.	Pesticides, herbicides, fungicides and insecticides	0.15 mg/L
17.	Cadmium ⁽⁴⁾	0.1 mg/L
18.	Chromium ⁽⁴⁾ (trivalent and hexavalent)	1.0 mg/L
19.	Copper ⁽⁴⁾	1.0 mg/L
20.	Lead ⁽⁴⁾	0.5 mg/L
21.	Mercury ⁽⁴⁾	0.01 mg/L
22.	Selenium ⁽⁴⁾	0.5 mg/L
23.	Nickel ⁽⁴⁾	1.0 mg/L
24.	Silver ⁽⁴⁾	1.0 mg/L
25.	Total toxic metals	2.0 mg/L
26.	Zinc	5.0 mg/L
27.	Arsenic	1.0 mg/L
28.	Barium	1.5 mg/L
29.	Iron	2.0 mg/L
30.	Manganese	1.5 mg/L
31.	Boron	6.0 mg/L
32.	Chlorine	1.0 mg/L

Explanations:

1. Assuming minimum dilution 1: 10 on discharge. Lower ratios would attract progressively stringent standards to be determined by the Federal Environmental Protection Agency.
2. Assuming surfactant as biodegradable.
3. MBAS means Methylene Blue Active Substances.
4. Subject to total toxic metals discharge as at S. No. 25.

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

S. NO.	Parameter	Source of emission	Standards
1	2	3	4
1.	Smoke	Smoke opacity not to exceed :-	40% or 2 (Ringlemann Scale)
2.	Particulate matter. ⁽¹⁾	Boilers and furnaces: (i) Using Oil. (ii) Using Coal. (iii) Cement Kilns. Grinding, crushing, clinker coolers and related processes, metallurgical processes, converters, blast furnaces, and cupolas.	300 500 200 500
3.	Hydrogen Chloride	Any.	400
4.	Chlorine	Any.	150
5.	Hydrogen Fluoride	Any.	150
6.	Hydrogen Sulphide	Any.	10
7.	Sulphur Oxides	Sulfuric Acid plants. Others.	400 400
8.	Carbon Monoxide	Any.	800
9.	Lead	Any.	50
10.	Mercury	Any.	10
11.	Cadmium	Any.	20
12.	Arsenic.	Any.	20
13.	Copper	Any.	50
14.	Antimony	Any.	20
15.	Zinc	Any.	200
16.	Oxides of Nitrogen	(i) Any Nitric Acid manufacturing unit	400
	(NO _x).	(ii) other sources.	400

Explanations:

1. Based on the assumption that the size of the particles is 10 microns or more.

Annex IIINATIONAL ENVIRONMENTAL QUALITY STANDARDS FOR MOTOR
VEHICLE EXHAUST AND NOISE

S. NO.	Parameter	Standards (maximum permissible limit)	Measuring method
1	2	3	4
1.	Smoke	40% or 2 on the Ringelmann Scale during engine acceleration mode.	To be compared with Ringelmann Chart at a distance of 6 meters or more.
2	Carbon Monoxide.	<u>Emission Standards:</u> <u>New Vehicles</u> 4.5%	<u>Used vehicles</u> 6% Under idling conditions: Non-depressive infrared detection through gas analyzer Sound-meter at 7.5 meters from the source
3.	Noise	85 db (A)	

[F. No. 2(21)/93-E-II]

 Mohammad Aslam Malik
 Section Officer

ENVIRONMENT AND URBAN AFFAIRS DIVISION

Islamabad, the 16th October, 1995

S.R.O. 1023 (I)/95.-In exercise of the powers conferred under clause (e) of section 6 of the Pakistan Environmental Protection Ordinance, 1983 (XXXVII of 1983), the Pakistan Environmental Protection Agency, with the approval of the Pakistan Environmental Protection Council, is pleased to make the following amendments in its Notification No. S.R.O. 742 (I)/93, dated the 24th August, 1993, namely:-

