



**AUDIT REPORT  
ON  
ENVIRONMENTAL AND SOCIAL  
IMPACT OF STEEL AND POLYTHENE  
BAGS INDUSTRIAL UNITS IN  
RESIDENTIAL AREA ON  
RESIDENTS OF TEHSIL BARA IN  
DISTRICT KHYBER**

**AUDIT YEAR 2020-21**

**AUDITOR GENERAL OF PAKISTAN**

## **PREFACE**

The Auditor General of Pakistan conducts audit in accordance with Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with Sections 8 and 12 of the Auditor General's (Functions, Powers and Terms and Conditions of Service) Ordinance 2001 and Section 37 of the Khyber Pakhtunkhwa Local Government Act, 2013. The Environmental Audit namely "Environmental and Social Impact of Steel and Polythene Bags Industrial Units in Residential Area on residents of Bara, District Khyber" was carried out accordingly, during Audit year, 2020-21.

The Director General of Audit, District Governments, Khyber Pakhtunkhwa, conducted Environment audit namely "Environmental and Social Impact of Steel and Polythene Bags Industrial Units in Residential Area on residents of Bara, District Khyber for the FY 2019-2020 during April, 2020 with a view to examine the role of Environmental Protection Agency and Local Administration in the effective implementation of various initiatives such as the Environmental Protection Act to ensure compliance by various industrial units in terms of keeping the environment safe despite commercial activities which are also essential for the economic growth of the country.

The Environmental Audit Report indicates specific actions if taken, will help the management to implement Environmental Protection Act to ensure compliance by various industrial units to keep the environment safe.

Most of the observations included in this report were finalized in the light of written replies of the department. However, DAC meeting was not convened despite repeated requests.

The performance audit report is submitted to the Governor Khyber Pakhtunkhwa in pursuance of Article 171 of the Constitution of the Islamic Republic of Pakistan, 1973, for causing it to be laid before the appropriate Legislative/ Executive forum.

Islamabad  
Dated:

**(Javaid Jehangir)**  
**Auditor General of Pakistan**

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## **ABBREVIATIONS AND ACRONYMS**

CFC	Chlorofluorocarbon
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
DAC	Departmental Accounts Committee
DC	Deputy Commissioner
DG	Director General
DGA	Director General Audit
EMS	Environmental Monitoring System
EPA	Environmental Protection Agency
GHGs	Greenhouse gases
ISO	International Organization for Standardization
KP	Khyber Pakhtunkhwa
KPIs	Key Performance Indicators
NEQS	National Environmental Quality Standards
NO	Nitrogen oxide
NO <sub>2</sub>	Nitrogen dioxide
NOCs	No Objection Certificates
PCSIR	Pakistan Council of Science and Industrial Research
SAI	Supreme Audit Institute
SDGs	Sustainable Development Goals
SO	Sulphur oxide

## **EXECUTIVE SUMMARY**

The Directorate General Audit, District Governments, Khyber Pakhtunkhwa, Peshawar carried out environmental audit titled “Environmental and social impact of Steel and Polythene bags industrial units in residential area on residents of Bara, District Khyber, erstwhile Khyber Agency”. District Khyber is newly established district and its Audit Jurisdiction is recently shifted from DGA Federal Government to DGA District Governments, Khyber Pakhtunkhwa. The audit was conducted in accordance with INTOSAI auditing standards as adopted by the Department of the Auditor General of Pakistan. The objective of Audit was restricted to examine the role of Environmental Protection Agency in the effective implementation of various initiatives such as the Environmental Protection Act to ensure compliance by various industrial units in terms of keeping the environment safe despite commercial activities which are also essential for the economic growth of the country.

Protection of the environment is one of the key functions of an efficient and well-functioning state. Absence of laws, rules and regulations for ensuring the protection, safety and sustainability of the environment results in the poor health of the masses especially in an environment which is toxic and hazardous due to large scale industrial activities in the country. The federal as well as the Government of Khyber Pakhtunkhwa spend a huge amount of funds through the Federal and the Provincial Environmental Protection Agencies in order to provide a clear and clean environment to the public.

Industrialization is a common factor for development of a nation in the modern world but along with its positive effects on the economy of the country, it has negative impacts on the surrounding environment as well. District Khyber being a newly merged district of Ex-FATA, was a tax free zone attracted many industrialists to establish industrial units in the area. The political administration of that time has also issued NOCs for these industrial units so as to improve the living standard of the local community by facilitating creation of jobs in the industries. However, these industrial units were established in the residential area without observing the national as well international best practices to safeguard

the local inhabitants from pollution. There was no specific area declared as industrial zone by Government in Tehsil Bara of district Khyber. The local community has approached the local administration and public representatives for redressal of issues caused due to environmental pollution caused by these industries but in vain. The Environmental Protection Agency (EPA) had issued orders against few industrial units under the EPA Act, 2014 but it yielded no change in the behavior of the industrialists.

During the audit it was observed that no proper policy, rules, by-laws and standing operating procedures except Khyber Pakhtunkhwa Environmental Protection Act 2014, for environmental protection were available. The Environmental Protection Agency was required to prepare, in co-ordination with the appropriate Government Agency or local council and in consultation with the concerned Sectoral Advisory Committees where established, environmental policies for the approval of the Council but no environment policy specifically for Tehsil Bara, District Khyber was framed. The Khyber Pakhtunkhwa Environmental Protection Agency was also required to prepare, revise and establish the Khyber Pakhtunkhwa Environmental Quality Standards with the approval of the Council and establish different standards for discharge or emission from different sources and for different areas under section 6 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014 but it still adopted National Environmental Quality Standards which may or may not be compatible to this region.

Since no financial and non-financial data is involved in the Audit of Environmental and Social impact of Steel and Polythene Bags Industrial Units in residential areas of Tehsil Bara, District Khyber; therefore, no significant Analytical Procedures were performed during the Audit. The Audit was carried out mainly around International Environmental Standards and wherever relevant data was available for analysis, all requisite analytical procedures were performed. Audit made following key observations.

1. The EPA and the Industries Department have neither established environmental objectives and environmental programs for relevant

industries functioning in area nor any comprehensive framework of policies, practices, procedures, systems and relevant management information were developed to support environmental management.

2. The EPA has no provisions in its rules and laws for the industries to establish Environmental Management System as per international practices.
3. The responsibilities of the top management of the industries in context of environmental protection are not clearly defined.
4. No mechanism exists in the industries to monitor and measure the operations that can have a significant impact on the environment i.e. risk assessment, the scale, frequency, severity and sensitivity of the environmental hazards.

### **Recommendations**

1. The Khyber Pakhtunkhwa Environmental Protection Agency need to prepare, revise and establish the Khyber Pakhtunkhwa Environmental Quality Standards with the approval of the Council and establish different standards for discharge or emission from different sources and for different areas under section 6 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014 as it has adopted National Environmental Quality Standards which may or may not be compatible to this region.
2. According to Section 3 (1) of the EPA Act, 2014, the KP Environmental Protection Council comprising of the Chief Minister as the Chairperson, the Minister for Environment and other members need to be constituted. Its primary functions would be to prepare, in co-ordination with the appropriate Government Agency or local council and in consultation with the concerned Sectoral Advisory Committees where constituted, environmental policies for the approval of the Council.
3. Well trained staff needs to be deputed by the Director General EPA with proper knowledge to perform their duty in the most effective and efficient manner. Inquiry into the matter also needs to be conducted to ascertain as to how such staff was appointed which is incapable to handle the official

duty of collection of samples and their testing by the authorized government laboratory.

