

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT
OF
M/S OASIS GAS (PRIVATE) LIMITED
DISTRICT ATTOCK**

SUBMITTED TO PEPA



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EXECUTIVE SUMMARY

The development of a country depends upon the industrial growth and the driving force behind the proper utilization of the available natural resources. Our country is rich in natural resources and multi opportunities are available to fulfill the market demands. Our province Punjab has adequate resources but there is a need to utilize these resources sustainably and the impacts on environment should be minimized. In this way there is a well approved system for the betterment of environment and sustainable use of natural resources. This system is governed by the Pakistan Environmental Protection Act 1997 and IEE/EIA Regulations 2000.

Our province, and specially our District (ATTOCK) is moderate in economic development and the available resources are not utilized in the same ratio. If the provincial government encourage the multinational companies and local contractors to exploit the available resources and eradicate unemployment, poverty and meet the present needs then an economical sound and stable province and even Pakistan is obvious. In this regard

M/s Oasis Gas (Private) Limited is one of the unit needs to be established at Mouza Kot Sundki Tehsil Hassan Abdal, District Attock Punjab. This unit will be established for the purpose of storage and bottling of Liquefied Petroleum Gas as it is in high demand for cooking, heating and even a fuel source in vehicles in whole country. As per provisions of the Punjab Environmental Protection Act 1997 and IEE/EIA Regulations 2000 this type of activity on commercial basis falls under Schedule II and needs the submission of EIA report for review and environmental approval. This study report will identify the environmental baseline information i.e. Physical, Biological and socioeconomic conditions of the project area. The storage capacity of the bottling will be 50 Metric Tons and will be supplied as per demands to district Attock and the surrounding areas as well. The storage of the LPG will be in liquid form in mounded bullet storage.

The remote areas of district Attock and nearby districts of AJK and KPK relies on fire wood, Dunghill (Dung Cake) as a fuel source and utilizes it for the cooking purposes on daily basis. The Oasis Gas (Private) Limited's storage plant will be highly appreciated by the residents of the area with pleasures and thanks as an alternate fuel source for the locals because there is a growing demand in the market for LPG.

The total estimated cost of the project is Rs. 40 million approximately and will be established on ten (10) Kanal of Land in Mouza Kot Sundki Tehsil Hassan Abdal, District Attock.

The project proponent will ensure the health and safety measures on top priority by providing the emergency fire combating equipment's like the compressed carbon dioxide gas along with the safety dress to workers. There will be a fire alarm hooter in the storage and filling plant. The filling and storage area will be used by the authorized personnel only. The general public will stand restricted to the storage and filling area. There will be special sign and symbols displayed on boards for the staff and general masses so as to avoid the chance of any health hazards in the area. There will be a water storage tank with 45,000 US Gallons capacity for the purpose of combating any accidental fire inside the storage plant. Further the normal cigarette smoking will be strictly prohibited in the premises. The workers and other relevant staff will be given special training for operation and maintenance of the storage plant. The SOPs will be displayed at various locations and will be strictly implemented accordingly.

There is no manufacturing process involved but a simple activity of receiving of LPG in bulk by road Browsers, decant these Browsers in the mounded storage bullets then filling of domestic and commercial cylinders by automatic electronic filling machines. The leakage will be avoided by ensuring the leakage proof valves and taps in order to avoid any accident.

Thus the aim of the EMP is to assist in the systematic and prompt recognition of problems and the effective actions to correct them and ultimately good environmental performance is achieved. For each impact proper mitigation measures will be adopted by the proponent for the improvement of environmental conditions. The proposed site is much suitable both socially and environmentally.

CHAPTER 1

INTRODUCTION

1.1 Overview

For a very long time, many development projects worldwide didn't take into account the effects of projects on the environment. This led to much environmental degradation which caused environmental problems. Some of these problems have been irreversible and costly. A comprehensive environmental policy was therefore needed to take care of the environment in a holistic way. This was achieved through enactment of the Pakistan Environmental Protection Act (PEPA), 1997 which latterly declared at provincial level as Punjab Environmental Protection Act 1997 after eighteenth constitutional amendment. The Act stipulates that Environmental Impact Assessment (EIA) be carried out on projects fall in the Schedule II of PEPA Regulation 2000. It is in response to this provision in the schedule II that this study report has been prepared. The proposed project entails the construction of an LPG Cylinders refilling plant.

In order to meet the desired goal and objectives, the LPG filling plant will comprise the following primary features

- One (15x50) LPG Road Bowser Decanting point
- Cylinders filling Shed (33 X 29.5) with Automatic Filling Machines
- Firefighting facilities

LPG brought from refineries in Road Tankers decant from tanker into the mounted LPG tank for refilling of commercial as well as domestic cylinders for selling to the appointed distributors. Liquefied Petroleum Gas (LPG) is used mainly for cooking purpose domestically and commercially in Attock district. LPG is a colorless, odorless mixture of hydrocarbons with major components of propane and butane which keeps gaseous nature at normal temperature and pressure and become liquefied when pressure is reduced or moderate pressure. A leakage detector substance known as ethyl mercaptan is added. LPG is preferred in areas where the natural gas pipeline network is unavailable. In present scenario of Pakistan out of 27 million households 6.1 million are supplied with natural gas and the rest of them rely on conventional fuel sources like coal, firewood, kerosene oil, dung cakes, which augment the demand for LPG.

In this concern Storage and Filling Plant of Oasis Gas (Private) Ltd will be an excellent input in the Attock district. In the province of Punjab LPG play an important role especially in those areas where Natural Gas is not pipelined. LPG is an important alternative fuel source for those areas

where people rely on wood as a fuel. Attock district and surroundings will have received a massive positive impact on the wellbeing of individuals and on the local economy.

Besides that all the other features are describes with detail to understand the positive and negative impact of the project. Socio economic conditions, availability of basic infrastructure, availability of water, labor, raw materials, transport and means of communication, electricity and approach to the project site were the major considerations and spatial & temporal boundaries are considered during this study.

The EIA report highlights various aspects like environmental, social and physical etc. of the project during construction and operation phase. The report also takes account of the necessary measures to be adopted to mitigate any environmental impacts on any part of the environment around. Environmental Management Plan (EMP) is the part of the EIA/IEE study. The proper and comprehensive EMP ensures that the proposed project meet regulatory and operational performance criteria. EMP will also be carried out essentially, to ensure that the identified impacts are maintained within the NEQS level. Thus the aim of the EMP is to assist in the systematic and prompt recognition of problems and the corrective actions to the effect and ultimately good environmental performance is achieved. For each impact proper mitigation measures to be adopted by the proponent is also indicated along with some more options to be adopted for further improvement of environmental conditions.

The existing situation of proposed project site itself explains that all the negative impacts are temporary and minimum in nature inside the vicinity of project site. Besides that the positive impacts of the project are more than the negative impacts on the bases of need of LPG plant which impose environmental legislation during operational activities, industrial development of the province, employment opportunities and development of the surrounding communities.

The EIA report clearly shows the minor impacts which are mitigated and ensure the implementation of mitigation measures. The site is environmentally safe and sound and very much suitable for the proposed project. Hence the award of NOC on need base at the earliest is requested, so that the owner may commence the construction activity as soon as possible, keeping in view the financial loss to proponent due to delaying the construction.

1.2 Purpose of the EIA report

This EIA report presents information on existing environmental attributes of the proposed LPG bottling and storage project. Geological, hydrological and ecological features, air quality, noise, water quality, soils, social and economic aspects and cultural resources are included in this document. The report predicts the probable impacts on the environment due to the proposed subproject (Schedule-II). Furthermore this EIA also proposes various environmental management measures to avoid or mitigate the impacts of proposed projects. Details of all background environmental quality, environmental impact / pollutant generating activities, pollution sources, predicted environmental quality and related aspects have been provided in this report.

The purpose of this study is to evaluate the proposed project activities against National Environmental Quality Standards (NEQS). The specific objectives of this EIA study are;

- To assess the existing environmental condition in the project area, including the identification of environmentally sensitive areas and receptors
- To assess the various activities such as construction, operations and process etc. to identify various socio-ecological and economic impacts and determine their significance
- To propose appropriate mitigation measures that can be incorporated in to the design of the proposed project to minimize any damaging effects or lasting negative consequences identified by the environmental assessment
- To assess the proposed activities to determine whether they comply with the relevant environmental regulations in province or not

1.3 Identification of the project

The Environmental Impact Assessment (EIA) is the legal requirement under the Punjab Environmental Protection Act 1997 (PEPA-1997) for those projects which are categorized in Schedule-II having reasonably foreseeable impacts on socio-ecological and economic environment. This document is the Environmental Impact Assessment (EIA) study for the proposed project of M/s Oasis Gas (Pvt) Ltd. in District Attock in the Punjab Province. The proposed project of LPG has foreseeable environmental and socio-economic impacts in the area which is included in schedule-II category and is required to submit an Environmental Impact Assessment (EIA) to the respective provincial Environmental Protection Agency (EPA). This project site is situated at

Mouza Kot Sundki Tehsil Hassan Abdal, District Attock. The project area is more suitable for the LPG bottling and storage due to growing market demand and unavailability of the natural gas in the adjoining areas. The LPG has a highly demand as an alternate fuel source for domestic as well as commercial use in the project area. It is the private sector project which is proposed to be established to meet the increasing demand of the area. Moreover the site is most suitable place for the construction of LPG bottling and storage.

1.4 Identification of the Project Proponent

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1.5 Brief Description of The project

The bottling and storage plant of M/s Oasis Gas (Pvt) Ltd is proposed to be installed on a land of 10 Kanal taken on lease situated at Mouza Kot Sundki Tehsil Hassan Abdal, District Attock. Plant Location Coordinates are Latitude 33.740479 Longitude 72.655312. The storage capacity of the bottling plant will be 50 Metric Ton with its one mounded bullet storage. The bottling capacity will be 9 TMTA. There is no manufacturing process involved except the storage and bottling of LPG in bulk. LPG is brought in road tankers (Browsers), storage the same in mounded bullet storage and filling of LPG into cylinders (Domestic and Commercial) using electronic/automatic filling machines. The filled cylinders are checked for quality and quantity and dispatch by trucks/Pickups depending on the numbers/quantity of cylinders.

This LPG bottling plant at District Attock is established with the purpose of supplying commercial and domestic LPG cylinders to the residents of District Attock and nearby districts of KPK, AJK and Islamabad area. It will facilitate timely delivery of domestic LPG refills to the customers in these districts. In the proposed LPG bottling plant, the storage of LPG will be in liquid form in mounded Bullet Storage. The mounded bullet storage will be of 50 M.Ton Capacity. The system of mounded storage has been recognized as one of the safest form of storage for LPG.

1.6 Phases of the Project

The proposed project has been broadly categorized into the following three phases

1.6.1 Design Phase

A preliminary assessment has been carried out during design phase of the project and different aspects of the project discussed with key stakeholders. Furthermore some relevant information on the project also obtained. This pre-feasibility study has justified the development of the project in the proposed site, because the project has been started in socio-ecologically and economically suitable environment. This is also designed with the aim to supply quality LPG for domestic purposes and local markets.

1.6.2 Construction Phase

The project feasibility study revealed that the proposed project construction phase is only likely to affect the areas within project premises. There are unlikely to be any significant impacts outside the premises except for perhaps temporary minor inconveniences to traffic when construction activities are carrying out at the site. Fortunately the project doesn't disturb any single settlement in surrounding of the proposed site and the activity is socially safe & sound in all respect.

1.6.3 Operational Phase

The potential socio-economic and environmental impacts of the proposed project assessed for the operational phase. There will be no significant long term impacts of the project during operational phase. Holistic and integrated approaches are required to manage the minor impacts of the project during this stage.

1.7 Scope of EIA

This EIA study process began with scoping and field reconnaissance during which rapid Environmental assessments were carried out to identify the potential impacts of the proposed project. The methodology of the EIA study was elaborated in order to address all interests. Subsequently both primary and secondary baseline environmental data was collected and the intensity and likely location of impacts were identified with relation the sensitive receptors; based on the work expected to be carried out at the site. The significance of impacts from the proposed project was assessed and for those impacts requiring assessment, mitigation measures were proposed to reduce impacts to an acceptable limit. The Scope of EIA for this project is as under;

- Description of the physical, ecological, socio-economic and cultural conditions on the proposed site of the project.
- Project impact identification, prediction and its significance based on project activities.
- Identification and assessment of the workability of mitigation measures to offset or minimize negative project impacts on the environment.

1.8 Covered Area for the project

The total covered area of the plot for the proposed bottling plant is approximately 10 Kanals (54,500 sq feet). This area will be reserved with diverse proportions for various project portions like Filling Shed, Generator Room, Fire Pump, Admin Block and Electric Panel Room.

CHAPTER 2

Policies, Legal and Administrative Framework

This Chapter covers national legislation and regulations relevant to the environmental and social aspects of the Project. Also covered in the Chapter is the WB safeguard polices, national and international environmental guidelines, and multilateral environmental agreements.

2.1 National Laws and Regulations

Pakistan's statute books contain a number of laws concerned with the regulation and control of the environmental and social aspects. However, the enactment of comprehensive legislation on the environment, in the form of an act of parliament, is a relatively new phenomenon. Most of the existing laws on environmental and social issues have been enforced over an extended period of time, and are context-specific. The laws relevant to the developmental projects are briefly reviewed below.

2.1.1 National Health Policy

The National Health Policy provides an overall national vision for the Health Sector based on "Health for All" approach. Under this approach, the national health policy aims to implement the strategy for protecting people against hazardous diseases, protecting public health, and upgrading curative care facilities. Under the new Health Policy, health sector investments are being viewed a part of the Government's Poverty Alleviation Plan. Priority attention has been accorded to the primary and secondary tiers of the health sector and good governance is seen as the basis for health sector reforms to achieve quality health care.

The key to the success of the new Health Policy lies in its implementation. This is not an easy task but is by no means impossible. The new Health Policy has outlined implementation modalities and has set targets and a time frame for each of the key areas identified that would be implemented over a 10-year period. These have to be implemented in partnership between the federal Ministry of Health and the provincial Departments of Health, and in close collaboration with the district health set-up under the Local Government structure. The private health sector would also be taken on board while implementing the key policy initiatives.