In the aforesaid Notification :-

(i) In Annex II, in column 1:-

- (a) In S.No. 7, in column 3, after the word "Others", the comma and words " , except for power plants operating on oil land coal" shall be added;
- (b) In S.No. 16, in column 3, in clause (ii), after the words "other sources", the comma and words " , except for power plants operating on oil and coal" shall be added; and
- (c) After the Explanations, the following shall be added, namely:-
"In respect of emissions of Sulphur Dioxide and Nitrogen Oxides, the power plants operating on oil or coal as fuel shall, in addition to National Environmental Quality Standards (NEQS) specified above, comply with the following standards:-

A. Sulphur Dioxide

Sulphur Dioxide Back-ground levels Micro-gram per cubic meter ($\mu\text{g}/\text{m}^3$).			Standards	
Background Air Quality (SO_2 Basis).	Annual Average	Max. 24-hours Interval	Criterion I	Criterion I
			Max. SO_2 Emission (Tons per Day per plant)	Max. allowable ground level increment to ambient ($\mu\text{g}/\text{m}^3$) (One Year Average).
Unpolluted	<50	<200	500	50
Moderately Polluted*				
Low	50	200	500	50
High	100	400	100	10
	>100	<400	100	100

*For intermediate values between 50 and 100 $\mu\text{g}/\text{m}^3$ linear interpolations should be used.

**No projects with Sulphur dioxide emissions will be recommended.

B. Nitrogen Oxides

Ambient air concentrations of nitrogen oxides, expressed as NO₂, should not exceed the following:-

Annual Arithmetic Mean 100 $\mu\text{g}/\text{m}^3$.
((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

[File No. 2 (21)/92-E-II.]

MUHAMMAD ASLAM MALIK
Section Officer.

or regulations or of the conditions of a license, or is likely to cause, or is causing, or has caused an adverse environmental effect, 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 as the 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 or 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 conditions may be reasonable in the circumstances, to the satisfaction of the ⁷³[Provincial Agency].

(3) Where the person, to whom directions under sub-section (1) are given, does not comply therewith, the ⁷⁴[Provincial Agency] may, in addition to the proceeding initiated against him under this Act or 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 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 ⁷⁵[five 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 and where such contravention or failure continues:

Provided that if contravention of the provision 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 by the ⁷⁶[Provincial Agency] shall be punishable with fine which may extend to ⁷⁷[five 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-section (1) and (2), the Environmental Tribunal and Environmental magistrate 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 Tribunal is satisfied that as a result of the commission of the offence monetary benefits have accrued to the offender, the Environmental Tribunal may order the offender to pay, in addition to the fines under sub-section (1),

(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 Tribunal 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 up 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 section 11, 13, 14 or 16 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 ⁷⁸[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 ⁷⁹[Provincial Agency] or an officer generally specially authorized by him in this behalf may, on the application of the accused compound as offence under this Act with the permission of Environmental Tribunal or Environmental Magistrate in accordance with such procedure as may be prescribed.

(7) Where the Director-General of the ⁸⁰[Provincial Agency] is of the opinion that a person has contravened any provision of this Act, he may, subject to the rules, by notice in writing to that person require him to pay to the ⁸¹[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 or who has paid an administrative penalty for a contravention of any provision of this Act.

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 or, 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;

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 ⁸²[Government] may, by notification in the official Gazette, establish as many Environmental Tribunals as it considers necessary and, where it establishes more than one Environmental Tribunal, 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 ⁸³[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.

⁸⁴[(4) A decision of an Environmental Tribunal shall be expressed in terms of the opinion of the majority, 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 by reason of a change in its composition, or the absence of any member from any sitting, be bound to recall and rehear any witness who was 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 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 ⁸⁵[Provincial 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 ⁸⁶[Provincial Agency] concerned of the alleged contravention and of his intention to make a complaint to the Environmental Tribunal.
- (4) In exercise of its criminal jurisdiction, the Environmental Tribunal 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 of Environmental Tribunal 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 authorized on this behalf by the Director General of the ⁸⁷[Provincial Agency], issue bail able warrant for the arrest of any person against who 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 sections 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 purposes of sections 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 or 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 ⁸⁸[Provincial Agency] under any provision of this Act and rules or regulations made thereunder may refer 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

(2) An appeal under sub-section (1) shall be heard by a Bench of not less than two Judges.

