

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT

ESTABLISHMENT OF GIBZ PHARMACEUTICALS PVT. LTD. VETERINARY & NUTRACEUTICAL FACILITY



PHASE 2, FIEDMC, M3 INDUSTRIAL CITY, FAISALABAD.



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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This Executive Summary provides a concise overview of the Environmental Impact Assessment (EIA) for the proposed veterinary pharmaceutical formulation facility by Gibz Pharmaceuticals (Pvt.) Ltd. The project is designed to align with the Punjab Environmental Protection Act and integrated sustainable development goals, ensuring high-quality veterinary medicine production while maintaining ecological integrity.

1. Title and Location of Project

The project is titled the Establishment of a Veterinary Pharmaceutical and Nutraceutical Facility, located at Plot #227-A, Phase 2, FIEDMC, M3 Industrial City, Faisalabad. Situated at coordinates 31.609607, 73.195607, the site rests within a premier industrial estate specifically planned for such activities.

2. Name of the Proponent

The Proposed project is spearheaded by Gibz Pharmaceuticals (Pvt.) Ltd., a company committed to providing quality veterinary products and services to support the national livestock and poultry sectors.

3. Name of the Organization Preparing the Report

The Environmental Impact Assessment report was professionally prepared by the expert team at Environmental Consultancies & Options (ECO). This organization is responsible for conducting the technical screening, scoping, and impact assessments.

4. A Brief Outline of the Proposal

The proposal involves the construction and operation of a formulation-based pharmaceutical facility spread over a total land area of 49,534 sq. ft. with an estimated investment of PKR 165.17 Million.

The manufacturing scope includes various dosage forms such as tablets, capsules, oral liquids, powders, and nutraceuticals. The process utilizes modern technology for mixing, granulation,

drying, and packaging, with a significant emphasis on quality control via dedicated QC and Microbiology labs.

Notably, the design incorporates a strictly isolated mini-facility for Penicillin production to ensure zero cross-contamination with other product lines.

5. The Major Impacts

Environmental impacts are categorized into two distinct phases.

During the 2-year construction phase, temporary impacts include localized dust generation, noise from construction machinery, and a water demand of approximately 8–12 m³/day for curing and dust suppression.

In the operational phase, the facility will generate 25–35 m³/day of wastewater, primarily from domestic use and equipment cleaning. Air quality impacts are limited to emissions from a 100 kVA backup generator and potential particulate matter from powder handling, while solid waste is estimated at 50–100 kg/day, consisting mostly of packaging materials and small quantities of pharmaceutical waste.

6. Recommendations for Mitigation Measures

To mitigate identified impacts, the facility will employ advanced pollution control hardware, including HEPA filters in the HVAC systems of production areas and specialized dust collectors for powder handling sections. The backup generator will be housed in an acoustic enclosure with a dedicated chimney stack to manage noise and air emissions. Wastewater, being non-hazardous in nature, will be discharged into the established FIEDMC sewerage network, while process wastewater will be treated in the proposed treatment plant prior to discharge, as detailed in Annexure J.

Furthermore, a green belt covering 30-40% of the plot area will be developed with 150–200 indigenous trees to act as a natural buffer and carbon sink.

7. Proposed Monitoring



A comprehensive monitoring program has been established with an initial EMP budget of PKR 2.0 Million. This plan includes regular sampling and analysis of stack emissions, ambient air quality, and noise levels to ensure continuous adherence to the Punjab Environmental Quality Standards (PEQS).

The facility's Management Team will conduct periodic preventive maintenance of all environmental controls and calibration of laboratory instruments. Additionally, the project includes a CSR framework for annual community engagement through tree plantation drives and veterinary camps to monitor and enhance the socio-economic welfare of the surrounding population.



CHAPTER-01

INTRODUCTION

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INTRODUCTION

1.1 Purpose of Report

The purpose of this Environmental Impact Assessment (EIA) report is to identify, predict, and evaluate the potential environmental and socio-economic impacts associated with the establishment and operation of Gibz Pharmaceuticals (Pvt.) Ltd.

This report has been prepared to comply with the statutory requirements of the Punjab Environmental Protection Act and associated regulations. It provides a comprehensive Environmental Management Plan (EMP) to mitigate adverse impacts, ensuring that the proposed project operates within the permissible limits of the Punjab Environmental Quality Standards (PEQS) and adheres to Good Manufacturing Practices (GMP).

1.2 Identification of Project and Proponent

The proposed project involves the establishment of Gibz Pharmaceuticals (Pvt.) Ltd., a specialized pharmaceutical manufacturing facility for the production and formulation of veterinary medicines and nutraceutical products.

The primary objective of the proponent is to manufacture high-quality veterinary medicines and nutraceutical products designed to support Pakistan's growing livestock and poultry sectors. By providing reliable, locally manufactured products, the project aims to significantly reduce the country's reliance on imported medicines while contributing to national economic growth through the creation of professional employment opportunities and the potential for future exports.

1.3 Details of Consultant

In keeping with the regulatory requirement of the country, Gibz Pharmaceuticals (Pvt.) Ltd has engaged M/s Environmental Consultancies and Options (ECO) to undertake an Environmental Impact Assessment (EIA) study for the purpose of obtaining Environmental Approval from Punjab EPA.



ECO is a professionally run environmental management & engineering firm with strong backup of highly qualified and experienced personnel. ECO services include environmental assessments, audits, risk assessments, environmental monitoring, training, water, wastewater treatment and alternate energy.

Address: 4-5 Commercial Area, 2nd Floor, Cavalry Ground Lahore Cantt.

Phone No: +92 42 36670099

Email: info@eco-intl.org 1.7

Project Team

ECO EIA's Team is engaged in preparing the EIA report for the proposed project. Based on the requirements of ToR and objectives of the study, Consultant formed a multidisciplinary team. The team comprised the following professionals:

Table 1.1 Project Team of Consultant

Sr. No.	Name	Position
1	Dr. Asim Mehmood	Team Leader (Senior Environment Specialist)
2	Dr. Saamia Saif	Senior Environment Specialist
3	Mr. Farman Hussain	Environmental
4	Mr. Muhammad Amir	Sociologist
5	Mr. Asim Jamil	Field Analyst
6	Mr. Asif Iqbal	Chemist

1.4 Brief Description of Nature, Size, and Location of Project

- **Nature:** The proposed project is a formulation-based pharmaceutical unit. It involves the manufacturing of oral liquids, powders, tablets/capsules (bolus), and injectables. A key feature is the inclusion of an isolated Penicillin mini-facility to prevent cross-contamination.
- **Size:**





- ✚ **Total Area:** Spread over approximately 49,534 sq. ft.
 - ✚ **Project Cost:** Estimated at PKR 165.17 Million.
 - ✚ **Production Capacity:** Multi-line facility producing antibiotics, nutraceuticals, and general medicines.
 - ✚ **Human Resource:** Estimated to employ 100+ personnel during the operational phase and 15–20 workers during construction.
- **Location:**
 - ✚ **Address:** Plot #227-A, Phase 2, FIEDMC, M3 Industrial City, Faisalabad.
 - ✚ **Coordinates:** 31.609607, 73.195607.
 - ✚ **Site Context:** The project is located within a specifically allocated industrial zone equipped with pre-existing road infrastructure, drainage systems, and utility corridors (electricity, gas, and water) provided by FIEDMC.

CHAPTER-02

SCREENING

CHAPTER-02

SCREENING

The screening process is a vital preliminary phase in the environmental assessment hierarchy, serving to define the depth and scope of the study required for regulatory compliance. For the proposed establishment of Gibz Pharmaceuticals (Pvt) Ltd, screening was conducted by evaluating the project's nature, the scale of manufacturing activities, the sensitivity of the chosen location, and the total capital investment.

This project is not merely a repacking unit but a comprehensive manufacturing facility designed to produce high-value medical products, including Tablets and Capsules (Bulus), General Oral Liquids and Powders, Antibiotics, Nutraceuticals, and specialized Injectables. The inclusion of antibiotics and penicillins is a critical factor in screening, as these substances require stringent containment and dedicated waste-stream neutralization to prevent environmental contamination and the potential development of antimicrobial resistance in the local ecosystem.

In accordance with the legal framework of the Punjab Environmental Protection Act 1997 (Amended 2012) and the specific procedural requirements of the Punjab Environmental Protection (Review of IEE and EIA) Regulations, 2022, all developmental and industrial projects must be categorized into specific schedules to determine the necessary level of environmental clearance.

Based on the industrial classifications provided in these regulations, pharmaceutical manufacturing units of this scale fall under Schedule II, Category B (Manufacturing and Processing), Sub-section 2, which specifically covers "Chemical manufacturing units, including pharmaceuticals and cosmetics." Schedule II projects are those deemed to have a significant potential environmental impact due to the complexity of their chemical processes, the volume of wastewater generated, and the potential for hazardous air emissions. Consequently, such projects are legally mandated to undergo a full Environmental Impact Assessment (EIA) rather than a simpler Initial Environmental Examination (IEE).

The financial scale of the project further reinforces this categorization. With a total estimated project cost of PKR 165,174,650, the investment significantly exceeds the threshold used by the

Environmental Protection Agency (EPA) Punjab to distinguish between small-scale and large-scale industrial interventions. This high capital expenditure reflects the installation of advanced machinery, sterilization equipment for injectables, and environmental control technologies. The screening process also takes into account the project's location at Plot #227-A, Phase 2, FIEDMC, M3 Industrial City, Faisalabad. While the project is situated within a planned industrial estate, the EPA requires a detailed EIA to ensure that the facility's internal environmental management systems particularly the Effluent Treatment Plant (ETP) and hazardous waste storage areas are compatible with the estate's collective infrastructure and the Punjab Environmental Quality Standards (PEQS).

The ultimate goal of Gibz Pharmaceuticals (Pvt) Ltd is to contribute to the national healthcare sector by providing quality products and services. However, this objective must be balanced with environmental stewardship. The screening phase confirms that because the facility involves the production of a wide variety of medicines with complex chemical profiles, it necessitates a detailed investigation of its potential impacts on the surrounding soil, groundwater, and air quality. Therefore, this EIA report has been prepared to provide a comprehensive analysis of the project's environmental baseline, identify potential risks during the construction and operational phases, and propose robust mitigation strategies to ensure the project remains environmentally sustainable and legally compliant.

CHAPTER-03

SCOPING OF THE ENVIRONMENTAL ASSESSMENT

CHAPTER-03:

SCOPING OF THE ENVIRONMENTAL ASSESSMENT

Scoping represents a critical phase in the Environmental Impact Assessment (EIA) process, aimed at identifying the key issues and boundaries that require detailed investigation. For Gibz Pharmaceuticals (Pvt) Ltd, the scoping exercise ensures that the study remains focused on the most significant environmental and social risks, avoiding unnecessary data collection for negligible impacts. This chapter defines the reach of the study and incorporates the concerns of stakeholders to shape the mitigation strategy.

3.1 Spatial and Temporal Boundaries of Environmental Assessment

The study area is divided into two distinct zones. The Primary Impact Zone includes the physical footprint of Plot #227-A, Phase 2, FIEDMC, where direct construction and operational activities occur. The Secondary Impact Zone (Study Area) extends to a 5-kilometer radius around the site. This broader area is analyzed to assess the dispersion of air emissions, the impact on the local groundwater table, and the socio-economic influence on nearby communities within the M3 Industrial City and adjacent rural settlements.

The assessment covers the entire life cycle of the project. This includes the Short-term Construction Phase (Expected 2 Year), characterized by land preparation and building assembly, and the Long-term Operational Phase (20+ years), which involves the daily manufacturing of medicines, chemical handling, and waste management. Finally, the boundaries account for the Decommissioning Phase, ensuring that any future closure of the facility adheres to environmental restoration standards.

3.2 Important Issues and Concerns Raised During Consultation

Public and stakeholder consultation is a mandatory requirement under EPA Punjab regulations to ensure transparency. During the scoping sessions with local community members, industrial neighbors in FIEDMC, and relevant regulatory bodies, the following primary concerns were identified:

-
- Stakeholders expressed concern regarding the high potency of pharmaceutical effluents. Specifically, the management of waste from Antibiotic and Penicillin sections was highlighted, with a demand for dedicated pre-treatment to prevent the discharge of active pharmaceutical ingredients (APIs) into the estate's drainage system.
 - Given the proximity of other industrial units, concerns were raised regarding chemical odors and VOC (Volatile Organic Compound) emissions from the production of oral liquids and injectables.
 - Local community representatives emphasized the need for "priority hiring" of skilled and unskilled labor from the Faisalabad region during both the construction and operational phases.
 - Concerns were noted regarding the disposal of expired raw materials, contaminated packaging, and laboratory waste, requesting a clear protocol for incineration or disposal through EPA-certified contractors.

3.3 Significant Impacts and Factors to be Determined

Based on the project specifics for Gibz Pharmaceuticals (Pvt) Ltd at M3 Industrial City, the following table outlines the potential environmental and social impacts along with their corresponding mitigation measures.

Table 3.1 Potential Environment Impacts & Mitigation Measures

Environmental/Project Component	Potential Environmental & Social Impacts	Proposed Mitigation Measures
Landscaping & Tree Plantation	Soil erosion, heat island effect within the industrial plot, and lack of aesthetic/ecological integration.	Allocate 30–40% of the plot as green area. Plant 150–200 trees (Neem, Ashoka, Amaltas) to act as a natural carbon sink and dust buffer.

Environmental Management Plan (EMP)	Failure to track pollutants leading to regulatory non-compliance and long-term ecosystem degradation.	Implement rigorous monitoring for air, water, and noise. Ensure 100% provision of PPE and conduct regular environmental training for staff. Formal budget allocation for plantation maintenance.
Emergency Response & Evacuation	Injury or loss of life during chemical spills, fires, or medical emergencies due to panic or lack of direction.	Install clearly marked Emergency Exits and a centralized alarm system. Establish designated Assembly Points outside the building. Form a trained Emergency Response Team (ERT) for immediate action.
Fire Fighting Plan	High risk of fire spreading due to the presence of flammable packaging, chemicals, and electrical equipment.	Install Water Hydrants, fire extinguishers, and specialized firefighting equipment. Provide Salvage First Equipment to protect critical pharmaceutical stock and records during an incident.
Air Pollution Control	Respiratory hazards from flue fgases and noise pollution from backup power generation.	Equip the 100 kVA generator with an Acoustic Enclosure. Use HEPA filters in production areas to maintain clean air.
Dust Control Measures	Inhalation of active pharmaceutical powders by workers and cross-contamination of products.	Utilize Closed Processing Systems for mixing and granulation. Install Local Exhaust Ventilation (LEV) and dust collectors in powder sections. Enforce strict use of high-grade masks and regular facility cleaning.

Wastewater Disposal Mechanism	Potential blockage or contamination of the FIEDMC sewer if wash-water contains high solid loads.	Strictly segregate domestic and wash-water. Direct all non-hazardous effluents to the FIEDMC Sewerage System. while process wastewater will be treated in the proposed treatment plant prior to discharge.
Wastewater Treatment	Accusations of non-compliance if hazardous effluent is suspected by the EPA.	The processed wastewater will be treated in the proposed treatment plant prior to discharge, as detailed in Annexure J.
Water Balance & Management	Over-extraction of groundwater (30 m ³ /day) and potential for localized water table depletion.	Use an efficient Groundwater Tube Well with flow meters. Optimize production usage (~18 m ³ /day) and minimize losses/evaporation (~7 m ³ /day) through leak detection. Regular monitoring of the local water table.
Solid Waste Disposal	Environmental pollution from pharmaceutical packaging and potential misuse of "small quantity pharma waste."	Store waste in a Designated, Labeled, and Ventilated area. Outsource disposal (50–100 kg/day) exclusively to EPA-Authorized Waste Contractors. Maintain a manifest for all packaging and cardboard recycling.

The scoping exercise confirms that while the project is located within a designated industrial zone (M3 Industrial City), the technical complexity of manufacturing Injectables and Antibiotics requires high-level mitigation.

CHAPTER – 04

ANALYSIS OF ALTERNATIVES

CHAPTER – 04

ANALYSIS OF ALTERNATIVES

4.1 Introduction

The analysis of alternatives is a key requirement of the Environmental Impact Assessment (EIA) process and is conducted to evaluate different feasible options related to site selection, project design, manufacturing technology, environmental management, and economic viability. The purpose of this analysis is to identify the most suitable alternative capable of achieving the project objectives while minimizing environmental and social impacts and ensuring compliance with applicable environmental regulations and industrial standards.

4.2 Site Alternatives

In the case of the proposed Gibz Pharmaceuticals (Pvt.) Ltd. project, the selected site is located within the jurisdiction of Faisalabad Industrial Estate Development and Management Company (FIEDMC). The selected site falls within a properly planned and regulated industrial estate specifically developed for industrial and manufacturing operations. The industrial estate has been designed with dedicated infrastructure including road networks, drainage systems, industrial sewerage systems, utility corridors, electricity supply, water supply, gas connections, and security arrangements. These facilities make the site highly suitable for the establishment of a pharmaceutical manufacturing unit.

Alternative sites outside the industrial estate were not considered feasible because such locations would not provide the same level of infrastructure, environmental compatibility, and regulatory compliance. Establishment of a pharmaceutical facility outside a planned industrial zone could result in land use conflicts, environmental management difficulties, traffic congestion, lack of industrial utilities, and potential social concerns associated with industrial activities near residential or agricultural areas.

The project site was officially allotted for industrial use by FIEDMC and the proposed activity is fully compatible with the approved master plan and land use classification of the industrial estate. Since the selected site already fulfills the environmental, technical, operational, and regulatory requirements of the project, further site alternatives were not considered necessary. Therefore, the proposed site is regarded as the most suitable and environmentally acceptable option for project implementation.

4.3 Design and Technology Alternatives

The proposed veterinary pharmaceutical manufacturing facility has been designed in accordance with international pharmaceutical manufacturing practices, Good Manufacturing Practices (GMP), and the regulatory requirements of the Drug Regulatory Authority of Pakistan (DRAP). The selected design and technology were finalized after evaluating operational efficiency, product safety, environmental protection requirements, contamination control measures, and long-term sustainability considerations.

Modern pollution control and environmental management systems have also been integrated into the project design. These include HVAC systems with HEPA filtration, local exhaust ventilation, dust collection systems in powder handling areas, acoustic enclosure for the diesel generator, and controlled storage systems for chemicals and raw materials. Such systems significantly reduce occupational exposure and environmental impacts associated with pharmaceutical manufacturing operations.

4.4 Environmental Alternatives

Environmental considerations formed an integral part of the project planning and design process. The proposed project has been developed in accordance with the environmental requirements of the Punjab Environmental Protection Agency (EPA), Punjab Environmental Quality Standards (PEQS), and the environmental management framework established by FIEDMC for industrial operations within M-3 Industrial City.

Different environmental management alternatives were considered with the objective of minimizing environmental impacts associated with construction and operational activities.

However, since pharmaceutical manufacturing facilities are subject to strict environmental regulations and operational standards, the environmental protection measures proposed for the project are largely mandatory rather than optional.

The project design incorporates several environmental protection measures including controlled storage systems for chemicals and raw materials, closed processing systems, local exhaust ventilation, dust collectors, HEPA filtration systems, solid waste segregation arrangements, spill containment measures, emergency response systems, and designated waste storage areas. These measures were selected to minimize emissions, occupational exposure, waste generation, and environmental contamination.

The project also includes environmental enhancement measures such as landscaping and plantation over approximately 30–40% of the total plot area. Green belt development and plantation activities will improve the site's environmental performance by reducing dust levels, improving aesthetics, and contributing to microclimatic improvement within the industrial premises.

4.5 Economic Alternatives, Their Selection and Rejection Criteria

Economic considerations were also evaluated during the alternative analysis process to determine the viability and sustainability of the proposed project. The primary economic alternatives considered included implementation of the proposed project versus the “No Project” scenario.

The “No Project” alternative would mean that the proposed veterinary pharmaceutical manufacturing facility would not be established at the allocated industrial plot within M-3 Industrial City. This option was considered undesirable because it would result in underutilization of industrial land specifically allocated for industrial development within a Special Economic Zone. In addition, failure to implement the project would lead to loss of potential economic benefits associated with industrial investment, employment generation, local pharmaceutical production, and revenue generation.

The proposed project involves an estimated investment of approximately PKR 165.17 million and is expected to generate direct and indirect economic benefits for the Faisalabad region and the national economy. The project will create employment opportunities during both construction and

operational phases, with approximately 100 employees expected during full-scale operation. In addition to direct employment, the project will support associated sectors including transportation, packaging, warehousing, raw material supply, and industrial services.

CHAPTER-05

DESCRIPTION OF THE PROJECT

CHAPTER-05

DESCRIPTION OF THE PROJECT

This chapter provides a detailed technical and operational profile of the proposed Gibz Pharmaceuticals (Pvt) Ltd. facility. It outlines the strategic objectives, logistical framework, and manufacturing processes essential for the production of high-quality veterinary medicines in compliance with international and national standards.