The health policy has developed a clear view of what is required to be done in key areas, and the measures to be taken to achieve the envisioned goals. The Policy provides guidelines to the Provinces while implementing plans in the health sector in accordance with their requirements and priorities. The Key Areas of National Health Policy are as below

- Key Area No.1: To reduce Widespread Prevalence of Communicable Diseases (i.e. EPI cluster of childhood diseases, TB, Malaria, Hepatitis-B and HIV-AIDS).
- Key Area No.2: To address inadequacies in primary/secondary health care services. The main inadequacies are identified as the deficient state of equipment and medical personnel at BHU/RHC level. Absenteeism is common. At the district/Tehsil level hospitals there are major shortcomings in emergency care, surgical services, and anesthesia and laboratory facilities. There is no referral system in operation.
- Key Area No. 3: To Remove Professional and Managerial Deficiencies in District Health System. The main deficiencies have been identified as the ineffectiveness of the district health office to supervise health services in a district. DHOs generally lack in essential qualifications and management skills. A large number of posts of male and female doctors and paramedics at the primary and secondary health facilities are vacant, as well as specialist positions in district and Tehsil hospitals. Mega-hospitals are managed in an ad-hoc manner.
- Key Area No. 4: To promote greater gender equity in the health sector.
- Key Area No. 5: To bridge the Basic Nutrition Gaps in the target-population i.e. children, women and vulnerable population groups.
- Key Area No. 6: To correct urban bias in the health sector.
- Key Area No. 7: To introduce required regulation in the private medical sector with a view to ensuring proper standards of equipment and services in hospitals, clinics and laboratories as well as private medical college and Tibb/Homeopathic teaching institutions.
- Key Area No. 8: To create mass awareness in public health matters.
- Key Area No. 9: To Effect improvement in the Drug Sector with a view to ensuring the availability, affordability and quality of drugs in the country.
- Key Area No. 10: Capacity Building for Health Policy Monitoring in the Ministry of Health.

2.1.2 Pakistan Environmental Protection Act, 1997

The Pakistan Environmental Protection Act, 1997 (the Act) is the basic legislative tool empowering the government to frame regulations for the protection of the environment (the 'environment' has been defined in the Act as: (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'). The Act is applicable to a broad range of issues and extends to socio-economic aspects, land acquisition, air, water, soil, marine and noise pollution, as well as the handling of hazardous waste. The discharge or emission of any effluent, waste, air pollutant or noise in an amount, concentration or level in excess of the National Environmental Quality Standards (NEQS) specified by the Pakistan Environmental Protection Agency (Pak-EPA) has been prohibited under the Act, and penalties have been prescribed for those contravening the provisions of the Act. The powers of the federal and provincial Environmental Protection Agencies (EPAs), established under the Pakistan Environmental Protection Ordinance 1983, have also been considerably enhanced under this legislation and they have been given the power to conduct inquiries into possible breaches of environmental law either of their own accord, or upon the registration of a complaint. The requirement for environmental assessment is laid out in Section 12 (1) of the Act. Under this section, no project involving construction activities or any change in the physical environment can be undertaken unless an initial environmental examination (IEE) or an environmental impact assessment (EIA) is conducted, and approval is received from the federal or relevant provincial EPA. Section 12 (6) of the Act states that the provision is applicable only to such categories of projects as may be prescribed. The categories are defined in the Pakistan Environmental Protection Agency Review of IEE and EIA Regulations, 2000 and are discussed below. The requirement of conducting an environmental assessment of the proposed project emanates from this Act. The present Plan broadly addresses the requirements given in the Act.

2.1.3 Pakistan Environmental Protection Agency Review of IEE and EIA Regulations 2000

The Pakistan Environmental Protection Agency Review of IEE and EIA Regulations, 2000 developed by the Pak-EPA under the powers conferred upon it by the Act, provide the necessary details on preparation, submission and review of the initial environmental examination (IEE) and

the EIA. Categorization of projects for IEE and EIA is one of the main components of the Regulations. Projects have been classified on the basis of expected degree of adverse environmental impacts. Project types listed in Schedule I are designated as potentially less damaging to the environment, and those listed in Schedule II as having potentially serious adverse effects. Schedule I projects require an IEE to be conducted, provided they are not located in environmentally sensitive areas. For the Schedule II projects, conducting an EIA is necessary. The proposed project falls under the Schedule I of the Regulations.

2.1.4 National Environmental Quality Standards

The National Environmental Quality Standards (NEQS), promulgated under the PEPA 1997, specify the following standards:

- Maximum allowable concentration of pollutants in gaseous emissions from industrial sources,
- Maximum allowable concentration of pollutants in municipal and liquid industrial effluents discharged to inland waters, sewage treatment and sea (three separate set of numbers).
- Maximum allowable emissions from motor vehicles.
- Ambient air quality standards.
- Drinking water standards
- Noise standards.

Some of these standards will be applicable to the gaseous emissions and liquid effluents discharged to the environment as well as noise generation from the activities under the proposed project.

2.1.5 Hospital Waste Management Rules, 2005

Under these Rules, every hospital is responsible for proper management of waste generated by it till its final disposal in accordance with provisions given in these Rules. The Rules require each healthcare facility to constitute a waste management team, and to prepare and implement a waste management plan. The Rules also include guidelines for waste segregation, collection, transportation, storage, and disposal. These Rules are applicable to the proposed project.

2.1.6 Land Acquisition Act, 1894

The Land Acquisition Act (LAA) of 1894 amended from time to time has been the de-facto policy governing land acquisition and compensation in the country. The LAA is the most commonly used law for acquisition of land and other properties for development projects. It comprises of 55 sections pertaining to area notifications and surveys, acquisition, compensation and apportionment awards and disputes resolution, penalties and exemptions. No land acquisition is envisaged under the proposed project.

2.1.7 Forest Act, 1927

The Act authorizes Provincial Forest Departments to establish forest reserves and protected forests. The Act prohibits any person to set fire in the forest, quarry stone, remove any forest-produce or cause any damage to the forest by cutting trees or clearing up area for cultivation or any other purpose. Much like the Punjab Wildlife Act described above, the Forest Act is also not likely to be applicable for the proposed project. No project activities will however be carried out in any protected forests, and no unauthorized tree cutting will be carried out for any facility expansion or waste disposal.

2.1.8 Factories Act, 1934

The clauses relevant to the proposed project are those that address the health, safety and welfare of the workers, disposal of solid waste and effluents, and damage to private and public property. The Act also provides regulations for handling and disposing toxic and hazardous substances. The Pakistan Environmental Protection Act of 1997 (discussed above), supersedes parts of this Act pertaining to environment and environmental degradation.

2.1.9 Employment of Child Act, 1991

Article 11(3) of the Constitution of Pakistan prohibits employment of children below the age of 14 years in any factory, mines or any other hazardous employment. In accordance with this Article, the Employment of Child Act (ECA) 1991 disallows the child labor in the country. The ECA defines a child to mean a person who has not completed his/her fourteenth years of age. The ECA states that no child shall be employed or permitted to work in any of the occupation set

forth in the ECA (such as transport sector, railways, construction, and ports) or in any workshop wherein any of the processes defined in the Act is carried out. The processes defined in the Act include carpet weaving, *Biri* (kind of a cigarette) making, cement manufacturing, textile, construction and others). The project proponent and their contractors will be bound by the ECA to disallow any child labor at the project sites/facilities.

2.1.10 Pakistan Penal Code, 1860

The Code deals with the offences where public or private property or human lives are affected due to intentional or accidental misconduct of an individual or organization. The Code also addresses control of noise, noxious emissions and disposal of effluents. Most of the environmental aspects of the Code have been superseded by the Pakistan Environmental Protection Act, 1997.

2.1.11 Acts Governing Healthcare Services

The following laws govern various aspects of the healthcare services in the Province:

- Punjab Health Care Commission Act 2010
- Medical and Health Institutions and Registration of Health Care Services regulation Ordinance 2002 (Amendment Act 2010)
- (Registration) Rules 1984
- Public Health (Emergency Provisions) Ordinance, 1944
- West Pakistan Epidemic Diseases Act, 1958
- Eye Surgery (Restriction) Ordinance, 1960
- Pakistan College of Physician & Surgeons Ordinance, 1962
- Medical and Dental Council Ordinance, 1962
- Allopathic System (Prevention of Misuse) Ordinance, 1962
- *Unani, Ayurvedic* and Homoeopathic Practitioners Act, 1965
- Pharmacy Act, 1967
- Medical Colleges (Governing Bodies) (Punjab Repeal) Ordinance, 1970
- Pakistan Nursing Council Act, 1973
- Drugs Act, 1976
- Medical and Dental Degrees Ordinance, 1982

- Mental Health Ordinance for Pakistan, 2001
- Prohibition of Smoking and Protection of Non-Smokers Health Ordinance, 2002
- Protection of Breast-Feeding and Child Nutrition Ordinance, 2002
- Injured Persons (Medical Aid) Act, 2004
- Transplantation of Human Organs and Tissues Act, 2010

However the above laws have a limited relevance for the environmental aspects.

2.2 Obligations under International Treaties

Pakistan is signatory of several Multilateral Environmental Agreements (MEAs), including:

- Basel Convention,
- Convention on Biological Diversity, Convention on Wetlands (Ramsar),
- Convention on International Trade in Endangered Species (CITES),
- UN Framework Convention on Climate Change (UNFCCC),
- Kyoto Protocol,
- Montreal Protocol,
- UN Convention to Combat Desertification,
- Convention for the Prevention of Pollution from Ships (MARPOL), UN Convention on the Law of Seas (LOS),
- Stockholm Convention on Persistent Organic Pollutants (POPs),
- Cartagena Protocol.

These MEAs impose requirements and restrictions of varying degrees upon the member countries, in order to meet the objectives of these agreements. However, the implementation mechanism for most of these MEAs is weak in Pakistan and institutional setup mostly non-existent. The most applicable MEAs for the Project are Basel Convention, which addresses trans-boundary movement of hazardous wastes, and the Stockholm Convention on Persistent Organic Pollutants (POPs), under which certain chemicals such as dichloro diphenyl trichloroethane (commonly known as DDT) cannot be used.

2.3 Institutional Setup for Environmental Management

The apex environmental body in the country is the Pakistan Environmental Protection Council (PEPC). The council is presiding by the Chief Executive of the Country. Other bodies include the Pakistan Environmental Protection Agency (Pak-EPA), provincial EPAs (for four provinces, Azad Jammu and Kashmir, and Gilgit Baltistan), and environmental tribunals. The EPAs were first established under the 1983 Environmental Protection Ordinance; the PEPA 1997 further strengthened their powers. The EPAs have been empowered to receive and review the environmental assessment reports (IEEs and EIAs) of the proposed projects, and provide their approval (or otherwise). The proposed project would be located in Punjab. Hence this document will be submitted to the Punjab EPA for review. In addition that EPA Attock District Office Environment will also be taken on board during the implementation of the project for conducting inspections, monitoring and enforcement of standards/plans.

2.4 Environmental and Social Guidelines

Two sets of guidelines, the Pak-EPA's guidelines and the World Bank Environmental Guidelines are reviewed here. These guidelines address the environmental as well as social aspects.

2.4.1 Environmental Protection Agency's Environmental and Social Guidelines

The Federal EPA has prepared a set of guidelines for conducting environmental assessments. The guidelines derive from much of the existing work done by international donor agencies and non-governmental organizations (NGOs). The package of regulations, of which the guidelines form a part, includes the PEPA 1997 and the NEQS. These guidelines are listed below.

- Guidelines for the Preparation and Review of Environmental Reports,
- Guidelines for Public Consultation,
- Guidelines for Sensitive and Critical Areas,
- Sectoral Guidelines.

It is stated in the Pakistan Environmental Protection Agency Review of IEE and EIA Regulations, 2000 that the EIA or IEE must be prepared, to the extent practicable in accordance with the Pakistan Environmental Protection Agency Environmental Guidelines.

2.4.2 World Bank Environmental and Social Guidelines

The World Bank publications that contain environmental and social guidelines are listed below.

- Health Care Waste Management Guidance Note.
- Environment, Health, and Safety (EHS) Guidelines prepared by International Finance Corporation and World Bank in 1997.
- Pollution Prevention and Abatement Handbook 1998: Towards Cleaner Production.
- Environmental Assessment Sourcebook, Volume I: Policies, Procedures, and Cross-Sectoral Issues.

These laws and rules are not relevant to the proposed project but as a requirement these laws are given in this chapter. The related laws and rules are given below.

- LPG (Production & Distribution) Rules, 2001
- Oil & Gas Regulatory Authority Ordinance 2002
- LPG (Production & Distribution) Policy Guidelines, 2013
- LPG (Production & Distribution) Policy, 2016

CHAPTER 3

DESCRIPTION OF THE PROJECT

3.1 Overview

Liquefied Petroleum Gas (LPG) is the generic name used for commercial propane and butane as fuel for cooking and heating in the northern Pakistan. These are hydrocarbon products produced by the oil and gas industries. It is also used as fuel in vehicles particularly taxi and rickshaws. More than 30,000 rickshaws and taxis in Karachi, Lahore and other parts of the country are run on LPG. The demand of LPG in most of the big cities is consistent throughout the year and increases during winters in Punjab and Northern Pakistan. Although demand of LPG is persistent throughout the year, supply of LPG from producers to marketing companies and distributors has been limited due to maintenance and overhauling shutdowns, which often creates shortages. Besides that, LPG producers are also limited in numbers and LPG marketing companies need to have a quota of gas to be allocated by the producer. This factor makes LPG business vulnerable in the hands of LPG producers. Commercial Propane predominantly consists of hydrocarbons containing three carbon atoms, mainly propane (C₃H₈). Commercial Butane predominantly consists of hydrocarbons containing four carbon atoms, (C₄H₁₀). They have the special property of becoming liquid at atmospheric temperature if moderately compressed, and reverting to gases when the pressure is sufficiently reduced. Advantage is taken of this property to transport and store these products.

LPG is rapidly becoming a fuel of choice in the areas, where natural gas distribution network is not available. Currently out of 27 million households in Pakistan, 6.1 million are connected to natural gas network and the rest are relying on LPG and conventional fuels like coal, firewood, kerosene, dung cake etc. LPG is a colorless, odorless and environment friendly mixture of hydrocarbons which is gaseous at normal temperature and pressure, and liquefiable under reduced temperature or moderate pressure. Currently more than 2500 M.Ton/day LPG is being produced domestically contributing less than 1.5% to the total energy supply mix.

