



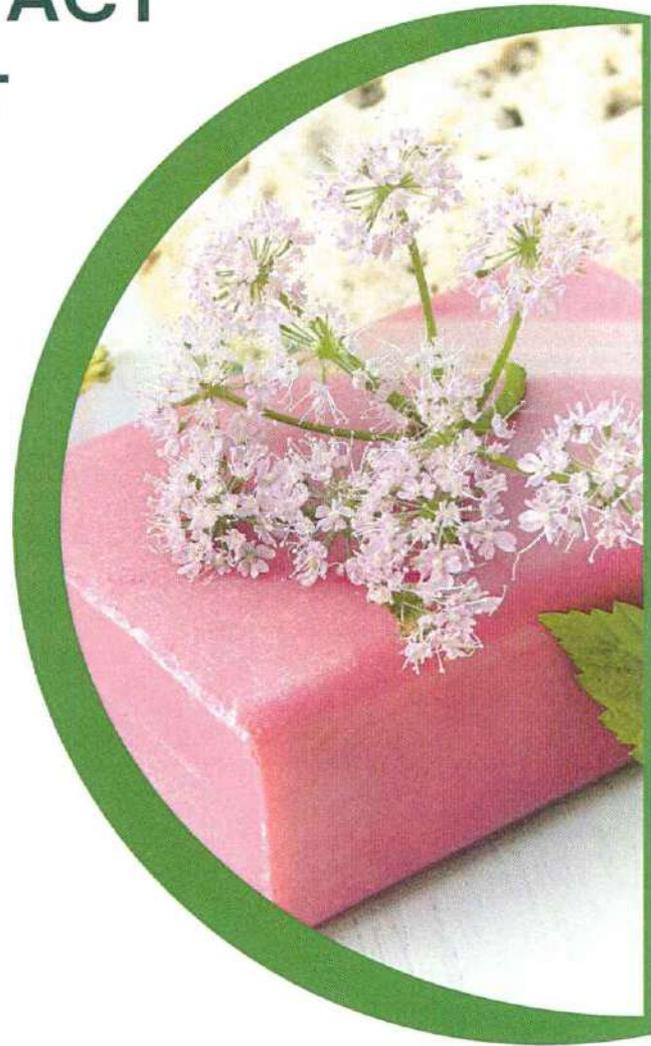
# ENVIRONMENTAL IMPACT ASSESSMENT REPORT

Submitted for

**Kisan Soap Factory**

Submitted by

**Pak Green Enviro  
Engineering Pvt. Ltd**



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46-M, Gulberg-III, Lahore

Pakistan "



**PAK GREEN**

ENVIRO-ENGINEERING (PVT) LTD.



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## PROJECT BRIEF SUMMARY

Section	Parameter	Details
<b>1. Project Identification</b>	Name of Project / M/S	Kisan Soap Factory
	Project Location	5-KM main Nankana road shahkot, chak no. 182 R.B. Borala, District Nankana Sahib
	Geographical Coordinates	Latitude: 31°32'37.71"N Longitude: 73°31'3.51"E
<b>2. Proponent Information</b>	Proponent Name	Muhammad Bilal Ghaffar
	CNIC	35403-9638920-5
	Proponent Address	Ward No. 7, Muhalla Abadi, Araiyan, Shahkot, Zila Nankana Sahib
<b>3. Project Overview</b>	Total Project Cost	Rs. 30 Million
	Project type	Proposed Establishment of Soap Manufacturing Unit
	Process Description	The said project is the establishment of soap manufacturing unit by M/s Kisan Soap Factory located at 5 – km Main Nankana road Shahkot, Chak no 182 R.B. Borla District Nankana Sahib. The total area of the unit is 57 Kanals 5 Marla while the coverd area of the unit is 32711 Sft with the 55 MT capacity/day. The project cost is 30 Million.
	Project Capacity per Day	Laundry Soap: 25 MT Washing Powder: 20 MT Dish Wash Bar: 8 MT Bath Soap: 2 MT Total: 55MT
	Land Area and Ownership	Area: 32711 Sft Owned:

	Allied Facilities	Warehouse, Admin Block, Utilities, Generators
<b>4. Waste Management</b>	Types of Waste	Waste water, solid waste, packaging waste, chemical effluents
	Estimated Waste Generation	Wastewater – approx. 100 metric tons per month  Solid waste – approx. 21.5 metric tons per month
	Waste Handling Measures	(Segregation, Storage, Transport)
	Final Disposal Plan	(Recyclers, Landfill, Incineration, etc.)
<b>5. Wastewater Management</b>	Coordinates of WWTP	<b>Latitude:</b> 31°32'37.71"N <b>Longitude:</b> 73°31'3.51"E
	Treatment Method	Primary & Secondary Treatment
	Disposal Method & Location	Sewer
<b>6. Rainwater Harvesting</b>	Harvesting Infrastructure	Pits, Storage Tanks, Recharge Wells
	Collection Source	Rooftop
	Implementation Status	Planned
<b>8. CSR &amp; Community Welfare</b>	CSR Budget	Rs. 9 lac
	Activities	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Environment &amp; Sustainability</li> <li>• Water, Sanitation &amp; Hygiene (WASH)</li> </ul>

## EXECUTIVE SUMMARY

### Project Title and location

Subject project for which Environmental Impact Assessment study has been conducted for the **Establishment of Soap Manufacturing Unit** by M/S Kisan Soap Factory located at 5-km main Nankana Road Shahkot, Chak No.182 R.B. Borala, District Nankana Sahib.

The proposed project falls under Schedule II, Category B, Clause 2 of Review of IEE and EIA Regulations, 2022. TORs of the study under clause 5 (f) of policy and procedure for the filing, review and approval of environmental assessment are annexed.

### Location

Subject proposed project is located at 5-km main Nankana Road Shahkot, Chak No.182 R.B. Borala, District Nankana Sahib.

Having coordinates:

- **Latitude:** 31.543328 N
- **Longitude:** 73.517932 E

Front..... Open area

Back.....Open area

Left.....Open area

Right..... Open area

Google map of site proposed for the establishment of the subject project:

# Proposes Establishment of Soap Manufacturing Unit under the name of M/s Kisan Soap Factory

Location: 5 - Km Main Nankana Road Shahkot, Chak No. 182 R.B. Borala, District Nankana Sahib.

Coordinates:

Latitude: 31°32'37.71"N

Longitude: 73°31'3.51"E



## Project Proponent

Attribute	Details
Company Name	M/s Kisan Soap Factory
Proponent	Muhammad Bilal Ghaffar
CNIC	35403-9638920-5
Gmail	<a href="mailto:kisansoapfactory@gmail.com">kisansoapfactory@gmail.com</a>
Location	5-KM Main Nankana Road, Shahkot, chak no. 182 R.B. Borala
Business Type	Soap Manufacturing Unit

## Environmental Consultant

Attribute	Details
Consultant	Pak Green Enviro Engineering Pvt. Ltd
Office Address	46-M, Gulberg III, Lahore
Contact	042-35441444, 0303-4442335
Scope of Services	Independent environmental consultancy for the preparation of EIA including baseline assessment, stakeholder consultations, impact analysis, mitigation planning, and formulation of the Environmental Management Plan (EMP).
Email	<a href="mailto:eia@pakgreen.pk">eia@pakgreen.pk</a>

## Brief outline of the proposal

Subject project is request for environmental approval for the establishment of soap manufacturing unit by M/S Kisan Soap Factory under the name of M/s Kisan Soap Factory located at 5-km main Nankana Road Shahkot, Chak No.182 R.B. Borala, District Nankana Sahib. The total area of the unit is **57 kanals 5 Marla** while the covered area of the unit is 32711SF with the **55MT capacity/day**. There are four different sections in this unit **Bath soap or Beauty soap, Dish wash bar, Washing Powder & Laundry soap having capacity of 2MT, 8MT, 20MT & 25MT/per day** respectively. The project cost is **30 million**. Subject project will be established within the given boundary. For Complete detail of the site, design specifications and layout is attached as **Annexure**.

### **Major Impacts**

Subject Establishment of Soap Manufacturing Unit by M/S Kisan Soap Factory is a proposed project, which will be installed after the approval from the EPA Punjab under section 12 of PEPA 1997 (Amended 2012). In order to identify all the activities associated with the project during Construction and operation phase with potential to cause adverse environmental impacts and harm, a thorough review has been conducted. Project does not have any major adverse impacts on the nearby community and on environment. Overall the project has positive impacts on the local population and country as a whole. Plantation also considered on priority basis.

. Potential Impact	Criteria for determining Significance	Key Mitigation Measures
<p><b>Impact due to Location</b></p>	<p>Seismic Region and Flood Zone Specification</p>	<p>There are no significant negative impacts on the environment due to the project location/ selected site, because project is present within facility of M/s Kisan Soap Factory having no significant impacts on the community.</p>
<p><b>Gaseous Emissions-</b> During the operational phase of the project, gaseous emissions from project site generator may affect the air quality of the project area.</p>	<p>PEQS for Ambient Air</p>	<p>M/s Kisan Soap Factory should ensure the PEQS compliance and should not be allowed to emit hazardous pollutants. Proper tuning of generator should be done to avoid the excessive gaseous emission from the generator during construction phase of the project. Vehicle emissions inspection should be done on regular basis. Sprinkling should be done on the unpaved area to avoid dust pollution/ particulate matter.</p>
<p><b>Noise- Noise due to industrial activity, machinery and generators can be a nuisance for the workers in the working area.</b></p>	<p>OSHA Standards</p>	<p>Activities generating high levels of noise should be minimized at the project site. Personal Protective Equipment PPEs including Ear muffs, Ear plugs and other noise abating equipment will be provided to the workers and other staff in case of noise at the project site. Generator should be covered with canopy. Proper maintenance and tuning of the vehicles should be done.</p>

<p>Discharge of wastewater- The discharge of untreated municipal wastewater may be a negative impact of the subject project.</p>	<p>PEQS for Municipal Effluents (mg/l, unless otherwise defined)</p>	<p>Wastewater released during construction must be treated before its discharge.                  Compliance of PEQS for effluents should be ensured.                  Monitoring should be conducted as per PEQS and reports should be submitted to EPA.                  There is no wastewater in the production process.</p>
<p>Health &amp; Safety Issues- different constructional and operational activities at the project site may cause health and safety issues for workers if precautionary measures will not be adopted.</p>	<p>OSHA Standards</p>	<p>Proper training of workers and staff should be conducted to avoid the accidents. Use of PPEs should be implemented at workplace.                  First aid measures/medical facility should be provided at the project site.                  Safe drinking water must be provided to workers, staff, and poor people of the area.                  Safety signs &amp; boards should be placed</p>
<p>Solid waste management- If solid waste will not be managed properly, it may cause negative impacts.</p>	<p>Exposure to potentially hazardous waste;                  Generation of excessive waste;                  Recyclable waste and reusable waste is discarded; Littering;                  Improper disposal.</p>	<p>A solid waste management division should be formulated to deal with the proper disposal of solid waste, supervised by HSE Manager, SW Manager, and other related personnel.</p>

## Recommendation for Mitigation measures

### Proposed Environmental Monitoring

To oversee the environmental performance of the project through its lifecycle enforcing the PEQS an Environmental Monitoring Program should be formulated which ensures effective surveillance of the environmental parameters at various stages of the project development and compliances with PEQS and legal obligations.

The proposed environmental monitoring plan for the project involving the Establishment Of Soap Manufacturing Unit By M/S Kisan Soap Factory should include regular monitoring of air quality, water quality, noise levels, and waste management practices. Monitoring for Environmental Parameters is recommended:

- **Air:** Regular monitoring of air emissions from the generator to ensure compliance with air quality standards and regulations.
- **Water:** Water monitoring will be ensured by the management of M/s Kisan Soap Factory.
- **Noise:** Monitoring of noise levels generated by the operation of machinery and equipment within the project site to assess potential impacts on surrounding communities. This may involve the installation of noise monitoring equipment at strategic locations.
- **Waste Management:** Monitoring of waste generation, segregation, treatment, and disposal practices to ensure compliance with waste management regulations. Regular audits of waste management practices and documentation of waste disposal methods should be included in the monitoring plan.
- **Compliance:** Regular inspections and audits to ensure that the project is complying with environmental regulations, permit conditions, and mitigation measures outlined in the (EIA) report. Non-compliance issues should be promptly addressed and corrective actions implemented.

By incorporating these elements into the environmental monitoring plan, M/s Kisan Soap Factory can effectively track and manage the environmental impacts of the project, mitigate potential risks, and ensure sustainable operations.