4. The Director General EPA may perform his duty and conduct Environmental Impact Analysis and accord environmental approval after fulfillment of all codal formalities by the steel industrial units.
5. The Director General EPA may ensure compliance to environmental protection protocols through regular monitoring of operational activities of the industries including sample testing and sharing their results etc.
6. The Director General EPA may ensure compliance on part of the industries with the government rules and regulations as contained in the EPA Act 2014 as well as the Companies Ordinance for the safety and welfare of the staff at industries as well as the protection of the environment.



# CHAPTER-1

## 1. Introduction and Background

The Kyoto Protocol is an International treaty to reduce greenhouse gas emissions, known to be causing global warming. The Kyoto Protocol was adopted by UN member countries in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. The main goal of the Kyoto Protocol is to control greenhouse gases (GHGs).

Pakistan is a signatory of the Kyoto Protocol. The Government of Pakistan is in the process of taking steps which are required to be taken to protect the environment at local level in order to contribute to global environmental protection measures. One important step of protecting the environment is to limit emissions that contribute to pollution and consequently to global warming. It is under such international protocols that Pakistan Environmental Protection Agency (Pak-EPA) was established under section (5) of Pakistan Environmental Protection Act, (PEPA) 1997. The basic functions of Pak-EPA are to enforce the PEPA-1997 Act, rules & regulations, carry out Environmental Impact Assessment (EIA) and Initial Environmental Examination (IEE). Pak-EPA is mandated to prepare or revise, and establish the National Environmental Quality Standards (NEQS) with approval of Pakistan Environmental Protection Council (PEPC); 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 and guidance to the public on environmental protection affairs.

Amendment XVIII (the Eighteenth Amendment) of the Constitution of Pakistan, passed by the National Assembly of Pakistan on April 8, 2010, which, among other changes, mandated the provincial governments' greater autonomy under the constitution. As such Federal Government assumes the responsibility of few important subjects while the Provincial Governments carry out functions and duties of more subjects. The environment and ecology is one of the subjects

under the control of provincial governments; thereby provinces of Pakistan have independent Environmental Protection Agencies/Departments; The Punjab Environment Protection Agency (EPA), Environmental Protection Agency - Khyber Pakhtunkhwa, Sindh Environmental Protection Agency, Baluchistan Environmental Protection Agency, and Pakistan Environmental Protection Agency (Pak-EPA) is restricted to Islamabad Capital Territory only.

District Khyber, which falls in the domain of EPA Khyber Pakhtunkhwa, is one of the newly merged districts of the Ex-FATA (Khyber Agency), is adjacent to District Peshawar, a capital of the Khyber Pakhtunkhwa and a center of trade, which increase its attraction to the industrialists. Administratively, it has 03 Tehsils, namely Tehsil Bara, Tehsil Jamrud and Tehsil Landi Kotal.

Tehsil Bara has a unique type of water, enriched with all minerals. Before partition, the British Government used to supply water of River Bara to Great Britain in drums due to its unique taste and quality. It has its exclusive water quality as compared to the rest of the country; therefore, it may require measures to safeguard underground water quality from liquid wastes of these industrial units.

The environmental issues have gained great importance world-wide in recent past and remained the focus of discussions at different forums both at national and international levels. The environmental problems affects the economic and social life of common man, thus the governments try to address them by making appropriate policies and enacting environmental legislation to respond to international institutions and treaties agreed upon as global partners. The Auditor General of Pakistan has the responsibility under the constitution, to investigate the effect of policy and the management measures that lead to policy decisions. In this way the Auditor General of Pakistan can help the Government to do a better job. Addressing environmental matters falls squarely within the mandate of any SAI because of the following reasons:

- a) The Government spends significant public resources on managing environmental problems, so the Auditor General needs to hold the

government accountable for prudent financial management by reporting the results to the parliament.

- b) The Governments sign numerous international agreements and the International Agencies collaborate with them to control the environmental degradation through technical and financial support. The Auditor General is mandated to carry out the audit of such expenditures to provide assurance to all stakeholders that the financial statements portray true and fair picture of environmental costs and liabilities.

The purpose of this environmental audit report was therefore to make known the findings of the audit regarding the environmental & social impact on residents of Tehsil Bara due to establishment of unplanned industrial units in residential area. The report was not intended to be comprehensive. In line with audits of this nature, the intention was to provide the reader with a general understanding of the state of environment in Tehsil Bara and its impact on the residents of Bara and in particular, to evaluate the establishment and operations of such industries whether they observe the international best practices to safeguard the environment from the hazardous impact of liquid, solid and gaseous emissions and whether they follow the Federal and Provincial laws promulgated from time to time. It is also intended to assess the role of Environmental Protection Agency in promulgation of the laws regarding environment.

### **1.1 Objectives of Environmental Audit**

Environmental audit determines how well the environmental management information systems and equipment are performing. It verifies compliance with the relevant national, local or other laws and regulations, which can ensure minimizing human exposure to risks from environmental, health and safety problems, thus increasing employee's awareness and placing environmental information in the public domain. It helps in reduction and prevention of waste of industrial units. Environment audit needs for an industry to achieve compliance standards and establish a report with regulatory bodies for implementation of

environment management policies. It also serves the industry as well as self-evaluation tool for the process and technology. It helps in pollution control, improves production safety and health conservations of nocturnal resources by ways of ensuring waste prevention and reduction. Environmental Audit report provides performance evaluation of industrial working facilities and its possible effect on the surrounding. It provides an up to date environmental data to the inspecting authority. Audit also looked into the health and safety measures adopted at the industries for the safety of the workers as well as that of the environment and the ecosystem of the area.

## **1.2 Scope of Environmental Audit**

The scope of this audit was to audit the operational activities of the Environmental Protection Agency for the Steel Industries & Polythene Bags Industries at Tehsil Bara, District Khyber for the financial year 2019-20, with specific focus on the gaseous emissions at the selected industries i.e. the Steel Mills at residential area of Tehsil Bara, which are considered to be more responsible for environmental pollution as compared to the other industries in the locality.

The audit was conducted by assessing the following:

1. The status of compliance with the current international laws and the rules and regulations prescribed by the Federal as well as the Provincial Government.
2. The status of solid, liquid and gas emissions whether international best practices are followed or otherwise.
3. The state and conditions of the operational activities were assessed against the international and local standards as prescribed.
4. The state and conditions of the workers were assessed in line with the international best practices.
5. The impact of the hazardous gases on the overall environment was assessed.

6. The impact of the operational activities on the local population was assessed.

### **1.3 Audit Criteria**

The audit findings were collected with the help of an audit checklist, personal interviews with workers, local population, District/Tehsil Administration, DG EPA Peshawar and selected industrialists at field visits for the Environmental Audit. Some of the key points of the audit checklist are as following: **(Total of 211 Questions in the checklist are attached at Annex-1).**

1. Assessment of Environmental and social risks and impact;
2. Assessment of resource efficiency and pollution prevention management;
3. Assessment of Community health and safety measures;
4. Assessment of workers health and safety measures;
5. Assessment of the departmental rules and regulations for such industries;
6. Assessment of impact on Biodiversity conservation and sustainable management;
7. Assessment of opinion of the local population; and
8. Assessment of stakeholders' engagement and information disclosure.