The main Producers in Pakistan are:

Its main producers and suppliers in Pakistan are

Pak Arab Refinery Company Ltd

Pakistan Refinery Ltd

National Refinery Ltd

BYCO Refinery Ltd

Pakistan Petroleum Ltd

OGDCL Ltd

MOL

The total demand for LPG is approximately 1.4 million; the remaining is covered from importing LPG from neighboring countries.

The main Importers in Pakistan are:

Pyramid Gas

Hazara Gas

Ayan Gas

Sui Southern Gas Co Ltd

In June 2000, the Federal Government decided to deregulate the LPG industry with a view to making it investor feasible, foster healthy competition, improve safety standards and ensure better customer services. Accordingly, in supersession of LPG (Production & Distribution) Rules 1971, LPG (Production & Distribution) Rules 2001 were formulated under which LPG allocations made by the Ministry of Petroleum & Natural Resources (MPNR) prior to deregulation were given protection to the extent of terms of existing agreements between the marketing companies and producers. These Rules also empower the producers and marketing companies to fix a reasonable producer price for their product and a retail price respectively. After promulgation of Oil & Gas Regulatory Authority (OGRA) Ordinance, 2002 all LPG regulatory functions as envisaged in LPG (P&D) Rules, 2001 were transferred to OGRA in March 2003.

The human beings should pay attention to existing resources with wise utilization in a manner of sustainable development. The EIA/IEE process in legal provision of Khyber Pakhtunkhwa which is supporting sustainable development and report like IEE will help us to develop our industries in sustainable development manners. The pollution raises from any industrial activity is directly related to the site allocation, types of equipment, use of equipment, the process involved in the storage and distribution of LPG.

3.2 Objectives of the proposed project

The objectives of the proposed project are given below;

- Storage and filling of LPG in cylinders by adopting remedial steps
- To provide LPG for 24 hours round the clock to customers
- To provide LPG in subsidized rate as comparatively
- To provide the opportunity of employment to locals
- To change the social life style of the workers
- To improve the socio-economic condition of the area

3.3 Justification of the project

LPG is well cleaned option as an alternate fuel to assist developing countries in the transition to modern fuels for the following reasons:

1. Environment friendly, it burns smokeless or without residual ash, thus avoiding the health hazards associated with indoor use of traditional fuels in the event of a leak; LPG doesn't contaminate the soil or aquifers.

2. Availability, there is nothing exotic to invent or improve. The transportation system that moves it is in place, the tank to store it is available and the appliances and equipment that provide heat and power will be on the shelf.
3. Infinite shelf Life, LPG does not deteriorate over time unlike some other liquid fuels that gel, stratify or evaporate and don't need to protect from weather to prevent deterioration.
4. High energy potential, Compared to traditional fuels in terms of weight equivalency, LPG has ten times energy.
5. LPG can be transported, stored, and used virtually anywhere in the world. It does not require a fixed network and does not deteriorate over time.
6. LPG is cost-effective, since a high proportion of its energy content is converted into heat.
7. LPG can be up to five times more efficient than traditional fuels, resulting in less energy wastage and better use of energy resources.
8. LPG is very clean burning and has low greenhouse gas emissions than any other fossil fuel when measured on a total fuel cycle.

The practical, operational and environmental characteristics of all four commercially available fuels are summarized in the following Table

Table 3.1

FUEL CHARACTERISTICS				
Fuel Characteristic	Petrol	Diesel	CNG	LPG
Air Pollution	Moderate to low emissions of hydrocarbons (HC) and Oxides of Nitrogen (NO _x). Low particle (PM) emissions.	High NO _x , low HC emissions. High PM emissions relative to other fuels even with reduced sulphur levels. By far the highest adverse impact on public health.	HC (methane) emissions can be high. Moderate to low NO _x . Very low PM.	Low NO _x and moderate to low HC emissions. Very low Particulate Matter.

Global Warming (Greenhouse)	Moderate CO ₂ , low methane (CH ₄) emissions. Some questions re Nitrousoxide(N ₂ O) formation in the catalyst.	Lower CO ₂ , low CH ₄ and HC. Air-borne PM may increase global warming. High NO _x levels may result in elevated N ₂ O emissions.	Potentially lowest CO ₂ of all fuels, but this can be offset by the very high greenhouse impact of methane (CH ₄) emissions from these engines.	Tailpipe CO ₂ levels lie between petrol and diesel. Lifecycle CO ₂ comparable to diesel, lower than petrol and CNG. Negligible CH ₄ emissions.
Engine Noise	Low	High	Low	Low
Application	Lowest cost fuel system, so attractive for cars and light commercials.	Complex high pressure fuel system increases cost, but most fuel efficient. Very durable and reliable in heavy duty applications.	High cost and limited range Preclude use in light duty vehicles and in areas where there is no pipeline gas. Use effectively limited to places where high pressure natural gas pipeline exists	Cost, range and on road performance equivalent to petrol in light duty vehicles. Engines now available for buses and medium trucks Not constrained to depot-based operations.
Retail Availability	Nationally Available	Nationally Available	Limited	Nationally Available

LPG has many technology advantages comparatively, it is a cheaper and green fuel hence it would be a better choice for use.

3.4 Capacity

The project is designed for the construction of storage & filling plant and will have a filling capacity of 20 M.Ton/day while the storage capacity will be 50 MT.

3.5 Process

LPG is transported from production field to storage and filling plant where LPG is stored in tanks and filled into cylinders for marketing and distribution to various areas. Transfer operation of LPG is very critical, as LPG is a highly inflammable product and the systems are required to be intrinsically safe. The systems also require very comprehensive fire safety arrangements.

3.5.1 Filling of Storage Tanks

LPG tankers will arrive on site and attached to the Bowser point via LPG pump and LPG will be transferred from Mobile tanker to storage tank of capacity 50 M.Ton. Storage tank will be mounted on RCC foundation about 5 feet above the ground level. LPG Storage and Bottling plant will be designed as per NFPA-58 standards and OGRA 13(3) of LPG Production and Distribution Rules 2001. The filling plant will be supplied with emergency and firefighting equipment to be used in case of fire emergencies.

3.5.2 Transfer of LPG to Filling Shed

LPG pump is used to transfer LPG from storage tank to filling shed via transfer pipes. LPG transfer pipes are provided with water lines in case of emergency fire combat.

3.5.3 Visual Inspection/ Segregation of Cylinders

Before the LPG cylinders are filled, a pre-fill inspection of the cylinders will be undertaken to ensure that the cylinders are safe and sound to fill. The cylinders that are found to be in good condition will be filled, sealed, weighed and loaded in trucks for dispatch. Cylinders found unfit for filling on visual inspection e.g. heavily rusted or heavily dented will be separated during visual inspection. Cylinders having twisted valve spindle, broken/bent foot protection ring would also be segregated.

3.5.4 Cylinder Filling

Valve protection cap will be removed and cylinder is filled at filling shed. The filling shed will have an area of 2500sq ft. The filling process will take place in the cylinder filling area. The Cylinders filling, weighing system will be fully computerized. This will ensure that every single cylinder will be filled thoroughly and that instances such as over-filling, under-filling, and leakages do not occur.

3.5.5 Final Inspection

Cylinders will be visually inspected to examine their sound condition & presence of protected valve and seal.

3.5.6 Storage and Delivery of Filled Cylinders

At this stage cylinders will be stored and ready for delivery. If required, the safe & sound cylinders can be directly sent to the trucks for loading or the cylinders will be sent for stacking in the area earmarked for purpose.

3.6 Supplies

➤ Water Supply

The surplus water during the construction phase of the whole project will be estimated to meet any unforeseen situation. The water demand will be fulfilled from ground water. Water requirement for maintenance of green belts will be done on daily basis by ground water through pumps and pipes to avoid wastage of water. The water requirement for the construction phase will be 1500 gal/day while during operational phase for firefighting an underground water tank with capacity of 45,000 US gallons is constructed. Water requirement for general purposes will be 800 Ltr/day.

➤ Electricity

Source of power will be WAPDA and a diesel fired generator of 100 KV.

3.7 Manpower

A total of 10-12 employees including mechanical, electrical, operators, sweepers and other managerial and office staff shall be employed at project site during construction phase. And 15-17 employees will be hired for Operational phase.

3.8 Fire Fighting

The facility will have a comprehensive firefighting system covering all hazardous areas and the other areas of the facility. This ensures that any fire within the plant is quickly surpassed and extinguished. Firefighting and emergency catering facilities will include:

- Manual call point
- Emergency shutdown
- Fire Alarm hooter (Manual & Electrical)
- Fire Extinguishers (12kg)
- Trolley mounted fire extinguishers
- Fire monitor
- Fire hydrant

- Fire pump
- Water Storage Tank of 45,000 US gallons capacity

Size of fire water pipelines will be:

- 5" dia main fire water header
- 4" dia main fire water line
- 2" dia distribution fire water pipelines
- 3" dia secondary distribution pipelines

3.9 Gas Detection System

A gas detection system with adequate number of detector heads at different locations shall be provided for the LPG filling station. Gas detectors will be provided to detect any leakage. The system should give audible alarm when detecting LPG at a concentration of 20% of the lower flammable limit and give direct signal to fire services Communication Centre when detecting LPG at a concentration 40% of the Lower flammable limit. Each detector head should be able to be isolated individually for the purpose of maintenance and testing.

3.10 Cost of the Project

Total project cost is estimated to be PKR 40 Million.

Activities will include:

- Applying for and getting all necessary approvals and contracts
- Construction of boundary wall and other structures
- Installation/construction of tanks and firefighting equipment
- Maintenance of machinery and tanks

3.11 Abandonment Plan

After completion of life, building will be demolished according to regularity standards. The garbage produced and debris generated by destructing the civil structure will be disposed of at designated sites while metallic and concrete structure may be reused, replaced or sold in the market. Dust/particulate matter to be generated will be minimized by constant sprinkling of water. An

environmental management plan will be put in operation for the safe disposal of waste matrix, debris generated and garbage produced after the destruction of assembled structure.

Chapter 4

DESCRIPTION OF THE EXISTING ENVIRONMENT

Attock is located near the Haro River, a tributary of the Indus River, 80 km (50 mi) from Rawalpindi, 100 km (62 mi) from Peshawar, and 10 km (6 mi) from the Pakistan Aeronautical Complex, Kamra. Geographically, the District is mainly hills, plateaus, and dissected plains. The Indus River flows on the northern and western borders of the district. After Haripur, the Haro River passes through the north of the Tehsil of Attock where there is a flood plain with fertile soil.

Geographical location of District Attock

District Attock is surrounded on the North by Swabi and Haripur districts of Khyber Pukhtoonkhwa, on the East by Rawalpindi, on the South by Chakwal district, on the South-West by Mianwali district, in the West by Kohat district and on North-West by Nowshera district of Khyber Pukhtoonkhwa. The Indus River flows along the Western boundary of the district for about 130 Kilometers. It divides Attock district from the three bordering districts of Khyber Pukhtoonkhwa.

4.1 Climate

Attock district has a climate of hot summers and cold winters. The Northern part of the district is more humid and is more moderate in climate relative to the Southern part of the district due to the higher altitude. Geographically, the district is mainly hills, plateaus and dissected plains. The Indus River flows on the Northern and Western borders of the district. After Haripur, the Haro River passes through the North of the tehsil of Attock where there is a flood plain with fertile soil. The district's average annual rainfall is 783 mm.

The summers are long, sweltering, muggy and sunny whereas the winters are short, cold, and mostly clear. Over the year, the temperature typically varies from 39°F to 104°F and is rarely below 34°F or above 111°F.

4.2 Agriculture

The economy of the district is mainly agriculture-based with peanuts, wheat, maize, millets, grams, corn and pulses being the main crops. Peanuts are a major cash crop in Attock.

The major crops grown, vegetables and the fruits in the district are enlisted below:

Crops	Fruit	Vegetables
<ul style="list-style-type: none"> • Wheat • Peanut • Fodders • Gram • Maize • Grams • Millets • Pulses • Corns 	<ul style="list-style-type: none"> Oranges Guava Watermelon Melon Grapes 	<ul style="list-style-type: none"> Spinach Cauliflower Coriander Bitter Gourd Chilies Radish Carrot

Flora

There is a wide range of plants in the forests of Attock District. Amongst them, the following trees and bushes are most abundant:

Phulai, Kahu, Sanatha etc.



Due to over exploitation of natural resources the area is facing the same situation of losing economically important plant species by the activities of locals. Fast depletion of a rich diversity of plants due to urbanization, deforestation, overgrazing and over exploitation will lead to the ultimate loss of certain important plant species. To tackle this issue is not only to document the flora

of entire district, but also to take safety measures for the conservation of those economically important plant species which were over exploited by anthropogenic activities and under threatening conditions.

Fauna

The natural forests of Pakistan are rapidly declining at a rate of 4-6% per year, resulting in a decline in population size of both flora and fauna. The threatened fauna of district Attock include Wolf, Hare and Mallard.



Hills support wildlife more than other types of lands. As a large part of Attock is mainly hills, wolves, foxes and wild cats are found in this district. Hare is fairly common while migratory ducks like teal pintail and mallard visit during winter.

Some common fauna of district Attock are given below.

Table 4.1 Fauna of District Attock

S.No	Common Name	Scientific Name
1.	Wolf	Canis lupus
2.	Millard	Anas platyrhynchos
3.	Hare	Lepus nigricollis

4.3 Monuments/ Archeological Heritage

Attock District is a district in Pothohar Plateau of Punjab. Created in April 1904 by the merging of tehsils of nearby districts it was named initially as Campbellpur. It is located in the north of the Punjab province, bordered by Chakwal to the south, Mianwali to the southwest, Rawalpindi to the east, Kohat to the west, Nowshera to the northwest, and Swabi and Haripur to the north. The Indus River flows along the western boundary of the district for about 130 km. Attock is a place of great historic significance. Mughal emperor Akbar the Great, the

grandson of Babar, recognized the strategic importance of this area in 1581 and built the famous Attock Fort Complex. The fall of the Mughal Empire in the eighteenth century saw the rise of Sikhs in Punjab and Durrani Afghans to the western side. Attock became a battleground between two contending powers. British finally ended the feud by subjugating both Sikhs and Afghans in the nineteenth century. British at the same time also brought rail lines to the area, built the first permanent bridge in 1880 over the Indus River. The District was named Campbellpur after the name of Sir Campbell who laid the foundation stone of Campbellpur City in 1908, a few kilometers away on the southeast of Attock Khurd Town. The District was constituted in 1904 by taking Talagang Tehsil from Jhelum District and Pindi Gheb, Fateh Jang, and Attock Tehsils from Rawalpindi District. The city was renamed Attock in 1978.