5.1 Objectives of the Project

The primary objective of the proposed facility is to establish a technologically advanced manufacturing unit dedicated to the production of high-quality veterinary pharmaceutical products, including oral liquids, oral powders, antibiotics, and nutraceuticals.

- This initiative is strategically designed to bridge the current gap in the livestock and poultry health sectors by providing reliable, quality-controlled local alternatives to expensive imported medicines.
- Central to the project's mission is the establishment of integrated Quality Control (QC) and Microbiology laboratories, alongside a modern warehousing system, to ensure that all operational phases remain in strict compliance
- The project serves as a catalyst for sustainable regional development. By generating over 100 direct employment opportunities and fostering localized manufacturing, the facility contributes to national economic resilience and the potential for export growth.
- The underlying "Need for Project" is substantiated by the rapid expansion of Pakistan's livestock and poultry populations, which has led to an escalating demand for dependable pharmaceutical supplies.

5.2 Location and Site Layout

The project is strategically located within the premier industrial hub of Punjab.

 **Address:** Plot #227-A, Phase 2, FIEDMC, M-3 Industrial City, Faisalabad.

-
- 250' 0"**
- 145' 0"**
- NUTRITIONAL SECTION PLAN**
- PHARMACEUTICAL SECTION PLAN**
- GENERAL LAYOUT**
- DETAIL LAYOUT**
- Room Schedule**
- | Room | Area (sq ft) | Count |
|-----------------------|--------------|-------|
| Raw Material Store | 1000 | 1 |
| Substrate Store | 1000 | 1 |
| Active Material Store | 1000 | 1 |
| Final Goods | 1000 | 1 |
| Quality Rm | 1000 | 1 |
| Control Room | 1000 | 1 |
| Reception | 1000 | 1 |
| Storage Area | 1000 | 1 |
| Washing Area | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Storage Room | 1000 | 1 |
| Physical Lab | 1000 | 1 |
| Office | 1000 | 1 |
| Reception/Storage | 1000 | 1 |
- Room Schedule**
- | Room | Area (sq ft) | Count |
|-----------------------|--------------|-------|
| Raw Material Store | 1000 | 1 |
| Substrate Store | 1000 | 1 |
| Active Material Store | 1000 | 1 |
| Final Goods | 1000 | 1 |
| Quality Rm | 1000 | 1 |
| Control Room | 1000 | 1 |
| Reception | 1000 | 1 |
| Storage Area | 1000 | 1 |
| Washing Area | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Storage Room | 1000 | 1 |
| Physical Lab | 1000 | 1 |
| Office | 1000 | 1 |
| Reception/Storage | 1000 | 1 |
- COVERED AREA**
- | Room | Area (sq ft) | Count |
|-----------------------|--------------|-------|
| Raw Material Store | 1000 | 1 |
| Substrate Store | 1000 | 1 |
| Active Material Store | 1000 | 1 |
| Final Goods | 1000 | 1 |
| Quality Rm | 1000 | 1 |
| Control Room | 1000 | 1 |
| Reception | 1000 | 1 |
| Storage Area | 1000 | 1 |
| Washing Area | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Storage Room | 1000 | 1 |
| Physical Lab | 1000 | 1 |
| Office | 1000 | 1 |
| Reception/Storage | 1000 | 1 |
- LABOR PLAN**
- GSK PHARMACEUTICALS (PVT) LTD**
- TOTAL AREA OF PLOT = 36000 SQ FT**
- COVERED AREA = 10000 SQ FT**
- COVERED AREA**
- | Room | Area (sq ft) | Count |
|-----------------------|--------------|-------|
| Raw Material Store | 1000 | 1 |
| Substrate Store | 1000 | 1 |
| Active Material Store | 1000 | 1 |
| Final Goods | 1000 | 1 |
| Quality Rm | 1000 | 1 |
| Control Room | 1000 | 1 |
| Reception | 1000 | 1 |
| Storage Area | 1000 | 1 |
| Washing Area | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Washing Unit | 1000 | 1 |
| Storage Room | 1000 | 1 |
| Physical Lab | 1000 | 1 |
| Office | 1000 | 1 |
| Reception/Storage | 1000 | 1 |

Figure 5.1 Site Layout Map

(Note: Detailed Engineering Layout Maps are annexed-A at the end of this report).

5.3 Land Use on the Site

The project site is situated within a zone specifically master-planned and allocated for heavy and high-tech industrial activities by FIEDMC, ensuring a landscape tailored for industrial excellence. The permissible land use is strictly designated for pharmaceutical manufacturing, chemical processing, and logistics, aligning perfectly with the project's operational scope.

Furthermore, the area functions as a fully developed Special Economic Zone (SEZ), providing high-end amenities such as dedicated utility corridors for electricity, gas, and water, alongside advanced drainage systems and 24/7 comprehensive security measures to support seamless industrial operations.

5.4 Road Access

The project site benefits from superior logistical connectivity, anchored by internal access through the wide, heavy-duty paved road network of FIEDMC Phase 2, which is specifically designed to accommodate seamless containerized vehicle movement.

This localized infrastructure is complemented by a strategic regional link, as the site's close proximity to the Sahianwala Interchange on the M-3 Motorway ensures a direct and efficient logistics corridor. This positioning facilitates the rapid arrival of raw materials and the streamlined distribution of finished products across Pakistan and to international ports.

5.5 Vegetation Features of the Site

As a core component of the Environmental Management Plan (EMP), the project integrates a robust landscaping and green-belt strategy designed to enhance the site's ecological footprint and aesthetic value.

Approximately 30–40% of the total plot area has been dedicated to green spaces, where a proposed selection of 150–200 trees will be planted.

The suggested vegetation includes a mix of indigenous and fast-growing species such as Neem, Amaltas, Gulmohar, Ashoka, and Conocarpus, chosen for their adaptability and carbon sequestration potential. These plantations are strategically planned to be concentrated along the boundary walls and internal roads, serving as both a visual screen and a biological buffer zone, with particular emphasis on the perimeter of the Penicillin unit to provide an additional layer of environmental isolation.

5.6 Cost and Magnitude of Operation

The project represents a significant private equity investment with 100% internal funding and no bank loans.

Table 5.1 Estimated Project Cost Breakdown

Component	Estimated Cost (PKR) - 2026-27
Land	11,000,000
Buildings, Furniture & Fixtures	69,195,000
Plant, Machinery & Equipment (PME)	67,942,000
Working Capital	34,148,450
Grand Total Project Cost	165,174,650

Magnitude of Operation: The facility will initially operate on a single-shift basis (8 hours/day) with a production capacity designed to meet local and regional veterinary demands.

5.7 Schedule of Implementation

The total period required for the completion of the project is estimated at 2 Years. This includes:

- Phase 1: Civil works, building construction, and utility installation.
- Phase 2: Machinery procurement, installation, commissioning, and trial production runs.

5.8 Description of the Project

5.8.1 Manufacturing Technology and Process

The facility utilizes advanced formulation-based manufacturing technology designed to ensure precision and consistency in every batch. The core operational sequence begins with the granulation and mixing phase, where oscillator granulators and cone mixers are employed to achieve a homogenous blend of active ingredients and excipients.

Following this, the material undergoes a controlled drying process utilizing industrial tray dryers specifically calibrated for optimal moisture control. The final stage for solid and powder dosages involves high-precision pouch and jar filling and sealing machinery to maintain product integrity. For liquid products, the facility utilizes specialized stainless steel (SS) formulation tanks equipped with silver san and slow-speed mixers, ensuring the production of uniform oral liquids and nutraceutical solutions.

5.8.2 Raw Materials and Chemicals

The project's supply chain relies on a strategic mix of materials, with approximately 80% being imported active pharmaceutical ingredients (APIs) and the remaining 20% sourced from local suppliers.

The primary APIs utilized in the formulation processes include high-potency compounds such as Doxycycline, Amoxicillin, Tylosin, Colistin, and Lincomycin. These are complemented by locally sourced excipients and additives, including Citric Acid, Dextrose, Glycerin, and Peppermint Oil.

To preserve the chemical stability and efficacy of these materials, the facility maintains a strictly regulated storage environment, with temperatures held between 15°C and 25°C and relative humidity kept below 60% through integrated HVAC systems.

5.8.3 Products and By-Products

The primary outputs are veterinary pharmaceuticals and nutraceuticals, including:

- **Solid Dosage:** Tablets, Capsules, and Bolus.

- **Powders:** General, Antibiotic, and Penicillin (Isolated).
- **Liquids:** General Oral liquids and Nutraceutical liquids.
- **Injectables.**
- **By-Products:** The process is formulation-based; therefore, no industrial by-products or hazardous chemical synthesis waste are generated. Only packaging and domestic waste are produced.

4.9 Restoration and Rehabilitation Plans

Gibz Pharmaceuticals is committed to maintaining the environmental integrity of the site throughout its lifecycle.

- Upon completion of civil works, all temporary structures and debris will be removed. Ground leveling and immediate implementation of the Tree Plantation Plan will commence to restore the site's aesthetics.
- Regular maintenance of the HVAC and filtration systems ensures no dust or particulate matter accumulates.
- In the event of future decommissioning, a rehabilitation plan will be executed to return the site to its original industrial-ready state, ensuring all machinery is safely removed and any residual materials are disposed of through authorized waste contractors.

CHAPTER-06

DESCRIPTION OF ENVIRONMENT

CHAPTER-06

DESCRIPTION OF ENVIRONMENT

6.1 Introduction

The primary objective of this chapter is to establish a comprehensive environmental and socioeconomic baseline for the area surrounding the proposed Gibz Pharmaceuticals (Pvt) Ltd. project. By characterizing the existing conditions of the physical, biological, and human environment, this section provides the necessary benchmark against which potential project-related impacts can be accurately predicted and monitored.

The proposed project by Gibz Pharmaceuticals (Pvt) Ltd. aims to provide high-quality medicinal products and services to meet the growing market demand in the country. The facility is designed to manufacture a diverse range of pharmaceutical products, including:

- Tablets and Capsules (Bolus)
- General Oral Liquids and Powders
- Antibiotic Oral Liquids and Powders
- Nutraceuticals (Oral Liquids and Powders)
- Penicillin (Oral Powder)
- Injectables

The assessment of existing environmental conditions within the vicinity of the Gibz Pharmaceuticals (Pvt) Ltd. facility has focused on an area referred to as the "Area of Influence," which extends from 100 to 250 meters from the project's boundary at Plot #227-A, Phase 2, FIEDMC. To compile this comprehensive data, a systematic approach was adopted. Information was gathered from a range of sources, including published literature, on-site field observations, environmental monitoring activities, and surveys specifically conducted for this pharmaceutical

project. These sources collectively provided valuable insights and data crucial for the environmental assessment.

Furthermore, to ensure a well-rounded perspective and to engage with the industrial community, consultations were held with both the general public and stakeholders within the M3 Industrial City area. These consultations aimed to solicit opinions and gather feedback regarding the implementation of the pharmaceutical manufacturing plant. By incorporating the input and concerns of local stakeholders and nearby industrial units, the project's planning and execution process becomes more inclusive and responsive to the needs and considerations of the community it will affect. The location map of Gibz Pharmaceuticals (Pvt) Ltd., Faisalabad is given in Figure 6.1.



Figure 6.1 Location Map of Proposed Gibz Pharma Site FIEDMIC, FAISALABAD

The following sections detail the baseline data collected through secondary research and site-specific surveys, ensuring that the Environmental Impact Assessment (EIA) for this facility is grounded in the specific environmental context of the Faisalabad industrial region.

6.2 Physical Environment

The below section offers an overview of the data pertaining to the physical environment within the proposed project study area. This information has been gathered from both primary and

secondary sources. The key parameters examined encompass physiographic and topographical characteristics, geological composition, soil attributes, seismic activity, climate and meteorological conditions, availability of water resources, management of solid waste, and the prevailing land use patterns, among others.

6.2.1 Physiography and Topography

Faisalabad previously known as Lyallpur was established as a Mandi Town in 1895 as a part of the program of colonization of West Punjab. It was formerly a part of Tehsil Jhang of Multan Division. Because most of the area was un-cultivated and there were no regular crops, it served the purpose of only a meadow for the cattle of the indigence.

Faisalabad lies in the rolling flat plains of northeast Punjab, at 186 metres (610 ft) above sea level. The city proper comprises approximately 1,326 square kilometres (512 sq mi) while the district encompasses more than 16,000 square kilometres (6,200 sq mi). The Chenab River flows about 30 kilometres (19 mi), and the Ravi River meanders 40 kilometres (25 mi) to the southeast. The lower Chenab canal provides water to 80% of cultivated lands making it the main source of irrigation. Faisalabad is bound on the north by Chiniot and Sheikhupura, on the east by Sheikhupura and Sahiwal, on the south by Sahiwal and Toba Tek Singh and on the west by Jhang.

The opening of Lower Chenab Canal in 1892 and its extension to the area in the form of Rakh Branch, Jhang Branch and Gogerah Branch coupled with the introduction of a Canal Irrigation system, brought the whole area under regular cultivation. The city was named in honor of Sir James Lyall, the then lieutenant Governor of the Punjab. The design of the Town was prepared by Mr. Young, and it was further improved by Sir Gunga Ram, a renowned Town Planner of the time. It was laid down on a parcel of land measuring 110 acres in a square form with eight bazaars radiating from the central Clock Tower.

The district of Faisalabad is situated in the center of the lower Rachana Doab, the area between Chenab and Ravi rivers, which has a mild slope from NorthEast to South-West with an average of about 0.2-to-0.3-meter drop per kilometer or about 1 to 1.5 feet per mile. The city is situated at an elevation of about 183.35 meters above the Sea level. The topography is however marked by valleys, local depression, and relatively high ground shown in Fig:5.2.

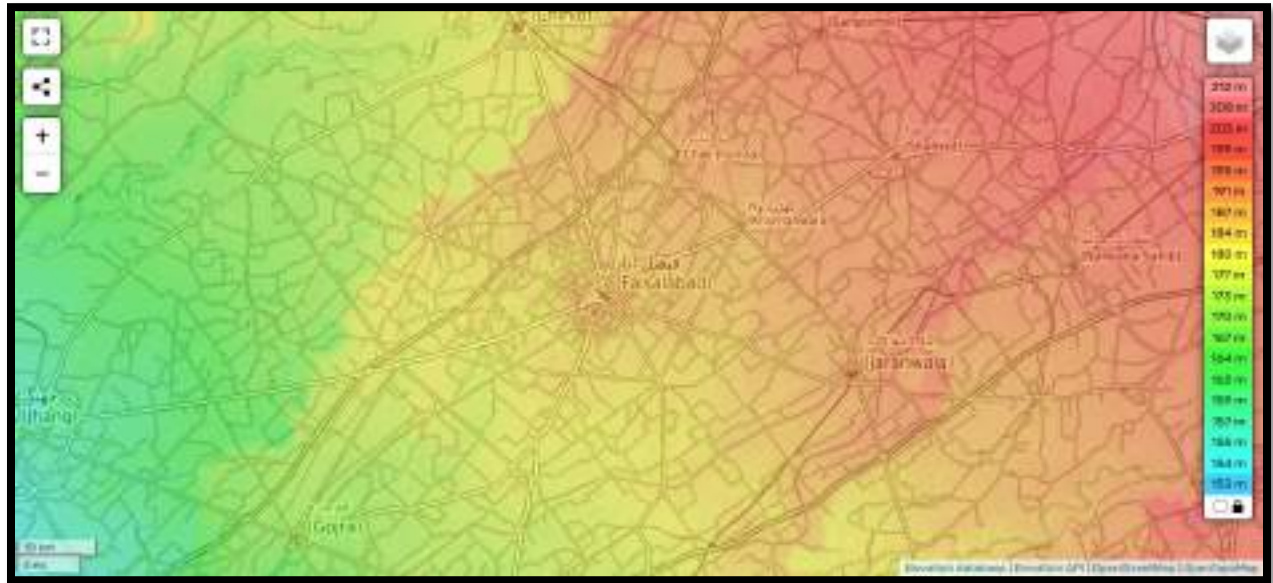


Figure 6.2 Topography Map of Faisalabad

6.2.2 Soil

The soil consists of young stratified silt loam or very fine sand loam which makes the subsoil weak in structure with common kankers at only five feet. The course of the rivers within Faisalabad are winding and often subject to frequent alternations. In the rainy season, the currents are very strong. This leads to high floods in certain areas which do last for a number of days.

The Rakh and Gogera canals have encouraged the water levels in the district however the belt on the Ravi River has remained narrow. The river bed does include the river channels which have shifted the sand bars and low sandy levees leading to river erosion. Faisalabad is situated at the centre of the lower Rechna Doab, the area is located between the Chenab and Ravi rivers.

There is a mild slope from the northeast to the southwest with an average fall of 0.2–0.3 metres per kilometre (1.1–1.6 feet per mile). The city is situated at an elevation of about 183 metres (600 ft). The topography is marked by valleys, local depression and high ground.

6.2.3 Seismicity

Faisalabad is classified as a low-to-moderate seismic risk area, specifically falling under Zone 2A on the Pakistan Seismic Zonation Map, according to IISSEE Data. While it is not on a major fault line, the city can experience tremors from surrounding active faults, such as those in the Himalayas.

Key Seismic Details for Faisalabad:

- **Zone Classification:** Zone 2A, indicating moderate seismic activity.
- **Seismic Risk:** Low to moderate (Zone 2A corresponds to a peak ground acceleration (PGA) of 0.08g to 0.16g).
- **Regional Activity:** Faisalabad is susceptible to tremors felt from, earthquakes in northern Pakistan. For instance, a 4.2 magnitude earthquake with a 111-km depth hit the Faisalabad division in 2025.
- **Building Standards:** Structures in this zone should follow the building codes of Pakistan to mitigate moderate risks.

The city sits on the alluvial plains of Punjab, which typically causes less amplification of seismic waves compared to rocky terrain, though it remains vulnerable to moderate shaking.

Since 2023, Faisalabad has had 21 quakes of magnitudes up to 4.7 within up to 100 km (63 mi) distance:

- 4 quakes above magnitude 4
- 13 quakes between magnitude 3 and 4
- 1 quake between magnitude 2 and 3
- 3 quakes below magnitude 2 that people normally don't feel.

Number of recent quakes in or near Faisalabad, Punjab Province, Pakistan, by magnitude

Table 6.1 Number of recent quakes in or near Faisalabad

	TOTAL NUMBER	<M2	M2+	M3+	M4+	M5+	M6+	M7+
Past 3 years	17 quakes	no data	1	9	4	-	-	-

Past 10 years	37 quakes	no data	1	21	12	-	-	-
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6.2.4 Climate and Meteorology

In Faisalabad, the summers are sweltering, muggy, and clear and the winters are short, cool, dry, and mostly clear. Over the course of the year, the temperature typically varies from 43°F to 105°F and is rarely below 38°F or above 112°F.

Based on the beach/pool score, the best time of year to visit Faisalabad for hot-weather activities is from late September to late October.

To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Faisalabad experiences significant seasonal variation in monthly rainfall.

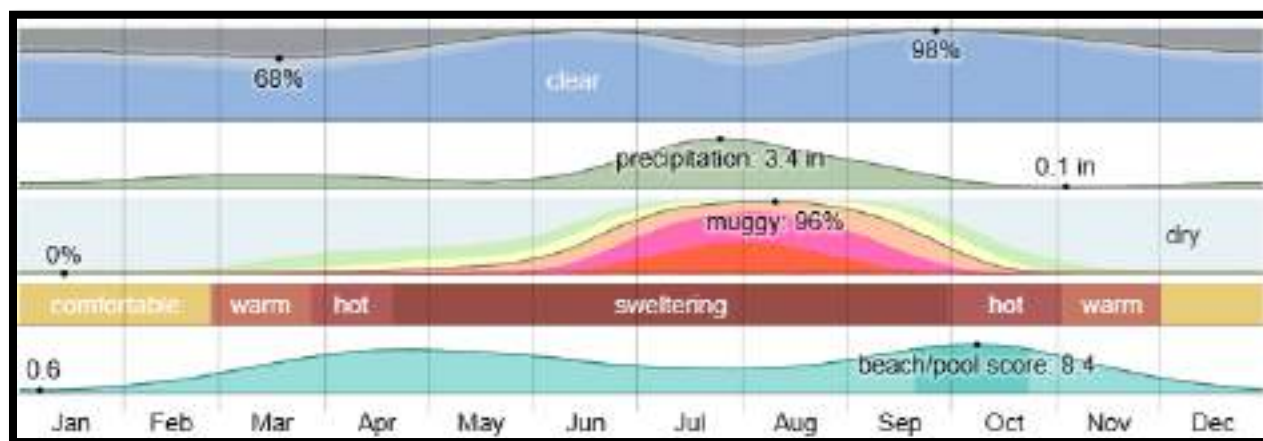


Figure 6.3 Average Weather Year Round in Faisalabad

The rainy period of the year lasts for 8.4 months, from January 25 to October 5, with a sliding 31-day rainfall of at least 0.5 inches. The month with the most rain in Faisalabad is July, with an average rainfall of 3.2 inches. The rainless period of the year lasts for 3.6 months, from October 5 to January 25. The month with the least rain in Faisalabad is November, with an average rainfall of 0.2 inches.