### **1.4 Risk Assessment/ Issues of Potential Significance**

The following are the general as well as specific guiding principles adopted for the audit;

1. Identification and assessment of potential environmental and social impacts of the industrial activities;
2. Identification and assessment of measures for mitigation of potential adverse environmental impacts from the industrial activities;
3. Verifying the level of compliance with environmental and key national regulations;
4. Identification of recommendations for rectification in order to bring about improvement in the industrial practices; and
5. Identification of environmental management plan at the industries.

## **1.5 Audit Approach**

Audit was conducted while taking into consideration the international and national laws and policies framed for the protection of environment, particularly the Environmental Protection Act of 1997 of the Federal Government, and the EPA Act, 2014 of the Government of Khyber Pakhtunkhwa. As per record of Local Administration there were total 18 steel industrial units out of which 16 units were functional. Similarly, there were only two polythene bag industries but both were non-functional. The audit visited 10 Steel industrial units established in Tehsil Bara, District Khyber. The audit intended to evaluate their operational activities, their internal control structure, their compliance level to the environmental laws and regulations and the possible positive or negative effects of the same on the environment as well as residents of the area. The audit analyzed the measures taken for minimizing the risk from the industrial process to the lives of human beings, livestock, fish and plants. The employees were interviewed in order to know their awareness about national, international or other environmental laws and regulations and safety measures to be adopted in industrial units. Observations were penned down during the visits and photographs were also made for the purpose of audit evidence. This helped auditors in understanding the systems and procedures of industrial units. Audit also visited Environment Protection Agency Peshawar to meet Director General Environmental Protection Agency Peshawar and had a meaningful discussion about the environmental effects of the industrial units on human beings, livestock and plants in Tehsil Bara, District Khyber. A checklist was prepared by audit consisting of multiple questions regarding environment to gather comprehensive data for assessment at lateral stage. The findings of DATA were shared with Deputy Director (Technical), and other relevant staff at Directorate General EPA, and their responses on them were obtained by Audit during the Exit meeting. The term “Environmental and Social Safeguards (or Standards)” is used by development institutions, international treaties and agencies to refer to policies, standards and operational procedures designed to first identify and then try to avoid, mitigate and minimize adverse environmental and social impacts that may arise in the implementation of development projects. After detailed discussions

and deliberations with all the stakeholders, following significant areas were covered during the Audit.

- Assessment and Management of Environmental and Social Risks and Impacts;
- Labor and Working Conditions;
- Resource Efficiency and Pollution Prevention and Management;
- Community Health and Safety;
- Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- Biodiversity Conservation and Sustainable Management;
- Indigenous People;
- Cultural Heritage; and
- Stakeholder Engagement and Information Disclosure.

## **1.6 Methodology**

During the course of audit, the audit team visited the functional Steel Mills at Tehsil Bara, District Khyber, to observe the actual situation of environmental hazards within and outside the units. The managements of the mills were interacted in respect of the operation of the Mills, safety of the workers and environmental and social impacts on the residents of the surroundings and their precautionary measures adopted for minimizing the environmental negative effects on the lives of workers and residents of the vicinity. The employees of the Mills were also interviewed in order to assess their awareness of the environmental laws, safety measures, and impact of industrialization on the environment which adversely affects the lives of human beings. Interview with the residents of the locality was also conducted. Administration of Tehsil Bara, including Deputy Commissioner Khyber, Assistant Commissioner Bara and Tehsil Municipal Officer Bara were also taken on board to know the legal and operational status of these industrial units. All the interaction with locals and the employees were taken in pictures as audit evidence. The audit also took pictorial evidence of the different operational units of the mills as well as their surroundings depicting various aspects with regard to

environment and attached at Annex-2. The Khyber Pakhtunkhwa Environmental Protection Act, 2014 was made the benchmark, besides other international and national environmental laws and regulations. A book namely “Environmental profile of Khyber Pakhtunkhwa published by Environmental Protection Agency of Khyber Pakhtunkhwa was also consulted.



## CHAPTER-2

### AUDIT FINDINGS

#### **2.1 Non-awareness of the management of the industrial units and general public of the environmental laws**

According to clause (xxiii) of the sub section 1 of the section 6 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014, the Environmental Protection Agency shall promote public education and awareness of environmental issues through mass media and other means including seminars and workshops.

The management of the industrial units were lacking the knowledge of industrial, labor and environmental laws. Neither management was fulfilling their responsibilities as employers nor were workers aware of their rights as employees. In neither of industrial units, health and life safety protocols were followed nor were any arrangements made for emergencies. Management of industrial units were either unaware of the adverse environmental effect of the industrialization on the human beings, livestock, life below the water, wild life and plants or were deliberately playing ignorant to avoid expense on environmental protection measures. The EPA has also no mechanism to communicate its policies to the management of the industrial units and ensure their compliance.

Further, no proper environmental awareness campaign was in place for education of the common people in the vicinity. Almost all the people residing in the surroundings of the industrial units were unaware of hazards of the pollution originating from the industrialization. Common man around these industrial units knew nothing about the precautionary measures required for protection from the hazardous effects of industrial pollution especially steel units.

Audit observed that due to negligence of EPA no arrangements were made for Environmental Awareness Campaigns for industrial management, labour and general public which resulted in lack of awareness regarding environmental laws.



## **2.2 Non-conducting Environmental Impact Assessment of the steel industrial units**

According to Section 13 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014, no proponent of a project shall commence construction and operation unless he has filed with the 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 Agency, environmental approval in respect thereof. Moreover, sub sections xii and xiii of section 6, provide that the Agency shall, carry out and conduct environmental monitoring and implementation of the environmental approvals provided in this Act and carry out and conduct environmental audits of old industrial units in accordance with rules.

During the environmental audit of the steel industrial units in Tehsil Bara, District Khyber it was observed that jurisdiction of Environmental Protection Agency, Khyber Pakhtunkhwa was extended to merged areas of ex-FATA in May 2018. However, EPA failed to conduct Environmental Impact Assessment of the steel industries in Tehsil Bara. Hence the steel industries were continuing their operations without approval of EPA.

Functioning of existing industrial units and establishment of new industrial units after extending the jurisdiction of EPA to the merged districts in May 2018 without approval of EPA occurred due to non-implementation of the EPA rules and regulations.

When asked, management, EPA did not reply.

Audit recommends that the Director General EPA may perform his duty and conduct Environmental Impact Analysis and accord environmental approval after fulfillment of all codal formalities by the steel industrial units.

### **2.3 Non installation of pollution control system in the industrial units**

According to Sub section 4 of Section 17 and Sub-section (ix) of Section (07) of Khyber Pakhtunkhwa Environmental Protection Act-2014, the EPA should exercise special or emergency powers to enter and inspect, direct, suspend remove, seize, seal any activity or work or installation of machinery or premises creating pollution offence at high risk or intensity or disastrous situation.