### Proposed Monitoring Schedule during the project operation

Sr. No.	Parameter	Monitoring Schedule according the PEQS
1	Ambient air	Quarterly
2	Noise Level	Quarterly
3	Ground water	Quarterly
4	Stack Emissions	Quarterly
5	Compliance	Periodically/Semiannually

*Recommendation: Environmental Monitoring data log book should be maintained by the project proponent.*

## CHAPTER 1: INTRODUCTION

### Background

Pakistan, as a developing nation, is experiencing accelerated industrial growth to cater to its expanding population. Among the most essential needs of the population is access to hygiene and sanitation products. Although hygiene was always a matter of concern, the outbreak of the COVID-19 pandemic significantly heightened global awareness of personal and environmental cleanliness. The crisis emphasized how infectious diseases can spread rapidly in environments lacking basic sanitary practices, prompting individuals and communities to prioritize hygiene more than ever before. This shift in perception has increased demand for soaps and cleaning products, especially among underserved rural and semi-urban communities.

In this context, **Kisan Soap Factory** is being proposed as a small-scale chemical manufacturing unit to cater to this growing demand. Located at **5-KM Main Nankana Road, Shahkot, Chak No. 182 R.B. Borala, District Nankana Sahib**, the factory will manufacture three primary types of products: bath soaps, laundry soaps, and dishwashing bars. The project falls under **Schedule II, Category B, Clause 2 (Chemical Manufacturing Units)** of the **Punjab Environmental Protection Agency (Punjab EPA) Regulations, 2022**, thus requiring a **comprehensive Environmental Impact Assessment (EIA)** study.

### Purpose of the Report

The main purpose of this EIA report is to identify, evaluate, and mitigate the potential environmental and social impacts associated with the establishment and operation of Kisan Soap Factory. The report aims to ensure regulatory compliance with Punjab Environmental Protection Act 1997 and related PEQS rules, and to assist the project proponent and authorities in decision-making regarding environmental sustainability.

## Project Identification

➤ **Project Title:**

Establishment of Kisan Soap Factory

➤ **Nature of Project:**

Chemical Manufacturing Unit

➤ **Products:**

- Bath Soap
- Laundry Soap
- Dishwashing Bar
- Washing Powder

➤ **Location:**

5-KM Main Nankana Road, Shahkot, District Nankana Sahib

➤ **Geographical Coordinates:**

Latitude: 31°32'37.71"N

Longitude: 73°31'3.51"E

➤ **Total Land Area:**

57 Kanals, 5 Marla

➤ **Project Category:**

Schedule II, Category B (Clause 2)



**Figure 1 Location of Project Site**

## Proponent Profile

Attribute	Details
Company Name	M/s Kisan Soap Factory
Proponent	Muhammad Bilal Ghaffar
CNIC	35403-9638920-5
Gmail	<a href="mailto:kisansoapfactory@gmail.com">kisansoapfactory@gmail.com</a>
Location	5-KM Main Nankana Road, Shahkot, chak no. 182 R.B. Borala
Business Type	Soap Manufacturing Unit

## Consultant Profile

Attribute	Details
Consultant	Pak Green Enviro Engineering Pvt. Ltd
Office Address	46-M, Gulberg III, Lahore
Contact	042-35441444, 0303-4442335
Scope of Services	Independent environmental consultancy for the preparation of EIA including baseline assessment, stakeholder consultations, impact

	analysis, mitigation planning, and formulation of the Environmental Management Plan (EMP).
<b>Email</b>	<a href="mailto:eia@pakgreen.pk">eia@pakgreen.pk</a>

## Project Objectives

The main objectives of this project include:

- To provide affordable and high-quality cleaning products to local communities.
- To support rural economic development through industrialization.
- To generate employment for the local population.
- To ensure compliance with environmental standards.
- To contribute to national hygiene and sanitation efforts.

## Project Description

Kisan Soap Factory is a proposed chemical manufacturing unit that will produce bath soaps, laundry soaps, washing powder and dishwashing bars. The facility will involve small-scale operations with locally sourced raw materials. The project is designed to follow best practices in production and environmental management.

Feature	Description
<b>Total Land Area</b>	57 Kanals, 5 Marla
<b>Total Covered Area</b>	32711 Sft
<b>Production Capacity</b>	55 Metric Tons capacity per day
<b>Water Requirement</b>	15,00 to 3000 liters per ton
<b>Power Requirement</b>	80 – 120 kwh per metric ton of product
<b>Wastewater Generation</b>	Approx. 100 metric tons per month

## Process Summary

The manufacturing of soap at Kisan Soap Factory follows a simple yet efficient production system. For bath soaps, the process begins with the mixing of raw materials using a mixer machine. The blended material is then transferred to a plodder that shapes the mixture into small blocks, which are further squeezed into strips in the milling unit. The strips are refined into uniform soap bars through a duplex system and subsequently cut and stamped into desired shapes. Any off-spec material is recycled back into the process, reducing waste. Finally, the soap bars are packed into cartons.

For laundry soaps, raw materials are first introduced into a Karaya unit and then blended with acid oil in a mixer. The semi-liquid mixture is poured into iron molds to solidify. The resulting blocks are cut into soap pieces, and again, any waste is recycled. The final pieces are then packed for distribution.

The dish bar process is comparatively straightforward. After mixing the raw materials, the blend is processed into bars using a duplex machine. The bars are cut into appropriate sizes and packaged accordingly. Across all production lines, internal recycling of waste material ensures minimal loss and supports sustainable production.

## Legal & Institutional Framework

The project is subject to the following national and provincial regulations:

Legislation/Guideline	Relevance
<b>Pakistan Environmental Protection Act, 1997</b>	Governs EIA requirements and environmental approvals
<b>Punjab Environmental Protection Act, 2012</b>	Mandates environmental clearance from Punjab EPA
<b>Punjab Environmental Quality Standards (PEQS)</b>	Sets standards for emissions, effluents, noise, etc.
<b>Labor Laws</b>	Applicable to occupational safety and staff welfare

## Environmental Compliance Requirements

The project must obtain environmental clearance from the Punjab EPA before construction and operation. It must ensure full compliance with PEQS related to:

- Effluent discharge
- Air emissions
- Occupational health & safety
- Noise levels
- Waste management

Monitoring and record-keeping will be part of the Environmental Management Plan (EMP).

## Scope of the Study

This Environmental Impact Assessment report evaluates:

- Baseline environmental conditions of the site
- Potential environmental and social impacts
- Mitigation measures to manage impacts
- Stakeholder concerns
- Monitoring and reporting protocols

## Justification of Site Selection

The selected site lies in a semi-urban locality with proximity to transport routes and labor availability. It is away from sensitive receptors like hospitals, schools, and residential colonies. The site offers adequate land, road access, and availability of utilities, making it ideal for this small-scale industrial operation.

## Expected Benefits of the Project

- Provision of low-cost soaps for hygiene and cleaning.
- Generation of employment in Shahkot and surrounding villages.
- Upliftment of industrial development in a semi-urban region.
- Contribution to national cleanliness and hygiene objectives.

## Stakeholder Identification

The key stakeholders of the project include:

- Local community members
- Employees and laborers
- Punjab EPA and regulatory bodies
- Nearby small businesses and transporters
- Suppliers and distributors

## PROJECT SCREENING

Project screening is the preliminary step in the Environmental Impact Assessment (EIA) process. It is a critical stage where the need for an environmental assessment is determined, the level of assessment is identified, and the relevant legal provisions are reviewed. Screening is essential to ensure that projects with significant environmental impacts are subjected to the appropriate level of scrutiny under environmental laws and regulations. For the proposed establishment of the Kisan Soap Factory, located at 5-KM Main Nankana Road, Shahkot, Chak No. 182 R.B. Borala, District Nankana Sahib, a detailed screening process is conducted as outlined below.

### Purpose of Screening

The purpose of screening is to:

- Determine whether the proposed project requires an Environmental Impact Assessment (EIA) or an Initial Environmental Examination (IEE).
- Classify the project according to its potential environmental impacts.
- Establish the scope of the environmental documentation required for environmental clearance.
- Ensure compliance with national legal and regulatory frameworks.

Screening also helps in the early identification of key environmental issues, allowing the project proponent to incorporate mitigation measures from the planning stage. This is not only cost-effective but also environmentally responsible.

### Legal Context and Regulatory Requirement

According to the Pakistan Environmental Protection Act (PEPA), 1997 and the Pakistan Environmental Assessment Procedures, projects are categorized into two schedules:

- **Schedule I (IEE):** Projects with low-to-moderate environmental impacts.
- **Schedule II (EIA):** Projects with potentially significant environmental impacts.

The proposed Kisan Soap Factory falls under **Schedule II, Category B (Chemical Manufacturing including Soap Manufacturing)** as per the Punjab Environmental Protection Agency (Punjab EPA) guidelines. This is due to the chemical handling, mixing, and production processes that have a direct impact on air, water, and solid waste generation.

Thus, a full-scale **Environmental Impact Assessment (EIA)** is mandatory for the project prior to the initiation of construction and operation activities.

## Screening Criteria for Kisan Soap Factory

In line with international best practices and PEPA guidelines, the following screening criteria have been considered:

Screening Criteria	Details for Kisan Soap Factory
<b>Nature of Project</b>	Chemical manufacturing (soap production – laundry, bath, washing powder and dish soaps)
<b>Type of Operation</b>	Batch processing with use of chemicals, acid oil, and mechanical equipment
<b>Location Sensitivity</b>	Semi-urban area with proximity to agricultural land and local settlements
<b>Waste Generation</b>	Solid waste, chemical effluents, wastewater, and packaging waste
<b>Air Emissions</b>	Expected from soap drying and heating processes
<b>Water Use</b>	Moderate consumption for mixing, cleaning, and hygiene
<b>Social Impacts</b>	Employment generation, improved hygiene, minor increase in local traffic and utility demand
<b>Legal Compliance Need</b>	Falls under Schedule II – requires mandatory EIA

This structured screening identifies that the project may have **significant environmental impacts** if not properly managed, thus warranting a detailed Environmental Impact Assessment.

## Screening Methodology

The following methodology was adopted for the screening:

### Document Review:

- Review of project layout plans and process diagrams.
- Analysis of raw materials and chemical inputs used.

### Site Reconnaissance:

- Physical inspection of the project site.
- Assessment of nearby land use, local infrastructure, and proximity to sensitive receptors.

### Stakeholder Consultations:

- Informal consultations with local residents and potential employees.
- Consideration of public concerns related to pollution, water use, and traffic.

### Environmental Baseline Understanding:

- Overview of baseline conditions such as air, soil, and water quality around the proposed site.

## Outcome of Screening

Based on the above criteria and methodology, it has been determined that:

- The project **does require a full EIA**, not merely an IEE.
- A comprehensive environmental study is needed to assess impacts on air, water, land, human health, and biodiversity.
- The environmental documentation will include mitigation measures, monitoring plans and stakeholder feedback.

## Screening Justification

The justification for selecting EIA over IEE is as follows:

- **Chemical Usage:** Acid oil and other additives pose potential risks to water and soil if spilled.
- **Air Emissions:** Mechanical operations, cutting, and drying stages may release particulates and odors.
- **Wastewater Generation:** Though minimal, soap slurry and wash water require proper treatment before disposal.
- **Proximity to Sensitive Areas:** While the area is semi-urban, nearby residential areas and farmlands could be impacted by improper waste management.
- **Cumulative Impact:** Considering cumulative emissions from this and other nearby small industries, even a medium-scale facility can have notable impacts.

Thus, screening concludes that the Kisan Soap Factory qualifies for EIA under Schedule II, and further assessment is necessary to develop mitigation strategies and ensure environmental compliance.

## Conclusion

The screening process highlights that the proposed Kisan Soap Factory is a Schedule II project requiring a comprehensive Environmental Impact Assessment. This aligns with the environmental protection goals of the Government of Pakistan and the Punjab Environmental Protection Agency. The EIA will serve as a tool to integrate environmental and social considerations into the project's planning and implementation phases, ensuring sustainable development and long-term compliance.

## SCOPING

Scoping is a vital phase in the Environmental Impact Assessment (EIA) process, serving as the foundation for identifying key environmental and social issues related to the proposed project. For Kisan Soap Factory, located at 5 Km Main Nankana Road Shahkot, District Nankana Sahib, this stage ensures that all potentially significant impacts are properly addressed, while resources and efforts are directed toward studying the most relevant environmental components. This chapter outlines the spatial and temporal boundaries of the assessment, important concerns raised during stakeholder consultations, and significant impacts to be determined.