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 contraventions 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 (1) except on a complaint in writing by--

(a) the ⁸⁹[Provincial Agency], or Government Agency or 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.

⁹⁰**[26. Power to delegate.**— The Government may, by notification in the official Gazette, delegate any of its or of the Provincial Agency's powers or functions under this Act, the rules or the regulations to any Government Agency, local council or local authority.]

⁹¹**[27. Power to give directions.**— In the performance of its functions, the Provincial Agency shall be bound by the directions given to it in writing by the Government.]

⁹²**[28. Indemnity.**— No suit, prosecution or other legal proceedings shall lie against the Government, the Council, the Provincial Agency, the Director General of the Provincial Agency, members, officers, employees, experts, advisors, or consultants of the Provincial Agency or the Environmental Tribunal, an Environmental Magistrate or any other person for anything which is in good faith done or intended to be done under this Act or the rules or the regulations.]

29. Dues recoverable as arrears of land revenue.— Any dues recoverable by the ⁹³[Provincial Agency] under this Act, or the rules or regulations made thereunder shall be recoverable as arrears of land revenue.

30. Ordinance 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 ⁹⁴[Government] may, by notification in the official Gazette, make rules for carrying out the purposes of this Act including rules may for implementing the provisions of the international environmental agreements, specified in the Schedule to this Act.

32. Power to amend the Schedule.— The ⁹⁵[Government] may, by notification in the official Gazette, amend the Schedule so as to add any entry thereto or modify or omit any entry therein.

⁸⁹ Words substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012).

⁹⁰ Section 26 substituted by the Punjab Environmental Protection (Amendment) Act, 2012 (XXXV of 2012).



ACCIDENT/EMERGENCY REPORT FORM AT CONSTRUCTION SITE



Details of Project

Name of Project/Site:

Phone:

Fax:

Mobile:

Email:

Address of Project Site

City:

Province:

Post Code:

Details of the injured/involved person:

Name of injured/involved person:

Date of Birth:

Gender: ☐ M ☐ F

Address of Injured/involved person:

City/Suburb:

State/Territory:

Post Code:

Job title/position:

Main Duties:

Phone:

NIC #:

Mobile #:

Type of employment

- | | |
|--|--|
| ☐ Full-time permanent | ☐ Part-time permanent |
| ☐ Full-time casual | ☐ Part-time casual |
| ☐ Other (e.g. site visitor, student, etc) | |

Type of worker

- | | |
|---|---|
| ☐ Trainee | ☐ Self-employed
(Contractor or Subcontractor) |
| ☐ Outworker | ☐ Unpaid worker |
| ☐ Apprentice | ☐ Work Experience |
| ☐ Pieceworker
(other than an Outworker) | ☐ Other (note: most employees will
fall into this category) |

Details of injury/illness/damage etc and any medical treatment



ACCIDENT/EMERGENCY REPORT FORM AT CONSTRUCTION SITE



Details of the Accident/Incident:

Date of the accident/incident:

Time of the accident/incident

Witnesses/other involved persons:

Name:

Contact number:

Name:

Contact number:

Describe the Accident/Incident: (attach additional information if more space is required)

Name of supervisor or person in control of the site/location at the time of the accident/incident:

Address where accident/incident occurred (if at a different location to project Site)

City:

Post Code:

Where did the incident occur (e.g. plant room, roof)

Environment and workplace conditions

Describe the workplace conditions at the time of the accident/incident (e.g. lighting, floor surface, weather, housekeeping etc)

Task and supervision

What task was being performed when the accident/incident occurred?



ACCIDENT/EMERGENCY REPORT FORM AT CONSTRUCTION SITE



Plant, Equipment, Tools, Materials and Substances

What plant/substances were being used? (provide details, e.g. model serial number, registration number etc)

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Risk assessment and where required for high risk construction work.

Was a risk assessment undertaken prior to commencing work?

Yes ☐ No ☐

If No, please explain why:

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Was a safe work method statement prepared if the work was high risk construction work?

Yes ☐ No ☐

If No, please explain why:

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Note: See the *contract document* for more information.