In Faisalabad, the average percentage of the sky covered by clouds experiences significant seasonal variation over the course of the year.

The clearer part of the year in Faisalabad begins around August 7 and lasts for 3.5 months, ending around November 23.

The clearest month of the year in Faisalabad is September, during which on average the sky is clear, mostly clear, or partly cloudy 97% of the time. The cloudier part of the year begins around November 23 and lasts for 8.5 months, ending around August 7. The cloudiest month of the year in Faisalabad is March, during which on average the sky is overcast or mostly cloudy 31% of the time.

To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Faisalabad experiences significant seasonal variation in monthly rainfall.

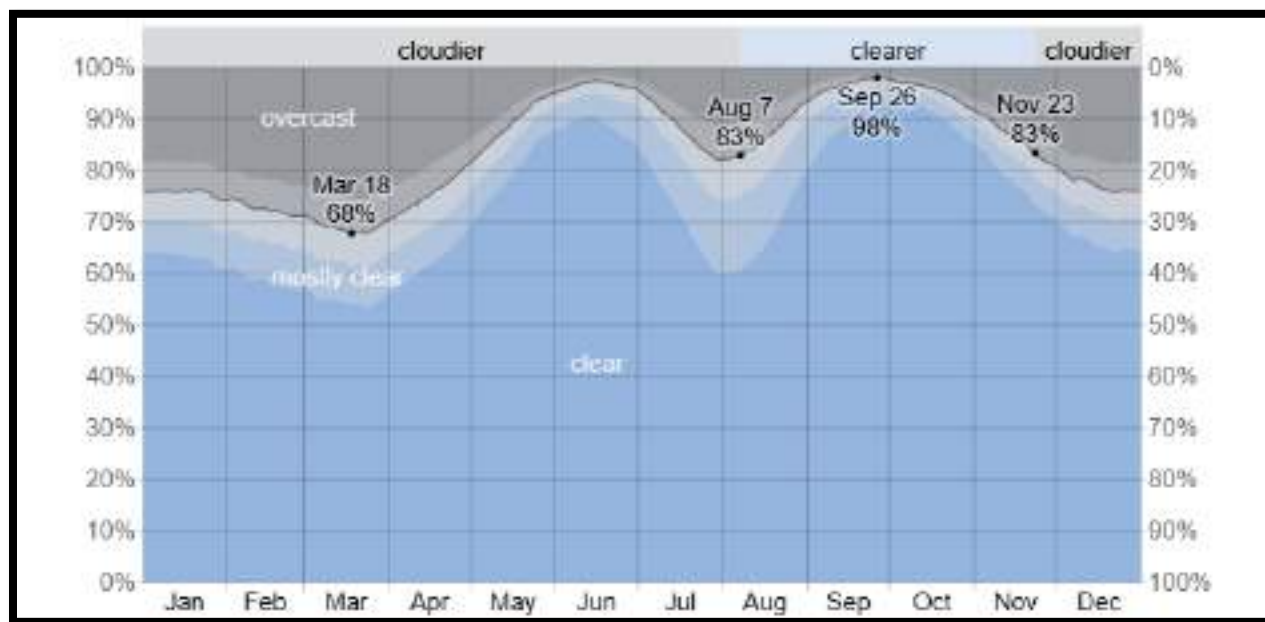


Figure 6.4 Cloud Cover Categories in Faisalabad

The rainy period of the year lasts for 8.4 months, from January 25 to October 5, with a sliding 31-day rainfall of at least 0.5 inches. The month with the most rain in Faisalabad is July, with an average rainfall of 3.2 inches. The rainless period of the year lasts for 3.6 months, from October

5 to January 25. The month with the least rain in Faisalabad is November, with an average rainfall of 0.2 inches.

The length of the day in Faisalabad varies significantly over the course of the year. In 2026, the shortest day is December 22, with 10 hours, 6 minutes of daylight; the longest day is June 21, with 14 hours, 12 minutes of daylight.

6.2.5 Groundwater

Groundwater in Faisalabad is experiencing a severe crisis, characterized by rapid depletion (1–2 meters annually) and widespread contamination from industrial effluents, agricultural runoff, and domestic sewage. Over 84% of samples in the area have shown poor to unusable drinking water quality due to high salinity and contamination, with over 30% of the district highly vulnerable to pollution.

The demand of groundwater has significantly increased during the past two decades to meet the food and fiber requirements due to constrained surface irrigation water. The groundwater has a major share to grow agriculture in Punjab-Pakistan, which produces more than 90% gains of the country. Beside the importance of groundwater, a major concern in recent years is the contamination of groundwater. The consecutive monitoring and mapping of aquifer water quality in large areas is a hectic job and not even economically feasible. Thus groundwater vulnerability maps are becoming more in demands to represents regional aquifer contamination potential. The aim of this research work was to find out the groundwater vulnerability potential zones in Faisalabad and its nearby areas, which is the fastest growing city of Pakistan.

For this purpose, GIS based DRASTIC model was used to measure vulnerability related to agriculture in Faisalabad district. The inputs of the model are based on seven different layers. The results of the model were compared with groundwater samples

6.2.6 Surface Water Hydrology and Drainage

Faisalabad's surface water hydrology is dominated by the Lower Chenab Canal system, which serves 80% of agriculture, alongside significant waterlogging issues. Urban drainage is severely

challenged by shallow water tables (under 5 feet) and high contamination, causing widespread, recurring waterlogging in suburban areas.

The Lower Chenab Canal is the primary source, supplying water for agriculture, which is the cornerstone of the region's economy. Excessive canal seepage and improper irrigation practices have resulted in severe waterlogging. A significant portion of the area between the Jhang and Bhowana branches remains submerged for most of the year. The region faces issues with saline groundwater, often making it unfit for consumption and creating complex interactions with surface water.

Faisalabad lacks an efficient, integrated drainage system, leading to the disposal of urban wastewater into open drains and natural depressions, which contributes to contamination. Groundwater samples near drainage channels show high levels of contaminants, exceeding WHO safe limits. Projects like those run by WASA Faisalabad seek to address the growing demand by implementing 10 MGD surface water treatment plants and, in some cases, incorporating 10 tube wells in areas like Gatwala.

6.2.7 Solid Waste Management

Solid Waste Management (SWM) in Faisalabad under the Suthra Punjab program focuses on a modern, digitised, and public-private partnership approach to eliminate open garbage, ensuring daily door-to-door collection, street sweeping, and efficient waste disposal. The Faisalabad Waste Management Company (FWMC) is fully operational, managing sanitation via the Suthra Punjab App for digital monitoring.

Real-time tracking of waste collection through geo-tagged data and time-stamped pictures. Daily, scheduled door-to-door waste collection and mechanized sweeping, reducing reliance on manual methods. Focus on transforming waste into energy and recyclable materials, reducing landfill reliance. Introduction of color-coded bins in schools and public spaces to ensure source segregation. A dedicated complaint management system allow residents to report sanitation issues through the app, managed by contractors.

SWM services in Faisalabad are managed by the FWMC, which has assumed control of assets and staff. The program, launched by the Punjab government, aims to transform waste into a resource,

fostering a clean and sustainable environment, transitioning from simply removing garbage to a comprehensive, circular waste economy.

6.3 Ecological Environment

6.3.1 Ecosystem

Faisalabad's ecosystem is a heavily industrial-agricultural mix, dominated by textile manufacturing and high-intensity farming, which has created a challenging environment with significant air pollution, water scarcity, and industrial waste issues. While it serves as a key agricultural research hub with fertile, alluvial soil, rapid urbanization and untreated industrial wastewater threaten local aquatic life and environmental sustainability.

Faisalabad is known as the "Manchester of Pakistan," Faisalabad serves as a critical industrial ecosystem, driving textile exports. This includes significant urban, suburban, and rural areas that face immense environmental stress. The region boasts fertile, alluvial soil and hosts important agricultural research, including the Agronomic Research Institute and the University of Agriculture, Faisalabad, which study crop optimization (e.g., wheat, cotton) and arthropod diversity in agro-ecosystems.

6.3.2 Flora

Faisalabad's flora is characterized by a mix of hardy native species and well-adapted ornamental plants that thrive in the city's semi-arid climate and fertile Punjab plains. The urban landscape is dominated by flowering shrubs like Arabian Jasmine and Hibiscus, while large shade-providing trees such as Neem and Sheesham are essential for cooling the environment.

In industrial zones like the M3 Industrial City, these species are often utilized for landscaping and green belts to mitigate dust and improve air quality. Additionally, the region's agricultural roots are evident in the common presence of fruit-bearing trees like Mango and Guava, alongside seasonal crops such as Chickpeas, which contribute to both the local economy and the area's ecological diversity.

Based on the regions specified for Faisalabad, the most common plants found in the area, categorized by their typical use:

Flowering Shrubs & Trees

1. **Chinese Hibiscus** (*Hibiscus rosa-sinensis*): A popular ornamental tree known for its large, fragrant, and vibrant blooms.
2. **Arabian Jasmine** (*Jasminum sambac*): Deeply significant in Pakistan, often used in garlands and for its sweet fragrance.
3. **Madagascar Periwinkle** (*Catharanthus roseus*): A hardy evergreen plant frequently grown for its colorful flowers.
4. **Crape Jasmine** (*Tabernaemontana divaricata*): Known for pinwheel-shaped white flowers with a carnation-like scent.
5. **Peregrina** (*Jatropha integerrima*): A decorative shrub with red or pink flowers that bloom year-round, though its parts are toxic if consumed.
6. **Orange Jasmine** (*Murraya paniculata*): An evergreen shrub suited for hedges that produces small, bee-attracting white flowers.
7. **Bougainvillea** (*Bougainvillea glabra*): A fast-growing shrub or vine famous for its colorful, paper-like bracts.
8. **Oleander** (*Nerium oleander*): A low-maintenance, evergreen shrub often used along roadsides.

Indoor & Ornamental Plants

9. **Golden Pothos** (*Epipremnum aureum*): Often called "Devil's Ivy," it is a resilient houseplant that can grow in low light.
10. **Aloe Vera** (*Aloe vera*): A succulent valued for its medicinal properties and its ability to store water in thick leaves.

-
11. **Ti Plant** (*Cordyline fruticosa*): A palm-like shrub often grown for its striking ornamental foliage.
 12. **Indian Laurel** (*Ficus microcarpa*): A fig tree often found in East Asian-influenced landscapes and used for shade.
 13. **Ixora** (*Ixora coccinea*): A tropical plant with dense clusters of small, brightly colored flowers.

Edible & Agricultural Plants

14. **Chickpea** (*Cicer arietinum*): An annual bushy plant widely cultivated in the region for its nutritious seeds.
15. **Sweet Basil** (*Ocimum basilicum*): A member of the mint family frequently used fresh or dried in various culinary dishes.
16. **Mango** (*Mangifera indica*): A common fruit-bearing tree widely planted for its edible produce.
17. **Guava** (*Psidium guajava*): Another staple fruit tree found in local gardens and farms.

Common Trees

18. **Neem** (*Azadirachta indica*): Highly valued for its medicinal uses and the dense shade it provides.
19. **Sheesham** (*Dalbergia sissoo*): A native rosewood tree common across the Punjab plains for its durable timber.
20. **Amaltas** (*Cassia fistula*): Also known as the Golden Shower tree, famous for its hanging clusters of bright yellow flowers.

6.3.3 Wildlife/Fauna

The fauna of Faisalabad reflects a diverse mix of native species, migratory birds, and animals sustained within both urban landscapes and protected areas like Gatwala Wildlife Park.

- **Common Residents:** Species such as the Black Kite, House Crow, Rock Pigeon, and Myna are ubiquitous in urban areas. Others include the Red-vented Bulbul, Hoopoe, and Rose-ringed Parakeet.
- **Game Birds:** The Grey Francolin and Black Francolin are commonly found in the surrounding agricultural plains.
- **Waterfowl and Migrants:** During winter, various migratory ducks visit the region's water bodies, including the Mallard, Northern Shoveler, Common Teal, and Northern Pintail.
- **Specialty Species:** The Asian Koel is a prominent summer visitor known for its distinctive call.
- **Wild Mammals:** Common species include the Northern Palm Squirrel, Indian Gerbil, and House Mouse. Larger wild mammals such as Wild Boar and Jackals are still found in less disturbed or forested areas.
- **Livestock:** Due to the peri-urban agricultural nature of Faisalabad, Buffalo (35.1%) and Cattle (29.3%) are the most dominant domestic animals, followed by Goats (25.8%).
- **Reptiles:** The region is home to the Indian Cobra and various lizard species. Notably, Gatwala Wildlife Park houses a dedicated crocodile farm with multiple Crocodiles and alligators.
- **Amphibians:** The Indus Valley Toad is a common sight in moist areas and near irrigation channels.
- **Deer and Antelope:** Populations include Hog Deer, Blackbuck, and Blue Bull (Nilgai).
- **Other Wildlife:** The park also hosts Mouflon Sheep, Rhesus Monkeys, and various Pheasants (Silver and Ring-neck).

6.3.4 Invertebrates

Faisalabad's invertebrate fauna is highly diverse, dominated by arthropods and mollusks that play critical roles as pollinators, decomposers, and pests within its extensive agro-ecosystem.

- **Hemiptera (True Bugs):** This is the most abundant order, including the Jassid (*Amrasca biguttula biguttula*), Whitefly (*Bemisia tabaci*), Cotton Aphid (*Aphis gossypii*), and the Cotton Mealybug (*Phenacoccus solenopsis*).
- **Coleoptera (Beetles):** A highly diverse group featuring several species of ladybird beetles such as the Seven-spotted Ladybird (*Coccinella septempunctata*) and *Brumoides suturalis*, which act as natural predators.
- **Hymenoptera (Bees and Wasps):** Key pollinators including Honeybees (*Apis dorsata*, *Apis florea*), Carpenter Bees, and various wasp species like the Oriental Hornet (*Vespa orientalis*).
- **Diptera (Flies):** Common species include the Housefly (*Musca domestica*), Drosophila, and various Hoverflies (Syrphid flies) that assist in pollination.
- **Araneae (Spiders):** A significant predator group in crop fields, represented by families such as Clubionidae (sac spiders) and Salticidae (jumping spiders).
- **Other Orders:** This includes Orthoptera (grasshoppers and crickets like *Acrida*), Lepidoptera (butterflies and moths such as the American Bollworm), and Mantodea (praying mantises).
- **Common Snail Species:**
 - *Ariophanta bristalis* (the most abundant species)
 - *Ariophanta bistrialis*
 - *Oxyloma elegans* (Amber snail)
 - *Zootecus insularis*
 - *Physa fontinalis* (Bladder snail)
 - *Monacha catiana*
- **Earthworms:** Various species are ecologically distributed along water bodies and within the agro-ecosystem to maintain soil health.

- **Nematodes:** Plant-parasitic nematodes are specifically common in sugarcane and vegetable fields.
- **Isopods:** Small crustaceans (woodlice) are also present in the soil and foliage of local crops.

6.3.5 Conservation Efforts

Conservation efforts in Faisalabad are driven by a combination of governmental initiatives, academic research, and protected ecological zones aimed at maintaining regional biodiversity and environmental balance.

- **Gatwala Wildlife Park:** Established in 1992, this 100 Km Square facility serves as a critical breeding center and botanical garden. It features a large bird sanctuary housing local and regional species, as well as a specialized crocodile farm for the conservation of crocodiles and alligators.
- **Wildlife Research Center Gatwala:** This institute conducts specialized research on wildlife survey techniques, population dynamics of endangered species, and the carrying capacity of local habitats. It also provides training in hatchery husbandry and the tranquilizing and restraining of animals.
- **Green Pakistan Initiative:** A significant environmental mission in the Faisalabad region involves transforming 1,500 acres of barren land in the Kamalia district through the plantation of over one million trees.
- **Tree Plantation Drives:** Local authorities and the Punjab Forest Department regularly conduct spring plantation campaigns. These efforts focus on promoting tree plantation on both state and private lands to enhance environmental protection and carbon sequestration.
- **University of Agriculture Faisalabad (UAF):** The Department of Forestry, Range Management, and Wildlife at UAF is a major contributor to conservation research. Their work addresses emerging issues such as shisham dieback, reasons for wildlife depletion, and the conservation of genetic diversity.

- **Entomological Research Institute:** Based in Faisalabad, this institute works to minimize pesticide loads by exploring bio-control agents. It also focuses on preserving endangered insect strains, such as lac insects, to help rebuild ecological balance.
- **Environment Protection Department (EPD):** The district office in Faisalabad monitors environmental standards and implements provincial conservation policies.
- **Social Forestry:** The government promotes social forestry in the private sector, providing seedlings to the general public to encourage community-led conservation.

6.4 Socioeconomic Environment

The assessment of the socioeconomic environment focused on the human and economic development and the quality of life of the population residing near the project site. The study considered various aspects of human and economic development, including population and community dynamics, industrial growth, infrastructure availability, institutional presence, transportation networks, existing land use, power sources, and agricultural practices in the project area.

6.4.1 Political and Administrative Settings

Faisalabad is a major industrial city in Punjab, Pakistan, known as the "Manchester of Pakistan" due to its large textile industry. Administratively, it serves as a divisional headquarter with a Municipal Corporation status (divided into six Tehsils) and is governed by a Deputy Commissioner. The city is a major agro-industrial hub with a population of over 9 million in the district as of 2023.

Administrative Structure

Faisalabad Division consists of four districts: Faisalabad, Jhang, Toba Tek Singh, and Chiniot. The Faisalabad District spans roughly 5,856 sq km and is divided into six tehsils. The city is managed by the Municipal Corporation. The Faisalabad Development Authority (FDA) manages an area of 1300 sq km for urban development and planning. The Deputy Commissioner (currently Nadeem Nasir) oversees the district's administrative affairs.

Political Landscape

Politics in the region are heavily influenced by the Biradary system (kinship-based voting). Major tribes and castes involved in local politics include Jutt, Arain, Gujjar, Rajput, Mughal, Syed, Pathan, Baloch, Bhatti, and Awan. The city was planned in the 1890s and became a major center for trade and industry, which has molded its political landscape, particularly with the influx of settlers (Mahajreen) after the partition.

Industrial/Economic Setting

It contributes significantly to Pakistan's GDP, housing over 56,000 power looms, numerous textile processing units, spinning units, and garment factories. The city features the Faisalabad International Airport and is connected by a dry port and a road network to the national motorway system

6.4.2 Industrial Infrastructure & Investment (FIEDMC & M3 Industrial City)

The specific project site within Chak Jhumra Tehsil is part of the M-3 Industrial City, a flagship Special Economic Zone (SEZ) managed by the Faisalabad Industrial Estate Development and Management Company (FIEDMC).

As of early 2026, the estate has become a major regional employer. The development progress is categorized as follows:

- **Established:** 90 factories fully operational by 2025.
- **Expanding:** 26 recently inaugurated units.
- **Pipeline:** 31 units currently under construction.

The site leverages its proximity to the Sahianwala Interchange, providing essential links to national trade corridors. The presence of "one-window" operations and dedicated utility corridors (gas, water, and power) has fostered a business-friendly environment that attracts both domestic and foreign direct investment.

6.4.3 Local Community and Livelihoods (Chak Jhumra)

The broader Chak Jhumra Tehsil presents a socio-economic profile of "mixed-use" development, where traditional livelihoods meet modern industrial opportunities.

Chak Jhumra serves as a critical railway junction, connecting the local economy to Faisalabad, Sargodha, and Wazirabad, which facilitates the efficient movement of labor and goods.

The local population is transitioning from subsistence and commercial agriculture toward industrial labor and services. There is a growing trend of residents being absorbed into the emerging pharmaceutical and textile units within the SEZ.

6.5 Environmental Monitoring of the Project Site

6.5.1 Ambient Air and Noise Quality

Ambient air quality and noise monitoring was conducted within the project premises to evaluate the existing environmental conditions and to ensure compliance with the applicable Punjab Environmental Quality Standards (PEQS). The monitoring results indicate that the concentrations of Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Nitrogen Dioxide (NO₂), particulate matter (PM₁₀), and noise levels were found to be within the permissible limits prescribed by PEQS. The recorded values reflect that the surrounding environment of the proposed project site is environmentally acceptable and no significant adverse impacts related to ambient air emissions or noise pollution were observed during the monitoring period.