### Spatial and Temporal Boundaries of Environmental Assessment

Establishing spatial and temporal boundaries helps define the geographic area and time frame over which potential environmental and social impacts of the project will be assessed.

#### Spatial Boundaries

The spatial extent of the assessment includes the following zones:

- **Core Zone:** This refers to the project site, i.e., the premises of Kisan Soap Factory including all its manufacturing units for bath soap, dishwashing bars, and laundry soap, utility infrastructure, and internal roads.
- **Buffer Zone:** An area of 500 meters around the project site. This zone includes agricultural land, scattered residential buildings, and a few commercial setups along the main Nankana Road.
- **Extended Zone of Influence:** This covers areas up to a 5 km radius from the project site to assess secondary impacts such as traffic, air dispersion, groundwater abstraction, and labor influx.

#### Temporal Boundaries

Temporal boundaries consider the different phases of the project lifecycle:

- **Pre-construction Phase:** Land acquisition, site clearance, and infrastructure setup.
- **Construction Phase:** Structural development, machinery installation, and utilities setup (expected to last 6–8 months).
- **Operational Phase:** Routine soap manufacturing operations expected to run indefinitely over several years.
- **Decommissioning Phase (if applicable):** Dismantling of plant machinery, waste removal, and rehabilitation of the site.

## Important Issues and Concerns Raised During Consultation

As part of the EIA process, stakeholder consultations were conducted to identify potential concerns, recommendations, and expectations from local communities and institutions. These were carried out through informal meetings, interviews, and public interaction within the project’s buffer zone.

### Key Stakeholders Consulted:

- Local residents (men and women)
- Nearby shop owners and informal businesses
- Local school teachers
- Farmers and agricultural landowners
- Municipal staff from Shahkot Tehsil

**Table 3.1: Summary of Concerns Raised During Consultation**

Stakeholder Group	Issues/Concerns Raised	Recommended Mitigation
Local residents	Fear of air and noise pollution	Install air filters, restrict night operations
Shopkeepers	Possible traffic congestion due to goods transport	Proper scheduling, traffic management plan

<b>Farmers</b>	Concern about contamination of irrigation water	Proper ETP installation and monitoring
<b>Women (households)</b>	Odor nuisance from manufacturing	Use of closed-system processing
<b>Local authorities</b>	Solid waste disposal and wastewater handling	Adherence to PEQS and routine inspections

## Significant Impacts and Factors to be Determined

The significance of environmental impacts was determined based on the magnitude, extent, duration, and reversibility of effects. Impacts were categorized for different phases of the project and examined in terms of their effect on environmental, social, and economic receptors.

## Environmental Impacts

- **Air Quality:** Emissions from boilers, machinery, and soap production units may introduce particulate matter and volatile compounds. Ambient air monitoring will be carried out to determine baseline levels and control measures.
- **Water Resources:** Consumption of groundwater for production and sanitation, along with the potential discharge of untreated or partially treated wastewater. This requires an Environmental Management Plan (EMP) with a strong ETP design.
- **Soil and Land Use:** Minor impacts on soil may result from construction waste or raw material handling. Measures such as spill control and paved storage areas will be evaluated.
- **Noise Pollution:** Moderate to high noise levels from mechanical operations, especially during construction. Baseline noise surveys will be conducted.
- **Solid and Hazardous Waste:** The soap-making process generates packaging waste and possible sludge from the ETP. Safe collection and disposal protocols are to be assessed.

## Social Impacts

- **Employment and Livelihoods:** The project is expected to generate job opportunities for local laborers during construction and operation.
- **Public Health and Safety:** Potential exposure to chemical emissions, improper waste handling, or transportation hazards.
- **Community Relations:** Risk of land use conflicts or misunderstandings with local people without timely awareness programs.

## Economic and Infrastructural Impacts

- **Local Economy:** Positive boost expected through increased demand for local goods and services.
- **Traffic and Transportation:** Movement of raw materials and finished products may cause occasional congestion, especially on narrow rural roads.
- **Utilities Usage:** Electricity, water, and fuel demand will increase, requiring efficiency-based technologies to reduce consumption.

**Table 3.2: Summary of Key Impacts to Be Assessed**

Category	Key Issues	Priority Level	Monitoring Required
<b>Air</b>	Boiler emissions, particulate matter	High	Yes (PM2.5, SO <sub>x</sub> , NO <sub>x</sub> )
<b>Water</b>	Groundwater abstraction, wastewater discharge	High	Yes (BOD, COD, pH, TDS)
<b>Waste</b>	Solid and hazardous waste generation	Medium	Yes
<b>Noise</b>	From machinery and vehicles	Medium	Yes
<b>Social</b>	Health, employment, community perception	High	Yes (Grievance redressal)
<b>Traffic</b>	Vehicle movement and congestion	Medium	Yes

## Conclusion of Scoping

The scoping phase has helped narrow down the list of significant issues to focus on in the detailed EIA. Based on stakeholder input, site surveys, and regulatory frameworks, it is clear that air emissions, water resource management, and waste handling are primary environmental concerns. Social impacts such as job creation and public health also demand proper planning. The next chapter (Baseline Environmental Conditions) will describe the existing conditions of environmental parameters within the identified spatial and temporal boundaries.

## CHAPTER 2: CONSIDERATION OF ALTERNATIVES

In the Environmental Impact Assessment (EIA) process, the consideration of alternatives is a critical component. It ensures that a project is being planned and implemented in a way that avoids or minimizes adverse environmental impacts while maximizing socio-economic benefits. This chapter elaborates on the alternatives that were reviewed for the proposed Kisan Soap Factory. As the proponent has provided specific direction and clarity regarding the proposed site and technology, only realistic and practical alternatives, based on available data and feasibility, are discussed below.

### Site Alternatives

The only site considered for the establishment of the Kisan Soap Factory is the current location at **5-KM Main Nankana Road, Shahkot, Chak No. 182 R.B. Boralala, District Nankana Sahib, Punjab**. This location was selected by the project proponent based on multiple practical factors, including proximity to raw material suppliers, ease of access via main roads, and availability of necessary utilities such as water and electricity.

#### Reason for Selecting This Site:

- Located on a main road, ensuring smooth transportation of raw materials and finished products.
- Situated in a semi-urban area with available skilled and unskilled labor.
- Adequate plot size for current and future production requirements.
- Availability of basic utilities (electricity, water, etc.).
- Distance from densely populated residential zones, minimizing community health concerns.

#### Rejection of Other Sites:

No other sites were formally considered or evaluated. The proponent made a direct investment decision based on the strategic suitability of the chosen site, and no alternative plots were proposed during planning.

## Design/Technology Alternatives

The proponent has opted for conventional soap manufacturing processes using established machines such as mixers, plodders, duplex machines, cutters, and packers. These technologies are widely used in similar-scale industrial setups in Pakistan and globally.

### Reason for Choosing the Selected Design and Technology:

- Proven efficiency and ease of maintenance.
- Cost-effective and suitable for local production requirements.
- Readily available in the local market.
- Operator familiarity and reduced training requirements.

### Rejection of Alternatives:

No alternative technologies were proposed by the proponent. The selected equipment and design are based on standard manufacturing practices, and no newer or unconventional technologies were considered feasible due to operational simplicity and financial constraints.

## Environmental Alternatives

Given the nature of the proposed operations (soap manufacturing), the environmental footprint of the project is relatively moderate. However, certain good practices have been voluntarily incorporated by the proponent to reduce the environmental burden.

### Implemented Environmental Measures:

- Efficient water usage in production and cleaning.
- Reuse of internal wastage by sending it back into the production line.
- Proper storage of raw materials to avoid spills and contamination.
- Use of packaging materials that are recyclable or reusable.

### **Reason for Not Considering Other Environmental Alternatives:**

No specific environmental technologies (advanced pollution control equipment) were considered at this stage due to scale and nature of the project. The production process does not involve hazardous emissions or high-energy inputs that require advanced alternatives. Moreover, the environmental management plan (EMP) includes mitigation measures aligned with PEQS.

### **Economic Alternatives**

The project's economic model is designed to cater to the local market with low-cost, high-utility soap products. The investment plan focuses on affordability, scalability, and operational efficiency.

### **Reason for Selecting the Current Economic Plan:**

- Lower initial investment cost by using locally available technology.
- Minimum transportation cost due to proximity to suppliers and buyers.
- Creation of employment opportunities in the surrounding semi-urban community.
- Competitive pricing strategy to target rural and semi-urban consumers.

### **Rejection of Other Economic Models:**

- High-end automated plants were not considered due to capital constraints.
- Import-based raw material dependency was avoided to reduce vulnerability to price fluctuations.

### **Conclusion**

In conclusion, the proposed Kisan Soap Factory project follows a practical and realistic approach in terms of site selection, technology, environmental practices, and economic strategy. All considerations are based on ground realities, local requirements, and the proponent's operational goals. As no formal alternative proposals were explored beyond

the chosen path, the project aligns well with regional development needs and is expected to have a manageable environmental footprint with planned mitigation measures.

## CHAPTER 3: DESCRIPTION OF THE PROJECT

### Objectives of the Project

The primary objective of the proposed Kisan Soap Factory is to establish a chemical manufacturing unit specifically for the production of laundry soaps, liquid detergents, washing powders, and bath soaps. The project aims to meet the growing demand for these cleaning agents in both domestic and commercial markets. The plant will utilize basic chemical processes in a controlled and safe environment, ensuring the end products conform to consumer safety standards and national quality guidelines. Additionally, the project aspires to generate local employment opportunities, enhance industrial development in the area, and contribute to local and regional economies.

### Location and Site Layout of the Project

The project is located at 5-KM Main Nankana Road, Shahkot, Chak No. 182 R.B. Borala, District Nankana Sahib. It lies outside the jurisdiction of any designated industrial estate. The site layout includes designated spaces for manufacturing, storage, packaging, office administration, and utilities (boilers, etc.).



## Land Use on the Site

The proposed project site currently comprises undeveloped open land. It is privately owned by the proponent and intended to be converted into an industrial chemical manufacturing unit. There is no existing residential or commercial development on the land. The intended land use is fully compliant with local zoning regulations for chemical-based production units.

## Road Access

The site is easily accessible via Main Nankana Road, a well-developed and paved road providing transportation for raw materials and dispatch of finished products. It ensures efficient logistics for both incoming raw materials and outgoing packaged goods.

## Vegetation Features of the Site

The site is predominantly flat with sparse vegetation. It features naturally growing grass and small shrubs. No significant trees or ecologically important flora have been identified on-site. Vegetation clearance required for construction will be minimal.

## Cost and Magnitude of Operation

The estimated total project cost is **PKR 30 million**, including infrastructure development, machinery, utilities, and workforce recruitment.

The unit will operate year-round with two shifts per day, employing an estimated 40–50 staff members in its operational phase.

## Schedule of Implementation

Project Activity	Timeline
------------------	----------

Land acquisition & clearance	1 month
Construction phase	4-6 months
Installation of machinery	1-2 months
Trial production & commissioning	1 month
Commercial operation	From 9th month onwards

The total implementation is expected to take approximately 8-9 months from the initiation date.

## Description of the Project

The manufacturing unit involves the production of:

- **Laundry Soap**
- **Liquid Detergent**
- **Washing Powder**
- **Bath Soap**

Each product is manufactured using a combination of basic chemical processing and mixing techniques. Below is a detailed explanation of the individual processes.

### A. Laundry Soap Manufacturing Process

#### Steps:

Process for manufacturing of laundry soap :

#### Raw Material Preparation

Raw materials include; silicate, caustic soda, acid oils, cotton seed oil, talo (desi churbi).

#### Karaya

Input of raw material, to create a homogeneous mixture for laundry soap production.

#### Mixer

Addition of Acid oil in the material received from previous stage.

### **Iron Block**

Mixed material put into iron blocks to convert material into solid form.

### **Cutting**

Cutting of block into pieces. At that stage wastage of processed material exist that send back to mixer machine and here wastage again put into reprocess.

### **Packing**

Pieces packed in cartons.

### **Quality Control**

Batch test and Implement quality control measures to ensure the performance, safety, and skin-friendliness of the laundry soap products.

## **B. Liquid Detergent Manufacturing Process**

### **Steps:**

Process for manufacturing dish soap:

### **Raw Material Preparation**

- Raw materials for dish soap include; **Talcum powder, marble silicate, sulphonic acid, fragrance, urea, soda ash, salt and water.**

### **Mixer Machine**

- Process of mixing by inputting of raw material.
- Mix the raw materials to create a homogeneous mixture for dish soap production.