Some of the important places of Attock are given below:-

- a. Attock Fort:** Attock Fort was built at Attock Khurd during the reign of Akbar from 1581 to 1583 under the supervision of Khawaja Shamsuddin Khawafi to protect the passage of the River Indus. After the Partition of India, Pakistan Army took control of the fort. It became headquarters of the 7th division of Pakistan Army. In 1956, the fort was handed over to the Special Services Group (SSG), a special operations force of the Pak Army. Today the fort remains in control of the SSG. It is sandwiched between Peshawar Road on one side and the River Indus on the other. It is located at a distance of 80km from the capital city of Islamabad. As its a military base, visitors are not allowed inside the fort.
- b. Attock Bridge:** Attock Bridge is situated between Attock Khurd and Khairabad Kund on Indus river in Pakistan. It is commonly known as "Old Attock Bridge". This bridge is one of the most important strategic and commercial crossing on the Indus River between Punjab and Khyber Pakhtunkhwa provinces. The bridge has 2 levels and 5 spans. The upper level is use for railway traffic and lower level was used for road traffic. The approaches to the bridge were built as solid fortifications as a defense against raids from nearby Pashtun tribesmen. In 1979 a new bridge was constructed and road traffic was shifted to there. This new bridge is known as "New Attock Bridge". Attock Bridge is still in use for railway traffic.

- c. **Kala Chitta National Park:** Kala Chitta Range is a mountain range in the Attock District of Punjab, Pakistan. Kala- Chitta are Punjabi words meaning Kala the Black and Chitta means the white. The range thrusts eastward across the Potohar plateau towards Rawalpindi. Kala Chitta was established in 2009 and it covers 91,343 acres of land. It is located in Attock District of Punjab Province.
- d. **Hydro Power Station of Ghazi-Brotha Project:** The run-of-river Ghazi Barotha Hydroelectric project is located around 100km from Islamabad, on the Indus River in north west Pakistan. It involved the construction of a partial river diversion at Ghazi, 7km downstream from the Tarbela dam.

None of the aforementioned historical places fall in the proposed project area neither these projects have any foreseeable negative consequences on these historical sites.

4.4 Water Resources:-

4.4.1 Surface Water

The Indus River flows on the Northern and Western borders of the district. After Haripur, the Haro River passes through the North of the tehsil of Attock where there is a flood plain with fertile soil. The district's average annual rainfall is 783 mm. Attock is located near the Haro River, a tributary of the Indus River, 80 km (50 mi) from Rawalpindi, 100 km (62 mi) from Peshawar, and 10 km (6 mi) from the Pakistan Aeronautical Complex, Kamra. Indus River plays an important role in the economy of the District. Indus River is source of irrigation for lower reaches of the District.

4.4.2 Ground Water

The project area has very feasible for ground water because of its location nearest to the River Indus. The depth of the ground water varies from 25 to 50 feet. Ground water is extracted through hand pumps, tube wells, dug wells. The ground water is harvested through a water pump installed very deep and channeled the water to a storage tank made of concrete on certain elevation. These water supply schemes are usually shared by two or three settlements. The water sample taken from the proposed project site was analyzed in the Public Health Food Analysis Laboratory at and found that the water is not fit for human consumption due to some upper/ variable parameters. The results are given below.

Table 4.2 Ground Water Analysis Results

ANALYSIS RESULTS EXPRESSED IN MILLIGRAMS PER LITER			
Chemical Analysis			
Parameter	Sample Analysis re- sult	Normal range	Remarks
pH	7.5	7.0-8.50	The concentration of CO ₂ identified in the sample is more than the desired value and the NO ₂ is also detected in the sample. The water is not fit for human consumption.
CO ₂	45	10 mg/lit	
Chloride	127	200 mg/lit	
Nitrates	Nil	0.1 mg/lit	
Nitrites	Traces	Nil	
Calcium	50	75 mg/lit	
Sulfate	75	200 mg/lit	
Total Solids	399	500 mg/lit	
Temporary Hardness	---	500 mg/lit	
Permanent Hardness	---		
Total Hardness	181		
Turbidity	Nil		
Hydrogen Sulphide	Nil		
E.Coli Bacteria	MPN/ml	0 Organisms/ml	
Coliform Bacteria	MPN/ml	20 Organisms/ml	

Interpretation of result by WHO standards:

Coliform/ml	Category
Zero/ml/1-10/ml	A
1-10/ml	B (Make regular sanitation chek)
10-50/ml	C (Unacceptable)
More than 50/ml	D (Grossly polluted).

OPINION

Co is more than 10mgs/l
Therefore the sample is unfit for human consumption.

4.5 Dialect

The main language spoken in District Attock is Punjabi. Few people also speak Urdu and Pashto languages.

4.6 Education

Education is not only a key driver of economic growth due to its varied linkages with employability, productivity, environment, health and human resource development but a globally recognized human right. Poverty nowadays is measured more comprehensively using the Multidimensional Poverty Index (MPI), which looks at overlapping deprivations in health, education and standard of living. Hence, equitable and fast development of education has striking impacts on strategies geared at poverty reduction. Attock has a total of 1,287 government schools out of which 51 percent (657 schools) are for female students. The district has an enrolment of 224,487 in public sector schools. It was established in the year 2010 with the aim to impart quality and relevant education.

4.7 Religion

The most common religion of the district is Islam that is 93.33% of the other religion including Christianity with 0.62% and about there are major Deeni institutions in the Attock district where the local peoples as well as from other far flung districts receive the religious education. People are inclined towards Islamic teachings.

Chapter 5

POTENTIAL ENVIRONMENTAL IMPACTS AND REMEDIAL MEASURES

The imperative portion of the EIA study consist of the positive and negative environmental consequences along with the proposed mitigation measures to prevent and/or alleviate them to the extent possible mainly during operational phases of the Project. For each impact proper mitigation measures adopted by the proponent is also indicated for further improvement of environmental conditions. Assessment of impacts depends on the nature and magnitude of the activity being undertaken, as well as the type of environmental control measures that are envisaged as part of the project proposal. The potential impacts from the project area are identified and assessed based on the type and scale of the various activities associated with this project. Several aspects and potential impacts were identified for each phase of the development, with impacts evaluated in terms of their nature, possibility and severity potential.

Several impacts are likely as a result of the construction and operation of the project. For the purposes of this EIA study, these potential impacts are assessed based on their magnitude and effect. Design of the building would adhere to all standard technical requirements in order to avoid adverse impacts on environment and human health. All tanks and piping will be done as per standards operating procedures.

5.1 Construction Phase

Positive impacts

5.1.1 Employment Opportunities

One of the main positive impacts during projects construction phase is the availability of employment opportunities especially to casual workers and several other specialized workers. Employment opportunities are of great benefit both economically and socially. In the economic sense it means abundant unskilled labor will be used in construction hence economic production. Several workers including casual laborers, masons, carpenters, joiners, electricians and plumbers are expected to work on the site from start to the completion. Apart from casual labor, semi-skilled and unskilled labor and formal employees are also expected to obtain gainful employment during the period of construction.

5.1.2 Improving Economic Growth

Through the use of locally available materials during the construction phase of the project including cement, concrete and ceramic tiles, timber, sand, ballast electrical cables etc. the project will contribute towards growth of the economy by contributing to the gross domestic product. The consumption

of these materials, fuel oil and others will attract taxes including value added tax which will be payable to the government hence increasing government revenue while the cost of these raw materials will be payable directly to the producers.

Negative Impacts

5.1.3 Disposal of excavation materials

Some of the excavation material will be rendered unusable and thus will have to be disposed of. This also applies to some of the soil/rocks which may not be reusable after excavation processes are complete.

Mitigation

All these materials need to be collected, transported and disposed-off appropriately in approved designated areas. It is encouraged that other alternative uses of these materials should be found for instance land filling.

5.2 Noise pollution

The construction works on site will most likely to have noise operation due to the moving machines (mixers, tippers, communicating workers), incoming vehicles to deliver construction materials, workers to site and other normal construction activities. This may prove to be a potential source of disturbance to the surrounding neighbors and a health hazard to the workers themselves.

Mitigation

The vehicles will be properly tuned, lubricated periodically and the activities on site will not be done during peak hours like early morning and start of evening. The site will be properly fenced so as to avoid the entry of unauthorized persons. Such noise emissions should be minimized as much as possible from the source point while workers should be provided with appropriate personal protective wear.

5.3 Dust emissions

Particulate matter pollution is likely to occur during the site clearance, excavation and loading and transportation of the construction waste. There is a possibility of PM₁₀ suspended and settleable particles affecting the site workers and even neighbors health.

Mitigation

The fugitive dust will be controlled by appropriate water showering. The activity will be carried out when the schools and official timings are out.

5.4 Increased water demand

Both the workers and the construction works will create an increased demand for water in addition to the existing demand. Water will be mostly used in the creation of aggregates for construction works and for wetting surfaces for softening or hardening after creating the formworks.

Mitigation

The surface water nearby available will be utilized instead of drinking water. If the surface water source is far away from the site then the water tanker option will be exercised.

5.5 Generation of exhaust emissions

Exhaust emissions are likely to be generated during the construction period by the various construction machinery and equipment. Motor vehicles used to mobilize the work force and materials for construction would cause a potentially significant air quality impact by emitting pollutants through gaseous exhaust emissions.

Mitigation

The new machinery will be hired which have minimum emissions level. Besides, the vehicles will be kept tuned periodically.

5.6 Building materials and energy used

Several building materials will be required for construction of the facility and associated facilities. These will include sand, ballast, hard core, timber, cement, clay tiles, metal sheets, electrical gadgets, and steel, plumbing materials, glass and paints among others. Most of these materials will be obtained locally within the surrounding areas. The main sources of energy that will be required for construction of the project will include mains electricity and fossil fuels (especially diesel). Electricity will be used for welding, metal cutting/grinding and provision of light. Diesel will run material transport vehicles and building equipment/machinery.

Mitigation

The proponent should promote efficient use of building materials and energy through proper planning to reduce economic and environmental costs of construction activities.

5.7 Waste Generation

Large amounts of solid waste will be generated during construction of the project. These will include metal cuttings, rejected materials, surplus materials, surplus spoil, excavated materials, paper bags, empty cartons, empty paint and solvent containers, broken glass among others.

Solid wastes if not well managed have a potential of causing disease outbreaks due to suitable breeding conditions for vectors of cholera and typhoid. Malaria outbreak could also be exacerbated by the presence of open water ditches for breeding of anopheles mosquitoes. The major vulnerable groups are children who could be exposed to these conditions. The construction workers will also generate fecal waste during their day-to-day operations. The generated waste needs proper handling to prevent diseases, for example cholera, typhoid and diarrhea outbreak on the site. Unless this is addressed, it can prove to be an environmental/health disaster.

Mitigation

A pit latrine(s) or mobile toilets should be established on site to avoid such health risks. The solid waste will be dumped in a designated area and will be segregated at source.

5.8 Workers accidents and hazards during construction

During construction of the proposed project, it is expected that construction workers are likely to have accidental injuries and hazards as a result of accidental occurrences, handling hazardous waste, lack or neglect of the use of protective wear etc. All necessary health and safety guidelines should be adhered to so as to avoid such circumstances. Workers are also likely to be exposed to diseases from contact with potentially harmful building materials.

Mitigation

It is therefore recommended that before the construction activities, there is need for the materials to be well inspected and harmonized to the occupational health and safety standards. The first aid medicines will also be ensured on site.

5.9 Operation Phase

Positive Impacts

5.9.1 Availability of LPG in the region

The proposed LPG storage and bottling plant is a dire need in the Attock district. The local community relies on fire woods for the commercial purposes as well as domestic consumption. The alternate fuel source which will lessen the mounting pressure on deforestation is the LPG storage and bottling plant in the proposed area. The LPG will be available at the door steps to locals and will be cheaper comparatively. Besides, the LPG is smokeless as compared to fire wood and other fuel sources like diesel and other high octane. Therefore this fuel source is most environments friendly as well as socially adoptable.

5.9.2 Employment opportunities

Employment opportunities are one of the long term impacts of the project that will be realized after construction and during the operation and maintenance of the facility. These will involve other sources of employment such as direct service provision to the domestic sector e.g. traders, office operators, engineers, security personnel etc.

5.9.3 Increase in revenue

There will be positive gain for the revenue system arising from the tax being paid by the proponent to the government and other lead agencies.

5.9.4 Improvement in quality of life

The employment opportunity for locals in their native land will improve their economic growth and augment the social status.

Negative Impacts

5.10 Electricity consumption

Upon completion, the project shall consume reasonable amount of electricity due to the number of activities being proposed and the activities that will take place once the project is complete. As there is already acute shortage of electricity in the country as well as in the suburbs which will have an adverse impact on the project activities.

Mitigation

The electricity will be utilized as minimum as possible. The alternate energy source like solar option will be exercised if required.

5.11 Leakage of gas and air pollution

Leakage of LPG can cause serious health risk to humans. The leakage may be sudden or slowly and gradually.

Mitigation

- Some radioactive substance is added to the cylinders so as to detect the leakage via pungent smell. Besides, the neck of bottles will be observed physically and use of liquefied detergents to check the leakage.

- When a gas leak is suspected, extinguish all flames, incense sticks, etc.
- Close the LPG regulator and put the safety cap on the cylinder.
- Don't light matches (or a lighter).
- Do not switch on/off any electrical switches or appliances.
- Open the doors and windows to ventilate building.
- Isolate main electrical supply from the outside.
- Alert the staff for use by alarms or siren
- Evacuate everyone from the affected area.

5.12 Fire risk

Leakage of gas can cause fire and explosions and cause destruction of property and life. When there is chance of leakage then the accidental fire will also take place. This will pose a high health hazards to staff of the plant and local community too.

Mitigation

Fire alarms will be set at the site which will give the caution of fire burst. The fire extinguishers will be ensured so as to combat any hazard before it happening. The water tank will also be available to feed the water hose for controlling the accidental fire. Other remedial steps are addressed under the emergency response plan given below.