Table 6.2: Ambient Air and Noise Quality at Site

S. NO.	Location	CO (mg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	Noise (dBA)	PM ₁₀ (µg/m ³)	Remarks
	PEQS	10	120	80	75	150	
1	Inside Premises	1.8	7.4	48.0	46.7	99	Within PEQS Limits

6.5.2 Ground Water Quality

Ground water quality monitoring was carried out at the project site to assess the baseline condition of underground water resources and to evaluate compliance with the applicable Pakistan

Environmental Quality Standards (PEQS) for drinking water. The analysis included important physico-chemical parameters such as pH, odour, chloride, turbidity, colour, sulphide, total dissolved solids (TDS), and sulphate concentration. The laboratory results indicate that all tested parameters were found within the permissible limits of PEQS, while sulphide was observed below the detectable limit (BDL). The monitored groundwater quality reflects that the water conditions in and around the project area are satisfactory and no significant contamination was identified during the assessment.

Table 6.3: Ground Water Quality at Site

Sr. No.	Parameters	Unit	PEQS	Concentration	Method
1	pH	-----	6.5 to 8.5	7.44	pH Meter
2	Odour	TON	Non Objectionable	0	Dilution
3	Chloride	mg/l	<250	28.0	Digital Titrator
4	Turbidity	NTU	<5	0.65	Turbidity Meter
5	Colour	ptcu	<15	2.0	Spectrophotometer
6	Sulphide	mg/l	-----	BDL	Spectrophotometer
7	Total Dissolved Solids	mg/l	<1000	257.0	Evaporation
8	Sulphate	mg/l	-----	32.0	Spectrophotometer

(Note: All Monitoring Reports are Annexed-B at the end of this report).

6.6 Analysis of Site Suitability

The selection of Proposed Site, Phase 2, M-3 Industrial City (FIEDMC) for the proposed pharmaceutical facility has been evaluated against environmental, regulatory, and technical benchmarks. The following analysis confirms the site's appropriateness for the manufacturing of veterinary pharmaceuticals and nutraceuticals.

6.6.1 Regulatory Compliance (Not Prohibited)

The project site is situated within a government-approved Special Economic Zone (SEZ) specifically master-planned for industrial development.

Pharmaceutical manufacturing, chemical processing, and logistics are explicitly listed as allowed activities for this zone. There are no statutory prohibitions or "Red Zone" classifications affecting the plot. The development is in full alignment with the land-use policies of the Faisalabad Industrial Estate Development and Management Company (FIEDMC).

6.6.2 Environmental Sensitive Receptors

This section identifies the physical, biological, and human components of the environment that may be susceptible to impacts from the construction and operation of the proposed pharmaceutical unit.

The assessment of sensitive receptors is categorized into two primary zones based on their proximity to the project site:

- **Primary Impact Zone (500-meter radius):** Areas immediately adjacent to the site boundary.
- **Secondary Impact Zone (1-km to 2-km radius):** Areas that may experience indirect or cumulative impacts.

Table 6.4 Major Environmentally Sensitive Receptors (ESRs)

Receptor Category	Specific Receptor Name	Distance/Direction from Site	Sensitivity Level
Agricultural	Productive Crop Fields	Immediate Vicinity (Surrounding the site)	High
Human Settlements	Oddan Wala Village	1 – 2 km	Medium/High
Human Settlements	Bhotay Wala Village	1 – 2 km	Medium/High
Human Settlements	Bhopal Wala Village	1 – 2 km	Medium/High
Industrial (Cumulative)	Chemical & Polyester Factories	~1 km	Medium (Cumulative)

The immediate surroundings of the Gibz Pharma Proposed site are characterized by active agricultural fields. These are primary receptors for any potential soil contamination or changes in

drainage patterns. The presence of these fields necessitates strict control over chemical storage and wastewater discharge to prevent degradation of crop yields for local farmers.

Three major residential clusters—Oddan Wala, Bhotay Wala, and Bhopal Wala—are located within a 1-km to 2-km radius. While they are outside the immediate 500-meter "no industry" buffer, they remain sensitive to potential air quality changes, noise from logistics, and impacts on the local groundwater table.

The presence of chemical and polyester factories within the 1-km range indicates an existing industrial baseline. The proposed project must consider the cumulative impact of these existing emissions alongside its own operational footprint to ensure regional environmental standards are maintained.

The area consists of sparse indigenous shrubs and grasses. These pockets of vegetation serve as receptors for dust (particulate matter) during the construction phase.

6.6.3 Compatibility with Surroundings

The project is highly compatible with the existing industrial fabric of the M-3 Industrial City.

The facility is surrounded by similar industrial units (chemicals and textiles), creating a cohesive industrial zone. To ensure compatibility with neighboring food or general medicine units, the project includes a Separate Penicillin Mini-Facility.

This isolated unit is specifically designed for total cross-contamination control, adhering to international safety standards. The 49,534 sq. ft. facility is designed to integrate seamlessly with the zone's heavy-duty road networks and security protocols.

5.6.4 Physical and Technical Suitability (Not Unsuitable)

The site provides the specialized infrastructure necessary for a pharmaceutical formulation plant.

- Direct access to gas, electricity, and water through established industrial corridors ensures the reliability of utilities required for quality control and microbiological testing.
- Proximity to the M-3 Motorway (Sahianwala Interchange) facilitates the efficient transport of raw materials and the distribution of finished veterinary products.

- The land is leveled and equipped with drainage, making it physically ready for the construction of manufacturing halls and storage warehouses without requiring extensive ecological modification.

CHAPTER-07

STAKEHOLDERS CONSULTATION

CHAPTER-07

STAKEHOLDERS CONSULTATION

7.1 Introduction

The consultation process aims to foster transparency, identify potential environmental and social impacts early, and build a consensus among various interest groups.

7.2 Methodology

Consultations were carried out through face-to-face meetings and structured feedback forms.

Two primary groups were targeted:

-  Institutional Stakeholders: Officials from FIEDMC and the Irrigation Department.
-  Community Stakeholders: Residents and workers from neighboring areas such as Chak Jhumra, Faisalabad, and Sahianwala.

7.3 Key Stakeholder Groups

7.3.1 Proponent's Environment Management Team

The proponent has established a dedicated Environment Management Team (EMT) responsible for the internal oversight of the project's ecological footprint. During the consultation phase, the EMT focused on aligning the project's technical design with the Punjab Environmental Quality Standards (PEQS). EMT focused on aligning the project's technical design with the Punjab Environmental Quality Standards (PEQS).

Their primary role is to ensure that the commitments made during these consultations—such as effective wastewater treatment and rigorous emission controls—are translated into operational reality.

7.3.2 The Responsible Authority

The Management Team of the Facility acts as the responsible authority for the day-to-day implementation and enforcement of environmental protocols. They are tasked with ensuring that all operational activities remain within the legal framework provided by the EPA and FIEDMC.

7.3.3 Other Departments and Agencies

Consultations were extended to external agencies including FIEDMC and the Irrigation Department to address regional impacts. Officials such as Col. (Retd.) Pervaiz and Maj. Bajwa (FIEDMC) focused on industrial growth, while Samar Iqbal and Junaid Akbar (Irrigation Dept)

7.3.4 Environmental Practitioners and Experts

The expert delegation from Environmental Consultancies & Options (ECO) conducted a comprehensive site reconnaissance of the proposed project area to engage in multi-level stakeholder dialogues. This consultative process involved structured discussions with personnel from adjacent industrial units and extensive outreach to the local communities surrounding the industrial estate.

The surveyed demographic comprised a diverse range of professionals—including healthcare practitioners, legal experts, civil servants, educators, and members of the agricultural and business sectors. These stakeholders provided substantial qualitative insights regarding the project's scope. The consensus among the participants was overwhelmingly favorable, with most expressing positive outlooks regarding the developmental impact and socio-economic contributions of the proposed facility.

7.3.5 Affected and Wider Community

Consultations with local inhabitants and workers from areas like Chak Jhumra, Sahianwala, and Faisalabad revealed strong communal support.

- **Employment:** Respondents including Irfan (Guard), Nadeem (Gardener), and Aslam (Laborer) expressed that the project is a beacon for local job creation.
- **Socio-Economic Growth:** Community members like Shahzad (Driver) and Amir (Gardener) noted that the industrial expansion in FIEDMC is seen as a driver for the local economy.
- **Environmental Consensus:** The majority of the community stated they had "no objection" to the project, under the condition that it contributes to the area's development without compromising local health.

The feedback from government and industrial departments was highly technical and supportive.

Table 7.1 Feedbacks from Govt. Officials

Name	Designation / Department	Key Feedback / Concerns
Col. (Retd.) Pervaiz	Chief Security Officer, FIEDMC	100% positive outlook for development.
Maj. Bajwa	Manager, FIEDMC	Positive toward employment generation.
Samar Iqbal	SE LCC West, Irrigation Dept	Emphasized that the project must manage wastewater effectively.
Fatima Mobeen	SE QB Link, Irrigation Dept	Noted the project provides good opportunities for employment.
Farukh Touseef	XEN FSD Canal, Irrigation Dept	Stated the facility should strictly follow emission SEQS.
Junaid Akbar	XEN Operation, Irrigation Dept	Highlighted the necessity of managing wastewater.
Dr. Farrukh	Pharmacist, FIEDMC	Viewed the project as "Good for development."

Figure 7.1 Pictorial Views of Public Consultation





7.4 Conclusion

The overall sentiment from both institutional and community stakeholders is positive. However, the recurring technical requirement from the Irrigation Department regarding wastewater management and emission standards must be addressed in the Environmental Management Plan (EMP). The local community's expectation for job priority should also be considered a key social benefit of the project.

Feedback Forms are attached as Annexes-E

CHAPTER-08

IMPACT ASSESMENT

CHAPTER-08

IMPACT ASSESSMENT

8.1 Methodologies for Impacts Identification

Potential environmental and social impacts arising from the proposed Gibz Pharmaceuticals (Pvt) Ltd. project activities were identified through a systematic approach. This involved a comprehensive review of the pharmaceutical formulation processes, a detailed study of the baseline environment within Phase 2 of the FIEDMC M3 Industrial City, and an analysis of applicable national and provincial environmental regulations. Furthermore, relevant literature on veterinary medicine manufacturing and expert professional judgment were utilized to ensure all potential interactions between the project and the environment were captured.

8.1.1 Checklist Methodology

To ensure a structured evaluation, the Checklist Methodology was adopted for the initial screening and identification of impacts. This methodology allows for a clear visualization of project activities—ranging from site preparation to high-tech formulation—against environmental receptors such as air quality, groundwater, and local socio-economics. In addition to the checklist, professional judgment was applied to evaluate "Residual Impacts," which are the remaining environmental effects anticipated even after the successful implementation of the proposed mitigation measures and GMP (Good Manufacturing Practice) protocols.

Table 8.1: Checklist of Environmental Impacts

Potential Environmental Impacts	Significance of Impact				Recommended Mitigation Measures
	None	Small	Medium	Large	
A. Due to Project Location					

Changes in hydrology affecting existing property values of land		✓ ST			Careful design of the facility's foundation and drainage will prevent any alteration to local water movement that could affect neighboring plot values.
Changes in drainage pattern/ water flow obstruction		✓ ST			The site will utilize the pre-existing industrial estate drainage network to avoid obstructing natural water flow.
Changes in land uses		✓ LT			The site is transitioning from vacant industrial land to an active manufacturing facility, which is consistent with the FIEDMC master plan.
Loss of ecology		✓ ST			Since the area is a developed industrial zone, natural ecology is minimal; however, minor vegetation removal will be offset by a plantation plan.
Displacement of population/Resettlement	✓				The project is located in an unoccupied, designated industrial zone; no residential resettlement is required.
Loss of Historical/monuments/cultural values	✓				There are no known archaeological or cultural heritage sites within the plot boundaries.
Endangering of species	✓				No endangered flora or fauna are present in this heavily industrialized sector.
Environmental aesthetics		✓ ST			The industrial structure will change the skyline; this is mitigated by maintaining a 30-40% green area.
B. Due to Project Design					

Unnecessary damages because Operation & Maintenance (O&M) requirements are too high		✓ ST			The use of GMP-compliant, modern machinery ensures that operational requirements are sustainable and do not lead to environmental degradation.
Assumed pollution removals not realized		✓ ST			Rigorous selection of air filtration and waste systems ensures that the designed pollution control efficiency is achieved.
Environmental pollution control operations		✓ ST			Regular monitoring and calibration of control devices like HEPA filters prevent operational failures.
Impairment of downstream beneficial water uses	✓				All wastewater is directed to the industrial sewer; no direct discharge to local water bodies occurs.
Impacts on adjacent land economic users including recreation/tourism		✓ ST			Operations are confined within plot boundaries, ensuring no negative economic interference with neighboring industries.
Intensification of national socioeconomic imbalances			✓ LT		The project supports national self-reliance in veterinary medicine, helping balance the economy.
Traffic congestion and nuisances along routes		✓ ST			The project is located in Phase 2 of M3 Industrial City. While the internal road network is designed for heavy traffic, the cumulative effect of multiple industries can cause bottlenecks at the Sahianwala Interchange and the main FIEDMC entry/exit gates during shift changes.
C. Construction & Decommissioning Phase					
Changes in land use		✓ LT			The physical transformation of the site begins in this phase.

Environmental aesthetics	✓				Construction is a temporary phase and standard site hoarding will maintain a tidy appearance.
Water pollution		✓ ST			Managed by providing temporary septic tanks for workers and preventing runoff from construction material piles.
Dust Emissions			✓ ST		Controlled through regular water sprinkling on dry soil and unpaved areas.
Gaseous emissions		✓ ST			Emissions from construction vehicles are minimized through regular mechanical tuning.
Run off erosion		✓ ST			Proper piling of excavated earth and silt traps prevents erosion during rainy periods.
Increased Noise & Vibration levels			✓ ST		Short-term medium impact. Limited to daylight hours to minimize disturbance; machinery will be well-lubricated.
Uncovered cut & fill trenches/areas		✓ ST			Trenches will be backfilled promptly or fenced off to ensure safety and stability.
Explosion/fire hazards/hazardous materials spills		✓ ST			Mitigation includes strict storage protocols for fuels and the presence of fire extinguishers on-site.
Sanitation disease hazards		✓ ST			Prevented by providing clean drinking water and proper waste disposal facilities for the labor force.
Thrust Boring/ Trenching / quarrying/blasting hazards		✓ ST			Managed through strict engineering supervision and safety barriers.

Workers' accidents/ health & safety risks			✓ ST		Mitigated through mandatory PPE use and regular safety briefings.
Blockage of wildlife passageways	✓				The area is fenced and does not serve as a wildlife corridor.
D. Operational Phase					
Inadequate Operation & Maintenance		✓ ST			Prevented by following a strict preventive maintenance schedule for all pharmaceutical equipment.
Inadequate operations phase/environmental monitoring		✓ ST			The EMP budget ensures regular testing of air, noise, and water quality.
Hazards to workers' health & safety		✓ ST			Managed through specialized HVAC for air purity and chemical safety training for handling APIs.
Air quality deterioration		✓ ST			High-efficiency filters in the production halls and proper stacks for generators protect the air.
Increased noise levels		✓ ST			Industrial noise is contained within the building structure and further dampened by the boundary tree plantation.
Water resources' contamination		✓ ST			Avoided by discharging only pre-treated, non-hazardous wastewater into the FIEDMC sewer.
Lowering of Groundwater table		✓ ST			The facility will implement water conservation measures and leak detection to reduce total withdrawal.
Land/ soil contamination		✓ ST			Prevented by using sealed storage containers and spill containment trays for all liquid chemicals.

Nuisance to public due to industrial & transportation Activities		✓ ST			Since the plant is deep within an industrial estate, it is far from residential populations.
Changes in the human settlements	✓				The project does not induce new residential settlements in the immediate industrial vicinity.
Depreciation of environmental aesthetics		✓ ST			Ongoing landscaping and facility maintenance ensure the site remains aesthetically pleasing.

Note: ST = Short Term, LT = Long Term

8.2 Evaluation of Impacts

The evaluation of impacts for the Gibz Pharmaceuticals project reveals that the Design Phase has minimal environmental interference, focusing primarily on necessary land-use transitions. During the Construction Phase, temporary physical stressors such as air quality and noise

The Operational Phase emerges as the most significant period for socio-economic development, contributing high positive impacts (+3) to both local employment and national economic growth. While operational water resource consumption presents a moderate risk (-2), it is addressed through the robust utility infrastructure provided by the FIEDMC industrial estate. Overall, the matrix demonstrates that the long-term economic and ecological gains, such as the site's green belt development, successfully outweigh the transient disturbances of the construction period.

Scoring Key:

- -3 to -1: *Low to High Negative Impact*
- +1 to +3: *Low to High Positive Impact*
- 0: *Negligible / No Impact*

Table 8.2: Impacts Matrices

Environmental Receptors	Design Phase	Construction Phase	Operational Phase
Physical Environment			
Air Quality & Dust	0	-3	-1

Water Resources (Groundwater)	0	-1	-2
Noise & Vibration	0	-3	-2
Soil Stability & Quality	-1	-2	-1
Ecological Environment			
Vegetation & Flora	-1	-1	+2
Local Fauna/Wildlife	0	-1	0
Socio-Economic			
Local Employment	+1	+2	+3
Public Health & Safety	0	-2	-1
Traffic & Logistics (M3IC)	0	-2	-1
National Economic Growth	+1	+1	+3

Matrix Analysis

- **Design Phase:** Impact is minimal. The main focus is Land Use Change (-1) as the site transitions to industrial, balanced by positive Economic Planning (+1).
- **Construction Phase:** This phase sees the highest physical stress, specifically in Air Quality (-3) and Noise (-3) due to earthworks and heavy machinery in FIEDMC. These are temporary and mitigated by water sprinkling and daylight-only shifts.
- **Operational Phase:** This is the most beneficial phase for the region, showing a High Positive (+3) for Employment and National Economy. The primary environmental risk is Water Resources (-2), which is managed through the integrated drainage and the industrial estate's treatment protocols.
- **Ecological Gain:** Note the +2 in the Operational phase; this reflects the long-term benefit of your Tree Plantation Plan (150–200 trees) once the facility is established.

8.2. Characteristics of Impacts

The impacts are characterized by following various aspects such as:

- **Nature:** Positive or negative, direct or indirect.
- **Magnitude:** This can be low, medium or high.

- **Extent/Location:** This can be site-specific, local, regional, national or international.
- **Timing:** Construction, operation and decommissioning.
- **Duration:** Short term, medium term, long term and permanent.
- **Reversibility:** Reversible or irreversible.
- **Risk:** This can be low, medium or high.

Table 8.3: Characterization of Impacts

Categories	Impact Nature & Timing	Characteristics (Detailed Analysis)
Nature	Direct & Indirect	Construction dust and noise are Direct impacts. Employment generation and regional economic growth are Indirect positive outcomes.
Magnitude	Medium to High	Physical disturbances like dust are Medium. Socio-economic benefits and pharmaceutical wastewater potential are categorized as High.
Extent & Location	Site-Specific & Local	Noise and spills are Site-Specific (Plot 227-A). Traffic and air emissions are Local (M3 Industrial City Phase 2).
Timing	Construction & Operational	Land clearing and civil works occur during the Construction phase. Formulation and utility usage occur during the Operational phase.
Duration	Short-Term & Long-Term	Noise and vibration are Short-Term (temporary). Land use change and economic contributions are Long-Term/Permanent.
Reversibility	Reversible & Irreversible	Air and noise impacts are Reversible once activities stop. Land transformation and groundwater withdrawal are Partially Irreversible.
Risk	Low to Medium	Chemical spills are Low Risk due to GMP/isolated design. Occupational safety risks are Medium, managed by mandatory PPE.

Summary of Characteristics:

- **Direct Impacts:** Primarily occur during the construction phase (e.g., earthworks) and at the specific point of emission (e.g., the generator stack).
- **Short-Term Timing:** Refers to the 24-month construction period. These impacts disappear once the facility is built.
- **Long-Term Duration:** Refers to the life of the project (20+ years). This includes the positive impact of your Green Belt plantation and the provision of veterinary medicines to the national market.

- **Reversibility:** Most negative impacts (dust, noise, traffic) are highly reversible through the application of the mitigation measures we discussed, such as water sprinkling and off-peak logistics scheduling.

CHAPTER-09

SCREENING OF POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

CHAPTER-09

SCREENING OF POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This chapter evaluates the potential environmental and social impacts associated with the establishment and operation of Gibz Pharmaceuticals (Pvt) Ltd. in FIEDMC, Faisalabad. The assessment covers the project's entire lifecycle, from design and construction to the operational phase, ensuring that all identified impacts are matched with robust, site-specific mitigation strategies.

9.1 Project Location Impacts

The selection of the site at Plot #227-A, Phase 2, FIEDMC, M3 Industrial City significantly influences the project's environmental footprint.

Impact:

Being located within a designated industrial estate (FIEDMC) minimizes "siting" impacts on residential communities. However, the proximity to other industrial units requires careful management of shared resources.