### **Duplex Operation (Preparation of Soap Bars)**

Further process the soap strips through the duplex machine to shape them into soap bars.

### **Cutter**

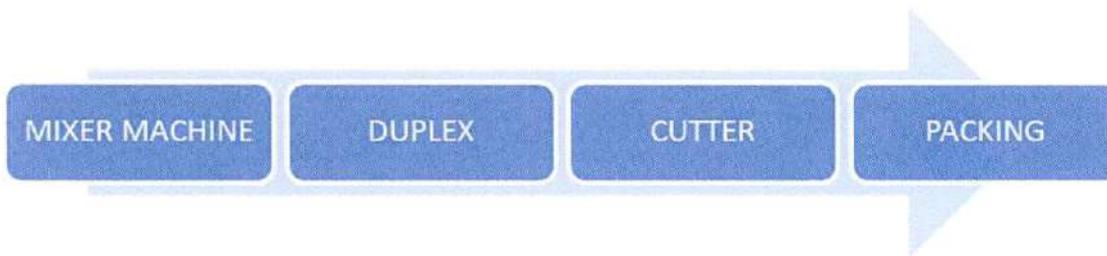
- Use the cutter machine to cut the soap bars into smaller soap pieces.
- Any wastage generated during this process is recycled back into the production line.

### **Packing**

Pack and label the soap bars into cartons for distribution and sale.

### **Quality Control**

Implement quality control measures to ensure the effectiveness, safety, and environmental friendliness of the dish soap products.



Process flow of Liquid detergent - Dish wash

## C. Washing Powder Manufacturing Process

### Steps:

Process for manufacturing washing powder:

#### Raw Material Preparation

Raw materials for washing powder includes; **sulphonic acid, soda ash, caustic soda, silicate, water, nansa (soda light) and sodium sulphate.**

#### Karaya

Input of raw material, to create a homogeneous mixture for washing powder production.

#### Mixer

Addition of Salt and soda ash in the material received from previous stage. The material adopt the shape of granules

#### Grinding

The granules convert into powder form.

#### Packing

Final product pack into cartons.

#### Quality Control

Implement quality control measures to ensure the performance, safety, and environmental sustainability of the washing powder products.



Process Flow diagram of washing powder

## D. Bath Soap Manufacturing Process

### Steps:

Process for manufacturing of laundry soap :

### Raw Material Preparation

Raw materials include; silicate, caustic soda, acid oils, cotton seed oil, talo (desi churbi).

### Karaya

Input of raw material, to create a homogeneous mixture for laundry soap production.

### Mixer

Addition of Acid oil in the material received from previous stage.

### Iron Block

Mixed material put into iron blocks to convert material into solid form.

### Cutting

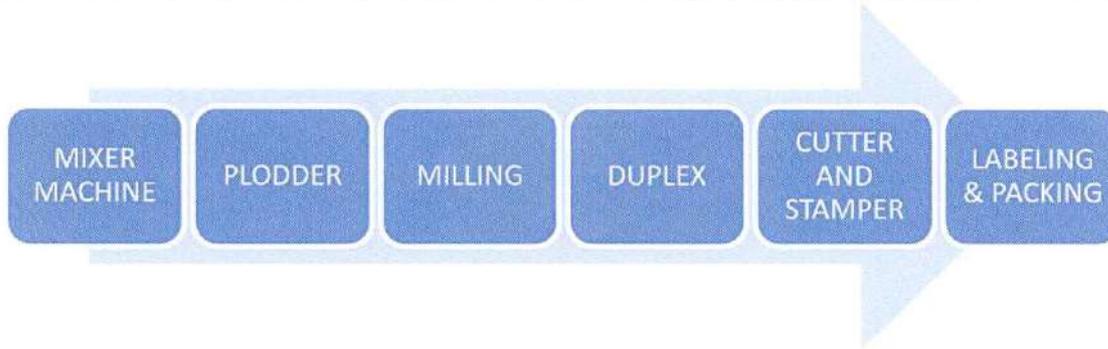
Cutting of block into pieces. At that stage wastage of processed material exist that send back to mixer machine and here wastage again put into reprocess.

### Packing

Pieces packed in cartons.

### Quality Control

Batch test and Implement quality control measures to ensure the performance, safety, and skin-friendliness of the laundry soap products.



Process Flow diagram of Bath soap

#### **Wastewater:**

Project site has no wastewater; all the processes material recycle again and again.

#### **Atmospheric Emissions:**

Generator and karaya utilization will be the main sources of Atmospheric emission during production process. Proponent should tune the generator regularly and modification of wood material can be considered.

#### **Electrical Works**

The design criterion for the electrical works in compliance with the requirements of WAPDA.

#### **Telecommunication**

Telephone facility provided by the M/s Kisan Soap Factory to the project site.

#### **Parking**

Parking area for the visiting vehicles and product carriage vehicles present within the vicinity of the M/s Kisan Soap Factory.

#### **Emergency Exit**

Emergency exit provided in the building of the M/s Kisan Soap Factory.

### **Fire Protection System**

An addressable fire protection system with detection and alarm annunciation and other installations etc. would be provided to protect against any fire hazards. Fire extinguishers should be placed at all sensitive places within the vicinity of said project by the management of M/s Kisan Soap Factory.

## **Security:**

Said project will be established within the vicinity of M/s Kisan Soap Factory, and project site is secured by all means.

## **Project Cost**

The approximate cost of the said project will be **30 million Rupees**.

## **Industries**

Different types of industries are present in the vicinity of the project site.

## **Infrastructure**

Infrastructure of the roads network is good. Project present on the main Shahkot Road in the area of the District Nankana Sahib.

## **Electricity:**

Electricity is fed by the Water and Power Development Authority (WAPDA). Roads network is available to the entire community and all roads are metallic.

## **Institutions**

The project area has the well government and private institutes at the distance of 10 to 15km from the site.

## **Transportation:**

Subject site is well provided with roads networks. Public transportation is also available for the community.

## **Restoration and Rehabilitation Plans**

The proponent is committed to restoring any disturbed areas post-construction. Plans include:

- Plantation of native vegetation along site boundaries.
- Proper paving to prevent dust emissions.

- Installation of stormwater drainage.
- Use of noise dampening materials around high-noise machinery.
- Periodic monitoring of effluents and emissions to ensure PEQS compliance.
- Designated waste storage and collection zones.

Rehabilitation Element	Proposed Action
Green belt development	Trees/shrubs along boundary walls
Soil restoration	Compaction and leveling post-construction
Noise control	Soundproof enclosures for generators
Water resource protection	Lined drainage and sedimentation tanks

## CHAPTER 4: DESCRIPTION OF THE ENVIRONMENT

This chapter provides a comprehensive assessment of the existing environmental conditions of the project site and its surroundings prior to the commencement of construction and operations. A detailed environmental baseline is crucial to evaluate the potential impacts of the proposed project and to devise suitable mitigation strategies.

### Baseline Physical Environment

#### Climate and Meteorology

The project site falls under a semi-arid climate typical of Punjab, Pakistan. Summers are long and hot, while winters are short and cool. Rainfall is seasonal, predominantly occurring during the monsoon months (July–September).

Parameter	Value Range
Temperature	4°C (winter) to 44°C (summer)
Annual Rainfall	300–500 mm
Humidity	30% – 80%
Wind Direction	Predominantly from West/NW

These climatic conditions are suitable for the planned operations.

#### Topography and Drainage

The site is located in a flat terrain with slight undulations. Natural drainage channels are minimal and rainfall runoff is managed via surface percolation. Proper stormwater infrastructure will be developed on-site to avoid waterlogging.

#### Geology and Seismicity

The project site lies in a geologically stable zone. The substratum consists of alluvial soils deposited by the nearby river systems. The site falls in Seismic Zone 2B (low to moderate risk) under the Building Code of Pakistan.

## Hydrology and Water Resources

There are no major surface water bodies within a 2 km radius. The primary water source is groundwater. Water for industrial use will be extracted via tube wells with necessary NOC and metering systems to prevent overexploitation.

## Ambient Air Quality

Preliminary assessments and nearby site observations indicate that air quality is within permissible limits of the Punjab Environmental Quality Standards (PEQS). Major sources of emissions in the vicinity include vehicular traffic and small-scale industries.

## Noise Environment

The baseline noise level in the area is within permissible daytime limits (55 dB) as per NEQS. There are no significant noise-generating activities in the immediate vicinity. Soundproofing measures will be adopted around generators and machinery.

## Soil Characteristics

Preliminary soil testing shows loamy texture with good compaction and moderate permeability. The site is stable for foundation works and industrial construction. Detailed lab reports have been conducted and are attached separately in the annexures.

## Baseline Ecological Environment

### Flora

The site is primarily covered with grass and wild shrubs. No significant tree species or rare flora were observed. Vegetation clearance will be minimal and a plantation drive is planned to restore ecological balance.

### Fauna

The surrounding area hosts common wildlife species including sparrows, mynas, field rats, squirrels, and lizards. No endangered or protected species were recorded. There are no wildlife corridors or protected habitats within a 5 km radius.

## **Ecologically Sensitive Areas**

There are no designated protected areas, wetlands, or forests in the proximity. The project does not intersect any critical habitat zones.

## **Baseline Socioeconomic Environment**

### **Demographics**

The area around the project site is semi-rural with a modest population density. Most households engage in agriculture, small businesses, or industrial labor.

### **Employment and Livelihood**

The establishment of the Kisan Soap Factory is expected to boost employment. Both skilled and unskilled local labor will be employed in the construction and operational phases.

### **Infrastructure and Utilities**

The site is connected by a metaled road. Basic utilities such as electricity, water, and telecommunications are accessible. No displacement or relocation of existing households is involved.

### **Education and Health Facilities**

Primary schools and basic health units are available within 3–5 km. The project may support nearby schools or clinics as part of its Corporate Social Responsibility (CSR).

### **Cultural and Historical Resources**

No archaeological sites, monuments, or culturally significant areas are present on or near the site. Cultural integrity of the local community is not expected to be affected.

## **Lab Reports and Environmental Analyses**

Comprehensive lab investigations have been carried out by third-party accredited laboratories. The following analyses were conducted:

- Soil composition and stability tests
- Groundwater quality (pH, TDS, hardness, heavy metals)
- Ambient air quality (PM2.5, PM10, SO<sub>x</sub>, NO<sub>x</sub>, CO)
- Noise level assessment

**Note:** Detailed reports are annexed and not included here.

## Suitability of the Site

- **Not Prohibited:** The site is not located in any banned or notified prohibited area.
- **Environmentally Compatible:** The surrounding land use is semi-rural and industrial-friendly. No natural parks or wildlife habitats nearby.
- **Compatible with Surroundings:** Nearby developments include agro-based industries and open fields.
- **Environmental Hazards:** The site does not fall in a floodplain or landslide-prone area. It is suitable for industrial use with routine safety and mitigation.

## Natural Hazard Vulnerability

The site has low vulnerability to natural disasters. However, standard emergency preparedness and fire safety plans will be implemented. Flood mitigation drains and fire extinguishers will be part of site infrastructure.

## Public Perception and Stakeholder Concerns

Preliminary consultations with nearby residents indicate a positive outlook toward the proposed project. Concerns were mostly related to water availability and air quality, both of which will be monitored and managed as per EMP.

## **Conclusion**

The existing environmental conditions support the suitability of the proposed Kisan Soap Factory site. With proper implementation of mitigation measures, the project will be environmentally sustainable and contribute to local economic development without compromising ecological integrity.

## CHAPTER 5: ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

### Introduction

The Environmental Impact Assessment (EIA) aims to systematically identify, predict, and evaluate potential environmental impacts resulting from the establishment and operation of the proposed Kisan Soap Factory. This chapter elaborates on the methods used for impact assessment, evaluates the nature and extent of impacts, and provides a detailed matrix-based analysis of component-wise impacts.

### Methodologies for Impact Identification

Environmental impacts have been identified using a combination of standardized methodologies. Each method offers unique advantages to ensure a comprehensive assessment.

### Checklists

Checklists help identify potential environmental impacts of specific project activities on various environmental components. A sample impact identification checklist is given below:

Project Activity	Air Quality	Water Quality	Soil	Noise	Ecology	Socioeconomic
Land Clearing	✓	✓	✓	✓	✓	✓
Construction Activities	✓	✓	✓	✓	X	✓
Chemical Handling	✓	✓	✓	X	X	X

<b>Production Operations</b>	✓	✓	✓	✓	X	✓
<b>Effluent Disposal</b>	✓	✓	✓	X	✓	✓
<b>Transportation</b>	✓	X	X	✓	X	✓

### Leopold Matrix

The Leopold Matrix is used to identify cause-effect relationships between project actions and environmental parameters. The intensity (I) and importance (Imp) of each impact are scored from 1 (low) to 10 (high).