During visit of the vicinity to inspect the production process in steel units, it was observed that no pollution control system was installed in majority of units. Environmental Protection Agency failed to issue notices or to take any legal action against these industrial units.

Furthermore, in two steel units the pollution control systems (Chemnis) were lying in uninstalled form. When inquired on the spot, it was disclosed that

those lying systems were locally made as a replica of the international pollution control system. Therefore, even if safety units installed, there was no guarantee of their effectiveness as local technicians are making/installing them and government has no mechanism to check their certification and effectivity.

Non-installation of Pollution Control System in the industries occurred due to lack of interest of EPA which resulted in drastic air pollution in the area and put the lives of residents of Tehsil Bara at risk.

When asked, the department replied that no action on the issue had been taken so far.

Audit recommends that legal actions under Sub-section (4) of Section (17) of the Khyber Pakhtunkhwa Environmental Protection Act 2014, may be initiated against non-compliant units under intimation to audit.



(Emission of huge smoke from steel mill, polluting environment due to non-availability /non-operational Pollution Control System)

## **2.4 Failure to achieve SDG Goals as committed and prioritized under National SDGs framework, 2018 by the Government of Pakistan**

According to para 3.4 of the SDGs, Pakistan integrating the three dimensions of sustainable development i.e. economic, social and environment sustainability.

According to clause (ix) of the sub section 1 of the section 6 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014, the Environmental Protection Agency shall co-ordinate with other Provinces, Federal Government, National and International Organizations for the implementation of environmental policies, issues concerns and programs as may be prescribed.

Many developed countries have experienced growth and industrialization side by side, while some countries have prioritized social indicators over industrialization before moving towards higher growth. Both these kinds of countries have faced environmental issues during industrial growth but countries with prioritized social indicators were better prepared to deal with such issues. Pakistan is struggling hard to keep balance between industrialization and coping with environmental issues through prioritizing consistency in policies and better coordination among all stakeholders. For being signatory of Kyoto Protocol, Pakistan is linking SDG key dimensions i.e. economic, social and environmental sustainability with governance style through adopting SDG targets as National Prioritized SDG Framework, 2018. However, very little had been achieved so far in this context in Tehsil Bara, District Khyber as no specific program was devised to deal with environmental issues in the light of International commitments.

Failure to achieve SDG Goals as committed and prioritized by the Government of Pakistan under National SDGs framework 2018, occurred due to lack of interest by the EPA.

When asked, management replied that necessary decisions would be taken and any action of non-compliance to such commitments would also be taken-up with the relevant offices.

Audit recommends that DG, EPA may come up with clear road map for achieving these SDG Goals and Targets with prescribed timelines so that these International commitments could be fulfilled.

## **2.5 Non-preparation and publishing of Annual Environmental Report**

According to clause (iv) of the sub section 1 of the section 6 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014, the Environmental Protection Agency shall prepare and publish an annual Environmental Report on the state of the environment in the Province.

During the environmental audit, it was found that Environment Protection Agency did not prepare and publish Annual Environmental Reports from last so many years. It is being an important tool for different stakeholders to design programs and procedures to protect people from the adverse impacts of Environmental pollution and take other significant policy level decisions with regards to future investments and industrialization.

Non-preparation and publishing of Annual Environmental Report occurred due to lack of interest by EPA due to which major environmental issues remained unattended.

When asked, management did not give any response for not preparing and publishing Annual Protection Report.

Audit recommends that immediate arrangements may be made to prepare and publish Annual Environmental report and conduct an inquiry to fix responsibility in the matter on the persons at fault under intimation to Audit.

## **2.6 No system for recycling and dumping of solid waste in environment friendly manner**

According to section 15(1) of Khyber Pakhtunkhwa Factories Act, 2013, effective arrangements shall be made in every factory for the disposal of wastes and effluents due to the manufacturing process carried on therein.

According to goal No. 13 of the Sustainable Development Goals, set in 2015 by the United Nations General Assembly and intended to be achieved by the year 2030, substantial reduction will be made in waste generation through prevention, reduction, recycling and reuse of the industrial waste.

No system was in place in the industries for recycling and dumping the solid waste generated from industrial operations. It is the responsibility of the EPA to ensure that all industrial units working under its jurisdiction to comply with the environmental protection protocols during waste generation through prevention, reduction, recycling and reuse of the industrial waste. In order to save money, industries are utilizing obsolete and outdated machinery and procedures at each stage of production.

Non availability of proper system for recycling and dumping of solid waste in environment friendly manner in the industrial units occurred due to negligence of EPA which resulted in non-compliance with the environmental protection protocols.

Resultantly, the industrial wastes were dumped in open air either inside or outside of the industrial premises, completed untreated and unprotected. The liquid waste of these industrial units was flowing in the open sewerage lines leading to irrigation canal, Bara River, contaminating clean drinking water. It had not only effected the life under water but also humans who used that water for drinking or farming. No steps were taken to ensure that these hazardous chemicals and other industrial wastes are disposed-off in environment-friendly mode in accordance with international best practices. During the visit the audit team also observed the following:

- i. No adequate procedure for spill prevention and control was observed.
- ii. No waste management assessment system was seen.
- iii. The industries had no inventory record of all the waste generated and recycled in the last years.
- iv. No plan for waste minimization and pollution prevention was in place in the industries.

- v. DG EPA Peshawar as well as the management of the industries did not have the capacity to assess impacts.

Audit asked the management of EPA Peshawar to show any such instructions/notices for compliance on part of the industries but no such evidence was shown.

Audit recommends that the Director General EPA should actively pursue issue of dumping of industrial wastes in environment friendly manner through research based directives and its compliance assurance through vigorous monitoring and follow-ups.



(Solid waste dumped untreated at Steel Mills)

## **2.7 Least impact of economic activity due to local industrialization**

According to para 6 (xxviii) the EPA Act 2013, the agency shall 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.



The industrialization of Tehsil Bara consisted of small units dominated by haphazard mushroom growth of small steel units which could have generated economic activity in the area if local population was provided job opportunities. As it was observed that all skill labor in these units were coming from out of the locality and a very small number of people were engaged from the local population. Therefore, local population was paying very high cost in terms of polluted air and water but gaining very little from the industrialization.

This tendency badly affected the moto behind establishment of these steel units in tehsil Bara.

When inquired, management did not reply.

Audit recommends that EPA may take appropriate steps to arrange necessary trainings and handholding courses through relevant government departments for the local community so that they could acquire necessary skills, which could enable them to get their share in the employments generated through local industrialization.

## **2.8 Non preparation of plans for emergency/contingency plans made in case of industrial catastrophe**

According to sections 8 read with section 9 of Khyber Pakhtunkhwa Factories Act, 2013, every factory shall have an emergency/disaster management plan and all workers shall be adequately trained in the routine to be followed in such case and Government may, make rules prescribing in respect of any factory, or class or description of factories, the means of escape to be provided in case of fire and the nature and amount of firefighting apparatus to be provided and maintained.

During audit it was noted that the industrial units did not have the capability to handle any emergent situation as no emergency response equipment were available inside the industries. The industries did not have any documented plan for dealing with emergencies that may have an environmental significance.

The industries did not have the procedures to identify the potential for and response to environmental incidents, accidents and emergency situation.