5.13 Emergency response plan / Firefighting system

1. The proponent will develop and implement a sound emergency response plan. It will commence with a complete fire safety systems adequate enough for the envisaged worst case scenario.
2. The firefighting system will comprise of a clear design plan and the fire extinguishers will be serviced accordingly and regularly.
3. The emergency shutdown (ESDs) will be installed in strategic locations to enable quick power cut off from the operations in case of an emergency.
4. An adequate stocked first aid kits boxes will be provided for and the employees will be properly trained on how to administer first aid.
5. Installation of sign boards at different locations where deem necessary will be ensured.
6. The precautionary measures/ SOP will be displayed at different locations which will be understandable to common persons too.

7. The proponent will impart the trainings to the workers so as to operate accordingly.
8. The Personnel Protective Equipments (PPEs) will be provided to the workers and strictly instructed for the timely usage.
9. Adequate fire hydrant system should be installed.
10. Flammable materials should be prohibited in the premises.
11. Pressure gauges should be checked regularly.
12. LP gas cylinders must be stored in an upright position. The pressure relief valve should be in the vapor space of the cylinder.

5.14 The General Requirements

- LPG will be stored in adequate location wherein vessels or cylinders are suitably positioned having regard to the relevant codes of practice.
- LPG plant will be designed to appropriate standards and be properly installed and commissioned by authorized persons.
- Plant will be fitted with adequate safety and monitoring control devices and operated by competent persons.
- There must be a suitable program of maintenance and testing by authorized persons
- Plant must be identifiable and accessible for maintenance.
- Records of maintenance and tests will be available at site.
- Precautions must be taken to prevent fire and explosion including appropriate protection of storage vessels.
- Installations must have appropriate security measures to prevent deliberate interference
- Incidents involving death or hospitalization, fire or explosion or a significant leakage of LPG will be reported to the Authority and records of such incidents will be maintained.

5.15 Health and Safety Measures

There will always be the possibility regarding hazard to health and safety of workers to occur during the construction and commissioning phase of the project. Following measure would be adopted to further improve the working conditions during operation phase.

- Workers will be provided with appropriate gloves, welding goggles, masks to avoid injuries.
- They will be provided with ear plug, shoes, helmet, jacket and glasses.

- They will be provided with first aid box in the working area
- They will be provided with fire extinguishers at the proposed project site
- Signs boards of safety instructions will be displayed at proper points.
- Emergency transport facility will also be provided to them.
- Drilling machine, sheet cutter, blower, wire cutter etc will also be provided to them to handle with emergency situation.
- Keeping stockpiles heights reasonably minimum
- Keeping stockpiles closer to consumption points and minimizing the transfer points.
- Reducing the vehicular speed.
- Covering the delivery vehicles
- Using low emissions vehicles for transportation of materials
- Miscellaneous solid waste including like tires, tubes, batteries, belts, nylon strips, filters, Scrap wood, steel scrap, bag filters and house hold articles etc will be sold in the market through scrap dealers.
- Waste Management Procedures would be regularly issued and implemented to offer a clean and hygienic surrounding
- The awareness of employees will be increased regarding waste by arranging a certain number of short and informal training sessions for all employees and by placing posters in strategic places, such as: kitchen, near the waste containers, etc.
- To avoid any chance of fire, a comprehensive firefighting system will be developed that includes all types of fire Extinguishers, fire hydrants, sand Buckets and firefighting Vehicles.
- Basic medical & safety training will be held from time to time to minimize the risk of health and safety issues which can result from ignorance (ergonomic hazards in particular) in the project premises.

5.16 Plantation Plan

The project is located in non-industrial zone and there is no pre plantation which will be chopped but improving the aesthetic value of the area the proponent will carry out some plantation of the native/ indigenous fast growing species. In the proposed project area the trees will be planted inside the boundary on leased land and available space in the premises. These local species of

plants will be planted in month of March. Mostly deep rooted plants will be planted in plantation season. During plantation following steps will be taken to enhance optimal level of plant growth.

- Native plant species will be planted at project site which will enhance habitats for avifauna.
- More trees will be planted along the boundary & other open space.
- The plants will be local species so as to grow according to the climatic conditions.
- Fast growing species will be preferred in plantation process with awareness of local community to keep safe growth of the plants.

CHAPTER 6

ENVIRONMENTAL MANAGEMENT & REHABILITATION PLAN

6.1 Overview

Environmental Management Plan (EMP) is the most important part of IEE/EIA reporting; therefore EMP clearly covered all aspects of environment impact either negative or positive. To implement the recommendations and suggestions for environmental protection and conservation a comprehensive management plan is required. Purpose of EMP is to address all the major environmental issues and to provide a framework for the implementation of the proposed mitigation measures during the construction and operational phases of the project. The proper implementation of the EMP will ensure all the adverse impacts identified in the EIA are adequately mitigated, either totally remedied or minimized to an acceptable level. Keeping the importance of the EMP, proponent should ensure the implementation of each and every remedial step during entire construction and operational phase of the project. The proponent will acquire the services of an authorized contractor or other qualified person who will implement the EMP plan effectively.

Objectives of Environmental Management Plan are as under

- All the environmental precaution are managed and well implemented.
- Negative impacts on environment are removed/ minimized.
- The biodiversity of the site is conserved or enhanced.
- All the relevant legislation is compiled with the proposed project.
- The project is monitored for environmental impact assessments.
- Effective plantation plan is made for plant.

The proposed project although have more positive impacts than of negative, however, the comprehensive EMP will be adopted and implemented by the proponent. Details are given below

Table 6.1.1 EMP FOR CONSTRUCTION PHASE

#	Environmental Areas/ Parameter	Impacts	Proposed Mitigation Measures
CONSTRUCTION PHASE			
			In order to avoid the public nuisance due to noise pollution then the proponent of the project will observe the proper timings iden-

1	Noise	Public Nuisance	<p>tified for the construction work. Furthermore the well tuned vehicles/ machinery will be hired used during construction phase.</p> <p>The working hours of the project construction activities shall be limited to day time only.</p> <p>Generators, if used during construction phase, shall be kept under canopy/ wooden cabin to avoid noise pollution.</p>
2	Water Pollution	<p>Unplanned wastewater disposal may contaminate the surface water channels, surface soil and depending upon the quantity of wastewater generated, it has a potential to contaminate the ground water aquifers.</p>	<p>Wastewater produced during construction phase shall be passed through a series of constructed settling tanks. The water from the last tank will be pumped through recycling pump and reused again for material making for construction phase and sprinkling purposes as well.</p>
3	Deterioration of Ambient Air Quality	<p>Generation of dust and particulate matters is an issue that could arise due to construction activities.</p> <p>Gaseous emissions including SO_x, NO_x, CO₂, lead and CO during construction phase. These gases are ozone depleting reagents. Besides, they also pose threat to human health.</p>	<p>The construction materials e.g. soil, clay would be covered appropriately. Instead of open and dry dumping, sprinkling of water in a quantity that reduces the chances of dust generation would be done. The workers would be provided safety gloves, masks and ear plugs and wherever necessary goggles to avoid health complications.</p> <p>Good quality fuel shall be used in the machineries, generators to avoid emission. Vehicles, machineries with good conditions which fall on the quality standards shall be used to control the exhaust emission.</p>
4	Solid Waste	<p>Unplanned dumping of solid waste generation during construction phase can lead to blockage of road, waterways and also create unaesthetic sight of the</p>	<p>Solid waste generated during construction phase shall be dumped in authorized place. The solid waste during construction phase will consist most of soil, packaging materials, plastic bags, iron rods, and food leftovers. The organic portion of solid waste shall be collected by local sanitary workers while other recyclable material will be reused.</p>

		proposed location.	
5	Health & safety	Health Hazards/ Risk	Regular onsite and offsite training of the workers shall be conducted. Group meetings and discussions with the site in-charge and daily wages workers will be done to resolve any issues that may create health safety and environmental problems during construction phase.
6	Emergency Response	Accidents and/or emergency breakdown of the equipment/machineries/vehicles involved may create environmental, health and safety hazards.	This situation can be avoided by regular maintenance of the vehicles for quality assurance. Each equipment will be checked prior to operation to avoid accidents and human health risk due to such accidents. First aid box should also be available at site.

6.1.2 EMP FOR OPERATION PHASE

#	Environmental Areas	Impacts	Proposed Mitigation Measures
OPERATIONAL PHASE			
1	Noise	In the area of storage, loading and unloading will produce noise pollution.	The loading and unloading will be done through special machines such that to avoid noise pollution. Workers should be provided and encouraged to use PPE's (ear plugs or ear muffs).
2	Water Pollution	At the project site, there will be no wastewater generation during operational activity; there will be only domestic waste water discharge.	Domestic waste water which will be treated by passing through septic tanks and finally discharged in local drain. Efforts should be made to ensure that water is conserved and that environment-friendly techniques are adopted too.
3	Air Emissions	Source of air pollution during operation phase would only be fugitive dust and	Proper ventilation can limit the amount of indoor pollutants. Water spraying should be practiced where required.

		vehicular emissions.	Regular monitoring. No waste should be burnt at the premises. Gas detectors will be installed for LPG leakage detection. Generators will be properly tuned and maintained and proper enclosure will be provided.
4	Solid Waste	Solid waste comprise of a domestic waste and waste scrap mainly which would be a source of land contamination.	No waste should be burnt within the premises but small waste storage bins should be installed for different type of wastes. The recyclable would be sold and the organic and municipal waste would be dumped in the designated areas.
5	Health & safety	Operation of the project may cause some concerns for safety, public health and nuisances within the project area.	Providing Personal Protection Equipments (PPEs) such as gloves masks etc. to the workers. Further the staff would be trained on fire extinguishers, water hydrant, fire alarms etc. Basic safety training should be provided to the specified work staff and basic medical services might be ensured at site.
6	Plantation plan	Least vegetation cover result in increased CO ₂ level.	Some indigenous species will be planted along the boundary wall & in open spaces of the area.
7	Social issues	Economic benefit,	Jobs will be given to local people preferably during construction and operational phase.

6.2 ENVIRONMENTAL MONITORING PLAN

An environmental monitoring plan will be provided to check the environmental compliance on regular basis. This will address the environmental consequences in detail and the possible solutions/ remedial steps proposed during the operational phase of the project. This plan will be in the form of a screening matrix/ constructed Performa.

6.3 CAPACITY Building

The organizational structure of the bottling and storage plant will be developed in a way that some environmental training will be given to staff that are responsible for operation and filling of the cylinders. The awareness regarding the fire hazards and safety measures will be provided to the working staff. The plant operator will be educated more about the environmental and safety concerns. The EMP will be explained and understandable to the plant operator.

6.4 CONCLUSION & SUGGESTIONS

The report presents Environmental Impact Assessment (EIA) of the Proposed Construction of LPG Storage & Filling Plant at district Attock. It includes description of the project, description of the environmental baselines, potential environmental impacts and suggested mitigation measures. An implementation mechanism for mitigation measures in the form of an Environmental Management Plan is included in the study.

The performed EIA showed all anticipated impacts (both positive and negative), associated with the project. Appropriate mitigation measures as explained in the environmental study shall reduce these impacts so that these are within acceptable limits. Moreover, no deterioration, depletion or exploitation of resources is expected to be caused by this project.

Based on overall assessment of the environmental impact of the project, it is concluded that the project is not likely to cause any significant adverse impact on the social, physical and biological environment of the area, provided that suitable mitigation measures as identified in this study are implemented. It is suggested that Environmental Approval for the project may be granted by the Environmental Protection Agency, KP, subject to fulfillment of the requisite legal obligations.

SUGGESTIONS

The Environmental Impact Assessment study and survey results are finally evaluated to suggest the following

- Implementation of EMP must be given top priority.
- Proper PPEs including ear plugs, ear muffs, mufflers, goggles, gloves and shoes etc should be provided to workers.
- Educate workers to use PPEs.

- Advise workers to follow SOPs.
- Installation of fire extinguishers in the premises and their bimonthly physical check up must be ensured.
- Equipment maintenance and efficiency must be checked.
- No compromise on public health and environment should be allowed.
- Waste minimization practices should be employed and workers should be encouraged to adopt such methods.
- Wages should be distributed on time.
- Proper tree plantation plan should also be developed in order to make unit environment friendly.
- Small and separate waste storage bins should be installed at different corner for proper waste collection.
- Proper dispensary and first aid box should be provided for workers.
- Smoking should be avoided within premises of project site and near fuel storage areas.
- The Security Guards shall also be trained to act in case of all possible emergency situations. The fire alarms can be activated to signal evacuation. At the same time, communication shall be made with hospitals, emergency services and police for urgent support.

رقم رجسٹر حق داران زمین (مسئل میعادوی)

نسل محل نوین نمونہ اول طرف

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		خاندان قوم اور سکونت				معاہدات	(اگر کوئی ہو)	مکتبہ کاشت کاروں	راجہ آباد وغیرہ	شرح اور مطالبہ	بالیہ و خوب	کلیت مدد
		کالک مالک										
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		نامی بہ نور										
		3 (ب) قومی شناختی کارڈ نمبر										
877	1744	ابغا مذکور				نور	3471	2-2	میرا	میرا	میرا	میرا
		3 (ب) قومی شناختی کارڈ نمبر										
887	1756	ابغا مذکور				نور	3475	37-0	میرا	میرا	میرا	میرا
		3 (ب) قومی شناختی کارڈ نمبر										
		نامی بہ نور										
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NON ENCUMBRANCE CERTIFICATE

Indices for the year from 2021-22 of Book No. to date of this off

have been consulted and there is no entry showing any encumbrance on property i.e.

Khasra No. 3471,3474,3475

Measuring 09K-01M-61FT

Situated Mouza Kot Sundki Tehsil Hassan Abdal Distt Attock


Owned by Mr.: Asim Sarwar S/o Ghulam Sarwar

Residing at Morhadi Bakot Tehsil and Distt Abottabad

During The Said Period.