### Leopold Matrix:

<b>Environmental Parameter</b>	<b>Site Prep (I/Imp)</b>	<b>Construction (I/Imp)</b>	<b>Operation (I/Imp)</b>	<b>Waste Disposal (I/Imp)</b>
<b>Air Quality</b>	7 / 6	8 / 7	9 / 9	7 / 6
<b>Water Quality</b>	4 / 5	6 / 6	7 / 8	8 / 9
<b>Soil Contamination</b>	3 / 3	6 / 5	6 / 6	7 / 8
<b>Noise</b>	4 / 5	8 / 7	6 / 5	3 / 3
<b>Flora &amp; Fauna</b>	5 / 5	4 / 4	3 / 2	2 / 1
<b>Socioeconomic</b>	6 / 8	7 / 9	8 / 10	4 / 5

### Characteristics of Environmental Impacts

Each potential impact is evaluated against the following characteristics:

- **Nature:** Positive or negative
- **Magnitude:** Low, medium, or high
- **Extent:** Local, regional, or global
- **Timing:** Immediate, short-term, or long-term
- **Duration:** Temporary or permanent
- **Reversibility:** Reversible or irreversible

- **Risk/Probability:** Likely, unlikely, or uncertain

**Example Table:**

Impact Category	Nature	Magnitude	Extent	Duration	Reversibility	Risk Level
Air Pollution	Negative	High	Local	Long	Reversible	Likely
Employment	Positive	Medium	Local	Long	NA	Certain
Noise Pollution	Negative	Medium	Local	Temporary	Reversible	Likely
Water Use	Negative	Medium	Local	Long	Reversible	Possible

## Environmental Components Affected

### Air Quality

- Dust emissions during construction.
- Emissions from fuel combustion and chemical reactions during operation.
- Controlled through dust suppression and chimneys with scrubbers.

### Water Resources

- Use of ground water for process and utilities.
- Risk of contamination from liquid effluents.
- Mitigation: On-site ETP and water recycling.

### Soil and Land

- Soil erosion during land clearing.
- Risk of chemical spills and contamination.
- Controlled by designated storage zones and concrete flooring.

## Noise Pollution

- High noise levels from machinery and transport.
- Mitigated via silencers, PPE, and scheduled operation.

## Ecological Impacts

- Minor impact due to sparse vegetation and non-sensitive species.
- No protected flora/fauna at or near the site.

## Socioeconomic Aspects

- Creation of jobs.
- Support to local economy via indirect employment.
- Training and capacity-building initiatives planned.

## Legal and Institutional Framework Impact

- Project aligns with PEQS and Local Industrial Zoning Laws.
- Registered under EIA Schedule II, Category B.
- Commitment to regular environmental audits and third-party validation.

## Cumulative and Indirect Impacts

- Cumulative emissions with nearby industries (if any) must be monitored.
- Indirect increase in traffic, labor migration, and urbanization of surrounding area.
- Encouragement of sustainable economic growth.

## Summary of Significant Impacts and Management

### Recommendations

Component	Significant Impact	Suggested Mitigation
Air	Emissions from process	Chimneys, scrubbers, dust control
Water	Discharge risk	ETP installation, monitoring
Soil	Spill contamination	Chemical handling SOPs, paved flooring
Noise	Machinery noise	PPE, maintenance, and silencers
Ecology	Minimal	Greenbelt around site
Socioeconomic	Employment and growth	Skill training, local hiring

### Conclusion

The impact assessment shows that while there are potential environmental and social impacts from the proposed Kisan Soap Factory, these can be effectively managed through standard environmental protection practices and adherence to mitigation measures. Continued environmental monitoring and community engagement will ensure that operations remain within regulatory limits and support sustainable development.

## Chapter 6: Screening of Potential Environmental Impacts and Mitigation Measures

### Introduction

Environmental Impact Screening is a preliminary step in the Environmental Impact Assessment (EIA) process. It aims to identify the potential significant impacts of a project on the environment, assess their severity, and develop mitigation strategies accordingly. This chapter highlights the screening of environmental impacts associated with the proposed Kisan Soap Factory and presents corresponding mitigation and enhancement measures across various project phases, including location, design, construction, and operation. It also includes a comprehensive overview of associated risks, enhancement opportunities, and monitoring strategies.

### Screening Methodology

Screening of environmental impacts was carried out using:

- Expert Judgment
- Site reconnaissance
- Baseline environmental data
- Public consultation feedback
- PEQS and other regulatory guidelines

Potential impacts were evaluated based on:

- Nature of impact (positive/negative)
- Magnitude and intensity

- Temporal scale (short-term/long-term)
- Spatial extent (local/regional)
- Reversibility and cumulative effects

## Impact Screening During Project Location Phase

Aspect	Potential Impact	Mitigation Measure
Proximity to residences	Air/noise pollution, nuisance	Selection of non-residential zone
Land use compatibility	Incompatibility with surroundings	Site chosen on privately owned barren land
Accessibility	Traffic congestion, road safety	Access via Main Nankana Road with safety signage
Soil condition	Unsuitable for foundation, erosion risks	Geo-technical assessment conducted

## Impact Screening During Design Phase

Design Component	Potential Impact	Mitigation Measure
Building layout	Inefficient energy use	Design to include natural ventilation and lighting
Utility design	Emission of untreated wastewater	Provision of ETP and separate drainage system
Fire safety	Fire hazard due to chemicals	Fire extinguishers, hydrants, and escape routes
Solid waste management	Inadequate waste handling	Designated zones for waste collection and disposal

## Impact Screening During Construction Phase

Construction Activity	Environmental Concern	Mitigation Measures
-----------------------	-----------------------	---------------------

<b>Site clearance</b>	Loss of vegetation, dust emission	Controlled vegetation clearance and dust suppression
<b>Earthworks</b>	Soil erosion, noise pollution	Compaction, noise barriers
<b>Material storage</b>	Risk of soil/water contamination	Covered storage and containment areas
<b>Equipment operation</b>	Emission, noise, oil leaks	Regular maintenance, use of mufflers
<b>Workforce concentration</b>	Sanitation, waste generation	Provision of temporary sanitation facilities

## Impact Screening During Operational Phase

<b>Operational Activity</b>	<b>Potential Environmental Impact</b>	<b>Mitigation Measures</b>
<b>Soap manufacturing</b>	Emission of vapors, chemical residues	ETP, PPE, ventilated spaces
<b>Transportation</b>	Vehicular emissions, road degradation	Well-maintained access routes, emission checks
<b>Energy usage</b>	High carbon footprint	Installation of solar panels, energy audits
<b>Water usage</b>	Overconsumption, discharge issues	Water-efficient fixtures, reuse of treated water
<b>Solid waste generation</b>	Improper disposal	Recycling programs, agreement with waste contractors

## Cumulative and Residual Impacts

- **Cumulative Impacts:** Continuous operation may result in gradual air quality degradation and noise buildup.
  - **Mitigation:** Long-term environmental monitoring, buffer plantation.

- **Residual Impacts:** Even with controls, minor levels of emissions and waste may persist.
  - **Mitigation:** Periodic audits and equipment upgrades.

## Environmental Risk Screening

Risk	Likelihood	Impact Severity	Mitigation/Control Measure
Chemical spills	Medium	High	Spill kits, bund walls, emergency drills
Fire hazard	Low	Very High	Fire alarms, hydrants, safety training
Worker health incidents	Medium	Medium	PPE, regular medical checks

## Potential Environmental Enhancement Measures

Area	Enhancement Strategy
Landscape	Green belts, native trees around site
Employment	Hiring locals, skill-building workshops
Waste management	Recycling and composting programs
Community engagement	Environmental awareness and safety sessions

## Monitoring and Reporting Framework

Parameter	Frequency	Responsibility
Air emissions	Quarterly	Environmental Officer
Effluent discharge	Monthly	EHS Supervisor
Waste collection	Weekly	Housekeeping Contractor
Health & safety audits	Bi-annually	HSE Department

## Climate Change Considerations

- **Potential GHG Emissions:** From fuel combustion and electricity.
- **Mitigation:** Use of renewable energy sources, energy-efficient motors.
- **Adaptation:** Elevated foundation against floods, rainwater harvesting.

## Occupational Health & Safety (OHS) Impacts

- **Risks:** Exposure to chemicals, machinery accidents.
- **Control Measures:**
  - Safety training
  - PPE enforcement
  - Emergency response plans

## Legal and Institutional Screening

The proposed project aligns with:

- Punjab Environmental Protection Act (2012)
- Punjab Environmental Quality Standards (PEQS)
- Hazardous Substance Rules
- Labor Health & Safety Laws

## Summary Table of Impacts and Mitigation Measures

Phase	Impact	Mitigation
Location	Land incompatibility	Chose compliant barren land
Design	Poor drainage system	Separate storm and waste lines
Construction	Dust, noise, sanitation	Sprinklers, barriers, mobile toilets

<b>Operation</b>	Emissions, waste	ETP, emission monitoring
<b>Enhancement</b>	Lack of vegetation	Develop green belts and tree plantation

## Chapter 7: Environmental Management and Monitoring Program

### Introduction

An effective Environmental Management and Monitoring Program (EMMP) is essential to ensure that the proposed activities of the Kisan Soap Factory are carried out in accordance with national environmental standards and that any adverse impacts on the environment are adequately mitigated. This chapter presents a detailed plan for managing and monitoring environmental impacts throughout the lifecycle of the project including planning, construction, operation, and decommissioning.

### Description of Proposed Mitigation Measures

All significant potential impacts identified in the EIA have been addressed through specific mitigation measures, as shown in the table below:

Environmental Aspect	Potential Impact	Proposed Mitigation Measure
<b>Air Quality</b>	Dust, emissions from generators and boilers	Water sprinkling, stack height management, low-sulfur fuel
<b>Noise</b>	Construction and mechanical noise	Sound barriers, schedule restrictions, PPE for workers
<b>Water Resources</b>	Wastewater discharge, spillage risks	Effluent Treatment Plant (ETP), closed drains, oil traps
<b>Soil Quality</b>	Contamination from chemicals	Proper waste storage, lined floors, chemical handling SOPs
<b>Solid and Hazardous Waste</b>	Improper disposal	Segregation, labeling, safe disposal through certified vendors
<b>Occupational Health &amp; Safety</b>	Exposure to chemicals, fire risk	PPEs, fire alarms/extinguishers, regular training

## Schedule for Implementation

Mitigation Activity	Timeline	Responsibility
Dust control during site development	Start of construction	Site Engineer/Contractor
Installation of ETP	Mid construction	Mechanical Engineer
Fire safety system installation	End of construction	Electrical/Fire Safety Team
Staff training on chemical handling	Quarterly	HSE Officer
Waste storage and segregation practices	Ongoing	Site Supervisor

## Environmental Management Team and Responsibilities

Position	Role/Responsibility
Environmental Manager	Oversee EMP implementation, reporting, coordination with regulatory bodies
HSE Officer	Daily monitoring, conduct trainings, ensure safety measures
Site Engineer	Ensure mitigation at design and construction stages
Chemical Handling Officer	Ensure safe chemical storage, handling and waste management practices
Monitoring Expert	Conduct sampling, prepare monitoring reports, analyze lab data

## Monitoring Program

Parameter	Frequency	Location	Method	Responsibility
Air Quality (PM, NO <sub>x</sub> )	Quarterly	Near boiler, plant gate	Stack emission test, ambient	Third-party lab

<b>Water Quality</b>	Monthly	ETP inlet/outlet	pH, TSS, BOD, COD	Environmental Officer
<b>Noise Levels</b>	Monthly	Boundary & operation area	Sound level meter	HSE Officer
<b>Solid Waste Storage</b>	Bi-weekly	Waste storage area	Visual inspection	Site Supervisor
<b>Occupational Health</b>	Quarterly	Entire facility	Safety audit, medical check	HSE Officer

## EMP Reporting and Review Procedures

- **Monthly Reports:** Prepared by the HSE Officer and submitted to Environmental Manager
- **Quarterly Reviews:** Conducted with management to assess EMP performance
- **Annual Audit:** Conducted by third-party to ensure compliance with PEQS and NEQS
- **Regulatory Submission:** Bi-annual reports to EPA Punjab

## Training and Capacity Building

To effectively implement the EMP and monitoring programs, staff will be trained in:

- Safe chemical handling and emergency response
- Waste segregation and hazardous waste labeling
- ETP operation and maintenance
- Personal protective equipment (PPE) use
- Reporting and documentation for EMP compliance

### Training Schedule:

Training Topic	Participants	Frequency
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<b>Chemical Safety and Spill Response</b>	Floor staff, supervisors	Quarterly
<b>Fire Safety and Evacuation Drills</b>	All employees	Bi-annually
<b>Waste Management Protocols</b>	Cleaning & waste staff	Monthly
<b>ETP Operation and Monitoring</b>	Operators and Engineers	Bi-annually

## Emergency Preparedness Plan

An Emergency Response Plan (ERP) will be established to deal with fire, chemical spills, and natural disasters. This includes:

- Evacuation procedures
- Fire drills
- First aid training
- Spill kits and containment zones

## Conclusion

The EMP ensures all environmental risks are systematically identified, managed, monitored, and reported. The proactive approach adopted will help in reducing environmental footprints and promoting sustainable operations of Kisan Soap Factory in accordance with Punjab Environmental Quality Standards (PEQS).