Outcomes – please complete relevant parts of this section

Estimated date of resumption of work:

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Action that has been or will be taken to prevent recurrence:

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Details of person completing this form

Full name:

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Phone:

Fax:

Mobile:

Email:

Job title/position:

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MONTHLY ENVIRONMENT MONITORING FORM



ENVIRONMENTAL COMPLIANCE CHECKLIST

1. ADMINISTRATIVE INFORMATION

Project Title:		Date:
Lead Department:	Start Work Date:	Estimated Work Ending Date:
Project Engineer/Manager/Director:		Phone No.:
Project Location (Bldg No. /Area.):	Work Phase:	ENV. NOC:

2. LOCATION OF PROPOSED ACTION: Describe the location at which the action would take place. If applicable, provide the square footage of the area(s) that will be disturbed during construction activities (construction activities include any clearing, grading, excavating, grubbing, stockpiling, and/or filling).

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3. WORK SCOPE DESCRIPTION: Describe your proposed action's work scope in detail, providing as much specific information as possible. Also, include all support facilities/activities that would be involved, for example, temporary power provided by a portable generator. Include attachments where appropriate.

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MONTHLY ENVIRONMENT MONITORING FORM



ENVIRONMENTAL ASPECTS/POTENTIAL SOURCES OF IMPACT

Check the appropriate box for any environmental hazard or impact associated with the project

ENVIRONMENTAL ASPECT/IMPACT	Yes/ No	ENVIRONMENTAL ASPECT/IMPACT	Yes/ No
1. Air emissions: Will the project generate emissions from combustion, dust, greenhouse gases, ozone-depleting substances, or chemical gases?		10. Industrial and Hazardous Waste Generation, Management, Storage, Transport and Disposal: Will any unused or spent chemicals, fuel, oils, solvents, PCBs, lead, asbestos, or other hazmat require handling as waste?	
2. Chemical Use, Storage, and Inventory: Will the project require lab chemicals, fuel, oils, coolants, cleaners, or solvents?		11. Biohazards: Will the project use or generate biological materials, such as microorganisms?	
3. Soil and Groundwater Contamination: Could project activities impact soil and groundwater in any way?		12. Nanotechnology: Will the project use or generate any nanosubstances?	
4. Discharge to Wastewater Systems: Will the project discharge any material to the sanitary sewer?		13. Historical Resource Disturbance: Are any of the structures involved with this project more than 45 years old?	
5. Surface and Stormwater Contamination: Could material from the project contaminate stormwater or be discharged to the storm drain system?		14. Archeological Resource Disturbance: Could any project activities impact archeological areas?	
6. Radioactive Materials Reduction and Radioactive Mixed-Waste Generation, Management, Storage, Transportation and Disposal: Will any radiological waste be generated by the project?		15. Interaction with Wildlife/Habitat: Will the project disturb soil in habitat areas or disrupt beehives, bird nests, or other wildlife areas?	
7. Environmental Radiation and Radioactivity: Could any project activities generate and/or release radioactivity?		16. Noise: Could the project generate noise that would impact personnel or wildlife nearby?	
8a. Use, Reuse, and Recycling: Are any project activities designed to minimize generation of waste through reuse, recycling, and environmentally preferable purchasing, such as purchasing recycled-content materials?		17. Water/Sludge for discharge/disposal: Will the project involve boring or drilling that would generate >300 gallons of water/sludge that will require disposal or discharge?	
8b. Conservation of Resources: (Are any project activities designed to conserve natural resources such as water, energy, fuel, etc.?)		18. Other?	
9. Construction, Renovation, and Demolition By-Products: Will any project activities generate construction debris or soil stockpiles by clearing or excavation, or disturb lead- or asbestos-containing materials?			



MONTHLY ENVIRONMENT MONITORING FORM



PROJECT SIGNATURE: This section is to be completed by the Project Manager/Director or individual completing this checklist.

I have reviewed this action and to the best of my knowledge have answered all questions completely to describe the proposed action.

Project Signature: _____ **Date:** _____

Please note: Any changes or unanticipated events to the project must be documented by updating this form.