Mitigation:

The Proposed project is strictly adhering to the FIEDMC Master Plan and land-use regulations. Site coordinates (31.609607, 73.195607) place the facility within a zone equipped with professional drainage and utility corridors, reducing the need for extensive off-site infrastructure development. A 30–40% Green Area is integrated into the site plan to act as a natural buffer and carbon sink.

9.2 Design Phase Impacts

Environmental considerations must be integrated at the engineering level to prevent long-term operational issues.

Impact:

Risk of cross-contamination (especially penicillin) and inefficient energy/water consumption.

Mitigation:

A dedicated Penicillin mini-facility has been designed to be physically isolated with independent HVAC systems to prevent β -lactam contamination.

Design specifications for machinery (Tray Dryers, Cone Mixers) favor energy-efficient models to keep energy consumption within the 50–100 kWh/day range.

9.3 Construction Phase Impacts

The construction phase is estimated to span two years and will involve a daily workforce of 15–20 personnel. While these impacts are generally temporary, they require rigorous management.

9.3.1 Air Quality and Dust

Impact:

Excavation, material transport, and curing activities (requiring approximately 12m³/day of water) can generate significant dust.

Mitigation:

To mitigate this, the project will implement regular water sprinkling on unpaved areas, ensure the covering of loose materials during transport, and mandate that all construction vehicles possess valid fitness certificates.

9.3.2 Noise and Vibration

Impact:

The operation of mixers, cutters, and temporary generators poses a noise impact.

Mitigation:

Construction activity limited to daylight hours (8:00 AM – 5:00 PM). Use of well-maintained machinery to minimize mechanical noise.

9.3.3 Waste and Labor Management

Impact:

The generation of construction debris and domestic waste requires the establishment of designated collection points.

Mitigation:

The Proposed project will provide basic sanitation and mandatory Personal Protective Equipment (PPE), such as helmets, gloves, and boots, for all workers. To avoid depleting local community supplies, water will be sourced exclusively from a designated groundwater tube well.

9.4 Operational Phase Impacts

The operational phase represents the longest duration of impact, driven by the production of veterinary pharmaceuticals.

9.4.1 Wastewater Management

Impact:

The facility will generate approximately 30m³/day of effluent from washing, cleaning, and domestic use. Since the production process involves formulation rather than chemical synthesis, the wastewater is largely non-hazardous.

Mitigation:

Sewerage-water will be discharged to the FIEDMC sewerage system, while process wastewater will be treated in the proposed treatment plant prior to discharge, as detailed in Annexure-J.

9.4.2 Air Emissions and Noise

Impact:

Potential impacts include emissions from the 100 kVA backup generator and particulate matter from powder filling.

Mitigation:

To mitigate these, the generator will be housed in a soundproof acoustic enclosure, and all heating equipment chimneys will meet PEQS height requirements for optimal dispersion.

Local exhaust ventilation and dust collectors will be operational in all powder-handling sections to protect worker health and ambient air quality.

9.4.3 Solid and Hazardous Waste

Impact:

Daily operations will generate 50–100 kg of waste, including packaging materials and pharmaceutical waste.

Mitigation:

Waste will be managed through a systematic segregation process using color-coded bins for domestic, recyclable, and hazardous streams. Expired or contaminated APIs (e.g., Tylosin, Amoxicillin) will be stored in labeled, ventilated areas and disposed of via EPA-certified contractors.

Penicillin waste will be managed under strict, isolated protocols to prevent environmental exposure, ensuring compliance with international Good Manufacturing Practices (GMP) and local regulations.

9.5 Potential Environmental Enhancement Measures (CSR)

The Proposed Project is committed to going beyond "neutral" impact to provide positive environmental and social contributions.

- ✚ **Tree Plantation Drive:** A dedicated budget of PKR 500,000 has been allocated for a comprehensive plantation plan, targeting the growth of 150–200 trees.

The selection focuses on native species such as Neem, Amaltas, and Gulmohar, which are well-suited to the Faisalabad climate and will serve to enhance local biodiversity while acting as natural air purifiers.

- ✚ **Renewable Energy Integration:** To minimize the project's carbon footprint and reduce reliance on the FESCO grid, the company is actively exploring the installation of a rooftop solar power system. Given the extensive 49,534 sq. ft. of available roof space, this initiative aims to harness solar energy to offset a significant portion of the facility's operational electricity load.
- ✚ **Veterinary Community Outreach:** As part of its social responsibility toward the livestock and poultry sectors, Proposed Project will organize free veterinary camps. These camps will provide essential medical consultations and support to local farmers in the Faisalabad region, ensuring better animal health outcomes in the facility's surrounding areas.
- ✚ **Local Employment Prioritization:** The project is committed to stimulating the local economy by prioritizing the recruitment of residents from the surrounding communities. The initial operational phase aims to create over 100 job opportunities, ranging from skilled technical roles in the labs to support and administrative positions.
- ✚ **Water Conservation Initiatives:** To ensure sustainable resource management, the facility will be equipped with modern water-efficient fixtures across all administrative and cleaning blocks. These measures are designed to optimize usage and maintain the groundwater extraction rate well below the projected 35m³/day, thereby preserving the local aquifer.

CHAPTER-10

**ENVIRONMENTAL
MANAGEMENT AND
MONITORING PROGRAM**

CHAPTER-10

ENVIRONMENTAL MANAGEMENT AND MONITORING PROGRAM

10.1 Executive Overview of the EMMP

The Environmental Management and Monitoring Program (EMMP) for Gibz Pharmaceuticals (Pvt) Ltd. serves as the operational manual for sustainable pharmaceutical manufacturing. This chapter outlines the rigorous protocols designed to mitigate the environmental footprint of the facility, located at Plot #227-A, Phase 2, FIEDMC, Faisalabad.

The EMMP is not a static document but a dynamic management tool that evolves with the project. It integrates the requirements of the Punjab Environmental Protection Act (Amended 2014), DRAP Good Manufacturing Practices (GMP), and the National Environmental Quality Standards (NEQS). The primary objective is to balance high-yield veterinary medicine production with the preservation of the local ecosystem.

10.2 Phase I: Design and Pre-Construction Phase

This phase focuses on "Prevention through Design" (PtD). It ensures that environmental safeguards are integrated into the engineering blueprints before ground is broken.

Table 10.1: EMMP for Design and Planning Phase

Environmental Aspect	Potential Impact	Mitigation/Design Action	Responsibility	Supervision
Site Layout	Cross-contamination of Antibiotics	Segregated HVAC and entry/exit for Penicillin unit.	Construction Contractor	Facility Manager

Wastewater	Soil/Water contamination	Inclusion of a neutralization tank in the plumbing design.	Construction Contractor	Facility Manager
Air Quality	Pharmaceutical dust	Integration of Dust Collectors and HEPA filters in the HVAC system.	Construction Contractor	Facility Manager
Resource Use	Energy/Water waste	Selection of energy-efficient lighting and low-flow water fixtures.	Construction Contractor	Facility Manager
Regulatory	Legal Non-compliance	Acquisition of IEE/EIA approval from Punjab EPA.	Construction Contractor	Facility Manager

10.3 Phase II: Construction Phase

The construction phase is expected to last 2 years. The focus here is on managing the physical footprint of building the 49,534 sq. ft. facility.

Table 10.2: EMMP for Construction Phase

Activity	Environmental Impact	Mitigation Action	Monitoring Frequency	Responsibility
Earthwork	Dust (PM ₁₀)	Water sprinkling on unpaved roads and soil heaps.	Twice Daily	Site Engineer
Machinery Ops	Noise & Vibration	Restricting work to 8 AM – 6 PM; regular equipment tuning.	Weekly Check	Site Engineer

Waste Gen.	Construction Debris	Segregation of steel, wood, and concrete for recycling or authorized disposal.	Continuous	Site Engineer
Labor Camp	Domestic Sewage	Provision of temporary soak pits and mobile toilets.	Daily Inspection	Site Engineer
Safety	Injuries/Falls	Provision of Helmets, Vests, and Boots; First Aid kit on-site.	Daily Walkthrough	Site Engineer
Plantation	Landscape Loss	Initiation of the 150–200 tree plantation plan at the boundary.	Monthly	Site Engineer

10.4 Phase III: Operational Phase

This is the most critical phase for a pharmaceutical unit, focusing on long-term sustainability and compliance with NEQS and GMP.

Table 10.3: EMMP for Operational Phase (Production & Logistics)

Aspect	Mitigation Measure	Monitoring Parameter	Frequency	Responsibility
Air Emissions	Stack height for 100 kVA Generator and use of low-sulfur fuel.	(NO _x , SO _x , CO)	Bi-Annually	Facility Manager
Indoor Air	Operation of Dust Collectors & HEPA filters in powder sections.	Air Changes & Particulate Count	Monthly	Facility Manager

Effluent	Neutralization of wash water before discharge to FIEDMC sewer.	pH, TDS, BOD, COD	Monthly	Facility Manager
Solid Waste	Segregation into General, Hazardous, and β -lactam waste.	Waste Manifest Records	Daily	Facility Manager
Penicillin	Negative pressure maintenance and dedicated PPE.	Pressure Differential ΔP	Daily/Continuous	Facility Manager
Noise	Acoustic enclosure and vibration pads for the generator.	Boundary Noise Levels	Quarterly	Facility Manager
Chemicals	Temperature (15-25°C) and Humidity (<60%) control in warehouse.	Temp/RH Logs	Every Shift	Facility Manager

10.5 Schedule for Implementation and Environmental Budget

The financial and temporal commitment to environmental safety is integrated into the core business model of Proposed Project.

10.5.1 Implementation Timeline

- **Pre-Construction:** Environmental Baseline Audit, PPE procurement, and EPA NOC acquisition.
- **Construction (Year 1-2):** Monthly site inspections, safety drills for laborers, and perimeter tree plantation.
- **Commissioning:** Validation of HEPA filters and HVAC pressure balancing.
- **Operation (Ongoing):** Bi-annual NEQS testing and annual environmental reporting.

10.5.2 Revised Environmental Budget Allocation

The Proposed Project has earmarked PKR 2.0 Million for the initial EMP setup. This increased upfront investment is designed to reduce long-term environmental risks and ensure compliance with stringent regulatory standards.

Table 10.4: 5-Year Estimated Environmental Expenditure

Expenditure Category	Year 1 (PKR)	Year 2 (PKR)	Year 3-5 (Annual)
Pollution Control Hardware	1,000,000	450,000	150,000
Environmental Monitoring	150,000	150,000	200,000
Plantation & Horticulture	400,000	150,000	100,000
Waste Management Services	150,000	200,000	300,000
Training & CSR Activities	300,000	350,000	550,000
Total	2,000,000	1,300,000	1,300,000

The Proposed project has earmarked an initial investment of PKR 2.0 Million for the comprehensive setup of the Environmental Management Plan (EMP), supplemented by a structured schedule for recurring monitoring and maintenance.

The allocation for Waste Management has been specifically scaled to facilitate the immediate implementation of robust waste segregation protocols and secure hazardous material storage systems. Furthermore, the budget emphasizes Capacity Building, with significant funding directed toward training and CSR initiatives to cultivate technical competency and strong community relations during the critical launch phase.

10.6 Environmental Management Team (EMT)

To ensure accountability, a dedicated hierarchy is established. Each role has specific mandates under the EMMP.

10.6.1 Organizational Hierarchy

1. **Chief Executive Officer (CEO):** Ultimate authority for policy and resource allocation.
2. **Environmental Health & Safety (EHS) Manager:** The lead coordinator for all EPA and DRAP compliance.
3. **Production Supervisor:** Responsible for shop-floor adherence to waste segregation.
4. **Quality Control (QC) Head:** In charge of monitoring the lab emissions and chemical storage safety.
5. **External Consultant:** A third-party EPA-certified lab for independent monitoring.

Table 10.5: EMT Roles and Specific Responsibilities

Position	Key Responsibility
CEO	Overall budget approval and commitment to Environmental Policy.
EHS Officer	Implementing the EMMP, training staff, and liaison with Punjab EPA.
Production Manager	Ensuring zero-leakage during the filling and mixing of antibiotics.
Maintenance Engineer	Preventive maintenance of HVAC, Dust Collectors, and Generators.
Security/Safety Head	Managing fire safety equipment and emergency evacuation drills.

10.7 Proposed Environmental Monitoring Program

Monitoring provides the data necessary to verify that mitigation is working. We will follow the Self-Monitoring and Reporting (SMART) rules of the EPA.

10.7.1 Air Quality Monitoring

- **Generator Emissions:** Measured once every six months for (CO), (NO_x), and Smoke density.

- **Indoor Air Quality:** Quarterly monitoring of "Airborne Viable Particles" in the sterile and antibiotic sections.

10.7.2 Water and Noise Monitoring

- **Effluent Quality:** Monthly testing for Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and pH.
- **Noise Pollution:** Noise maps will be created for the facility once a year to identify "High Noise Zones" where earplugs are mandatory.

Table 10.6: Monitoring Framework

Parameter	Method	Frequency	Target Standard
Liquid Effluent	Laboratory Analysis	Monthly	NEQS for Municipal Sewers
Gaseous Stack	Flue Gas Analyzer	Bi-Annual	NEQS for Industry
Ambient Noise	Sound Level Meter	Quarterly	< 75 dB at boundary
Drinking Water	Microbiological Test	Quarterly	WHO Standards

10.8 Reporting and Reviewing Procedures

10.8.1 Internal Documentation

- **Daily Logbooks:** Maintenance of dust collectors and filter pressure drops.
- **Incident Register:** Record of any chemical spills or minor fires, including "Near Miss" reporting.
- **Waste Manifests:** Tracking the quantity of waste leaving the site and the name of the authorized contractor.

10.8.2 External Reporting and Audit

- **Quarterly Progress Report (QPR):** Submitted to FIEDMC management.

-
- **Annual Environmental Report:** A comprehensive summary of monitoring data, plantation survival rates, and CSR impacts.
 - **Management Review Meeting (MRM):** Held every 6 months to adjust the EMMP if monitoring shows any non-compliance.

10.9 Capacity Building and Training Needs

Human error is a leading cause of environmental incidents. Proposed Project will invest in continuous education.

10.9.1 Training Matrix

- **Induction Training:** Every new employee (from the initial 100) will undergo a 1-day "Green Factory Orientation."
- **Specialized SOP Training:** Detailed sessions for Penicillin unit staff on "Containment and Decontamination."
- **Emergency Response:** Live fire-fighting drills and chemical spill containment exercises (simulating a Doxycycline or Amoxicillin spill).

10.9.2 Awareness Programs

To promote environmental stewardship and operational sustainability, the project integrates community engagement with internal resource management. World Environment Day is marked by annual tree planting drives that actively involve local community members, fostering a shared responsibility for the regional ecosystem.

10.10 Waste Management SOP

As a pharmaceutical unit, waste is categorized and handled with extreme caution:

1. **General Waste:** Paper, plastic, and canteen waste (collected in Green Bins).
2. **Hazardous Waste:** Expired raw materials or rejected tablets (collected in Yellow Bins and incinerated).

3. **Infectious Waste:** QC Lab samples and microbiology cultures (autoclaved before disposal).
4. **β -Lactam Waste:** Specifically deactivated with alkaline solutions before disposal to prevent environmental antibiotic resistance.

CHAPTER-11

CONCLUSION

CHAPTER-11

CONCLUSION

This section presents the conclusion of the Environmental Impact Assessment (EIA) study conducted for the proposed Gibz Pharmaceutical Project located in Faisalabad Industrial Estate Development and Management Company (FIEDMC) M-3 Industrial City, Faisalabad. The primary purpose of carrying out this EIA study is to ensure compliance with the applicable environmental rules, regulations, policies, and guidelines of the Pakistan Environmental Protection Agency (Pak-EPA) and Punjab Environmental Protection Agency (EPA Punjab).

Environmental Consultancies and Options (ECO) was engaged to prepare the EIA report for the proposed pharmaceutical manufacturing facility. Based on the requirements of the Terms of Reference (ToR) and objectives of the study, ECO constituted a multidisciplinary team of environmental experts and specialists to undertake the assessment. Baseline environmental and socioeconomic data of the project area was collected through field surveys, laboratory analyses, stakeholder consultations, and available published literature. The collected information was utilized to develop profiles of the existing physical, biological, and socioeconomic environment likely to be influenced by the proposed project activities.

An assessment of the potential environmental and socioeconomic impacts associated with the construction and operational phases of the proposed pharmaceutical facility was conducted. The study identified likely impacts on air quality, noise environment, wastewater generation, solid and hazardous waste management, occupational health and safety, and surrounding community conditions. Appropriate mitigation and environmental management measures have been recommended to minimize potential adverse impacts and to ensure environmentally sound project operations.

The EIA study of the proposed Gibz Pharmaceutical Project has achieved the following objectives:

- Identification of applicable national and provincial environmental regulatory requirements relevant to the proposed development activities.

-
- Identification of the environmental and socioeconomic features of the project area and assessment of the likely impacts of the project on the surrounding environment.
 - Recommendation of appropriate mitigation and environmental management measures to avoid, minimize, and control adverse environmental impacts during project implementation and operation.
 - Development of an Environmental Management and Monitoring Plan (EMMP) to ensure continuous environmental compliance and monitoring throughout the project lifecycle.

After detailed assessment of the proposed project activities and investigation of the project area, the environmental consultants, Environmental Consultancies and Options (ECO), conclude that:

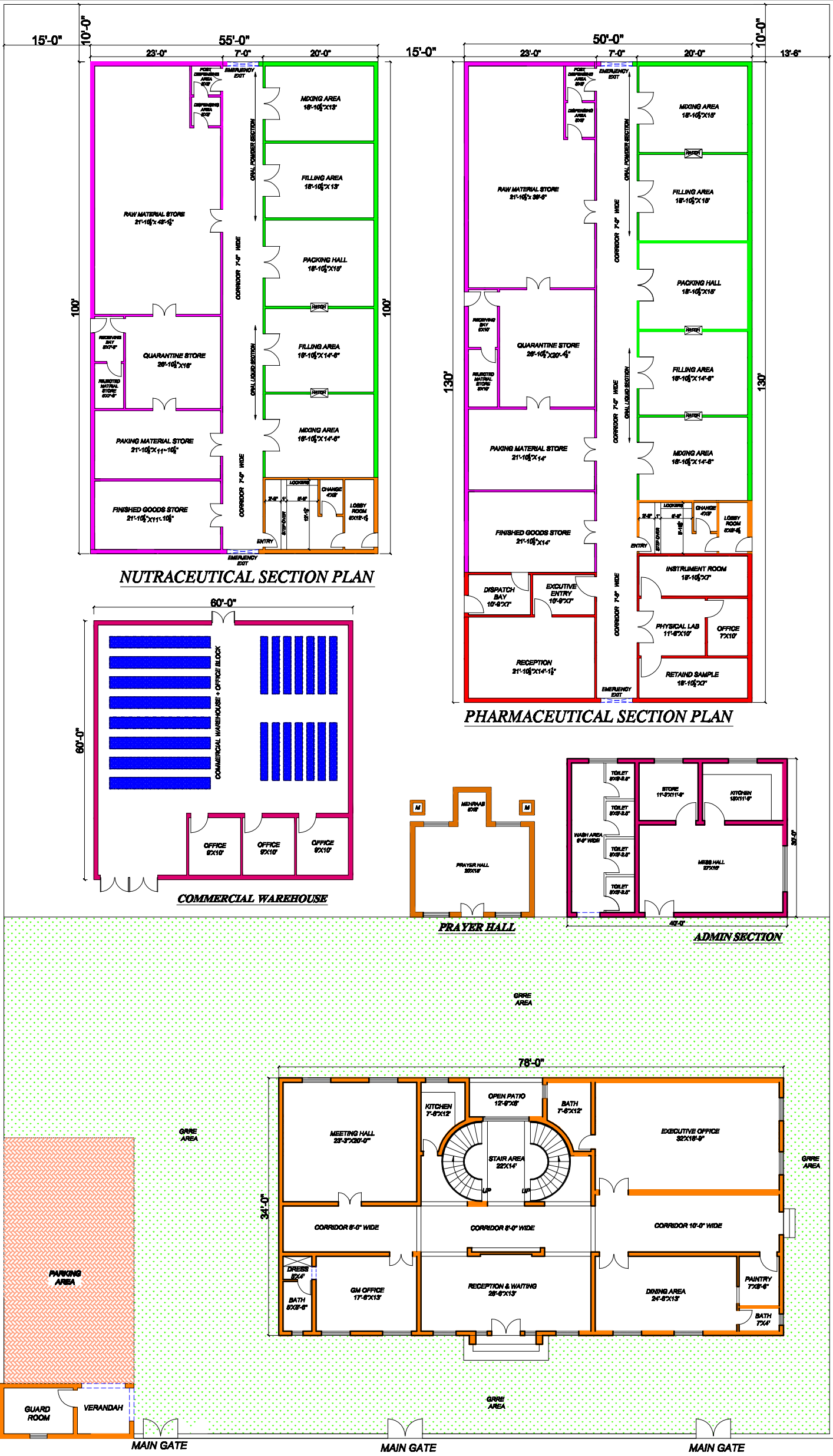
"If the activities are commenced as proposed and defined in this report, and the recommended mitigation and environmental management measures are implemented, the project will not result in any long-term or significant impacts on the environment".