Almost all industrial units had no idea about personal hygiene, personal safety, response to emergencies, safety drills and working with external agencies such as fire brigade etc. Such a non-serious attitude of the industrial management and EPA was alarming since workers in these industrial units were working in an environment where they were exposed to high temperatures, high electric voltage, and high levels of hazardous toxic gases emissions. Top of them was combustion process in furnaces of steel mills where raw materials like gas cylinders, CFCs and methane gases were used in very unprofessional manner which posed a great threat to the lives of workers, working inside the furnace unit.

Non-preparation of emergency/contingency plans in case of industrial catastrophe occurred due to non-discharge of responsibility by EPA which may cause sudden mishap in the industrial units at tehsil Bara.

When asked, EPA management replied that providing safety equipment to the worker did not fall under their mandate as per Environmental Protection Act. Reply is not convincing as Audit is of the view that ensuring provision of safe working environment to the industrial workers is the responsibility of EPA.

Audit recommends that the Director General EPA may take appropriate action to ensure that all industrial units provide safe working environment to its workers and be ready with the contingency plan in case of any emergency.



(Workers at Steel Mills working without any safety measures in place near or around the furnace area)

## **2.9 Violation of Environment Protection Protocols**

According to clause (xxviii) of the sub section 1 of the section 6 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014, the Environmental Protection Agency shall take all necessary measures for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution and promotion of sustainable development.

It was observed during field visits to the industrial sites during Environmental Audit that majority of industrial units were using local materials as raw product including hazardous junk which resulted in toxic emissions beyond prescribed limits. They had neither devised any procedures to regularly monitor and measure emission to keep it down the significant level nor EPA had any mechanism to make reliable assessment of the Green House gas emissions caused by these industrial units. Audit had following observations:

1. No efforts for control of emissions were seen on ground. Audit team visited the industries along with a team provided by local administration, where the audit team observed that a thick dark sooty emission was flying from the furnace in all directions without having even a chimney to direct

the emissions in the air. It was very difficult to breathe in the vicinity, even in surgical mask, when the steel units were in operation. The gaseous emissions emanating from the fire furnace were so thick that they made blackout in a daytime.

2. The management of the steel mills were not having any EPA report regarding the acceptable limits of gaseous emissions. Even the EPA staff accompanying the Audit team had no idea about permissible limit of hazardous gas emissions and tools used to gauge it. The management also complained that they never received test reports on the samples collected from their units by EPA.
3. Release of Sulphur Dioxide from these units was certain keeping in view the raw material used and their combustion process; while, SRO 549(I)/2000 of Ministry of Environment Section 6(2) had strictly restricted permission to projects with SO<sub>2</sub> emissions as per National Environmental Quality Standards. It also restricted dilution of gaseous emission to bring them to NEQs level through excess air mixing blowing before emitting into the environment but same is happening in these industrial units.

Audit observed that violation of environmental protection protocols occurred due to failure of EPA to implement environmental laws which resulted in environmental pollution.

When asked management EPA replied that efforts would be made to implement environmental laws.

Audit recommends that the Director General EPA should ensure compliance to environmental protection protocols through regular monitoring of operational activities of the industries including sample testing and sharing their results etc.



(CFC cylinder containing gas lying in the raw material to be used)





(Daytime view of the vicinity during operation of Steel Mills)

## **2.10 No Health and Safety arrangements for the Workers**

According to sections 20 to 24 of Khyber Pakhtunkhwa Factories Act, 2013, facilities of lighting, drinking water, spittoons, vaccination, ventilation, latrines and urinals shall be provided to the factory workers.

It was found during Environmental Audit that workers of industrial units were not provided with personal protective equipment like helmets, gloves, masks and the like. No arrangements were made for first aid, food, resting place and other basic facilities.

Audit observed that non-use of personal protective equipment occurred due to failure of EPA to strictly implement its laws. Also the failure of industrial management to comply with Factories Act 2013, which may cause serious incident and the lives of labour were also put to risk.

When asked, management of industrial units replied that protection equipment were provided to the workers but they did not like to use them. However, no inventory record could be shown to Audit where these protection

equipment were issued to the workers. Similarly, EPA management also failed to produce any instructions issued to industrial units to provide workers with personal protection equipment (PPEs).

Audit recommends that the Director General EPA may ensure compliance on part of the industries with the government rules and regulations as contained in the EPA Act 2014 as well as the Companies Ordinance for the safety and welfare of the staff at industries as well as the protection of the environment.



(No facilities of helmet, mask, safety shoes, uniform, Café, Resting place for workers in Steel Mills)

## **2.11 Unauthorized establishment of the industrial units in the residential areas**

According to para 3(i) of the Khyber Pakhtunkhwa EPA act 2014, the Agency to promote Eco-tourism initiatives, establish alpine and other type botanical gardens in suitable locations and develop a comprehensive **Land Zonation** strategy to save the agriculture and forest land. (International environmental protocols)

The industrial units in Tehsil Bara, District Khyber were not established in the Government notified industrial zone and all the industrial units were established in the residential areas which were creating different types of pollution i.e. Air pollution, water pollution and noise pollution.

Establishment of industrial units in residential area was tantamount to exposing residents to various diseases and other environmental adverse effects.

Following are the audit observations regarding the various kinds of exposures to environmental hazards caused by the operational activities of these units in residential area:

1. Arsenic Exposure: Presence of Arsenic airborne particulate matter in breathing space of residents is considered a risk for certain diseases. Taken together, various potential pathways of arsenic exposure proved to affect humans adversely.
2. Carbon monoxide exposure: Carbon monoxide is a toxic gas which causes damage to the lungs and bronchial system along with cardiovascular system if it exceeds its acceptable level of emission at the industry level.

EPA had no facility to assess arsenic, CO, CO<sub>2</sub>, NO, NO<sub>2</sub> level in the gaseous emissions of the industries. It was also unaware of the damage the industries were causing to the local population. In recent past, there was great surge of various types of cancers and bronchial diseases in the Tehsil Bara as witnessed by the local doctors. Small children in particular were brought in great number to the local hospitals infected with diseases like cough and allergies caused by these toxic gases.

Audit recommends that well trained staff should be deputed by the Director General EPA with proper equipment and level of knowledge to perform their duty in the most effective and efficient manner. Audit also recommends inquiry into the matter as to how such staff was appointed which is incapable to handle the official duty of collection of samples and their testing by the



authorized government laboratory. The finding of inquiry may also be shared with audit.



(Steel Mills in residential area where schools, Madrasa, Masjid fall within 500 meters radius)



(The steel Mills are situated in the residential area of Tehsil Bara)



(Clouds of dark smoke making a canopy over the village)

## CONCLUSION

Audit concludes with the following findings:

1. Environmental Protection Agency was least prepared to comply with the International Environmental Commitments made by Government of Pakistan at various International forums like Kyoto Protocol and Paris Conference on Environmental Protection. Such negligence on part of EPA was visible in case of dealing with the industrial units of Tehsil Bara, District Khyber.
2. At the Industrial Units of Tehsil Bara, District Khyber, level of conformity with the internationally accepted environmental protocols was almost non-existent.
3. EPA even failed to make sure that industrial units of Tehsil Bara, District Khyber comply with the National Environmental Standards as circulated from time to time.
4. No study or research was made by EPA to assess permissible level of pollution or figuring out all significant environmental costs, cost-benefit analysis or identify significant environmental risks and contingences at EPA as well as Industrial level.
5. Level of staff awareness of operational issues relating to environmental performance was very low at EPA as well as industries level.
6. Overall status of environmental protection protocols for assessment/measurement of environmental protection at EPA as well as industries level was unsatisfactory.