## Summary of Impacts and their mitigation measures

Serial No.	Environmental Issues/ Impacts	Mitigation Measures	Responsibility
<b>PLANNING, SITE SELECTION AND DESIGN STAGE</b>			
1	Observance of administrative and legal formalities	NOCs to be obtained from relevant departments.	<b>proponent</b>
2	Acquisition of land	Ownership of the M/s Kisan Soap Factory	<b>proponent</b>
3	Loss of environmentally sensitive areas	There is no any sensitive area near the project site however the project proponent will achieve the PEQ'S at the boundary wall of the subject project to avoid the environmental impacts on the nearby industrial unit	<b>proponent</b>
4	Changes in traffic pattern	Prepare suitable in/out traffic plans	<b>proponent</b>
5	Potential conflicts with stakeholders	Settle the issues through scoping and specific group discussions.	<b>proponent</b>
6	Resettlement issues	No resettlement issues	<b>proponent</b>
7	Project Design	<ul style="list-style-type: none"> <li>• Structure Stability Assessment of soil should be done, as per building design i.e. total area of building, No. of stories, etc.</li> <li>• Installation of Dust/flue gases/odor controlling devices should be incorporated in the design. Project proponent is committed to provide all these provision in the design of the project.</li> </ul>	<b>proponent</b>
<b>SITE DEVELOPMENT STAGE</b>			

SOAP MANUFACTURING UNIT  
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1	Erosion due to stripping and site clearance	Sprinkling of water on road side or dusty tracks	Project manager/ contractor/HSE Manager
2	Generation of dust	<ul style="list-style-type: none"> <li>Careful loading and unloading of construction materials.</li> <li>Sprinkling of water and construction site and surrounding areas.</li> </ul>	Project manager/ contractor/HSE Manager
3	Generation of noise	<ul style="list-style-type: none"> <li>Avoid using forbidden horns at the site.</li> <li>Do not throw heavy equipment and construction materials in haphazard manner.</li> </ul>	Project manager/ contractor/HSE Manager
4	Local flooding/ponding	Immediate repair and maintenance of water supply pipes and sewers in case of any defect will be undertaken.	Project manager/ contractor/HSE Manager
5	Outbreak of fire	Keeps the firefighting equipment at the site in good working condition.	Project manager/ contractor/HSE Manager

6	Safety	<ul style="list-style-type: none"> <li>• Safety of the workers and others will be ensured.</li> <li>• Privacy of the neighbors will not be disturbed.</li> </ul>	Project manager/ contractor/HSE Manager
7	Labor issues	Employ the local labor as far as possible	HR department
<b>CONSTRUCTION STAGE</b>			
1	Minor erosion of land	<ul style="list-style-type: none"> <li>• There are two types of erosions: <ol style="list-style-type: none"> <li>1. Wind Erosion</li> <li>2. Water erosion</li> </ol> </li> <li>• It is recommended to construct the boundary wall first that will reduce the soil erosion due to wind and chances of water erosion due to water flow from the adjacent will be reduced also.</li> <li>• Clearing of land should be step wise; vegetation should be removed only from the area where main building will be developed.</li> <li>• Add more vegetation, restore the land by more plantation</li> <li>• Sprinkle water on dusty tracks is recommended</li> </ul>	Project manager/ contractor/HSE Manager
2	Contamination of land and water	Hazardous substances like oil, fuel, etc. should be kept on concreted surface.	Project manager/

		Essential services like water supply, sewerage disposal and solid waste management will in working condition.	<b>contractor/HSE Manager</b>
3	Impacts of dust, noise and smoke on neighbors	<ul style="list-style-type: none"> <li>• Sprinkle water on dusty tracks is recommended</li> <li>• Avoid using forbidden horns at the site.</li> <li>• Do not throw heavy equipment and construction materials in haphazard manner.</li> <li>• Proper tunings of vehicles and machinery must be ensured.</li> <li>• Schedule construction timings should be implemented for minimum disturbance to neighbors.</li> <li>• Continuous Environmental monitoring must be ensured as per proposed monitoring plan.</li> </ul>	<b>Project manager/contractor/HSE Manager</b>
<b>OPERATION STAGE</b>			
1	Contamination of land and water sources	<ul style="list-style-type: none"> <li>• Continuous vigilance on maintenance of services</li> <li>• Tarpaulin sheets will be placed to avoid leaching of oil into ground</li> <li>• Waste water treatment facility will be installed to treat the water prior to discharge into local drain or use for irrigation</li> <li>• Pollution controlling devices will be installed.</li> <li>• PEQ'S compliance Generator will be used but in case of emissions from generator, scrubbing system will be installed.</li> </ul>	<b>Project manager/contractor/HSE Manager</b>
2	Impacts of dust, noise and smoke		<b>Project manager/contractor/HSE Manager</b>

		<ul style="list-style-type: none"> <li>Noise will be controlled through proper checking and maintenance of vehicles and machinery</li> <li>PPEs will be provided and implemented</li> <li>Monitoring will be conducted as per PEQ's Rules</li> </ul>	
3	Fire breakouts	<ul style="list-style-type: none"> <li>Training of workers regarding flammable substances will be ensured. SOPs of fire prevention will be adopted like forbidden of smoking, regular testing of electricity infrastructures and regular testing of gas supply system to the industry.</li> <li>Firefighting equipment will be in working condition</li> <li>Firefighting plan will be formulated</li> </ul>	<b>Project manager/contractor/HSE Manager</b>
4	Safety/security concerns	<ul style="list-style-type: none"> <li>Safety of the workers and others will be ensured.</li> <li>Privacy of the neighbors will not be disturbed.</li> </ul>	<b>Project manager/contractor/HSE Manager</b>
5	Malfunction of utilities	<ul style="list-style-type: none"> <li>It is proposed to appoint maintenance engineer with technicians like plumber and electrician for smooth operation of utility services.</li> </ul>	<b>Project manager/contractor/HSE Manager</b>
6	Occupational Health, Safety and Environment	<ul style="list-style-type: none"> <li>Regular medical check-ups will improve the working condition and efficiency of workers.</li> </ul>	<b>Project manager/contractor/HSE Manager</b>

		<ul style="list-style-type: none"> <li>• Relevant safety devices like belts, gloves and testers will be strictly used by the operators at the work site.</li> <li>• Safety of management, workers and visitors must be ensured.</li> <li>• Observance construction and safety codes.</li> <li>• Provision of emergency exits. At least two exits points will be available at each workplace.</li> <li>• Hygienic conditions will be ensured at production hall</li> <li>• Quality of products will be maintained</li> <li>• PPEs will be implemented</li> <li>• Drugs or smoking will be prohibited during working hours</li> </ul>	<b>contractor/HSE  Manager</b>
<b>6</b>	<b>Production of Sludge and Solid Waste</b>	<b>The sludge and solid waste will be Sold out through a certified contractor to dispose it in environmental friendly manner</b>	<b>Project  manager/  contractor/HSE  Manager</b>

**ENVIRONMENTAL MANAGEMENT PLAN FOR THE ESTABLISHMENT OF SOAP MANUFACTURING UNIT FOR M/S KISAN SOAP FACTORY.**

Sr. No.	Impacts from the project Activities	Project Stage	Impacts	Mitigation Measures	Responsibility
1	Disturbance to the people	Construction/ Operation	Disturbance to everyday life and working of people	<ul style="list-style-type: none"> <li>Inform residents of the area, stockholders and shop keepers about detail of work, likely disturbances, and their duration and to whom they should address their complaints.</li> <li>Establishing good community relationship so that any disruption can be resolved with due consideration of community.</li> </ul>	Project manager/ contractor /HSE Manager
2	Surface and ground water contamination	Construction/ Operation	Surface and ground water contamination from oil leakage of construction machinery & generators	<ul style="list-style-type: none"> <li>Proper arrangement for collection of oil base products.</li> <li>Proper maintenance of route plan and timings for the removal of waste material from working site</li> </ul>	Project manager/ contractor/HSE Manager

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		contamination of surface water because of transportation and temporary storage of sludge	
3	Soil Erosion	Construction/ Operation	<p>Soil erosion may result from the project construction activities. It may harm natural vegetation of the area  Or deteriorate soil quality</p> <ul style="list-style-type: none"> <li>• Maximum plantation is recommended within at outside the unit and for this area is reserved.</li> <li>• Land will be restored by planting indigenous plants</li> </ul>
4	Solid Waste	Construction/ Operation	<ul style="list-style-type: none"> <li>• M/s Kisan Soap Factory solid wastes from the construction activities shall be segregated and duly disposed of. The solid redundant materials will be disposed of away from the city</li> </ul>

		<p>adequately. None of these wastes shall be accumulated on site. It shall be ensured that none of the wastes or materials of construction spread on the public roads or on the foot path or else.</p> <ul style="list-style-type: none"> <li>• Construction Solid waste will be stored in solid waste bins and will be handed over to contractor and also construction waste will be used for road repairing and maintenance purpose</li> </ul>	
5	<p>Waste water</p> <p>Construction/ Operation</p>	<p>The waste water to be generated shall be discharged into the waste water treatment tanks for its treatment and then it will drain into nearby drain or</p> <ul style="list-style-type: none"> <li>• The waste water to be generated shall be discharged into the waste water wastewater treatment tanks/WWTP for treatment at PEQ'S levels.</li> <li>• While laying sewage pipes, measures will be adopted to ensure that other pipes, wires or systems already existing in the rout of the sewage pipes are not damaged.</li> </ul>	<p>Project manager/ contractor/HSE Manager</p>



	<p>used as irrigation purposes.</p> <p>Domestic/construction waste water after Treatment in wastewater treatment tank will be sprinkled or irrigated to the plants or drained into nearby local sewage drain.</p>	<ul style="list-style-type: none"> <li>• Tarpaulin sheets will be placed under generator (s), (if any) at any stage of the project) underground tanks and other leaching substances.</li> <li>• Sewage and other waste effluents will be handled to avoid contaminating surface and groundwater:</li> <li>• No contaminated effluents will be released into the environment without having been treated.</li> <li>• An appropriately designed wastewater treatment tank/treatment plant will be used to treat sewage and outlets will release treated effluent into drain or it will be used irrigation purpose. The integrity of the entire system will be maintained and monitored.</li> <li>• Periodic cleaning of the wastewater treatment tank is recommended</li> </ul>
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6	Water supply	Construction/ Operation	It shall be ensured that no activity tempers with the water supply system.	<ul style="list-style-type: none"> <li>Monitoring will be conducted on monthly or quarterly bases by EPA certified lab if required</li> <li>It shall be ensured that no activity tempers with the water supply system.</li> <li>Project proponent committed to provide safe drinking water to all workers and staff</li> </ul>	Environmental/HSE Manager/HSE Manager
7	Dust/ gaseous emissions	Construction/ Operation	<p>Air Pollution is a result of dust</p> <p>Other emissions from vehicles can also be harmful</p> <p>Dust may generate during unloading of raw materials.</p> <p>It may result from trash burning</p>	<ul style="list-style-type: none"> <li>Construction activities causing dust should not be carried out on excessively windy days.</li> <li>Provide masks to the workers.</li> <li>Minimize exhaust emissions from machinery and vehicles</li> <li>Regular Sprinkling of water on road to minimize dust emissions</li> <li>One diesel fired generator shall cater for emergency situation only. Their exhaust will be emitted through an adequately fabricated stack. It will also be kept in mind that the generators</li> </ul>	Project manager/ contractor/HSE Manager