ANNEXURES

ANNEXURE A

145'-0"

250'-0"



Pharmaceutical Section		
Raw Material Store	24*45	1080
Quarantine Store	24*30	800
Packing Material Store	24*20	480
Finish Goods	24*20	480
Dispatch Bay	12*10	120
Exective Entery	12*10	120
Reception	24*20	480
Mixing Area OP	21*20	420
Filling Area OP	21*20	420
Packing Hall	21*20	420
Filling Area OL	21*20	420
Mixing Area OL	21*20	420
Change Room	21*10	210
Insurment Room	21*15	315
Physical Lab	10*10	100
Office	10*10	100
Retained Sample	21*15	315
Total		6500

Neutra Section		
Raw Material Store	26*50	1300
Quarantine Store	26*20	520
Packing Material Store	26*20	520
Finish Goods	26*20	520
Mixing Area OP	23*20	460
Filling Area OP	23*20	460
Packing Hall	23*20	460
Filling Area OL	23*20	460
Filling Area OL	23*20	460
Change Room	17*20	340
Total		5500

LAYOUT PLAN GIBZ PHARMACEUTICALS (PVT) LTD		COVERED AREA	SFT	%AGE
TOTAL AREA OF PLOT = 36250 SFT COVERED AREA = 19952 SFT		PHARMACEUTICAL SECTION	6500 - SFT	17.93%
		NUTRACEUTICAL SECTION	5500 - SFT	15.17%
		PRAYER HALL	300 - SFT	0.83%
		ADMIN SECTION	1200 - SFT	3.31%
		OFFICE / EXECUTIVE SECTION	2652 - SFT	7.32%
		WAREHOUSE	3600 - SFT	9.93%
		GUARD ROOM	200 - SFT	0.55%
		TOTAL COVERED AREA	19,952 - SFT	55.04%

ANNEXURE B



GLOBAL ECO LAB

CERTIFIED LABORATORY FROM EPA PUNJAB

(As per GEL/MS74-PM2.5)

Issue: 02

Issue date: 14/06/21

PAGE: 1 OF 1

AMBIENT AIR QUALITY MONITORING REPORT

Report Reference No: A/49901
Name of Customer: Gibz Pharmaceutical Pvt. Ltd.
Address: 227 A, Phase 2, M-3 Industrial Area Sahiwalwala
Faisalabad-Pakistan
Location: Mentioned Below
Date of Monitoring: 30.04.2026
Date of Completion of Analysis: 11.05.2026

Date: 12.05.2026

S. NO.	Location	CO (mg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	Noise (dBA)	PM ₁₀ (µg/m ³)	Remarks
	PEQS	10	120	80	75	150	
1	Inside Premises	1.8	7.4	48.0	46.7	99	

Deviation from standard method if any: Nil

PEQS: Punjab Environmental Quality Standards

This report is not valid for any negotiation

1. Report Prepared by:

MA CHIEF

2. Checked/Verified by

[Signature]

3. Signature of the incharge of the environmental laboratory:

Name: Dr. Asim Mahmood
Designation: Chief Executive Officer
Date: 12.05.2026

END OF THE REPORT



GLOBAL ECO LAB

CERTIFIED LABORATORY FROM EPA PUNJAB

ENVIRONMENTAL
Page 1 of 12
Date: 12/05/2026
Page 1 of 12

CHEMICAL ANALYSIS TEST REPORT

Report reference No: W49803
Name of Customer: Gibz Pharmaceutical Pvt. Ltd
Address: 227 A, Phase 2, M-3 Industrial Area Sahianwala
Faisalabad-Pakistan
Nature of Sample: Canal Water
Date of sample received: 30.04.2026
Date of completion of analysis: 11.05.2026

Dated: 12.05.2026

Sr. No.	Parameters	Unit	PEQS	Concentration	Method	Remarks
1	pH		6 to 9	7.26	pH Meter	
2	Total Hardness	mg/l		36.0	Digital Titration	
3	Turbidity	NTU		93.0	Turbidity sensor	
4	COD	mg/l	150	15.0	Reflux Method 5800	
5	Total Dissolved Solids	mg/l	3500	92.0	Evaporation	
6	Total Suspended Solids	mg/l	200	182.0	Filtration	

Deviation from standard method if any: Nil
PEQS: Punjab Environmental Quality Standards
BDL: Below detectable limit
NS: Not Specified

1. Report Prepared by:

2. Checked/Verified by:

3. Signature of incharge of the environmental laboratory:

Name: Dr. Asim Mahmood
Designation: Chief Executive Officer
Date: 12.05.2026

END OF THE REPORT



GLOBAL ECO LAB

CERTIFIED LABORATORY FROM EPA PUNJAB

ANALYSIS REPORT
Page No. 1445-1
PAGE 1 OF 1

CHEMICAL ANALYSIS TEST REPORT

Report Reference No. WM49902
Name of Customer Glo Pharmaceutical Pvt. Ltd.
Address 227 A, Phase 2, M-3 Industrial Area Sahianwala
Faisalabad-Pakistan
Nature of Sample Ground Water
Date of Monitoring 30.04.2026
Date of Completion of Analysis 11.05.2026

Date: 12.05.2026

Sr. No.	Parameters	Unit	PEQS	Concentration	Method	Remarks
1	pH		6.5 to 8.5	7.44	pH Meter	
2	Odour	TCN	Non Objectionable	0	Observation	
3	Chloride	mg/l	<250	26.0	Mercuric Nitrate	
4	Turbidity	NTU	<5	0.65	Turbidity Meter	
5	Colour	ptcu	<15	2.0	Spectrophotometer	
6	Sulphide	mg/l		BDL	Spectrophotometer	
7	Total Dissolved Solids	mg/l	<1000	257.0	Evaporation	
8	Sulphate	mg/l		32.0	Spectrophotometer	

Deviation from standard method if any: Nil

PEQS: Punjab Environmental Quality Standards

BDL: Below Detectable Limit

This report is not valid for any negotiation.

1. Report Prepared by: ALA

2. Checked/Verified by: [Signature]

3. Signature of the incharge of the environmental laboratory:
Name Dr. Asim Mahmood
Designation Chief Executive Officer
Date 12.05.2026

END OF THE REPORT

ANNEXURE C

GLOSSARY

Part 1: Acronyms and Abbreviations

- ✚ **API:** Active Pharmaceutical Ingredient – The biologically active component of a drug formulation that produces the intended medicinal effect.
- ✚ **BDL:** Below Detection Limit – A term used in environmental laboratory monitoring indicating that a specific chemical or pollutant is present in concentrations lower than what the testing equipment can reliably measure.
- ✚ **BOD:** Biological Oxygen Demand – A measure of the amount of dissolved oxygen needed by aerobic biological organisms to break down organic material present in a given water sample over a specific time period; used to gauge wastewater quality.
- ✚ **COD:** Chemical Oxygen Demand – An environmental monitoring test that measures the amount of organic compounds in water by determining the mass of oxygen consumed during chemical oxidation.
- ✚ **CSR:** Corporate Social Responsibility – A company's voluntary commitment to manage its social, environmental, and economic effects responsibly and in alignment with public expectations.
- ✚ **DRAP:** Drug Regulatory Authority of Pakistan – The federal autonomous regulatory body responsible for licensing, registering, and ensuring the quality, safety, and efficacy of therapeutic goods and pharmaceutical manufacturing facilities in Pakistan.
- ✚ **ECO:** Environmental Consultancies and Options – The corporate environmental engineering and consultancy firm engaged as the technical experts to conduct this EIA study.
- ✚ **EIA:** Environmental Impact Assessment – A systematic process of identifying, predicting, evaluating, and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made.
- ✚ **EMP / EMMP:** Environmental Management Plan / Environmental Management and Monitoring Program – An operational framework that outlines the mitigation, monitoring, and institutional measures to be taken during the project implementation and operation to eliminate or offset adverse environmental and social impacts.

- ✚ **EPA:** Environmental Protection Agency – The government regulatory authority responsible for administering environmental laws, conducting clearances, and enforcing environmental standards (specifically EPA Punjab in this report).
- ✚ **ERT:** Emergency Response Team – A designated group of trained personnel within the facility structured to take immediate, organized action during chemical spills, fires, or medical emergencies.
- ✚ **ETP:** Effluent Treatment Plant – A specialized industrial treatment facility designed to treat waste wash-water and neutralize harmful chemical residues prior to its safety release into the estate drainage infrastructure.
- ✚ **FDA:** Faisalabad Development Authority – The civic body responsible for urban planning, regulation, and socioeconomic development control across Faisalabad.
- ✚ **FIEDMC:** Faisalabad Industrial Estate Development and Management Company – The public-private partnership entity responsible for developing and managing the M3 Industrial City Special Economic Zone.
- ✚ **GIS:** Geographic Information System – A framework for gathering, managing, and analyzing spatial and geographic data, used in this study for regional aquifer vulnerability mapping.
- ✚ **GMP:** Good Manufacturing Practices – A globally recognized quality assurance system that ensures pharmaceutical products are consistently produced and controlled according to strict quality standards appropriate to their intended use.
- ✚ **HVAC:** Heating, Ventilation, and Air Conditioning – An integrated mechanical system used to control temperature, humidity, and air purity throughout the manufacturing cleanrooms and warehouses.
- ✚ **HEPA:** High-Efficiency Particulate Air [Filter] – A specialized, high-efficiency mechanical air filter capable of trapping microscopic airborne particulate matter, vital for avoiding cross-contamination and preventing the release of pharmaceutical powders into the ambient environment.
- ✚ **IEE:** Initial Environmental Examination – A preliminary, lower-level environmental study mandated for projects with potentially less significant or more easily mitigable environmental impacts compared to those requiring a full EIA.

-
- + **LEV:** Local Exhaust Ventilation – An engineering control system designed to capture dust, fumes, or vapors right at the source of generation (such as during powder mixing or granulation) to protect workers and cleanrooms.
 - + **M3IC:** M3 Industrial City – The specific planned industrial estate in Faisalabad where the project is physically located.
 - + **PEQS:** Punjab Environmental Quality Standards – The legally enforceable limits and parameters enacted by the government defining the maximum allowable concentrations of pollutants in industrial wastewater discharge, ambient air, noise levels, and gaseous stack emissions.
 - + **NOC:** No Objection Certificate – The formal environmental approval certificate issued by the Punjab EPA signifying regulatory clearance for project development.
 - + **O&M:** Operation and Maintenance – The ongoing day-to-day activities related to the running, servicing, and repairing of the facility's manufacturing machinery and pollution control devices.
 - + **PKR:** Pakistani Rupee – The official national legal tender currency of Pakistan used in the financial evaluation and environmental budgeting breakdown of the project.
 - + **PM₁₀:** Particulate Matter 10 – Microscopic airborne particles with an aerodynamic diameter less than or equal to 10 micrometers, monitored as a key indicator of dust emission and respiratory health risks.
 - + **PPE:** Personal Protective Equipment – Protective garments and gear (such as high-grade masks, gloves, safety boots, and suits) worn by personnel to protect against chemical exposure, physical injury, and active pharmaceutical dust inhalation.
 - + **PtD:** Prevention through Design – An architectural and engineering concept focused on integrating environmental, health, and safety safeguards into the baseline layout blueprints before actual ground physical development begins.
 - + **QC:** Quality Control – A dedicated system of laboratory analysis and testing protocols utilized to verify that manufactured pharmaceutical batches meet all specifications and criteria before distribution.

- ✚ **RH:** Relative Humidity – The amount of water vapor present in the air expressed as a percentage of the amount needed for saturation at the same temperature; strictly monitored below 60% in storage warehouses to maintain chemical stability of APIs.
- ✚ **SEZ:** Special Economic Zone – A geographically defined industrial region designated by the government that is equipped with pre-built utility corridors, roads, and specific economic and tax incentives tailored for industrial manufacturing excellence.
- ✚ **SMART:** Self-Monitoring and Reporting Technology / Rules – An environmental compliance rule system under the EPA where industrial proponents systematically test and report their own emission and effluent discharge levels using certified methods.
- ✚ **SS:** Stainless Steel – High-grade, corrosion-resistant alloy steel used to manufacture formulation tanks and pharmaceutical mixing vessels to ensure non-reactivity and ease of sanitation.
- ✚ **TDS:** Total Dissolved Solids – The combined total inorganic and organic substances contained in a liquid in molecular, ionized, or micro-granular suspended form; tracked as a key parameter for industrial wash-water quality.
- ✚ **ToR:** Terms of Reference – A regulatory document defining the specific scope, data requirements, methodologies, and boundaries mandated by the environmental protection agency for compiling the EIA report.
- ✚ **VOC:** Volatile Organic Compound – Organic chemical compounds that have high vapor pressure at ordinary room temperature, resulting in significant vaporization into the air; monitored for chemical odors and emissions from the liquid dosage sections.
- ✚ **WHO:** World Health Organization – The specialized international agency of the United Nations responsible for international public health, whose standards are referenced in the report for drinking water safety.

Part 2: Technical and Environmental Terms

- ✚ **Acoustic Enclosure:** An insulated physical soundproofing structure or casing placed over high-noise equipment, such as the facility's 100 kVA diesel backup generator, to contain and dampen mechanical noise levels below PEQS limits.

- ✚ **Aquifer:** An underground geological layer of water-bearing permeable rock, rock fractures, or unconsolidated materials (gravel, sand, or silt) from which groundwater is extracted.
- ✚ **Area of Influence:** The immediate localized physical zone (stretching 100 to 250 meters from the property boundary lines) that receives direct localized impacts from the facility's routine physical activities.
- ✚ **Baseline Environment:** The existing physical, biological, socioeconomic, and human conditions of the project area surveyed prior to any physical development or manufacturing activities.
- ✚ **Bolus:** Large, elongated solid tablets or capsules manufactured specifically for veterinary usage to administer oral medications to livestock.
- ✚ **Carbon Sink:** A natural system or repository (such as the project's proposed 150–200 trees green belt) that absorbs and stores more carbon dioxide from the atmosphere than it releases, offsetting industrial carbon and dust emissions.
- ✚ **Checklist Methodology:** A structured, systematic evaluation technique consisting of a comprehensive matrix listing project actions against environmental components to initially identify and screen potential impacts.
- ✚ **Cross-Contamination:** The unintentional transfer of physical or chemical contaminants, pathogens, or active pharmaceutical compounds from one product line to another, dangerous particularly in penicillin and general antibiotic mixing areas.
- ✚ **Decommissioning Phase:** The final phase of the project lifecycle involving the permanent closure, dismantling of machinery, safe hazardous containment removal, and environmental restoration of the industrial plot.
- ✚ **DRASTIC Model:** A standardized GIS-based geographic indexing methodology that calculates groundwater pollution vulnerability based on seven hydrogeologic factors: Depth to water, Recharge, Aquifer media, Soil media, Topography, Impact of vadose zone, and Hydraulic Conductivity.
- ✚ **Effluent:** Liquid industrial waste or wash-water generated during facility operation, vessel sanitation, and laboratory work that is systematically collected and neutralized before its final discharge.

- ✚ **Excipient:** An inactive or inert substance (such as citric acid, dextrose, or glycerin) formulated alongside the active ingredient of a medication to serve as a vehicle, binder, or stabilizer.
- ✚ **Flue Gas:** The combustion exhaust gases emitted to the atmosphere through a chimney stack from boilers or generator engines, containing potential combustion pollutants.
- ✚ **Formulation-Based Facility:** A manufacturing plant that relies purely on mixing, blending, granulating, and packaging pre-synthesized active pharmaceutical ingredients (APIs) and excipients into final dosages without conducting raw chemical synthesis or hazardous basic chemical manufacturing.
- ✚ **Granulation:** A pharmaceutical manufacturing process where fine powder particles are gathered and bound together into larger, robust permanent aggregates or granules to ensure uniform flowability and tablet compression.
- ✚ **Green Belt:** A planned perimeter zone of land inside the industrial plot (covering 30–40% of the area) explicitly dedicated to dense tree plantation and landscaping to serve as a dust buffer and sound dampener.
- ✚ **Microclimatic Improvement:** Localized modification of climatic features (such as shade, humidity, and lower ground temperatures) achieved inside the factory premises through the dense plantation of indigenous trees.
- ✚ **Mitigation Measures:** Specific actionable design selections, engineering controls, or operational procedures implemented to avoid, minimize, eliminate, or compensate for adverse environmental and social risks.
- ✚ **Nutraceuticals:** Specialized dietary supplements, food additives, or medicated veterinary formulations designed to provide physiological benefits or support general health and nutrition in poultry and livestock.
- ✚ **Penicillin Mini-Facility:** A completely isolated, physically segregated building module or production cleanroom engineered with independent HVAC zoning and negative pressure to strictly keep antibiotic dust from entering general product spaces.
- ✚ **Primary Impact Zone:** The physical, geographic footprint of Plot #227-A within which direct construction work, ground excavation, and structural operational activities occur.

- ✚ **Rachana Doab:** The low-lying geographic land area located between the Chenab River and the Ravi River in Punjab, characterized by a gentle slope and rolling flat plains.
- ✚ **Residual Impacts:** The remaining environmental or social impacts that are anticipated to persist even after all recommended mitigation actions, engineering controls, and GMP protocols have been successfully deployed.
- ✚ **Scoping Matrix:** A preliminary analytical framework or table mapping out environmental components against potential project interactions to focus the EIA study on large-scale risks while filtering out negligible issues.
- ✚ **Screening:** The initial phase in the environmental assessment hierarchy used to evaluate a project's size, capital expenditure, financial parameters, and manufacturing nature to categorize it under the correct legal schedule for licensing.
- ✚ **Secondary Impact Zone:** The wider environmental study area expanding to a 5-kilometer radius around the industrial site, used to track air emission dispersion, regional groundwater depletion, and socioeconomic changes in nearby rural settlements.
- ✚ **Sequestration [Carbon]:** The process of capturing and removing carbon dioxide from the atmosphere, executed biologically by the green belt trees planted along the facility walls.
- ✚ **Spatial and Temporal Boundaries:** The physical geographic limits (primary and secondary zones) and timeframe horizons (construction, operational, and decommissioning stages) defined to scope the reach of the environmental study.
- ✚ **Water Balance:** A tracking system quantifying the total volumes of groundwater extracted daily versus the volumes consumed in production formulations, lost via evaporation, or directed to industrial sewers.
- ✚ **Waterlogging:** The saturation of soil with groundwater to the extent that it restricts oxygen flow and creates surface puddling, caused regionally by excessive canal seepage and shallow water tables.
- ✚ **Zero Hazardous Effluent Policy:** An environmental commitment maintained by the facility by restricting operations strictly to formulation blending, ensuring that no highly toxic synthesized chemical chemical wastes enter the sewage network.