## RECOMMENDATIONS

The Federal as well as the provincial government, as per constitution are bound to ensure people's rights to life and to health, as well as the right to a healthy environment. Audit suggests the following corrective action and recommendations for environmental protection:

1. The EPA should prepare by-laws as enshrined in EPA Act and implement those laws in letter and spirit.
2. The EPA should appoint highly qualified staff with proper authorization of inspection and training of their staff so that effective checks on the operations of the industries in Tehsil Bara, District Khyber could be imposed.
3. The EPA should issue renewal of NOCs of operation to the industries after observing all the codal formalities particularly the laboratory reports generated by the industries through an independent and government approved laboratory such as PCSIR etc.
4. The industries which are damaging the environment should be sealed immediately through official orders in liaison with the local administration i.e. the AC and DC Office, until they observe the environmental protocols in letter and spirit.
5. The EPA should make sure that the industries prepare environmental management plans, labor safety plans, occupational health and safety measurements and employees as well as community awareness programs/seminars under the auspices of the EPA.
6. The EPA should, under the law, make the industries bound to observe the mitigation measures for environmental damage caused by liquid, solid and gaseous effluents during the operational activities of the industries.
7. The EPA, in liaison with the Forestry and Agriculture department KP, should launch tree plantation campaign, funded by the stakeholders like the government departments and the industries at Tehsil Bara, District Khyber so that the damage to the environment may be minimized.
8. The EPA should ensure annual audit to be conducted regularly in order to bring about improvement in its policies and its implementation for the safety of the environment.

## ANNEXURES

### Annex-1

#### Checklist

Environmental audit Check list on account of environmental audit “Environmental and social impact of Steel and Polythene bags industrial units in residential area on residents of Tehsil Bara, District Khyber, erstwhile Khyber Agency,”.

S.NO	Questions	Yes	No	Not sure	Comments by EPA
1.	Does the EPA have a documented Environmental policy?	Yes			First in 1997 (Pak EPA) Than 2014 KP-EPA
2.	Is this policy consistent with international Environmental policy?	Yes			
3.	Has top management defined and committed to the policy?	Yes			
4.	Are the views of stakeholders taken into account in developing the policy?		No		
5.	Is the policy appropriate to the nature and scale of the department and environmental impacts of its activities, products or services?			Not sure	
6.	Is the environmental policy clear and specific enough to guide the setting of environmental objectives and targets?	Yes			
7.	Is the policy sufficiently clear to be capable of being understood by interested parties?	Yes			
8.	Does the policy show commitment to continuous improvement in the environment?	Yes			
9.	Does it comply with relevant environmental legislation and regulations and other environmental mandates?	Yes			
10.	Has the policy been communicated to and understood by employees of all business units?		No		
11.	Is the policy reviewed periodically to ensure its continuing relevance, in the light of changing standards, technology, and emerging concerns?			Not Sure	
12.	Has the EPA clearly established environmental objectives?	Yes			
13.	Is their exist by-laws /regulations that				EPA act on the

	reflect the government's environmental policy as enunciated in the EPA Act?		No		regulation on PAK-EPA
14.	Do they reflect significant environmental impacts associated with the industries' operations?	Yes			
15.	Has the EPA established proper systems to translate its objectives into action?		No		
16.	Has the EPA developed adequate procedures to accomplish its objectives and are they really efficient and viable?		No		
17.	Has the EPA established environmental objectives for each relevant business function and level?		No		
18.	Have targets been set by EPA for environmental objectives to be achieved by industries?		No		
19.	Are the EPA's objectives and targets reviewed and revised to incorporate changes/updates in the environmental policy?		No		
20.	Does the EPA have a system of communicating their environmental objectives and policies to various concerned internal and external stakeholders (like employees, contractors and suppliers etc)?	Yes			
21.	Does the EPA have a proper system to identify, allocate and review human, technical and financial resources to meet its environmental objectives and targets?		No		
22.	Does the EPA have any provisions in their rules/laws for the industries to establish environmental Management System as per international practices?		No		
23.	Have the industries developed a comprehensive framework of policies, practices, procedures, systems and relevant management information to support environmental management?		No		
24.	Have the industries adopted any principles of the Environmental Management System?		No		
25.	Has environmental management		No		

	system been integrated into the overall business management processes of the industry?				
26.	Do the existing procedures in the industries fully take into account all environmental aspects at all levels and activities?		No		
27.	Are the environmental responsibilities of the Chief Executive and Executive Members of the industry reasonably clearly defined?		No		
28.	Do the industries collaborate with other departments or agencies in relation to environmental management?		No		
29.	Do the industries communicate specific responsibilities and accountabilities among the employees?		No		
30.	Are the environmental responsibilities documented within the industry and are they up-to-date?		No		
31.	Have the industries considered/sought/achieved ISO certification?			Not sure	
32.	Do the industries have sufficient resources and technical competencies to implement EMS as per ISO requirements?	Yes			Having but not utilizing.
33.	Have the industries assessed the costs and benefits of environmental safety measures?		No		
34.	Has the Management of industries prepared any proper plan for identification of major environmental issues?		No		
35. H h	Has the management of industries conducted any Planning for addressing the future environmental issues?		No		
36.	Have the industries established a systematic and documented process describing the methods to identify, monitor and evaluate environmental aspects of its activities, products or services?		No		
37.	Do the processes in the industries comply with the environmental policy		No		

	of the government?				
38.	Do the industries monitor and measure the operations that can have a significant impact on the environment?		No		
39.	Do the industries carry a regular environmental risk assessment to evaluate those aspects, which may have a significant impact on the environment in a positive and negative way?		No		
40.	Does it consider the scale, frequency, severity and sensitivity of the environmental impacts?		No		
41.	Do the industries make efforts to determine the significance of those impacts using a recognized risk management approach?		No		
42.	Does management in the industries have interaction with the local population to assess the impact of the production activities?		No		
43.	Does the company provide for the audit and review of the process to confirm that planned arrangements are properly implemented and maintained?		No		
44.	Does the management have any plans/vision in a documented form for the environmental impact awareness of the nearby public?		No		
45.	Have the industries established Key Performance Indicators for the safety and protection of the environment?		No		
46.	Are there any key Performance Indicators (KPIs) to demonstrate progress against the set environmental objectives and targets?	Yes			EPA demonstrate progress to the various stake holders actively
47.	Do the industries have the capability to identify and track KPIs and other data, necessary to achieve its environmental objectives and targets?		No		
48.	Have these targets or objectives been linked to the organization's corporate or business plans to ensure accountability or follow up?	Yes			
49.	Have the industries developed		No		