SEAL _____

Dated 3-4-24


SUB REGISTRAR

Hassan Abdal

2024



TITLE OF THE LICENCE	Licence for Construction of LPG Storage and Filling Plant		
Validity Period	From: August 30, 2024 to August 29, 2026		
LICENCE NO. OGRA-LPG-17(1121)/23	DATE: August 30, 2024		
Granted under Rules 7 and 8 (1) of LPG (Production and Distribution) Rules, 2001			
Name of the Company:	M/s Oasis Gas (Private) Limited		
Registration No. (Under section 16 of the Companies Act, 2017)	No. 0241412	Date: 4 th October, 2023	Place: Islamabad
Name of the Chief Executive:	Mr. Asim Sarwar		
Address:	Office No. 507-B, 5 th Floor, Evacuee Trust Complex, F-5/1, Aga Khan Road, Islamabad		
Contact No.	Phone	0300-7897893	
	Fax	---	
	Email	---	
Proposed Nature of Works	Storage: (1X50) 50MT	Filling Capacity: 25 MT/Day	
Area of Operations	All over the Country		
Location of Plant	Khasra No. 3471, 3474, 3475, 3469, Khewat No. 559, 887, 877, Mouza Kot Sundki, Tehsil Hassan Abdal, District Attock		

TERMS AND CONDITIONS OF THE PROVISIONAL LICENCE

- i.** Construction of LPG storage and filling facilities will be started only after obtaining NOCs from all concerned Federal/Provincial/Local authorities including NOC of Environment Protection Agency (EPA), strictly complying with the applicable laws clearly stating that the site is suitable for putting up LPG facility from public safety point of view. The company shall be responsible and liable for any act on its part leading to violation of any law, bye-laws or imposition of penalties by any of the above concerned departments/authorities.
- ii.** Construction of proposed works for the storage and filling plant shall be strictly in accordance with the LPG (Production & Distribution) Rules, 2001, as amended from time to time, the terms and conditions of this provisional licence and instructions of the Oil and Gas Regulatory Authority hereinafter referred to as the "Authority", issued from time to time, in the public interest.
- iii.** Issuance of this provisional licence in no manner shall establish the right of the company for any allocation of LPG quota. Company shall be fully responsible to arrange supplies of LPG on commercial basis at its own cost and risk.
- iv.** As soon as the construction is completed and licence from Chief Inspector of Explosives is obtained, the company shall approach the Authority for appointment of 3rd party inspectors to verify the works. The Authority will appoint the 3rd party Inspector under Rule 13 of LPG Rules, 2001, who shall verify technical competence of your staff and shall certify that the equipment, machinery, fittings, fixtures and installation meet the requisite safety standards. In case of any deficiency or fault, the company shall not operate the LPG storage and filling plant, even on trial run unless the deficiencies/faults are removed / rectified to the satisfaction of the Authority. The company shall pay prescribed fee to the Authority, for the purpose of such 3rd party inspection or inspections.
- v.** The company shall mark with conspicuous sign on the place at which the storage tanks, filling plants, etc are located for the purpose of safety and security.
- vi.** Purchase or sale of any specified equipment and machinery from or to any other licensee shall require prior permission in writing of the Authority.
- vii.** The company shall strictly comply with the prescribed standards as set out in Appendix-1 of the Liquefied Petroleum Gas (Production and Distribution) Rules, 2001. Any negligence on the part of the company or non-compliance of prescribed standards by the company, causing damage or loss of life/property shall be compensated by the company in accordance with the applicable laws.



SAY NO TO PLASTIC
پلاسٹک سے انکار۔ زندگی سے پیار



ENVIRONMENTAL PROTECTION AGENCY

Street No. 06 opposite Ayesha Masjid Farooq-e-Azam Colony Attock
PH. No. 057 9316192
Email: doe.attock@punjab.gov.pk



To,

The Assistant Director (EIA),
EPA-Punjab Lahore.

No. ADF/EPA/ATK/024/547

Dated: 30/10/2024.

Subject: -

SITE INSPECTION / SITE SUITABILITY REPORT OF PROJECT OF M/S CONSTRUCTION OF LPG STORAGE AND FILLING FACILITIES ON THE LAND SITUATED IN KHASRA NOS. 3471, 3474, 3475 KHEWAT NOS. 559, 887, 877, AT MOUZA KOT SNDKI, TEHSIL HASSANABDAL DISTRICT ATTOCK.

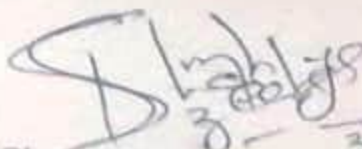
Reference No. 1051/DC/ALC/ATK, dated: 01-10-2024.

It is submitted that undersigned office has received subject case on dated: 15-10-2024 from the office of Addl. Deputy Commissioner (Gen), Attock vides No. 1051/DC/ALC/ATK, dated: 01-10-2024.

The case falls in Schedule II of EIA regulations-2000, so proponent is advised to file the application in EPA-Headquarter Lahore. He is further advised to submit following documents for Environmental Approval of the subject LPG Plant. The required documents are listed below for submission to the concerned authority.

1. Form IV
2. Bank Draft worth Rs. 30,000 as review fee of EIA in favor of Director General Environmental Protection Agency, Punjab, Lahore (NTN No. 9021801-9)
3. Affidavit about no objection from neighbors. (if any)
4. Affidavit regarding information about court case against subject project.
5. Undertaking regarding PEQS.
6. Location map/Site Plan approved from concerned Authority (01 copy).
7. NIC Copies of Owners/Partners if any, 02-Witness and neighbors.
8. Environmental Impact Assessment report (EIA), (10-copies hard and 02-copies electronic CD).
9. Sewerage and Solid Waste Management Plan.
10. Partnership deed (if any).
11. Schedule VIII must be submitted on stamp paper as an undertaking for compliance of terms & conditions as mentioned in the Environmental Approval as well as mitigation measures proposed in the IEE/EIA Report.

It is submitted for your kind information and further process, please.


(Shahzeera Mariyam)
Assistant Director (Field)
EPA-Attock
30/10/24

C.C

1. The Addl. Deputy Commissioner, Attock, vides letter no. 1051/DC/ALC/ATK, dated: 01-10-2024.
2. PA to Director General, EPA-Punjab, Lahore.
3. Mr. Asim Sarwar, Office No.507-B, 5th Floor, Evacuee Trust Complex, F-5/1, Aga Khan road, Islamabad
4. One window cell, EPA, Lahore.

THE PAKISTAN ENVIRONMENTAL PROTECTION ACT 1997
(XXXIV of 1997)

CONTENTS

SECTION	HEADING
1.	Short title, extent and commencement.
2.	Definitions.
3.	Establishment of the Punjab Environmental Protection Council.
4.	Functions and powers of the Council.
5.	Establishment of the Provincial Environmental Protection Agency.
6.	Functions of the Provincial Agency.
7.	Powers of the Provincial Agency.
8.	[<i>Omitted</i>].
9.	Establishment of the Provincial Sustainable Development Fund.
10.	Management of the Provincial Sustainable Development Fund.
11.	Prohibition of certain discharges or emissions.
12.	Initial environmental examination and environmental impact assessment.
13.	Prohibition of import of hazardous waste.
14.	Handling of hazardous substances.
15.	Regulation of motor vehicles.
16.	Environmental protection order.
17.	Penalties.
18.	Offences by bodies corporate.
19.	Offences by Government Agencies, local authorities or local councils.
20.	Environmental Tribunals.
21.	Jurisdiction and powers of Environmental Tribunals.
22.	Appeals to the Environmental Tribunal.
23.	Appeals from orders of the Environmental Tribunal.
24.	Jurisdiction of Environmental Magistrates.
25.	Appeals from orders of Environmental Magistrates.
26.	Power to delegate.
27.	Power to give directions.
28.	Indemnity.
29.	Dues recoverable as arrears of land revenue.
30.	Act to override other laws.
31.	Power to make rules.
32.	Power to amend the Schedule.
33.	Power to make regulations.
34.	Repeal, savings and succession.

SCHEDULE

**^{1[1]}THE ^{2[2]}[PUNJAB] ENVIRONMENTAL PROTECTION
ACT, 1997**

^{1[1]}This Act of Parliament received the assent of the President on 3 December 1997, and was published in the Gazette of Pakistan, Extraordinary, dated 6 December 1997.

(XXXIV of 1997)

[6 December 1997]

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

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

It is hereby enacted as follows:-

- 1. Short title, extent and commencement.**— (1) This Act shall be called the ^{3[3]}[Punjab] Environmental Protection Act, 1997.
 - (2) It extends to the whole of ^{4[4]}[the Punjab].
 - (3) It shall come into force at once.

- 2. Definitions.**— In this Act, unless there is anything repugnant in the subject or context,—
 - (i) “adverse environmental effect” means impairment of, or damage to, the environment and includes—
 - (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; this includes diversity within species, between species and of ecosystems;
 - (v) “Council” means the ^{5[5]}[Punjab] Environmental Protection Council established under section 3;
 - (vi) “discharge” means 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;

This Act was originally in the Federal ambit, however, the subject on which this law was enacted devolved to the provinces by virtue of 18th Amendment in the Constitution, hence it was adapted, with amendments, for the province of the Punjab by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{2[2]}Substituted for the word “Pakistan” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{3[3]}*Ibid.*

^{4[4]}*Ibid.*

^{5[5]}Substituted for the word “Pakistan” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

- (ix) “emission standards” means the permissible standards established by the ^{6[6]}[Provincial Agency] for emission of air pollutants and noise and for discharge of effluent and waste;
- (x) “environment” means–
 - (a) air, water and land;
 - (b) all layers of the atmosphere;
 - (c) all organic and inorganic matter and living organisms;
 - (d) the ecosystem and ecological relationships;
 - (e) buildings, structures, roads, facilities and works;
 - (f) all social and economic conditions affecting community life; and
 - (g) the inter-relationships between any of the factors in sub-clauses (a) to (f);
- (xi) “environmental impact assessment” means an environmental study comprising collection of data, prediction of qualitative and quantitative impacts, comparison of alternatives, evaluation of preventive, mitigatory and compensatory measures, formulation of environmental management and training plans and monitoring arrangements, and framing of recommendations and such other components as may be prescribed;
- (xii) “Environmental Magistrate” means the Magistrate of the First Class appointed under section 24;
- (xiii) “Environmental Tribunal” means the Environmental Tribunal constituted under section 20;
- (xiv) ^{7[7]}[* * * * *];
- (xv) “factory” means any premises in which industrial activity is being under taken;
- ^{8[8]}(xvi) “Government” means Government of the Punjab;]
- ^{9[9]}(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;]
- (xviii) “hazardous substance” means–
 - (a) a substance or mixture of substances, other than a pesticide as defined in the Agricultural Pesticides Ordinance, 1971 (II of 1971), which, by reason of its chemical activity or toxic, explosive, flammable, corrosive, radioactive or other characteristics causes, or is likely to cause, directly or in combination with other matters, an adverse environmental effect; and
 - (b) any substance which may be prescribed as a hazardous substance;
- (xix) “hazardous waste” means waste which is or which contains a hazardous substance or which may be prescribed as hazardous substance or which may be prescribed as hazardous waste, and includes hospital waste and nuclear waste;
- (xx) ^{10[10]}[* * * * *];
- (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

^{6[6]}Substituted *ibid.*, for the words “Federal Agency or a Provincial Agency”.

^{7[7]}Omitted by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{8[8]}Substituted *ibid.*

^{9[9]}*Ibid.*

^{10[10]}Omitted *ibid.*

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 purposes;

- (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 ^{11[11]}[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) ^{12[12]}[* * * * *]
- (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 properties of the air, land or water or which may, or is likely to make the air, land or water unclean, noxious or impure or injurious, disagreeable or detrimental to the health, safety, welfare or property of persons or harmful to biodiversity;
- ^{13[13]}[(xxxiv) “prescribed” means prescribed by the rules or regulations;]
- (xxxv) “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:

^{11[11]}Substituted for the words “Federal Government or a Provincial Government” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{12[12]}Omitted *ibid*.

^{13[13]}Substituted by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

- (d) mineral prospecting, mining, quarrying, stone-crushing, drilling and the like;
- (e) any change of land use or water use; and
- (f) alteration, expansion, repair, decommissioning or abandonment of existing buildings or other works, roads or other transport systems, factories or other installations;
- (xxxvi) “proponent” means the person who proposes or intends to undertake a project;
- ¹⁴^[14][(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;]
- ¹⁵^[15][(xxxvii-a) “Punjab Environmental Quality Standards” mean the standards prepared by the Provincial Agency and approved by the Council;]
- (xxxviii) “regulations” means regulations made under the Act;
- (xxxix) “rules” means rules made under this Act;
- (xl) “sewage” means liquid or semi-solid wastes and sludge from sanitary conveniences, kitchens, laundries, washing and similar activities and from any sewerage system or sewage disposal works;
- (xli) “standards” means qualitative and quantitative standards for discharge of 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 ¹⁶^[16][Punjab] Environmental Quality Standards, emission standards and other standards established under this Act and the rules and regulations made there under;
- (xlii) “sustainable development” means development that meets the needs of the present generation without compromising the ability of future generations to meet their needs;
- (xlili) ¹⁷^[17][* * * * *]
- (xliv) “vessel” includes anything made for the conveyance by water of human beings or of goods; and
- (xix) “waste” means any substance or object which has been, is being or is intended to be, discarded or disposed of, and includes liquid waste, solid waste, waste gases, suspended waste, industrial waste, agricultural waste, nuclear waste, municipal waste, hospital waste, used polyethylene bags and residues from the incineration of all types of waste.

3. Establishment of the ¹⁸^[18][Punjab] Environmental Protection Council.— ¹⁹^[19][(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

¹⁴^[14] *Ibid.*

¹⁵^[15] Inserted *ibid.*

¹⁶^[16] Substituted for the word “National” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

¹⁷^[17] Omitted *ibid.*

¹⁸^[18] Substituted *ibid.*, for the word “Pakistan”.

¹⁹^[19] *Ibid.*

- (iii) such other persons not exceeding thirty five as the Government Members 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 Protection Member/Secretary] Department.

(2) The Members of the Council, other than *ex-officio* members, shall be appointed in accordance with the prescribed procedure and shall hold office for a term of 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 them with such functions as it may deem fit, and the recommendations of the committees shall be submitted to the Council for approval.

(6) The Council or any of its committees may invite any technical expert or representative of any Government Agency or non-governmental organization or other person possessing specialized knowledge of any subject for assistance in performance of its functions.