ANNEXURE D

LIST OF ABBREVIATIONS

Abbreviation	Full Term
API	Active Pharmaceutical Ingredient / American Petroleum Institute
BOD	Biological Oxygen Demand
CC	Construction Contractor
CO	Carbon Monoxide
COD	Chemical Oxygen Demand
CSR	Corporate Social Responsibility
dB	Decibel
DG	Diesel Generators
DRAP	Drug Regulatory Authority of Pakistan
ECO	Environmental Consultancies & Options
EHS	Environment, Health, and Safety
EIA	Environmental Impact Assessment
EMMP	Environmental Management and Monitoring Program
EMP	Environmental Management Plan
EMT	Environment Management Team
EPA	Environmental Protection Agency
EPD	Environmental Protection Department
ETP	Effluent Treatment Plant
FESCO	Faisalabad Electric Supply Company
FIEDMC	Faisalabad Industrial Estate Development and Management Company

GMP	Good Manufacturing Practices
HEPA	High-Efficiency Particulate Air (Filter)
HIV	Human Immunodeficiency Virus
HPLC	High-Performance Liquid Chromatography
HSD	High Speed Diesel
HSE	Health, Safety and Environment
HVAC	Heating, Ventilation, and Air Conditioning
kVA	Kilovolt-Ampere
kWh	Kilowatt-hour
LCC	Lower Chenab Canal
LPG	Liquefied Petroleum Gas
MM	Modified Mericalli
MOGAS	Motor Gasoline
MRM	Management Review Meeting
MSDS	Material Safety Data Sheet
NGO	Nongovernmental Organizations
NOC	No Objection Certificate
NO_x	Oxides of Nitrogen
NS	Not Specified
OGRA	Oil and Gas Regulatory Authority
PEPC	Pakistan Environmental Protection Council
PEPO	Pakistan Environmental Protection Ordinance
PKR	Pakistani Rupee
PM	Particulate Matter

PME	Plant, Machinery, and Equipment
PPE	Personal Protective Equipment
PtD	Prevention through Design
QC	Quality Control
RCC	Reinforced Cement Concrete
RH	Relative Humidity
SEQS	Smart Environmental Quality Standards
SIE	Sundar Industrial Estate
SOP	Standard Operating Procedure
SO_x	Oxides of Sulfur
TA	Technical Assistance
TDS	Total Dissolved Solids
ToR / TOR	Terms of Reference
TSS	Total Suspended Solids
VOCs	Volatile Organic Compounds
VRS	Vapor recovery systems
WWTP	Wastewater Treatment Plant
XEN	Executive Engineer

ANNEXURE E

For GIBZ PHARMA, FIEDMC, Faisalabad

FEEDBACK FORM

Name	Occupation	Area/Address	Feedback	Signature
غریبان	ٹارڈ	جنگھڑا	کوئی مسئلہ نہیں۔	IRFAN
ندیم احمد	صالی	ادڈھاٹا	کوئی مسئلہ نہیں۔	ندیم
محمد فیروز	ٹارڈ	جنگھڑا	کوئی مسئلہ نہیں۔	Farooq
مشاہد علی	ڈرائیور	فیصل آباد	کوئی مسئلہ نہیں۔	مشاہد علی
منور حسین	منزل دور	فیصل آباد	کوئی مسئلہ نہیں۔	منور حسین
اسر عباس	کسان	لوڈ والا	کوئی مسئلہ نہیں۔	اسر عباس
اسلم	مرد دور	جنگھڑا	کوئی مسئلہ نہیں۔	ASLAM
محمد نواز	فیلڈیٹر	جنگھڑا	کوئی مسئلہ نہیں۔	M. Noor
ناقب	فیلڈیٹر	سیالکوٹ	کوئی مسئلہ نہیں۔	ناقب
غریب	کسان	ادڈھاٹا	کوئی مسئلہ نہیں۔	غریب
عاصم	صالی	فیصل آباد	کوئی مسئلہ نہیں۔	(Amir)
الوار	مرد دور	فیصل آباد	کوئی مسئلہ نہیں۔	الوار
شہزاد	ڈرائیور	جنگھڑا	کوئی مسئلہ نہیں۔	Shazad



FOR GIBZ PHARMA, FIEDML, Faisalabad

FEEDBACK FORM

[illegible]

ANNEXURE F

REFERENCES

(For GIBZ PHARMA EIA REPORT)

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4. <https://en-us.topographic-map.com/map-sgp5s8/Faisalabad-City-Tehsil/>
5. <https://en-gb.topographic-map.com/map-4n4rr/Faisalabad/>
6. <https://earthquaketrack.com/pk-04-faisalabad/recent>
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ANNEXURE G

TERMS OF REFERENCE FOR IEE/EIA STUDY

Title of the Assignment	Environmental Impact Assessment (EIA) Report Establishment of Gibz Pharmaceuticals (Pvt.) Ltd. Veterinary & Nutraceutical Facility
Project Area	49, 534 Sq. ft
Project Cost	PKR. 165,174,650
Location of the Assignment	Plot # 227-A, Phase 2, FIEDMC, M-3 Industrial City, Faisalabad

1.0 TERMS OF REFERENCE

The term of reference (TOR) will include the following:

1.1 Executive Summary

This section would allow for a clear understanding of the project proposal and summarize the significant results of the EIA study, e.g. positive and negative environmental, social and economic impacts, options considered, reasons for selection of the proposed option and the measures to be implemented to prevent or mitigate negative impacts or capitalize on positive impacts.

1.2 Introduction

In this section the context of the project and the EIA would be explained, the delineation and justification of the boundary of the study area, general methodology, assumptions and constraints of the study.

1.3 Policy, Legal and Administrative Framework

Outline the pertinent legislation, regulations, policies and standards governing environmental quality, safety and health, protection of sensitive areas, protection of endangered species, siting and land use control at the national and local levels. The examination of the legislation should include the relevant international conventions, protocols and treaties where applicable

- All applicable legislation, regulations, policies and standards in relation to the construction and operation of the development should be highlighted, including but not be limited to the other development permits such as Planning and Building. (Punjab Environmental Protection Act 1997, (As Amended up to 2017)
- Describe traditional land use and prescriptive rights including public access rights.

- Discuss issues relating to provisions for law enforcement and security as it relates to this development.

1.4 Public Participation and Consultation

The proponent should consult with relevant entities and the public throughout the EIA process. Document the public participation. Describe the public participation methods, timing, type of information provided and collected from the public and stakeholder target groups consultations. Instruments used to collect the information must be included in the appendix. The issues identified during the public participation process and discuss the public input that has been incorporated or addressed in the TOR and EIA.

Concerns that were raised by the public but not considered in the EIA must be justified. Public Meetings shall be held in accordance with the Guidelines for Public Presentation at a time and location signed off by the client and EPA

Public meetings shall be held to present:

1. The conceptual design of the project and the TOR before the EIA starts. Feedback received will be used to further refine the TOR.
2. The findings of the EIA when it is completed

1.5 Comprehensive Description of the Proposed Project

This should include but not be limited to the following:

1.6 The Proponent

This section should provide a description/profile of the company proposing to carry out the development project, profile of principals of the company, and business alliances of the company.

1.7 Project Concept & Description

This section should provide detailed description of the project including but not limited to:

- History and background of the project,
- Site location, Site Layout,
 - o Expected project components and alternatives that may be considered by the developer
- Schematic plans,
- Estimated cost of the proposed development,
- Proposed project milestones,

- o If the project is to be done on a phased basis, all phases should be clearly defined and the relevant time schedules provided, supported by maps, diagrams or any other appropriate visual aids,
- Proposed times of operation of the facilities,
- Construction methods and equipment,
- Construction materials.

1.8 Project Infrastructure

Overview of the proposed infrastructure and structural components of the Projects, including but not limited to the conceptual/preliminary design for:

- Water storage and supply,
- Drainage,
- Sewage disposal,
- Solid waste disposal,
- Transportation systems (on land and water),
- Electrical power (fossil energy, wind, sun, wave and tidal),
- Communications and other utility requirements
- Supporting infrastructure on the mainland,

1.9 Project Operations & Maintenance

Proposed operations and maintenance activities including but not limited to:

- Equipment and machinery to be involved, and how these will be mobilized,
- Areas to be used for storage of machinery and material should be clearly indicated,
- Transportation systems or arrangement pre-, during- and post – construction,
- Workforce requirements, including proposals for mobilization and accommodation,
- Health, safety and security systems.

1.10 Description of the Existing Environment

An inventory and assessment of the natural resources in the study area should be conducted for a period equivalent to at least one (1) calendar year adequately representing seasonal, diurnal and nocturnal variations.

Secondary data can be used in the assessment as long as it is representative and relevant. The source of all data (existing or collected for the study) would be disclosed; who collected the information, when and where. All limitations and assumption made must be clearly stated.

The proponent shall submit an inventory of existing data and a statement on the data gaps for review by EPA before starting the EIA.

The following aspects must be described in this section:

1.10.1 Physical

Morphology and morphological processes (Topographical features including bathymetry of surrounding waters Soils & geology of the area), including but not limited to: geological structure, surrounding water bodies, mineral resource potential of the area under study and Existing Infrastructure

- Climate (wind and precipitation), run-off and drainage
- Data to support the use of alternative energy sources (wind solar, wave)
- Air quality
- Water quality
- Identify source of freshwater, including drinking water supply

1.10.2 Natural Hazards

This section would include the following:

- A study on Hurricanes and storm surges in the area under study
- Earthquakes and landslides and the history of such events in the area under study

1.10.3 Biological

This section would include the consideration of the following:

- Flora and fauna survey of project area and surrounding environment,
- Detailed qualitative and quantitative assessment of the economic zone, including inventory (list) and distribution (map) of species.
- Detailed description and qualitative and quantitative assessment of natural habitats and communities including but not limited to area where the project would be initiated;
- Commentary on the ecological health and functions, threats and conservation significance of terrestrial and fresh water habitats.
- Species interdependence, habitats/niche specificity and community structure and diversity would also be considered.

The field data collected shall include, but is not limited to:

- Species lists and distribution for each community (ecosystem) Migratory species, insects and micro-organisms should also be considered,

- A habitat map of the area
- Other benthic features of the proposed development areas as well as the areas of potential impact
- Vegetation profile
- Fish and other fresh water species

1.10.4 Heritage

This section would include the assessment of the existing archeological structures of the area under study and probability of loss of archeological structures during the construction and operation of any project.

1.10.5 Human/Social

This section of the EIA would include the assessment of following:

- Demography, regional setting, location assessment and current and potential land-use
- Description of existing infrastructure such as transportation, electricity, solid waste disposal; water and telecommunications, and public health and safety
- Identification of all the existing resource users (including traditional users) ranging from subsistence utilization of the natural resources to commercial activities
- Public perception of the proposed project inclusive of potential impacts on social, aesthetic, historical and cultural values and any prescriptive rights for usage of the economic zone.

1.10.6 Identification and Assessment of Potential Direct and Indirect Impacts

A detailed analysis of the various project components shall be done in order to identify the potential environmental impacts, both negative and positive, of the project at all stages. The identified impacts must be profiled to assess the magnitude and importance of the impacts. The extent and quality of the available data shall be characterized, explaining significant information deficiencies and any uncertainties associated with the predictions of impacts. The impact must take in account the number and magnitude of mitigation strategies which need to be employed to reduce the risk(s) introduced to the environment. Where possible, impacts must be quantified. Each project activity or impact is to be assessed and ranked for both the magnitude and importance of the impact and presented in a weighted matrix for all the phases of the project (i.e. preconstruction, construction and occupation and operational).

2.0 Recommended Mitigation

Mitigation and abatement measures would be formulated for each potential negative impact identified. This will also include recommendations for the maximization and enhancement of beneficial impacts, energy conservation and the use of green building technology.

2.1 Identification and Analysis of Alternatives

Alternatives to the site location (on other cays or islands), project design, scale, conditions of operation and technology shall be analyzed including the “no-action” alternative. The examination of project alternatives should incorporate the use history of the overall area in which the site is located and previous uses of the site itself. These alternatives must be assessed based on the physical, ecological and socio-economic parameters of the proposed site. Justification for the selection of the chosen alternative(s) shall be included.

3.0 Environmental Management of the Project

A draft environmental monitoring and management plan would be developed which will detail the monitoring requirements for pre-, during- and post- construction and during the operational phases of the project. This will include recommendations to ensure the documented implementation of mitigation measures and long term minimization of negative impacts and maximization of positive impacts.

3.1 At a minimum the draft monitoring plan should include:

- Introduction outlining the need for a monitoring programme
- The activity being monitored and the parameters chosen to effectively carry out the exercise
- The methodology to be employed and the frequency of monitoring
- Frequency of reporting to EPA
- The sites being monitored. These should incorporate a control site where no impact from the development is expected
- Raw data to be collected and relevant Tables and graphs to be used

Deliverables

The No Objection Certificate from Environment Protection Department (EPD) is main deliverable.

The other key deliverables, as per following:

1. Study of previous EIA'S of project area and other relevant literature review

Terms of Reference (TOR)

2. Collection of baseline secondary and primary data of site in terms of social, economic, environmental, flora, fauna and hydrological factors. Collection of any other relevant data considered important by consultant.
3. Development of baseline conditions at site including analysis of air, water, soil, solid waste and noise samples.
4. EIA report to be prepared exactly as per the guidelines of EPD Punjab/EPA whichever applicable at site. Report to be submitted within 45 days of contract award.
5. Required number of EIA copies to be submitted to EPA/EPD for approval



Proponent

Gibz Pharmaceuticals (Pvt.) Ltd



Consultant

Environmental Consultancies & Options
(ECO)

ANNEXURE H

PROJECT TEAM AND RESPONSIBILITIES

NAME	POSITION	QUALIFICATION	TERM OF REFERENCES
Dr. Asim Mahmood	Director	PhD. (Environmental Sciences & Management) & MBA	Dr. Asim was responsible for: * Environmental Assessment & Management. * Supervision of monitoring team for air water noise and soil analysis * Preparation of technical EMP
Dr. Saamia Saif	Executive Director	PhD. (Environmental Sciences & Management)	Dr. Saamia was responsible for: * Field surveys and consultation with stakeholders * Preparation of Environment monitoring plan * Identification of sensitive receptors
Mr. Farman Hussain	Environmentalist	M.Phil. Environmental Sciences	Mr. Farman was responsible for: * Identification of Sensitive Receptors * Detailed flora and fauna survey of project site * Site Survey * Site Monitoring * Preparation of EIA Report
Mr. Amir	Sociologist	MA. Sociology	Mr. Amir was responsible for: * Detailed social survey of project site * Social impact assessment
Mr. Saif Ullah	Chemist	M.Sc. Chemistry	Mr. Saif Ullah was responsible for: * Detailed survey of project site * Soil & water samples collection * Analytical analysis of samples
Mr. Abdul Ghaffar	Field Analyst	B.Sc. Chemistry	Mr. Abdul Ghaffar was responsible for: * Detailed physical survey of project site * Ambient Air, noise monitoring and analysis

ANNEXURE I



**FAISALABAD INDUSTRIAL ESTATE
DEVELOPMENT & MANAGEMENT COMPANY**
Making Tracks of Success



Dated: 23rd February, 2026

Ref. No. M-3IC/P-2/IND/0263

M/S GIBZ PHARMACEUTICALS (PRIVATE) LIMITED

Address: H No. 644, Sector F, Street 39, Askari X, Lahore Cantt.

Cell # 0300-5553961

E-mail: islitiaz4158@gmail.com



PROVISIONAL ALLOTMENT LETTER

Reference to your online application No. PB2810 for allotment of the Industrial Plot at M-3IC and subsequent approval of the Special Economic Zone (SEZ) Committee constituted under section 23 of the SEZ Act, 2012, in its 54th meeting held on 16th December, 2025 and Zone Enterprise approval letter No.M3IC/54-SEZC/ZE/04 Dated 24th December, 2025 & Customer acceptance dated 12th January, 2026.

FIEDMC is pleased to inform that **INDUSTRIAL PLOT** more particularly described hereunder is provisionally allotted to Zone Enterprise i.e. M/S Gibz Pharmaceuticals (Private) Limited for setting up the industrial unit of **Manufacturing of Veterinary Pharmaceutical & Nutraceutical Products** subject to the conditions indicated in the Annex's (A& B) append hereto and also the terms & conditions mentioned hereafter.

Membership No. M-3IC/P-2/IND/0263 **Plot No. 227-A**

Phase: II **Plot Size: 1.38 Acres (49,534/-Sqft)**

1. The Zone Enterprise shall be under obligation to pay the remaining price of the above mentioned industrial plot within due date(s) as per the schedule payment plan (attached herewith) and will also submit post-dated cheques of the said amount in favor of M/s Faisalabad Industrial Estates Development and Management Company (FIEDMC). In case of delay in payment of schedule payment, Late Payment Surcharge (LPS) will be charged as per policy approved by the BOD FIEDMC.
2. The Zone Enterprise must begin construction of facilities within six months and assume regular business operations within twenty four months of their approval as zone enterprise and after receipt of all required licences and permits under clause 16(e) of SEZ Act, 2012 and By Laws No. 44 of FIEDMC, failing which non-utilization charges will be charged as per policy approved by the BOD FIEDMC or the allotment may be cancelled as per Bylaws of FIEDMC.

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FAISALABAD INDUSTRIAL ESTATE DEVELOPMENT & MANAGEMENT COMPANY

Making Tracks of Success



3. The Zone Enterprise shall be legally bound to comply with all the terms and conditions and provisions as outlined in the Special Economic Zones Act, 2012, ("SEZ Act") read with Special Economic Zones Rules, 2013, ("SEZ Rules") Special Economic Zone Enterprise Admission and Sale, Lease and Sub-Lease of Plot Regulations, 2021 ("SEZ Regulations") as well as the Bye-Laws, Standard Operating Procedure (SOP) and Policies framed from time to time by FIEDMC.
4. The Zone Enterprise shall strictly adhere the Building Bye-Laws, Regulations and those enacted by the FIEDMC or local Govt/Municipal authority from time to time. In case of violation of any Building Bye-Laws by the Zone Enterprise, FIEDMC reserve the right to impose violation charges or cancel the allotment and subsequent retrieval of the plot.
5. That the Zone Enterprise shall not use the Industrial Plot or any part thereof or the building and superstructure raised thereon or plant or machinery or other equipment installed thereon, for any purpose other than those approval is provided in the Zone Enterprise Entry Application. In order to change nature of business, the Zone Enterprise shall obtain prior "No Objection Certificate" (NOC) from the FIEDMC being the absolute owner of the plot.
6. That the Zone Enterprise shall carry out the maintenance of Common Areas of the M-3 Industrial City, Faisalabad and will also maintain the common facility like Roads, Sewerage and Lights etc. provided by the FIEDMC. For maintenance and running of these facilities, FIEDMC will charges the monthly bill/maintenance expenses and the Zone Enterprise shall be bound to pay these charges within the due date of billing.
7. Provision of utility services connections such as Electricity, Telephone and Gas is the responsibility of the concerned utility providers i.e. FESCO, PTCL and SNGPL, subject to the terms and conditions of the relevant contracts between the Zone Enterprise and the utility provider(s) and in case of excess load/extra usage from sanctioned load, FIEDMC will charge extra load charges as per policy approved by the BOD FIEDMC.
8. The Zone Enterprise shall not be allowed to sub-let/rent or transfer any right of the plot or any portion thereof or create any encumbrance in any manner whatsoever, to any third Party (ies) bank, investment company without prior written approval of the FIEDMC as this provisional allotment does not confer any legal right, title or interest in the said plot.
9. In case of Force Majeure, FIEDMC is wholly or substantially unable to fulfill its functions/obligations under the Act or Rules, the Zone Enterprise shall not be entitled to claim any rights or benefits against FIEDMC.
10. The Zone Enterprise will be eligible for final Allotment letter of the plot after clearance of all due payments and commercial production/operation certificate of the industrial unit. The title of the plot may be transferred in favor of the zone enterprise only when it has commenced authorized commercial activities within twenty four months of acceptance of its zone entry application and performed business operations in the SEZ

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FAISALABAD INDUSTRIAL ESTATE DEVELOPMENT & MANAGEMENT COMPANY

Making Tracks of Success



for at least six months and submission of requisite documents mentioned under Bylaw No. 53 & 54. The title of the plot shall further be non-transferrable in any manner whatsoever.

11. That if the zone enterprise persistently defaults in fulfilling the requirements of the Act, Rules, Regulation and Bylaws, FIEDMC reserve the right to cancel the allotment without prejudice to its right to recover dues, arrears, fines and to take other actions as determined by it.
12. The Zone Enterprise also declares and affirms that in case of any eventuality or unavoidable circumstances to carry on the business activity or non-operational activity, compulsory shut down of the plant or insolvency, default declared by any authority, or force majeure, this allotment shall be cancelled and plot will be surrendered to FIEDMC.


23/2/26
HOD (Estate & Land)




23.2.26
Chief Executive Officer FIEDMC

Acknowledgement:

I, Mr. /Mrs. /Ms. _____ bearing CNIC/Passport _____
representing M/S _____ having designation _____ hereby
acknowledge and accept the Provisional Allotment Letter.

Signatures: _____

Name: _____

Mobile#: _____

Seal of the Company:

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IMPORTANT TERMS & CONDITIONS

1. The Sanctioned electricity load per acre is 125 KAV, and for Gas, it is 0.0077278 mmcf/d. Any additional requirement for electricity and Gas load will incur charges at the rate of Rs.8,052,258/- per Mega Watt (MW) for electricity and Rs.39,000,000/- per mmcf/d for gas, or as determined by the Board.
2. The allottee(s) shall maintain sufficient funds in your account on the day of presenting the cheque to facilitate its clearing. Failure to do so, resulting in a bounced cheque, may lead to legal consequences, including the cancellation of the plot. You shall bear any collection charges imposed by the bank, as well as any exchange gain/loss incurred in the case of foreign exchange payments.
3. The allottee shall be bound to follow Pakistan Environmental Protection Act 1997/National Environment Quality Standards for preservation and conservation of environment in the Industrial Estate and disposal of waste/effluents. If the allottee is found, violating the said laws during or after construction of building, the FIEDMC shall have right to impose violation charges as applicable and direct the allottee to rectify such violation within a specified period. In case allottee fails to rectify the violation, the FIEDMC may order any appropriate measure including but not limited to sealing of premises to stop any such violation.
4. All allottee are required to provide written affidavit, upon admission, to adhere to all rules, regulations, instructions, terms, and conditions set forth by FIEDMC, including any subsequent amendments and modifications made from time to time.
5. Any officer or team from FIEDMC, the Local Government, or the relevant department authorized to monitor and enforce FIEDMC Bylaws, Construction bylaws, and SEZ Laws/Rules/Regulations and has the right to enter and inspect the plot or any buildings.
6. An Allottee shall be liable to pay all the taxes, duties, fees, surcharges and impositions whatsoever, which may now or hereinafter be charged or imposed upon or be payable in respect of the said Plot and any building(s) constructed thereon by any competent authority including, without limitation, the Local Government(s), under any laws, rules, bylaws or orders for the time being enforced by FIEDMC, Federal/Provincial Governments.
7. In compliance with applicable laws, the competent authority (Board of Directors/SEZ Committee) has the authority to reassign plots that are not feasible on the ground or to revoke allocations made in violation of FIEDMC Bylaws/SEZ Laws.
8. No application for exchange of Plot(s) shall be entertained except in exceptional cases and on compassionate grounds in which case the CEO may recommend to the Board /SEZ Committee to allow the exchange of a Plot from one location to another within the same Industrial Estate.