				<p>will only function during emergency condition for Ltd. period.</p> <ul style="list-style-type: none"> <li>Monitoring will be conducted on quarterly basis if required,</li> <li>No trash burning will be allowed in or out side the pump site</li> <li>Air quality monitoring has been conducted before construction and lab results are attached.</li> </ul>	
8	Noise pollution	Construction/ Operation	<p>Noise Pollution,; can harm hearing sense of workers, drivers and traders</p> <p>Can cause disturbance to local population</p>	<ul style="list-style-type: none"> <li>In order to avoid noise in the project area, vehicles to carry raw materials, shall be operated during night time as far as possible.</li> <li>The project construction activities don't involve any activity which may create high noise levels.</li> <li>No activity producing extra ordinary levels of noise will be allowed as a policy matter.</li> <li>One standby generator will be installed in emergency situation in a</li> </ul>	Project manager/ contractor/HSE Manager

	<p>specially constructed room where its noise will be curtailed within the limiting values of the National Environmental Quality Standards</p> <ul style="list-style-type: none"> <li>• Ear plugs will be provided &amp; implemented</li> <li>• Monitoring will be conducted on monthly or quarterly basis if required</li> <li>• Noise level monitoring has been carried out before construction and lab results are attached.</li> </ul>	
<p>9</p>	<p>Odor</p>	<p>Construction/ Operation</p> <p>Very high odor may cause annoyance to local people and workers</p> <p>Following mitigation measures will be adopted:</p> <ul style="list-style-type: none"> <li>• Proper ventilation will be provided at workplace.</li> <li>• Maximum plantation will be done at site and at the front of ventilation system.</li> <li>• PPEs will be provided to workers in case of heavy odor problem.</li> </ul> <p>Project manager/ contractor/HSE Manager</p>

				<ul style="list-style-type: none"> <li>Project proponent committed to adopt any mitigation measures to control any impacts resulting from the project.</li> </ul>	
<b>10</b>	Decommission and Waste Management problems	Construction/ Operation	Degradation in Aesthetic and social acceptance Sludge piles on site can cause odor problems	Solid waste and sludge must be removed timely from the site and carefully transported to landfill dumping site following safe route for transportation of sludge	Project manager/ contractor/HSE Manager
<b>11</b>	Traffic control issues	Construction/ Operation	Traffic jams and congestion may take place and cause inconvenience to the people where the construction take place	<ul style="list-style-type: none"> <li>Efforts should be made to accommodate the traffic along the road as far as practically possible</li> <li>Provision of signboards directing the drivers about the diversion</li> </ul>	Project manager/ contractor/HSE Manager
<b>12</b>	Workers health & safety concerns	Construction/ Operation	Poor management and negligence may	The EMP guidelines will be followed strictly.	Project manager/ contractor/ proponent

cause impacts on workers' health	<ul style="list-style-type: none"><li>• Training of workers will be conducted regarding health and safety.</li><li>• Use of PPEs will be implemented at workplace.</li><li>• First aid measures will be provided to workers.</li><li>• Shift Rotation, proper ventilation will be provided to workers in case of thermal stress.</li><li>• Safety signs, safety boards, exit arrows etc. will be placed on site.</li><li>• An Assembling point will be kept to gather in case of emergency situation such as fire hazards.</li><li>• Fire Fighting Equipment's &amp; system will be installed.</li><li>• Floor will be kept clean without slippery to avoid any hazard.</li><li>• Electric wires, D.Bs will be kept covered &amp; closed.</li></ul>
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<p>13</p>	<p>Environment quality enhancement measures: flowers and plants and decoration lights.</p>	<p>Construction/ Operation</p>	<p>It has positive impact on environment, will provide esthetical beauty to site</p>	<ul style="list-style-type: none"> <li>• Machinery will never be left in running condition.</li> <li>• Safe drinking water will be provided to workers and staff (admitted by the proponent)</li> <li>• Proper housekeeping will be ensured</li> <li>• Flower pots containing flowers and plants will be provided in front of the building to add to the improvement of the environment around.</li> <li>• All other necessary measures shall also be taken to maintain standards of cleanliness so that the building may add to the scenic/aesthetic beauty of the area around</li> </ul>	<p>Project manager/ contractor/HSE Manager</p>
<p>14</p>	<p>Staff for catering the Environmental Management Plan</p>	<p>Construction/ Operation</p>	<p>---</p>	<p>Special staff will be recruited to implement this Environmental Management Plan on regular basis.</p>	<p>Project manager/ contractor/HSE Manager</p>

## CHAPTER 8: STAKEHOLDERS CONSULTATION

### Introduction

Stakeholder consultation is a fundamental component of the Environmental Impact Assessment (EIA) process, aimed at ensuring transparency, inclusivity, and collective decision-making. It provides an avenue for individuals, institutions, and interest groups who are likely to be affected by the proposed project to express their concerns, contribute local knowledge, and influence the decision-making process.

The proposed establishment of the Kisan Soap Factory at Shahkot has the potential to impact various environmental, social, and economic parameters, hence consultations were undertaken to assess stakeholders' views and integrate their insights into planning and mitigation strategies.

### Objectives of Stakeholder Consultation

- To inform stakeholders about the project scope, scale, and potential impacts.
- To gather stakeholder inputs, concerns, and recommendations.
- To ensure the views of all relevant parties are considered in decision-making.
- To promote community participation and ownership of the environmental management process.

### Identification of Stakeholders

Stakeholders for this project were identified based on their potential influence on or susceptibility to the project impacts. They include:

- **Internal stakeholders:** Project proponent, environmental management team, employees.

- **Government agencies:** Environmental Protection Agency (EPA), District Administration, Department of Industries.
- **Community members:** Residents living in and around the project area.
- **Civil society organizations:** NGOs, community-based organizations.
- **Environmental experts and consultants.**

## Modes of Engagement

Engagement with stakeholders was conducted through:

- Public meetings
- Focus group discussions
- One-on-one interviews
- Email and written correspondence
- Online and social media outreach (where applicable)

## Proponent's Environment Management Team

The team is responsible for communicating EIA findings and ensuring that all community and regulatory concerns are addressed. Their consultation strategy included:

- Holding regular internal meetings
- Coordinating with external stakeholders
- Preparing environment-specific awareness materials
- Ensuring that responses to concerns were integrated into the project design

## Responsible Authority

The Punjab Environmental Protection Agency (EPA) was consulted as the primary regulatory body. Discussions focused on:

- Compliance with Environmental Protection Act, 1997
- Submission requirements for EIA approval
- Expectations for periodic environmental monitoring and compliance reporting

## Coordination with Other Departments and Agencies

Inter-agency consultations were carried out with:

- **Department of Industries:** Reviewed chemical handling protocols
- **Local Health Department:** Assessed potential public health impacts
- **Water and Sanitation Agency (WASA):** Reviewed wastewater disposal mechanisms
- **Traffic Police Department:** Discussed traffic management near project site

## Engagement with Environmental Experts

Expert consultations were essential for technical input on pollution control, occupational health, and process safety. Insights provided were used to:

- Strengthen mitigation measures
- Improve the environmental monitoring plan
- Identify suitable technologies for emissions and effluent treatment

## Community Engagement

The wider community was engaged through local gatherings and awareness sessions. Topics discussed included:

- Job creation
- Environmental health and safety
- Noise, dust, and odor management

- Community grievance redressal mechanisms

The community showed general support for the project provided mitigation and monitoring commitments are honored.

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## **Documentation and Record Keeping**

All stakeholder inputs have been documented and archived. Key recommendations have been incorporated in:

- Project design revisions
- Environmental Management Plan (EMP)
- Monitoring and compliance framework

## **Grievance Redressal Mechanism**

A grievance redressal system has been established to address ongoing concerns:

- Suggestion boxes at project site
- Dedicated community liaison officer
- Complaint registry and response tracker

## **Feedback Integration**

The stakeholder concerns and recommendations were mapped and assessed. Relevant feedback was:

- Translated into action items for EMP
- Used to adjust construction and operation protocols
- Forwarded to design engineers for infrastructure modifications

## Conclusion

The stakeholder consultation process ensured active participation and valuable contributions from all concerned parties. The inclusive approach strengthened the project's environmental credibility and compliance outlook.

## CHAPTER 9: CONCLUSION & RECOMMENDATIONS

### CONCLUSIONS

- The EIA study reveals that the project is economically viable, socially acceptable and environment friendly.
- On completion of the project M/s Kisan Soap Factory will provide Commercial market facility to local people and community.
- It will generate additional jobs during construction and operation phases.
- Project is environmental friendly and pollution free
- The proponent has committed to implement the project in the environment friendly manner.
- If there is wastewater from Project, proponent has ensured to install the Waste Water Treatment facility to treat the domestic waste water prior to discharge into drain or use for irrigation purposes.
- Project proponent has ensured to adopt the proper solid waste management system.
- Proponent has ensured to adopt all the necessary measures to control any impact if resulting from the project.
- Project proponent has ensured to provide the safe drinking water to all workers and staff.
- Proponent of M/s Kisan Soap Factory intends to register the project with local Government.
- Project proponent has prepared and implemented very comprehensive Emergency Preparedness and Response Standard Operating Procedures.
- Project proponent has prepared and implemented very comprehensive Security and Fire Fighting Standards Operating Procedures.

#### **Main environmental issues are as under:**

- Production of Solid Waste (Sludge)
- Generation of waste water (Treated Wastewater)
- Generation Noise
- Traffic issues
- Health and Safety issues

## RECOMMENDATIONS

- In view of the comprehensive screening process and findings of the present study there is no need of conducting further investigations.
- Tree plantation is recommended.
- A good firefighting system should be installed.
- Proper solid waste management system should be followed according to direction of the Local Government. Sludge should be handed over to the EPA approved Contractor for the proper and environmental friendly disposal of Sludge.
- If there is waste wastewater, treated wastewater should be utilized in the nearby agriculture land for the sustainable resource utilization.
- High standards of bio-security and safety should be enforced during operation stage. Safety of the workers should be top priority for the management.
- M/s Kisan Soap Factory should continue to assist the local communities as a corporate/social responsibility.

The present EIA report is enough to meet the administrative and legal framework. Therefore, the environmental approval may be accorded for the establishment of soap manufacturing unit.

# **Annexure**

TORs

TERM OF REFERENCES (TORS)

TO CONDUCT THE ENVIRONMENTAL IMPACT  
ASSESSMENT STUDY FOR

**M/S Kisan Soap Factory**

LOCATED AT

**5-KM Main Nankana Road, Shahkot, Chak No, 182**

**R.B. borala, District Nankana Sahib**

## TERM OF REFERNCES

These terms of references are being submitted for the subject EIA study under 5 (f) of policy and procedure for the filing, review and approval of environmental assessment. These TORs of EIA have been prepared by the environmental consultants, in consultation with the project proponent.

### INTRODUCTION OF PROJECT:

The Subject project is the establishment of soap manufacturing unit. the total area of the unit is 57 kanals and 5 marlas while the covered area of the unit is 32711 sft with the 55 MT capacity per day. The estimated cost of the said project is 30 million PKR approximately.

This EIA is being submitted in compliance with **Section 12 of the Pakistan Environmental Protection Act (PEPA), 1997 (Amended 2012)**, to ensure that the expansion is carried out in an environmentally responsible and sustainable manner.

### Name & Address of proponent

- **Name:** Muhammad Bilal Ghaffar
- **Address:** Ward no. 07, Muhallah Abadi, Araiyan, shahkot, Zila Nankana Sahib
- **CNIC:** 35403-9638920-5

**M/S Kisan Soap Factory** has appointed the Pak Green Enviro-Engineering (Pvt) Ltd as the Consultant for the subject project to conduct the EIA. M/S Pak Green Enviro-Engineering (Pvt) Ltd will be called as "Consultant" Kisan Soap Factory as the "Client".

### Objective of the EIA study

The Objective of study includes Compliance of section 12 of PEPA 1997 (Amended 2012) & NEQS/ PEQS.