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

- (a) co-ordinate and supervise enforcement of the provisions of this Act;
- (b) approve comprehensive national environmental policies and ensure their implementation within the framework of a national conservation strategy as may be approved by the ^{20[20]}[Government] from time to time;
- (c) approve the ^{21[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 national development plans and policies; and
- (f) consider the ^{22[22]}[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 ^{23[23]}[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 specified aspect of environment.

5. Establishment of the ^{24[24]}[Provincial] Environmental Protection Agency.— ^{25[25]}[(1) The Government shall, by notification in the official Gazette, establish the Provincial

^{20[20]}Substituted, for the words “Federal Government” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{21[21]}*Ibid.*, for the word “National”.

^{22[22]}Substituted for the words “National” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{23[23]}*Ibid.*, for the words “Federal Agency”.

^{24[24]}*Ibid.*, for the word “Pakistan”.

^{25[25]}*Ibid.*, for sub-section (1).

Environmental Protection Agency to exercise the powers and perform the functions assigned to it under this Act, the rules and the regulations.]

(2) The ^{26[26]}[Provincial Agency] shall be headed by a Director General, who shall be appointed by the ^{27[27]}[Government] on such terms and conditions as it may determine.

(3) The ^{28[28]}[Provincial Agency] shall have such administrative, technical and legal staff as the ^{29[29]}[Government] may specify, to be appointed in accordance with such procedure as may be prescribed.

(4) The powers and functions of the ^{30[30]}[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 ^{31[31]}[Provincial Agency] in the discharge of its functions, the ^{32[32]}[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 ^{33[33]}[Provincial Agency].— (1) The ^{34[34]}[Provincial Agency] shall—

- (a) administer and implement the provisions of this Act and the rules and regulations made thereunder;
- (b) prepare, in coordination with the appropriate Government Agency and in consultation with the concerned sectoral Advisory Committees, ^{35[35]}[* * *] environmental policies for approval by the Council;
- (c) take all necessary measures for the implementation of the ^{36[36]}[* * *] environmental policies approved by the Council;
- (d) prepare and publish an annual ^{37[37]}[Punjab] Environment Report on the state of the environment;
- (e) prepare or revise, and establish the ^{38[38]}[Punjab] Environmental Quality Standards with approval of the Council:

Provided that before seeking approval of the Council, the ^{39[39]}[Provincial Agency] shall publish the proposed ^{40[40]}[Punjab] Environmental Quality Standards for public opinion in accordance with the prescribed procedure;

- (f) ensure enforcement of the ^{41[41]}[Punjab] Environmental Quality Standards;
- ^{42[42]}[(g) establish standards for the quality of the ambient air, water and land, by notification in the official Gazette;]
- (h) co-ordinate environmental policies and programmes nationally and internationally;

^{26[26]}*Ibid* for the words “Federal Agency”.

^{27[27]}*Ibid.*, for the words “Federal Government”.

^{28[28]}*Ibid.*, for the words “Federal Agency”.

^{29[29]}*Ibid.*, for the words “Federal Government”.

^{30[30]}*Ibid.*, for the words “Federal Agency”.

^{31[31]}*Ibid.*

^{32[32]}*Ibid.*, for the words “Federal Government”.

^{33[33]}Substituted for the words “Federal Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{34[34]}*Ibid.*

^{35[35]}The word “national” omitted *ibid.*

^{36[36]}*Ibid.*

^{37[37]}Substituted for the word “National”.

^{38[38]}*Ibid.*

^{39[39]}*Ibid.*, for the words “Federal Agency”.

^{40[40]}*Ibid.*, for the word “National”.

^{41[41]}*Ibid.*

^{42[42]}Substituted *ibid.*

- (i) establish systems and procedures for surveys, surveillance, monitoring, measurement, examination, investigation, research, inspection and audit to prevent and control pollution, and to estimate the costs of cleaning up pollution and rehabilitating the environment in various sectors;
- (j) take measures to promote research and the development of science and technology which may contribute to the prevention of pollution, protection of the environment, and sustainable development;
- (k) certify one or more laboratories as approved laboratories for conducting tests and analysis and one or more research institutes as environmental research institutes for conducting research and investigation, for the purposes of this Act;
- (l) identify the needs for, and initiate legislation in various sectors of the environment;
- (m) render advice and assistance in environmental matters, including such information and data available with it as may be required for carrying out the purposes of this Act:

Provided that the disclosure of such information shall be subject to the restrictions contained in the proviso to sub-section (3) of section 12;

- (n) assist the local councils, local authorities, Government Agencies and other persons to implement schemes for the proper disposal of wastes so as to ensure compliance with the standards established by it;
 - (o) provide information and guidance to the public environmental matters;
 - (p) recommend environmental courses, topics, literature and books for incorporation in the curricula and syllabi of educational institutions;
 - (q) promote public education and awareness of environmental issues through mass media and other means, including seminars and workshops;
 - (r) specify safeguards for the prevention of accidents and disasters which may cause pollution, collaborate with the concerned person in the preparation of contingency plans for control of such accidents and disasters, and co-ordinate implementation of such plans;
 - (s) encourage the formation and working of non-governmental organizations, community organizations and village organizations to prevent and control pollution and promote sustainable development;
 - (t) take or cause to be taken all necessary measure 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 ⁴³[Provincial Agency] may—
- (a) undertake inquires 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 ⁴⁴[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 ⁴⁵[Government] the adoption of financial and fiscal programmes, schemes or measures for achieving environmental objectives and goals and the purposes of this Act, including—

⁴³[43] Substituted for the words “Federal Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

⁴⁴[44] Substituted for the words “Federal Government” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

⁴⁵[45] *Ibid.*

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

7. Powers of the ^{46[46]}[Provincial Agency].— Subject to the provisions of this Act, the ^{47[47]}[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 ^{48[48]}[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

- ^{49[49]}[(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.]

^{46[46]}*Ibid.*, for the words “Federal Agency”.

^{47[47]}*Ibid.*

^{48[48]}*Ibid.*, for the words “Federal Government”.

^{49[49]}Substituted by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

8. ^{50[50]}[* * * * *]

9. Establishment of the Provincial Sustainable Development Fund.— ^{51[51]}[(1) There shall be established a Provincial Sustainable Development Fund.]

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

- (a) grants made or loans advanced by the ^{52[52]}[Government or the Federal Government];
- (b) aid and assistance, grants, advances, donations and other non-obligatory funds received from foreign governments, national or international agencies, and non-governmental organizations; and
- (c) contributions from private organizations, and other persons.

(3) The Provincial Sustainable Development Fund shall be utilized in accordance with such procedure as may be prescribed for—

- (a) providing financial assistance to the projects designed for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, the sustainable development of resources and for research in any specified aspect of environment; and
- (b) any other purpose which in the opinion of the Board will help achieve environmental objectives and the purposes of this Act.

10. Management of the Provincial Sustainable Development Fund.— ^{53[53]}[(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) In accordance with such procedure and such criteria as may be prescribed, the Board shall have the power to—

- (a) sanction financial assistance for eligible projects;
- (b) invest moneys held in the Provincial Sustainable Development Fund in such profit-bearing government bonds, savings schemes and securities as it may deem suitable; and
- (c) take such measures and exercise such powers as may be necessary for utilization of the Provincial Sustainable Development fund for the purposes specified in sub-section (3) of section 9.

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

11. Prohibition of certain discharges or emissions.— (1) Subject to the provisions of this Act and the rules and regulations made there under no person shall discharge or emit or allow

^{50[50]}Section 8“Establishment, powers and functions of the Provincial Environmental Protection Agencies” omitted *ibid.*

^{51[51]}Substituted *ibid.*

^{52[52]}*Ibid.*, for the words “Federal Government or the Provincial Governments”.

^{53[53]}Substituted by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012)

the discharge or emission of any effluent or waste or air pollutant or noise in an amount, concentration or level which is in excess of the ^{54[54]}[Punjab] Environmental Quality Standards or, where applicable, the standards established under sub-clause (i) of clause (g) of sub-section (1) of section 6.

(2) The ^{55[55]}[Government] may levy a pollution charge on any person who contravenes or fails to comply with the provisions of sub-section (1), to be calculated at such rate, and collected in accordance with such procedure as may be prescribed.

(3) Any person who pays the pollution charge levied under sub-section (2) shall not be charged with an offence with respect to that contravention or failure.

(4) The provision of sub-section (3) shall not apply to projects, which commenced industrial activity on or after the thirtieth day of June, 1994.

12. Initial environmental examination and environmental impact assessment.— (1) No proponent of a project shall commence construction or operation unless he has filed with the ^{56[56]}[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 ^{57[57]}[Provincial Agency] approval in respect thereof.

(2) The ^{58[58]}[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, or require that the environmental impact assessment be re-submitted after such modifications as may be stipulated, or reject the project as being contrary to environmental objectives.

(3) Every review of an environmental impact assessment shall be carried out with public participation and no information will be disclosed during the course of such public participation which relates to—

(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 ^{59[59]}[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, national security or maintenance of law and order, except with the consent of the ^{60[60]}[Government]; or

(iii) matters covered by legal professional privilege.

(4) The ^{61[61]}[Provincial Agency] shall communicate its approval or otherwise within a period of four months from the date the initial environmental examination or environmental impact assessment is filed complete in all respects in accordance with the prescribed procedure, failing which the initial environmental examination or, as the case may be, the environmental impact assessment shall be deemed to have been approved, to the extent to which it does not contravene the provisions of this Act and the rules and regulations made thereunder.

^{54[54]}Substituted for the word “National” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{55[55]}*Ibid.*, for the words “Federal Government”.

^{56[56]}*Ibid.*, for the words “Federal Agency”.

^{57[57]}*Ibid.*

^{58[58]}*Ibid.*

^{59[59]}Substituted for the words “Federal Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{60[60]}*Ibid.*, for the words “Federal Government”.

^{61[61]}*Ibid.*, for the words “Federal Agency”.

(5) Subject to sub-section (4) the ⁶²[Government] may in a particular case extend the aforementioned period of four months if the nature of the project so warrants.

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

(7) The ⁶³[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 and the disclosure of information in such Registers shall be subject to the restrictions specified in sub-section (3).

⁶⁴[13. **Prohibition of import of hazardous waste.**— No person shall import hazardous waste into the Punjab.]

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

- (a) under a licence issued by the ⁶⁵[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.

15. Regulation of motor vehicles.— (1) Subject to the provisions of this Act and the rules and regulations made thereunder, no person shall operate a motor vehicle from which air pollutants or noise are being emitted in an amount, concentration or level which is in excess of the ⁶⁶[Punjab] Environmental Quality Standards, or where applicable the standards established under clause (g) of sub-section (1) of section 6.

(2) For ensuring compliance with the standards mentioned in sub-section (1), the ⁶⁷[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 ⁶⁸[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.

16. Environmental protection order.— ⁶⁹[(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.]

⁶²[*ibid.*, for the words “Federal Government”.

⁶³[*ibid.*, for the words “Federal Agency”.

⁶⁴[Section 13 substituted *ibid.*

⁶⁵[Substituted for the words “Federal Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

⁶⁶[*ibid.*, for the word “National”.

⁶⁷[*ibid.*, for the words “Federal Agency”.

⁶⁸[*ibid.*

⁶⁹[Sub-section (1) substituted *ibid.*

(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 condition as may be reasonable in the circumstances, to the satisfaction of the ⁷⁰[Provincial Agency].

(3) Where the person, to whom directions under sub-section (1) are given, does not comply therewith, the ⁷¹[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 ⁷²[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 ⁷³[Provincial Agency] shall be punishable with fine which may extend to ⁷⁴[five hundred thousand] rupees, and in case of continuing contravention, or failure with an additional fine which may 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), further additional fine commensurate with the amount of the monetary benefits.

(5) Where a person convicted under sub-sections (1) or sub-section (2); and had been previously convicted for any contravention under this act, the Environmental Tribunal

⁷⁰Substituted for the words “Federal Agency or Provincial Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

⁷¹*Ibid.*

⁷²*Ibid.*, for the words “one million”.

⁷³*Ibid.*, for the words “Federal Agency or Provincial Agency”.

⁷⁴*Ibid.*, for the words “one hundred thousand”.

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 involving hazardous waste;

- (e) order such person to restore the environment at his own cost, to the conditions existing prior to such contravention or as close to such conditions as may be reasonable in the circumstances to the satisfaction of the ^{75[75]}[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 ^{76[76]}[Provincial Agency] or an officer generally or specially authorized by him in this behalf may, on the application of the accused compound an 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 ^{77[77]}[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 ^{78[78]}[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.

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

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

^{75[75]}Substituted for the words and commas “Federal Agency or, as the case may be, Provincial Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{76[76]}Substituted for the words “Federal Agency or of a Provincial Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{77[77]}*Ibid.*

^{78[78]}*Ibid.*, for the words and commas “Federal Agency or, as the case may be, Provincial Agency”.

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 ^{79[79]}[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 ^{80[80]}[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.

^{81[81]}(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—

^{79[79]}Substituted for the words “Federal Government” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{80[80]}*Ibid.*

^{81[81]}Substituted *ibid.*

- (a) the ^{82[82]}[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 ^{83[83]}[Provincial Agency] 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 the Court of Session under the Code of Criminal Procedure, 1898 (Act V of 1898).

(5) In exercise of the appellate jurisdiction under section 22, the Environmental 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 ^{84[84]}[Provincial Agency], issue bailable warrant for the arrest of any person against whom reasonable suspicion exists, 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, 1860 (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 ^{85[85]}[Provincial Agency] under any provision of this Act and rules or regulations made thereunder may prefer an appeal with the Environmental Tribunal within thirty days of the date of communication of the impugned order or direction to such person.

(2) An appeal to the Environmental Tribunal shall be in such form, contain such particulars and be accompanied by such fees as may be prescribed.

23. Appeals from orders of the Environmental Tribunal.— (1) Any person aggrieved by any final order or by any sentence of the Environmental Tribunal passed under this Act may, within thirty days of communication of such order or sentence, prefer an appeal to the High Court.

^{82[82]}Substituted for the words “Federal Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{83[83]}*Ibid.*, for the words and comma “Federal Agency, or the Provincial Agency concerned”.

^{84[84]}*Ibid.*, for the words “Federal Agency or of Provincial Agency”.

^{85[85]}Substituted for the words “Federal Agency or any Provincial Agency” by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

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

24. Jurisdiction of Environmental Magistrates.— (1) Notwithstanding anything contained in the Code of Criminal Procedure, 1898 (Act V of 1898), or any other law for the time being in force, but subject to the provisions of this Act, all 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 ^{86[86]}[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.