9. Each Allottee operating an industrial unit in an Industrial Estate shall be bound to install power factor improvement equipment of suitable rating. In case of failure to do so, a surcharge at the rate as prescribed by the concerned electricity distribution company shall be charged from the relevant Allottee in addition to cost of energy consumed.
10. The planning and construction of industrial/commercial structures must align with the Construction Bylaws of the TMA.
11. Maintenance charges will be levied on each allottee after the issuance of the Provisional Allotment letter at the rates as determined by the Board of Directors from time to time.
12. All Zone Enterprises are strictly prohibited to burn/use the tyres and substandard fuels in Industrial estates.



Acknowledgement:

I, Mr. /Mrs. /Ms. _____ bearing CNIC/Passport _____
representing M/S _____ having designation _____ hereby
acknowledge and accept the Provisional Allotment Letter.

Signatures: _____

Name: _____

Mobile #: _____

Seal of the Company:

STANDARD OPERATING PROCEDURES AND POLICES.**1. Mortgage/Lien, Non Encumbrance Certificate (NEC), NO Objection Certificate (NOC) and No Demand Certificate (NDC)**

- a. The allottee acquires a No Encumbrance Certificate (NEC) from FIEDMC by paying the prescribed fee. This certificate is then submitted to the bank for loan/mortgage purposes. The issuance of the NEC is contingent upon the clearance of all fees, dues, and payments, along with the prescribed fee. Furthermore, the Plot under consideration must be free from any outstanding charges in any term.
- b. Bank writes to FIEDMC for marking of lien and requests ban on further sale until NOC issued by the Bank.
- c. FIEDMC records the loan amount in the Customer Mortgage Register upon payment of the prescribed fee and informs the bank accordingly.
- d. If Original Final Allotment Letter is available then the lien is marked on it in favour of the loan giving agency for the amount of the loan and removed upon receiving of NOC from the Bank.
- e. The original Allotment Letter is kept with the loan giving agency.

2. An Allottee required to obtain a No Demand Certificate (NDC) for the purpose of Payment clearance, he may request in writing to FIEDMC for the issuance of the NDC with prescribed fee. the NDC will be issued upon the clearance of all dues/payments, including plot installments, any imposed taxes/duties, maintenance charges, operational charges, prescribed fees, Gas/Electricity extra load charges, or any other outstanding charges imposed by FIEDMC, the Government, or concerned authorities.

3. Amalgamation and Division of Plots.

Amalgamation and division of plots may be allowed by the CEO upon the payment of fee as prescribed by BOD from time to time with the approval of competent authority (SEZ Committee for plots holding SEZ status).

4. Commercial Production Certificate.**a. For Plots holding SEZ Status**

- i. The SEZ Committee shall certify that once the unit has become operational. The SEZ Committee shall inspect the civil works within the SEZ to ensure that they are built to the standards as stipulated under Rule. The SEZ Committee shall designate a panel of qualified certified engineers for this task.
- ii. The SEZ Committee shall certify each Zone Enterprise once all of the criteria have been met and such certification shall qualify the Zone Enterprise for entitled benefits.



- iii. To be certified, the Zone Enterprise shall be required to achieve the following:
 - a) Commence Commercial Activities no later than twenty four months after approval of Zone Entry Application.
 - b) Be engaged in the Authorized commercial Activities that are described in its application.
 - c) The Zone Enterprise may apply to the SEZ Committee to amend or change its authorized commercial activities which may consider the same as per authorized commercial activities as well as prohibited activities list for the specific SEZ and that whether the said change is anyway harmful to the neighboring Zone Enterprises or the overall scheme of the particular SEZ.
 - d) Meet the investment density requirement.
 - e) Comply with all SEZ building Codes as certified by the designated panel of the SEZ Committee which shall not issue such certification unless the facilities are compliant with the building code.
 - f) Comply with the environmental, labor and other applicable laws/standards; and
 - g) Be in compliance with any other commitments as agreed with the Developer and the SEZ Committee.

b. For Non SEZ plots

The purpose of issuance of commercial production certificate, FIEDMC team will visit the plot for physical verification. Further Following documents required for the issuance of Commercial Production certificate above.

- a) Letter from FIEDMC for Commercial Production Certificate
- b) CNIC of the owner of plot
- c) Provisional Allotment letter from FIEDMC
- d) Final Allotment letter from FIEDMC
- e) NOC for construction from FIEDMC
- f) Sanction of Building Plan Distt Council FSD
- g) Approved Map Drawings from Distt Council FSD
- h) Approved Map Drawings from TMA Chak Jhumra
- i) NOC from Civil Defense/Firefighting Certificate FSD
- j) Approval Certificate from Environment Protection Agency LHR
- k) Completion Certificate from TMA Jhumra
- l) No Demand Certificate from FIEDMC
- m) Copy of SEZ Approval Letter not interested in SEZ status
- n) List of imported machinery. Two sets of machines (for Re-Cycling of cotton from cloth waste) purchased locally. No machinery was imported from abroad.
- o) Still pictures of the facility
- p) Electric Bill before and after Production (last two years)
- q) List of Employees registered with EOBI-NOT APPLICABLE
- r) Project Profile
- s) Sales tax invoices
- t) Purchase invoices
- u) Sale invoices/Bill
- v) Affidavit about child labor



5. NOC of Electricity Connection

- a. Customers are required to submit an application, along with documents such as the allotment letter, site plan, completion certificate of the building, and a test report for a permanent electricity connection from FESCO through FIEDMC.
- b. FIEDMC calculates a sanctioned load of 125 kVA per acre and subsequently issues a No Objection Certificate (NOC) to the customer.
- c. If the customer requires an additional load exceeding the sanctioned limit, an amount of Rs. 8,052,258/- per megawatt (MW) shall be paid by customer to FIEDMC. FIEDMC issue letter by calculation extra load to the customer for the payment.
- d. Customer makes the payment for the additional load to FIEDMC's Finance Department, the NOC is issued upon clearance.
- e. The customer's file is then submitted to the FESCO Department.
- f. FESCO conducts a survey of the site.
- g. Following the survey, FESCO issues a Demand Notice to the customer.
- h. The customer submits the required fees as per the Demand Notice.
- i. Upon receipt of the fees, FESCO proceeds to provide the electricity connection.

6. NOC of Gas Connection

- a. Customers are required to submit an application, along with documents such as the allotment letter, site plan and NOC for construction building, for a Gas connection from SNGPL through FIEDMC.
- b. FIEDMC sanctioned load of 0.0077278 mmcf/d per acre and subsequently issues a No Objection Certificate (NOC) to the customer.
- c. If the customer requires an additional gas exceeding the sanctioned limit, an amount of Rs. 39 million per mmcf/d shall be paid by customer to FIEDMC. FIEDMC issue letter by calculation extra load to the customer for the payment.
- d. Customer makes the payment for the additional load to FIEDMC's Finance Department, the NOC is issued upon clearance.
- e. The customer's file is then submitted to the SNGPL Department.
- f. SNGPL conducts a survey of the site.
- g. Following the survey, SNGPL issues a Demand Notice to the customer.
- h. The customer submits the required fees as per the Demand Notice.
- i. Upon receipt of the fees, SNGPL proceeds to provide the Gas connection.

7. Sale Deed/Transfer of Title/Ownership.

Customer apply for the Sale Deed, for which his unit must be in production form last six months and all payments should be cleared. The customer requested for a fard to be issued in their name to facilitate the document preparation for the land transfer. It is necessary to obtain all relevant No Objection Certificates (NOCs) from the respective departments, pay all fees associated with the land transfer, and provide all specified documents as outlined.

Check List of Sale Deed

1. No Demand Certificate (NDC) issued by FIEDMC)
2. Final Allotment Letter (Issued by FIEDMC)
3. Commercial production certificate (issued by FIEDMC)
4. TMA drawings along with NOC
5. Building completion certificate by TMA
6. EPA Environment Protection certificate

7. 1122 Rescue
8. Civil defense NOC

On completion/ installation of industry, Transfer Deed will be executed on stamp paper of appropriate value provided by the customer, HEDMC will extend necessary help to the member respecting registration of sale deed with registration authorities and effecting mutation in the revenue record. All costs, inclusive of taxes for both the buyer and seller, stamp paper duties, TMA fees, and a 1% transfer fee (calculated on the purchase price, to be paid to FIEDMC) are the responsibility of the allottee. All sale deeds and transfers of plots must be processed through FIEDMC, accompanied by the payment of the prescribed transfer fee ratio determined by FIEDMC. Necessary amendments respecting said transfer of ownership will be made in record maintained by FIEDMC.



Acknowledgement:

I, Mr. /Mrs. /Ms. _____ bearing CNIC/Passport _____
representing M/S _____ having designation _____ hereby
acknowledge and accept the Provisional Allotment Letter.

Signatures: _____

Seal of the Company:

Name: _____

Mobile #: _____

Statement of Account

Ref. No.	M-3IC/P-2/IND/0263	Date	23-Feb-26
Name:	M/S GIBZ PHARMACEUTICALS (PRIVATE) LIMITED	Zone/Phase:	II
Number of Plots	1	Plot No.	227-A
SEZ Application No:	P82810	Plot Size	1.38 Acres
Date of ZE approval:	16-Dec-25		49,534 Sqft. (Approx)
Date of ZE approval letter:	24-Dec-25		

Particulars	Plot Size (Acres)	No. of Plots	Amount (Rs.)
Total price of plot @ 10,400,000 per acre	1.38	1	14,309,822
		Total Receivable	14,309,822

Particulars	Due Date	Date Rcvd	Amount Due (Rs.)	Amount Rcvd	Balance Due
Down Payment		12-Jan-26	3,577,456	2,600,000	(977,456.00)
1st Instalment	24-Mar-26		894,364	-	(894,364)
2nd Instalment	24-Jun-26		894,364	-	(894,364)
3rd Instalment	24-Sep-26		894,364	-	(894,364)
4th Instalment	24-Dec-26		894,364	-	(894,364)
5th Instalment	24-Mar-27		894,364	-	(894,364)
6th Instalment	24-Jun-27		894,364	-	(894,364)
7th Instalment	24-Sep-27		894,364	-	(894,364)
8th Instalment	24-Dec-27		894,364	-	(894,364)
9th Instalment	24-Mar-28		894,364	-	(894,364)
10th Instalment	24-Jun-28		894,364	-	(894,364)
11th Instalment	24-Sep-28		894,364	-	(894,364)
12th Instalment	24-Dec-28		894,364	-	(894,364)
Total:			14,309,822	2,600,000	(11,709,822)

1. Above instalments are due every three months from the date of purchase. Please ensure availability of funds in your account as per post dated cheques given by you against the balance payment of plot.

2. In pursuance of BOD meeting no 124 dated 26-Oct-2022 please note that above plot price is provisional price it may be increase or decrease subject to the approval of BOD difference of the amount shall be charge / reimbursement accordingly before issuance of Final Allotment Letter.

3. The policy of levy tax as per the PRA Punjab Sales Tax Services Act 2012, M/S GIBZ PHARMACEUTICALS (PRIVATE) LIMITED shall be liable to pay the applicable tax Pkr 100/- rupees per sq yard once at the time of issuance of Provisional Allotment Letter as and when approved.

4. In compliance with the decision taken in the 145th Board of Directors (BoD) FIEDMC, Meeting held on 03-09-2025, a penalty equivalent to ten percent (10%) of the cheque amount is hereby imposed on any FIEDMC customer whose cheque is returned unpaid by the bank due to insufficient funds or for any other reason attributable to the customer and outstanding amount shall be recoverable.

Sincerely,



O.E. (Estate & Land)




HOD (Estate & Land)

CC to:
Recovery Dept.
Finance Dept.
Office File

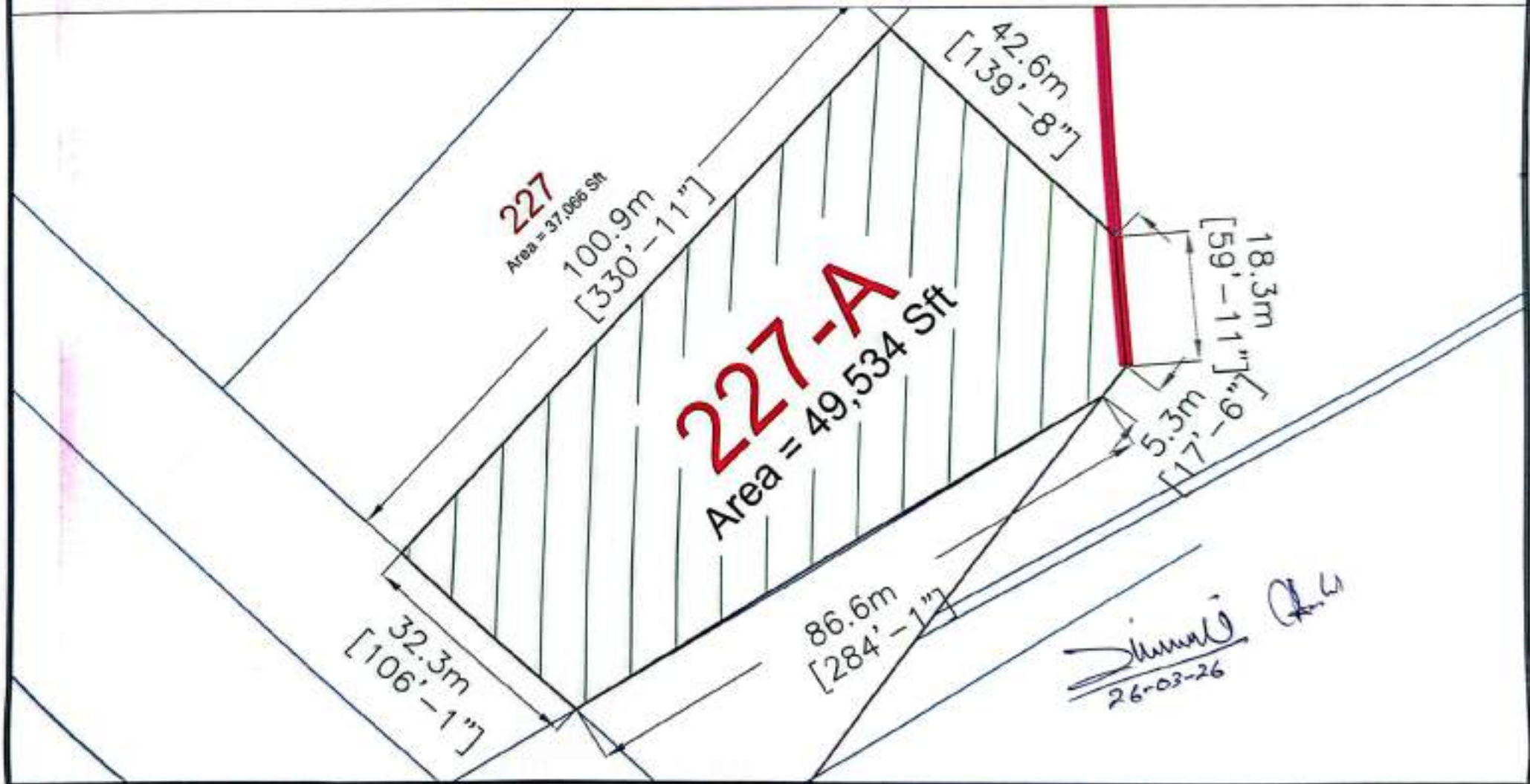
M3 Industrial City
Site Plan of Plot # 227-A
Phase-II



Approval of Zone Enterprise Entry Application Ref: M3IC/54-SEZC/ZE/04 dated 24th December, 2025

Provisional Allotment Letter # M-3IC/P-2/IND/0263 Issue Date: 23th February, 2026

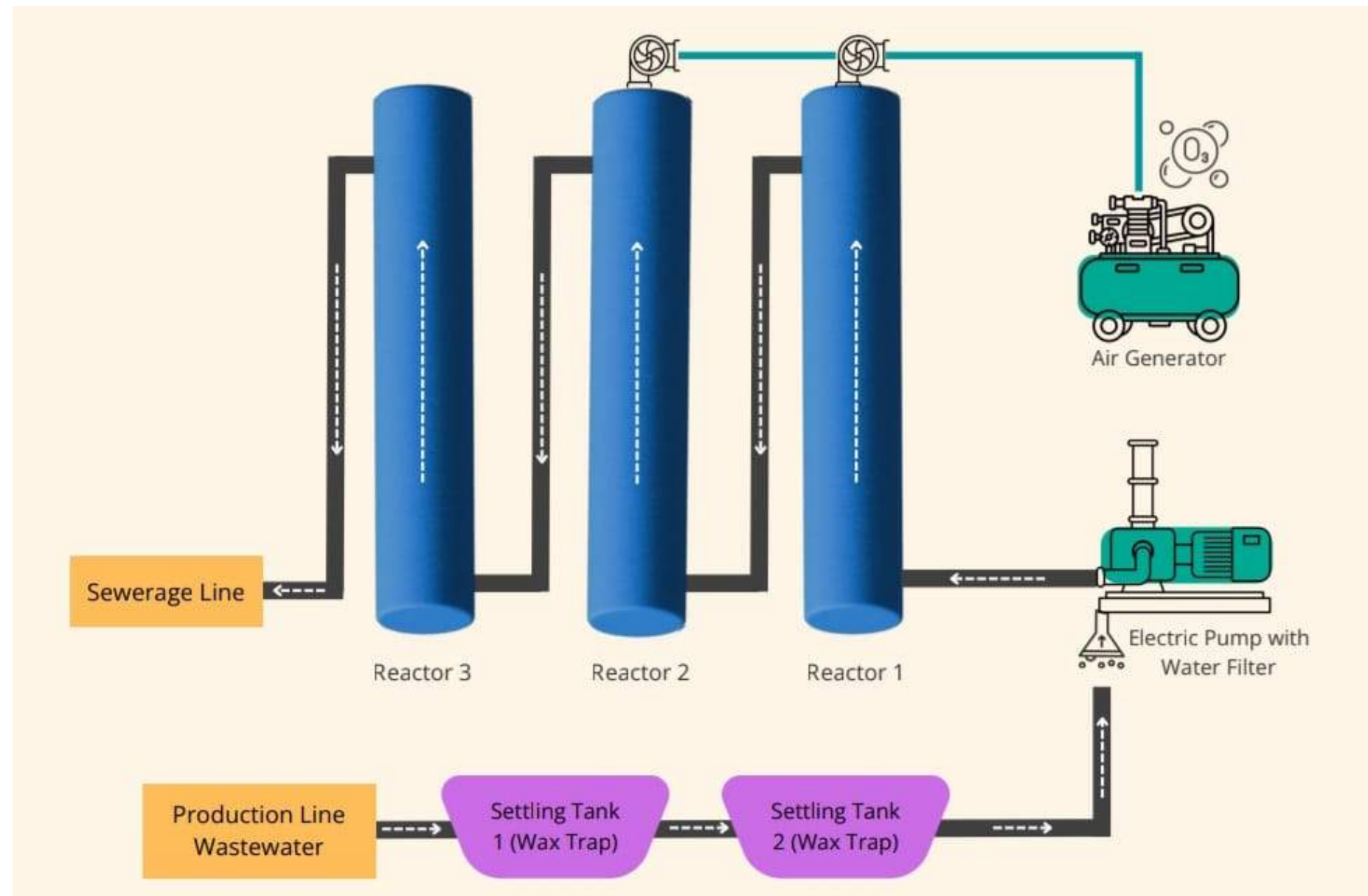
Note Sheet from Marketing Department Date : 25.03.2026.



ANNEXURE J

ADVANCED OXIDATION EFFLUENT TREATMENT PLANT

Proposed Ozone-based ETP at GIBZ PHARMACEUTICALS PVT. LTD.
VETERINARY & NUTRACEUTICAL FACILITY



Gibz Pharmaceuticals (Pvt.) Ltd.
Plot No. 227-A, Phase-II, FIEDMC M3 Industrial City, Faisalabad