	programs to achieve objectives and targets established for each relevant business function and level?				
50.	Do these programs respond to company's environmental policy and the risk assessment?		No		
51.	Do these programs support or contribute to the authorities or Governments overall environmental programs?		No		
52.	Do the programs nominate personnel with specific responsibilities in the environment area?		No		
53.	Are the programs monitored to track progress against objectives and targets?		No		
54.	Is someone declared responsible for tracking progress towards achieving objectives and targets?		No		
55.	Does the program include an environmental review for new activities?		No		
56.	Has the program been amended to reflect changes for new activities?		No		
57.	Do the industries monitor and revise its environmental management programs?		No		
58.	Is there any environmental management strategy in place in a documented form at the industry?		No		
59.	Is there an Executive Committee or Board to oversee the environmental monitoring and reporting of the company's activities?		No		
60.	Has top management defined the roles, responsibilities and authorities of personnel for environmental management in the context of the company's Environmental Management System (EMS)?		No		
61.	Do the roles, responsibilities and authorities extend to establishing, implementing, maintaining and reporting on the EMS?		No		
62.	Have the roles been documented and communicated to relevant people responsible for environmental management and are the relevant		No		

	people aware of the roles assigned to them?				
63.	Has management provided adequate resources to implement and control its EMS?		No		
64.	Do the industries integrate an awareness of environmental issues into its culture?		No		
65.	Do the industries integrate the principles of sustainable development in decision making process through the appraisal and evaluation of policies, programs, plans and projects? Are there written guidelines on how to conduct operations in a manner that is responsible in accordance with the principles of sustainable development?		No		
66.	Are systems of internal control for managing the environment appropriate to the company's corporate plan or business charter?		No		
67.	Do they provide timely and useful management information?		No		
68.	Do the industries have an effective internal environmental audit function?		No		
69.	Do the industries conduct a Training Needs Analysis for environmental management issues?		No		
70.	Is there adequate expertise in the industries to deal with the environmental and sustainability issues?		No		
71.	Do the industries have a systematic and documented process to ensure that personnel who carry out tasks that have a significant impact on the environment are adequately trained and experienced?		No		
72.	Do the industries assess the adequacy of resources and training of staff with designated responsibilities for environmental management and/or protection?		No		
73.	Are employees' responsibilities for environmental management identified in their accountabilities (e.g. position descriptions, annual performance goals)?		No		

74.	Are employees encouraged to take the initiative, submit suggestions for improvement, and to suggest actions or policies to control the industry's environmental impact?		No		
75.	Does the training include response to emergencies and drills, and working with external agencies such as fire brigade?		No		
76.	Do the industries communicate with key stakeholders in regard to significant environmental aspects and is this process documented?		No		
77.	Do the industries try to identify, monitor, evaluate safety measures and ensure the physical safety of the working labor?		No		
78.	Does the industry have a process to record and maintain communications between key employees responsible for environmental management?		No		
79.	Do the industries have a system to receive, record and respond to communications from interested parties about environmental impacts associated with the company's operations?		No		
80.	Do the industries proactively seek the advice of independent community groups (e.g., through newsletters, regular meetings, open forums, or community oversight committees) regarding possible risks posed by the operations of the company?		No		
81.	Have the industries established documented procedures to monitor and evaluate the effectiveness and efficiency of communication strategy/methods regarding environmental protection?		No		
82.	Have the industries established, and does it maintain, information to describe the core elements of the Environmental Protection and provide direction on where to obtain more information on specific parts of Environmental safety?		No		
83.	Does the information describe how the elements interact with each other?		No		
84.	Does it describe the key roles,		No		

	responsibilities, procedures, follow-up actions or response?				
85.	Have the industries identified operations and activities that are associated with significant environmental aspects of the company's operations?		No		
86.	Are these operations and activities carried out under controlled conditions and in accordance with operating criteria to ensure compliance with environmental policy and the achievement of objectives and targets?		No		
87.	Do the industries have a formal written policy regarding materials/resource conservation, reduction, re- use and recycling?		No		
88.	Have the industries established specific targets for material/resource conservation programs for energy, or waste avoidance, or other emerging issues or activities?		No		
89.	Have the industries established specific targets for each conservation strategy?		No		
90.	Do the industries routinely make chemical use that causes environmental releases?	Yes			But no reports were provided
91.	Do the industries address issues of habitat protection and stewardship (such as watershed management, wilderness protection, biodiversity, etc.) in areas affected by their operations?		No		
92.	Is there any Monitoring & Measurement plan in a documented form at the industries?		No		
93.	Have the industries developed and implemented procedures for checking/monitoring the gaseous emissions of the industry?		No		
94.	Is there an adequate system to identify areas of non- conformance?		No		
95.	Do the industries have procedures to regularly monitor and measure the significant operations and activities that can have a significant impact on the environment?		No		

96.	Do the industries have systematic and documented procedures to evaluate compliance with relevant environmental legislation and regulations?		No		
97.	Are periodic audits carried out using established programs and procedures?		No		
98.	Do the industries have data collection and information management systems adequate to support environmental reporting needs?		No		
99.	Is the performance of the industries regularly monitored in relation to the principles of sustainability and best practices?		No		
100.	Do the industries compare and publicly report the monitoring reports made in Environmental Impact Assessment?		No		
101.	Do the industries have auditing programs for workplace health, safety of the staff?		No		
102.	Do the industries monitor and document the consumption of natural resources?		No		
103.	Do the industries use imported raw material?		No		
104.	Do the industries use local rear material with hazardous junk?	Yes			
105.	Do the industries use a separate power supply line from the local population?	Yes			
106.	Do the industries have systems to measure the cost and quality of environmental protection services and the use of resources entrusted to the same?		No		
107.	Is this done through a managerial cost accounting system or other financial management system that routinely compiles, analyses, and reports on environmental costs?		No		
108.	Which environmental costs are so identified (e.g., management costs, resource use, waste disposal, permitting, monitoring, training, auditing, insurance)?		No		
109.	At what level are environmental effects recorded in the industry?		No		Not recorded till date

110.	Do documented emergency/contingency plans exist for rectifying significant environmental mishaps at the industries?		No		
111.	Do the industries have procedures to establish and maintain responsibility and authority for handling investigations of non-conformance and taking corrective and preventative action regarding environmental violations?		No		
112.	Has the cost of rectifying specific environmental mishaps/repercussions been estimated in order to prioritize the risk assessment?		No		
113.	Does the Executive Committee or Board regularly receive key information, such as performance information, major initiatives or investigations of issues affecting the environment?		No		
114.	Do the industries provide sufficient facilities to the staff inside the industry?		No		
115.	Do they take into account the results of audits undertaken and any changed circumstances for continuous improvement?		No		
116.	Are the results of the reviews: documented, reported to, and considered by, the Board and or Chief Executive?		No		
117.	Do they take action on the results of the reviews?		No		
118.	Do the industries have proper floorings/lighting etc. For the working staff?		No		
119.	Is the labor inside industry satisfied with working conditions of the industry?		No		As the condition show
120.	Are views of the working taken into account in decision making?		No of the labor		
121.	Is the labor and other staff hired from the locality to provide employment opportunities to the local population?	Yes			Non-technical only
122.	Do the operations require compliance with environmental, health or safety	Yes			