^{87[87]}**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.]

^{88[88]}**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.]

^{89[89]}**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 ^{90[90]}[Provincial Agency] under this Act, or the rules or regulations made thereunder shall be recoverable as arrears of land revenue.

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

31. Power to make rules.— The ^{91[91]}[Government] may, by notification in the official Gazette, make rules for carrying out the purposes of this Act including rules for implementing

^{86[86]}Substituted for the words and comma "Federal Agency, Provincial Agency", by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{87[87]}Substituted *ibid.*

^{88[88]}*Ibid.*

^{89[89]}*Ibid.*

^{90[90]}Substituted for the words "Federal Agency or Provincial Agency" by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

^{91[91]}*Ibid.*, for the words "Federal Government".

the provisions of the international environmental agreements, specified in the Schedule to this Act.

32. Power to amend the Schedule.— The ^{92[92]}[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.

33. Power to make regulations.— (1) For carrying out the purposes of this Act, the ^{93[93]}[Provincial Agency] may, by notification in the official Gazette and with the approval of the ^{94[94]}[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 (XXXVII of 1983), any rules or regulations or appointments made, orders passed, notifications issued, powers delegated, contracts entry into, proceedings commenced, rights acquired liabilities incurred, penalties, rates, fees or charges levied, things done or action taken under any provisions of that Ordinance shall, so far as they are not inconsistent with the provisions of this Act, be deemed to have been made, passed, issued, delegated, entered into, commenced, acquired, incurred, levied, done or taken under this Act.

(3) ^{95[95]}[* * * * *]

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.

^{92[92]}*Ibid.*
^{93[93]}*Ibid.*, for the words “Federal Agency”.
^{94[94]}*Ibid.*, for the words “Federal Government”.
^{95[95]}Omitted by the Punjab Environmental Protection (Amendment) Act 2012 (XXXV of 2012).

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.
 4. Convention on Wetlands of International importance Especially as Waterfowl Habitat, Ramsar, 1971 and its amending Protocol, Paris, 1982.
 5. Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention), Paris, 1972.
 6. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973.
 7. Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 1979.
 8. Convention on the Law of the Sea, Monte go Bay, 1982.
 9. Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985.
 10. Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 and amendments thereto.
 11. Agreement on the Network of Aquaculture Centres in Asia and the Pacific, Bangkok, 1988.
 12. Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal, Basel, 1989.
 13. Convention on Biological Diversity, Rio De Janeiro, 1992.
 14. United Nations Framework Convention on Climate Change, Rio De Janeiro, 1992.
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GOVERNMENT OF PAKISTAN
Ministry of Petroleum & Natural Resources

LIQUEFIED PETROLEUM GAS
(PRODUCTION & DISTRIBUTION)
POLICY, 2016

1. Introduction

Liquefied Petroleum Gas (LPG) is a colourless, odourless and environment friendly mixture of hydrocarbons (mainly propane and butane) which is gaseous at normal temperature and pressure, and liquefiable under reduced temperature or moderate pressure. A chemical ethyl mercaptan is added to impart a pungent odour for leak detection. Currently about 1390 tons/day LPG is being produced domestically contributing less than 1% to the total energy supply mix. Because of its characteristics LPG is fast becoming a fuel of choice in the areas, where natural gas distribution network is not available. Currently out of 27 million households in Pakistan, 7 million are connected to natural gas network and the rest are relying on LPG and conventional fuels like coal, firewood, kerosene, dung cake etc.

In June 2000, the **Federal Government** decided to deregulate the LPG industry with a view to making it investor friendly, foster healthy competition, improve safety standards and ensure better consumer services. Accordingly, in supersession of LPG (Production & Distribution) Rules 1971, the LPG (Production & Distribution) Rules, 2001, were formulated under which LPG allocations made by the Ministry of Petroleum & Natural Resources (MPNR) prior to deregulation were given protection to the extent of terms of existing agreements between the marketing companies and producers. These Rules also empower the producers and marketing companies to fix a reasonable producer price for their product and a retail price respectively. After promulgation of Oil & Gas Regulatory Authority (OGRA) Ordinance, 2002 all LPG regulatory functions as envisaged in the LPG (P&D) Rules, 2001, were transferred to OGRA in March 2003. The Government introduced LPG(Production & Distribution) Policy, 2006, with the objective to streamline its distribution at affordable prices and promoting competition etc. The policy covered the issues of licensing, safety standards, pricing, import and automobile sector.

Subsequently, the Government introduced LPG (Production & Distribution Policy), 2011, and 2013, with the objective to increase LPG supplies through indigenously produced and imported product. However, despite the above policy initiatives, the LPG prices for domestic consumers remained considerably high due to linkage of domestic LPG producer prices with international prices, deregulated consumer prices as well as high producer price and overcharging by the marketing companies. LPG is considered as a poor man's fuel yet the same is being priced at over 20 times higher than natural gas for lifeline domestic consumers.

Taking cognizance of the issue, MPNR has reviewed the issue in its entirety and has concluded that the price deregulation policy has failed to achieve its intended objective of enhancing availability of LPG at affordable prices.

2. Objectives

The main objective of this policy is to make available LPG for domestic consumers at an affordable price and to avoid frequent price fluctuations to ensure a sustained price level.

3. Policy Guidelines

3.1.1 Production and Disposal of LPG by Public Sector (E&P) Companies and Refineries

Public Sector E&P Companies shall directly or through other companies exercise their right to set up LPG extraction facilities at gas fields where LPG can be commercially extracted in accordance with the development plan approved by the Government.

In case, the Public Sector E&P Company is unable to set up LPG extraction plant as per the development plan with reference to extraction of LPG as per provisions of the applicable Petroleum Concession Agreement (PCA), its right of LPG extraction would stand surrendered to the Government who can get it extracted through a competitive bid process.

Public Sector E&P Companies and Refineries shall give preference in sale of LPG to Gas Utility Companies for supply to LPG Air-Mix Plants in pursuance of GOP's socio economic consideration for supply of fuel to domestic consumers. In case Gas Utility companies are unable to lift LPG, the LPG would be disposed of in a transparent manner through a competitive bid process to the licensed LPG marketing companies on terms and conditions to be settled between the Buyer and Seller, subject to LPG Pricing as provided in Section 3.4 of this Policy.

The existing LPG supply agreements of Refineries and E&P Companies shall however be honoured to the extent of their terms.

3.1.2 Production and Disposal of LPG by Private Sector (E&P) Companies & Refineries

Private Sector E&P Companies having potential to produce LPG shall submit details of LPG potential to DG Petroleum Concession as part of their field development plan and their intention to exercise their right for extraction of LPG.

In case, the Private Sector E&P Company is unable to set up LPG extraction plant as per the development plan with reference to extraction

of LPG as per provisions of the applicable Petroleum Concession Agreement (PCA), its right of LPG extraction would stand surrendered to the Government who can get it extracted through a competitive bid process.

3.1.3 Production and Disposal of LPG by Private Sector Producers other than E&P Companies and Refineries

Other Private LPG producers will dispose of LPG in a transparent manner to the licensed LPG marketing companies on terms and conditions to be settled between the Buyer and Seller, subject to LPG pricing as provided in Section 3.4 of this Policy.

3.2 LPG Licensing

3.2.1 OGRA will issue a Provisional Licenses for an initial period of two(2) years for LPG Marketing to technically and financially sound applicants for construction of works commensurate to their work program.

The work program will ensure that adequate storage, cylinders and logistics infrastructure is constructed within this timeframe in line with the marketing plan of the company. On completion of works to the satisfaction of OGRA, the Provisional License will be converted to a Marketing License for a period of Fifteen years.

3.2.2 OGRA will also issue licences for Production/Extraction/LPG Air-Mix plants, LPG Storage and Filling plants, and LPG Refuelling Stations for automotives. Permission from Department of Explosives will also be required wherever applicable under the Rules.

3.2.3 The Licenses shall be cancelled in case of non-compliance with the licensing terms and conditions.

3.3 LPG Safety Standards

3.3.1 To ensure safety throughout the LPG supply chain i.e. LPG Extraction Plants, LPG Storage Tanks, LPG Transporters and Distribution Outlets, the Licensees will meet the minimum safety standards in accordance with NFPA 58 or equivalent standards as updated from time to time.

3.3.2 Decanting of LPG from cylinder to cylinder is prohibited and cross filling of other LPG marketing companies' cylinder is also prohibited

except under hospitality arrangement with prior information in writing to OGRA. OGRA shall cancel Licenses of the LPG Marketing Companies involved in violation of provisions of this section.

- 3.3.3 Prescribed codes and standards for conversion of vehicles to LPG and the establishment of LPG refuelling stations for the automobile sector by LPG Marketing Companies, Oil Marketing Companies and CNG Stations / Petrol Pumps or other companies will be followed. Hydrocarbon Development Institute of Pakistan (HDIP) or any other party authorized by OGRA will certify compliance of the above equipment in accordance with NFPA 58 or equivalent.
- 3.3.4 NFPA 58 or equivalent standards, as updated from time to time, will be used for regulating the LPG auto sector, and an effective compliance monitoring mechanism will be put in place by OGRA concerned as per the applicable laws and rules.
- 3.3.5 Use of Domestic or Commercial cylinders in automobiles is prohibited. Refilling of Domestic or Commercial cylinders or any other Gas cylinders at LPG refuelling stations is prohibited.
- 3.3.6 OGRA will publish a list of authorized manufacturers for all LPG equipment including LPG refueling stations, conversion kits, fuel tanks, cylinders, storage tanks etc. duly approved and certified by HDIP or any other party authorized by OGRA. The equipment manufactured by the authorized manufacturers will be verified and monitored for conformance to the international standards through strict quality control and quality assurance measures by OGRA.
- 3.3.7 The LPG Marketing Companies shall provide certificates duly mentioning the serial number of their cylinders to OGRA before 31st December of each year confirming that the cylinders have been properly tested as per requirement of the LPG Rules/Standards. Further, it shall be the responsibility of the LPG Marketing Companies to ensure that their LPG cylinders have been revalidated as per law after a specific period as determined by OGRA.

3.4 LPG Pricing

- 3.4.1 Subject to Policy Guidelines of the **Federal Government**, the Oil and Gas Regulatory Authority will regulate and notify the prices of indigenous LPG including Producers' Price, Margins of Marketing and Distribution Companies and Consumer Prices.

- 3.4.2 The Government may charge a Petroleum Levy from local LPG Producers as provided in the Petroleum Products (Petroleum Levy) Ordinance, 1961, as specified from time to time by the **Federal Government**.
- 3.4.3 The **Federal Government** will, from time to time in consultation with OGRA and relevant stakeholders, determine the quantity of LPG to be imported to meet any gap between demand and supply; this quantity will be imported by Public Sector companies. Petroleum Levy on LPG or Gas Infrastructure Development Cess (GIDC) may be utilized to subsidize the LPG imported by Public Sector companies for bringing the prices equal to local LPG prices for Domestic sector supplies.
- 3.4.4 Tariff for LPG Air-Mix for supply to Domestic and commercial consumers will be as determined by the **Federal Government** from time to time.
- 3.4.5 LPG prices will be regulated with a Maximum Price at all levels of the supply chain. However, Producers, Marketing Companies and Distributors may sell below the Maximum Price determined from time to time.
- 3.4.6 OGRA will intervene in case of deviation from the above pricing basis and would also involve the local administration to ensure punitive action against the defaulting Marketing Companies and Distributors.

3.5 Import and Export of LPG

- 3.5.1 Any party having valid OGRA Licence can import LPG after paying applicable government duties and taxes.
- 3.5.2 Export of surplus quantity of LPG will be allowed by the MPNR keeping in view the local demand of LPG.

3.6 General

- 3.6.1 For effective policy formulation and implementation all LPG Licensees shall furnish requisite information/data to MPNR/OGRA as may be required.
- 3.6.2 OGRA will also apprise the MPNR about the implementation status of this Policy on a quarterly basis.

- 3.6.3 The **Federal Government** may issue instructions to OGRA from time to time for implementation of this policy and/or in respect of matters related thereto, as may be considered necessary.
- 3.6.4 OGRA shall obtain list of all existing LPG Distributors from LPG Marketing Companies and register them within 90 days of the date of issuance of this Policy.
- 3.6.5 OGRA will charge a reasonable fee from each LPG Distributor not exceeding Rs. 10,000/- for registration. For all future Distributors, the Marketing Companies shall within 7 working days of the appointment of a Distributor notify OGRA, and OGRA shall within 90 days thereof register those Distributor(s).
- 3.6.6 The LPG Marketing Companies being the License holder of OGRA; would remain responsible for observance of all safety codes and standards at their Distributors' premises as well as implementation of LPG sale price to be notified by OGRA.
- 3.6.7 With a view to ensure adequate supplies of LPG and discourage deforestation in mountainous areas of KPK and Punjab, and in AJK, FATA and Northern Areas, all local LPG producers in KPK and Punjab will dedicate 10% of their production to LPG Air-Mix plants and Marketing Companies for exclusive distribution in these areas. Similarly, all local LPG producers in Sindh and Balochistan will dedicate 10% of their production to LPG Air-Mix plants and Marketing Companies for exclusive distribution in Balochistan and Rural Sindh.
- 3.6.8 The Air-Mix Plants established by Public Sector Companies will be operated either by these companies or through their third party operators in accordance with prescribed safety standards.
- 3.6.9 The indigenous LPG production will primarily be supplied to Domestic and Commercial consumers. All other sectors such as automobile and industrial will only be allowed to use imported LPG.
- 3.6.10 In case, the indigenous LPG production is not fully consumed by domestic and commercial sector, the **federal government** may allow its use in other sectors giving due consideration to all relevant factors.

4. Applicability and effect of the Policy Guidelines

- 4.1 This policy will come into force with immediate effect.
- 4.2 OGRA will amend its rules and regulations as well as Licensing terms of its Licensees, where necessary, to give effect to this policy.
- 4.3 This policy supersedes all previous instructions, orders and policies issued by the **Federal Government** from time to time in respect of the matters specifically covered in this policy.

5. Removal of difficulties

If any difficulty arises in giving effect to any provision of this Policy, the **Federal Government** may issue such orders as may be necessary for the purpose of removing the difficulty.