	regulations at either the national or state level?				
123.	Is there documented record of the working staff inside the industries?		No		
124.	Is there any documentary record in the industry to identify the legal /regulatory requirements associated with environmental impacts of activities, products or services?		No		
125.	Is the any system in place to evaluate compliance with the legal and other regulatory requirements?		No		
126.	How does the company keep track of (changes to) legal and other requirements?		No		
127.	Have the industries established and maintained procedures for controlling all key documents?		No		
128.	Are the procedures adequate so that the documents can be easily located at relevant locations?		No		
129.	Who is authorized to approve alterations to documentation?		No		
130.	Are obsolete documents promptly removed from all points of issue?		No		
131.	Are obsolete documents retained for legal and other reasons and suitably identified?		No		
132.	Is there any transparent and open system of reporting to communicate the company's management responses to the safety of the environment to the public?		No		
133.	Is there an appropriate and reliable environmental reporting system which meets requirements of the entity?		No		
134.	Do the industries report to regulators?		No		
135.	Do the industries contribute in any way to National or International environmental safety & sustainability?		No		
136.	Does the Environmental Protection Agency produce an annual Environment Report about the industries under its jurisdiction?	Yes			
137.	Does the EPA arrange regular inspections of the industries?	Yes			
138.	Is the inspection report externally verified or validated?	Yes			

139.	Does the EPA report to the Parliament and/or the public on the fulfillment of its environmental responsibility ?	Yes			EPA submit report to Provincial assembly and Chief secretary, when asked.
140.	Is the staff of EPA at the regional directorate adequately trained in the technical inspection of industries?	Yes			
141.	Is the sector in which the company operates prone to and known for a high level of pollution/ environmental impact?	Yes.			
142.	Do the industries fall within the notified industrial zone as per the government 's notifications/orders?		No		
143.	Are there clearly specified orders empowering the entity to operate in the specified industry?		No		
144.	Has the industries obtained all the necessary approvals or permits for the operations?		No		
145.	Are all these approvals properly documented and readily available for inspection?		No		
146.	Does the sector in which the entity operates entail any special environmental risks or require special consideration?	Yes.			Melting section & unchecked gaseous emissions of steel industry
147.	Do the industries carry out environmental risk analysis in accordance with specified schedule?		No		
148.	Is there a suitable internal control system to ensure that the entity's operations achieve the intended environmental objectives?		No		
149.	Does it provide for regular verifications and physical monitoring?		No		
150.	Are there any actions taken by the EPA to mitigate/ abate the environmental impacts?	Yes			
151.	Are the actions taken by the management to mitigate/ abate the environmental impacts adequate?		No		
152.	Are the mitigative action adequate?		No		
153.	Is the industry operating as per the legally allowed operational hours?		No		
154.	Was the industry legally required to carry out any EIA prior to starting its operations?	Yes			According to section 13 of KP-EPA act 2014, it is mandatory.
155.	Was it carried out?	Yes			



156.	Did the entity apply for and obtain environmental clearances as required under the relevant laws and regulations?		No		
157.	Were the conditions subject to which the clearance was granted duly met?		No		
158.	Do the industries self assess their environmental impact?		No		
159.	Does the regional Directorate of EPA have the capacity to conduct the environmental impact assessment?		No		
160.	Is the regional Directorate EPA empowered to instruct the industries on any environmental issues?	Yes			
160.	Do the industries require official approval for emissions to air?	Yes			
161.	If yes, have they obtained these approvals (in the form of permits, licenses, consents or authorization)?		No		
162.	Are these approvals up to date and available for inspection?		No		
163.	If relevant, are authorized limits and conditions under approval (e.g. monitoring data) being met?		No		
164.	Do the industries release toxic emissions beyond their prescribed limits?	Yes			
165.	Have the industries taken action to measure and quantify the pollution level, emission level etc. during its operations?		No		
166.	Has any reliable assessment of the level of Green house gas emissions/extent of air pollution of the environment attributable to the industry's operations been made?		No		
167.	Are there any reports available for inspection?		No		
168.	Are efforts being made to control such emissions?		No		
169.	Has the sanctioning authority reviewed the same and given its approval?		No		
170.	Do the industries contribute a huge amount of heat to the environment?	Yes			
171.	Do the industries observe the acceptable limits of heat?		No		

172.	Does the company require official approval to discharge liquid effluent to ground, surface water (including streams, rivers and lakes) or sewer or drainage systems?	Yes			
173.	If yes, have these approvals been obtained?		No		
174.	Are these approvals up to date and available for inspection?		No		
175.	Are all discharges identified and if required, authorized, licensed or permitted?		No		
176.	Is there any system in place in the industries for recycling/dumping of the solid waste in the industries?		No		
177.	Are discharge monitoring reports available for past few (say three) years?		No		
178.	Is there adequate procedure for spill prevention and control?		No		
179.	Is there any Waste management Assessment system in the industries?		No		
180.	Do the industries have an inventory of all the waste generated and recycled in last years?		No		
181.	Do the industries monitor and document usage, volume and disposal of all such waste?		No		
182.	Are the solid wastes finally disposed off to pepper dumping sites?		No		
183.	Do the industries have specific programmes to minimize such waste?		No		
184.	Do the industries generate hazardous waste?	Yes			
185.	Are hazardous waste collected and stored in properly constructed, undamaged, and closed containers?		No		
186.	Are containers held on site for the minimum time possible, and less than any legally specified limit?		No		
187.	Is any hazardous solid waste kept inside the industries?	Yes			
188.	Do the industries have a hazardous waste minimization/ pollution prevention plan in place?		No		
189.	Is spill clean-up and containment equipment easily available?		No		
190.	Are there any Emergency response		No		

	equipment available inside the industries?				
191.	Do the industries have a documented plan for dealing with emergencies that may have an environmental significance?		No		
192.	Are emergency actions clearly posted in all areas, with relevant telephone contact numbers?		No		
193.	Do the industries have procedures to identify the potential for, and response to, environmental incidents, accidents and emergency situations?		No		
194.	Are the site emergency procedures reviewed and exercised regularly?		No		
195.	Do the industries have procedures to report on environmental incidents, accidents and emergency situations and implementing corrective actions?		No		
196.	Are the procedures communicated to all relevant parties like employees, factory neighbours etc.?		No		
197.	Is there a programme to eliminate, or if not possible reduce the use of hazardous substances?		No		
198.	Is there a list of the hazardous substances on site, plus information on handling, disposal etc.?		No		
199.	Do the industries, routinely or in specific circumstances, track chemical use or some other method as distinct from, or in addition to, tracking environmental releases?		No		
200.	Do the industries use such raw material which contains poisonous substances?	Yes			
201.	Are there safety measures in place for the nearby population to stay safe from hazardous substances?		No		
202.	Are the any health related issues widespread in the nearby population?	Yes			
203.	Does the population nearby the industries have any complaints about the operations of the industries?	Yes			

204.	Are these complaints in the notice of the district administration?	Yes			
205.	Did the local administration take any action in this regard?	Yes			
206.	Has the management taken timely remedial actions in the past?			Not sure	
207.	Do the industries maintain record of violations and remedial actions?		No		
208.	Do the industries required under law or regulations to submit periodical environmental performance reports to the government?	Yes			
209.	Do the industries report environmental performance regularly in the annual reports?		No		
210.	Is the reporting system of the industries satisfactory?		No		
211.	Are these reports externally verified?		No		

Annex-2