### Purpose of the EIA

The key objectives of the EIA are to:

- Document the ecological and socioeconomic baseline conditions of the study area and the affected communities
- Inform and obtain input from stakeholders, (e.g., governmental authorities, the public, and indigenous communities) and capture their relevant issues and concerns
- Assess in detail the environmental, social, and health impacts that would result from the Project

- Identify environmental and social mitigation measures to address the impacts identified
- Develop the EMPs as discussed above, based on the mitigation measures developed in the EIA
- Meet the requirements or recommendations of the applicable national Environmental Laws and Guidelines

#### Scope of Services

1. Review of existing regulatory framework
  - 1.1 Laws and Regulations
  - 1.2 National and International Guidelines and Policy
  - 1.3 Guidelines of Labor & Human Resource Department
  - 1.4 Punjab Local Government Ordinance
2. Methodology for carrying out this study
  - 2.1 Project Description
    - 2.2 Site Selection
    - 2.3 Project Alternatives
3. Process Description
  - 3.1. Detailed review of the processes
  - 3.2 Design Parameters
  - 3.3 Details related to Plant and Equipment's
4. Environmental profile of the environmental study area
  - 4.1 Climatology
  - 4.2 Geographical features
  - 4.3 Geological and Hydrological features
    - 3.5.4 Historical review
    - 3.5.5 Land Use
    - 3.5.6 Ecology, i.e. Flora and Fauna etc.
  - 3.6 Analysis of EPA required environmental parameters
    - 3.6.1 Sampling for Air, Water, and Noise Level
  - 3.7 Investigate Socio-Economic and Socio-Environmental aspects and cultural values within and around the operating facility

- 3.7.2 Cultural and Social Values
- 3.7.4 Interviews from different groups
- 3.8 Development activities and Waste Management
- 3.9 Identify and evaluate major environmental impacts
- 3.10 Identify mitigation measures and develop Environmental Management and Monitoring plan
- 3.11 Conclusions based on the study conducted for this EIA
- 3.12 1-2 Site Visits for data acquisition
- 3.13 Environmental Monitoring plan
- 3.14 Preparation of Lab Analysis Report
- 3.15 Preparation of Environmental Management Plan EMP
- 3.16 Briefing & Presentation to the Expert Committee in the EPA Punjab.
- 3.17 Reply to technical Environmental Objections/Review
- 3.18 Presentation in the office of DG EPA, Punjab (if required)

## CLIENT RESPONSIBILITY

- Proponent will be responsible to nominate a senior officer as Coordinator who will be responsible for all coordination activities as required by the Consultants and to whom the Consultants will refer for information and assistance. All correspondence between the Consultants and the CLIENT will be routed through the Coordinator.
- Consultants will require free access to all relevant information available with the Client
- The report developed for the CLIENT shall be the property of the CLIENT and the Consultants shall adhere to confidentiality morally as well as legally.
- Client will provide relevant documents as:
  - Signed application on company letter head
  - Pay Order in favor of DG EPA as review fee 30,000/-
  - Undertaking on Stamp Paper as per EPA Format
  - Affidavit on Stamp Paper as per EPA Format
  - Copy of NIC of proponent
  - Duly filled and Sign Schedule IV
  - Details of firefighting Equipment's
  - Layout Maps of the project
  - Other NOCS/Certificates from other concerned departments (if any)
  - Any other relevant documents/details required by the consultant.

Signatures: \_\_\_\_\_

Environmental Consultant  
Pak Green Enviro-Engineering  
Pvt. LTD.

Signatures: \_\_\_\_\_

Muhammad Bilal Ghaffar  
M/s Kisan Soap Factory



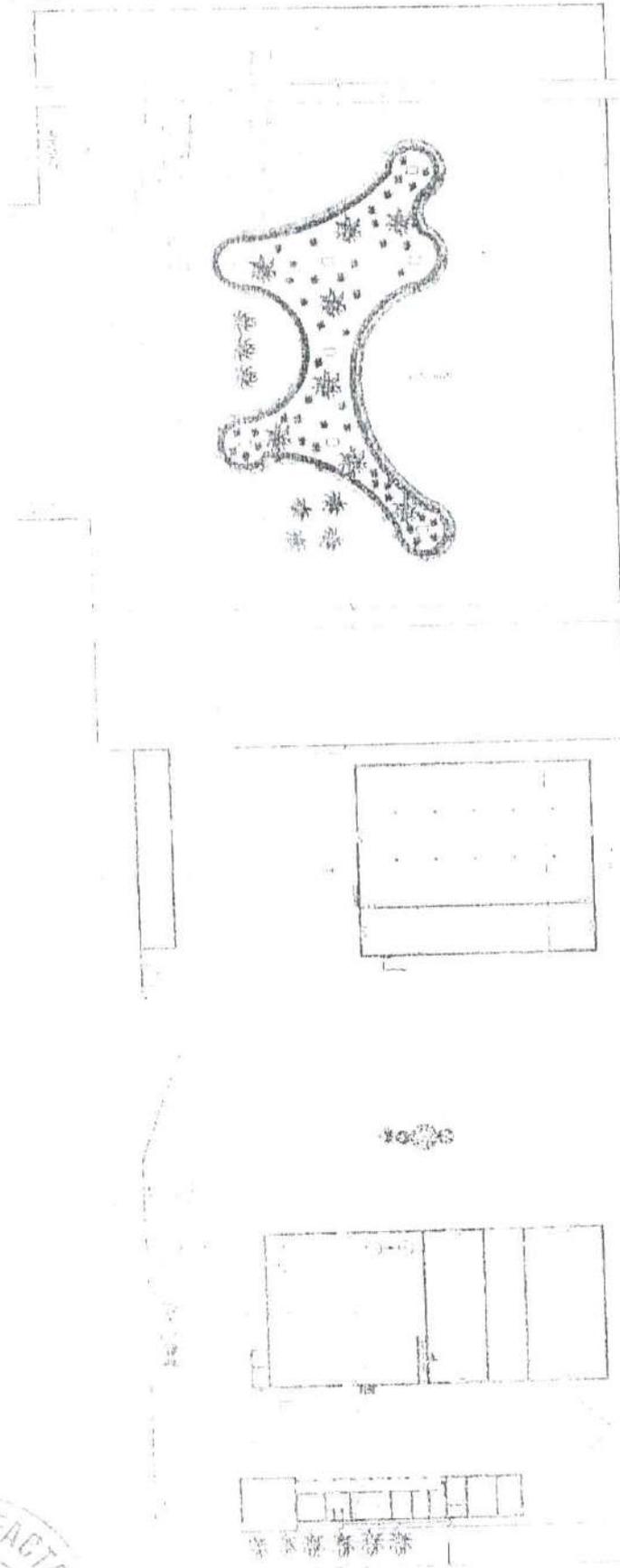
## **Annexure**

### **Layout and Google Earth Map**

# MISAN SOAP FACTORY (SHAHKOT)

SHAH KOT  
S.A. 182 C.R.

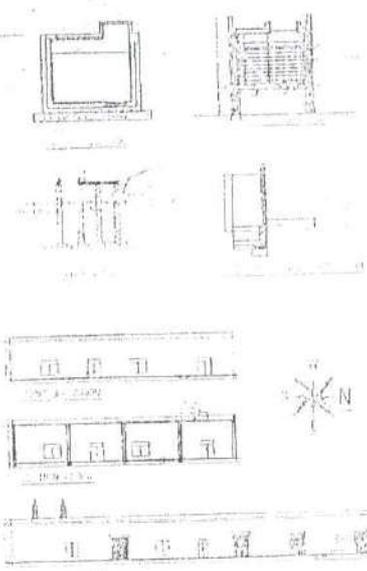
S. M.  
S. S.



Architect  
**Khuram Nawaz Siddiqui**  
B-ARCH REG. NO. 22946-06304  
B-ARCH REG. NO. 22946-06304

NO. OF FLOORS	5
NO. OF ROOMS	10
NO. OF TOILETS	10
NO. OF STORES	10
NO. OF OFFICES	10
NO. OF KITCHENS	10
NO. OF CLOSET	10

- FLOOR FINISH
- EMERGENCY EXIT
- TOILETS
- STORES
- OFFICES
- KITCHENS
- CLOSET



1. The building is designed for a soap factory and should be constructed with a strong and durable material.
2. The building should be constructed with a strong and durable material.
3. The building should be constructed with a strong and durable material.
4. The building should be constructed with a strong and durable material.
5. The building should be constructed with a strong and durable material.
6. The building should be constructed with a strong and durable material.
7. The building should be constructed with a strong and durable material.
8. The building should be constructed with a strong and durable material.
9. The building should be constructed with a strong and durable material.
10. The building should be constructed with a strong and durable material.



# M/s Kisan Soap Factory

Shahkot Rd, Nankana Sahib

## Legend

-  KISAN SOAP FACTORY ????
-  M/s Kisan Soap Factory
-  Sukh chain city shahkot



Google Earth

Image © 2024, Airbus

# **Annexure**

## **Land documents**





قلمبر حصار حيدرآباد (سليمانيه)

مقاله نمبر 182-RB

مقاله نمبر 2019-20

مقاله نمبر 182-RB

مقاله نمبر 182-RB

مقاله نمبر 182-RB

مقاله نمبر 182-RB

مقاله نمبر	مقاله نمبر	مقاله نمبر	مقاله نمبر	مقاله نمبر	مقاله نمبر
(1)	(2)	(3)	(4)	(5)	(6)
28112-05	1145/3058	1145/3058	1145/3058	1145/3058	1145/3058
326-13-0	41	41	41	41	41
35-403-5638920-5					
14-6-68	1145/26132	1145/26132	1145/26132	1145/26132	1145/26132
14-6-68	1145/26132	1145/26132	1145/26132	1145/26132	1145/26132



مقاله نمبر: 28112-05  
 مقالہ نمبر: 1145/3058  
 مقالہ نمبر: 1145/3058  
 مقالہ نمبر: 1145/3058  
 مقالہ نمبر: 1145/3058  
 مقالہ نمبر: 1145/3058

مقاله نمبر: 326-13-0  
 مقالہ نمبر: 41  
 مقالہ نمبر: 41  
 مقالہ نمبر: 41  
 مقالہ نمبر: 41  
 مقالہ نمبر: 41

مقاله نمبر: 35-403-5638920-5  
 مقالہ نمبر: 35-403-5638920-5  
 مقالہ نمبر: 35-403-5638920-5  
 مقالہ نمبر: 35-403-5638920-5  
 مقالہ نمبر: 35-403-5638920-5

مقاله نمبر: 14-6-68  
 مقالہ نمبر: 1145/26132  
 مقالہ نمبر: 1145/26132  
 مقالہ نمبر: 1145/26132  
 مقالہ نمبر: 1145/26132

مقاله نمبر: 14-6-68  
 مقالہ نمبر: 1145/26132  
 مقالہ نمبر: 1145/26132  
 مقالہ نمبر: 1145/26132  
 مقالہ نمبر: 1145/26132



مقاله نمبر: 182-RB  
 مقالہ نمبر: 2019-20  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB

مقاله نمبر: 182-RB  
 مقالہ نمبر: 2019-20  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB

مقاله نمبر: 182-RB  
 مقالہ نمبر: 2019-20  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB

مقاله نمبر: 182-RB  
 مقالہ نمبر: 2019-20  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB

مقاله نمبر: 182-RB  
 مقالہ نمبر: 2019-20  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB  
 مقالہ نمبر: 182-RB













# **Annexure**

## **CNIC and other Documents**



PAKISTAN National Identity Card  
ISLAMIC REPUBLIC OF PAKISTAN



Name  
Ejaz Ahmad



Father Name  
Ali Ahmad



Gender Country of Stay  
M Pakistan

Identity Number Date of Birth  
35403-2526346-7 05.05.1984

Date of Issue Date of Expiry  
23.05.2019 23.05.2029

Holder's Signature



35403-2526346-7



Registrar General of Pakistan

گمشدہ کارڈ ملنے پر قریبی لیٹر بکس میں ڈال دیں



PAKISTAN National Identity Card  
ISLAMIC REPUBLIC OF PAKISTAN



Name  
Mehran Bashir



Father Name  
Muhammad Bashir Anjum



Gender Country of Stay  
M Pakistan

Identity Number Date of Birth  
35403-7467074-5 07.03.1988

Date of Issue Date of Expiry  
29.09.2021 29.09.2031

Holder's Signature

35403-7467074-5



Registrar General of Pakistan

گمشدہ کارڈ ملنے پر قریبی لیٹر بکس میں ڈال دیں



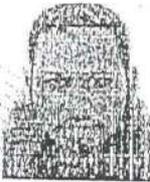
PAKISTAN National Identity Card  
ISLAMIC REPUBLIC OF PAKISTAN



Name  
Muhammad Mateen



Father Name  
Ali Muhammad



Gender Country of Stay  
M Pakistan

Identity Number Date of Birth  
35403-3226869-3 05.03.1980

Date of Issue Date of Expiry  
04.04.2022 04.04.2032

Holder's Signature

35403-3226869-3



Registrar General of Pakistan

گمشدہ کارڈ ملنے پر قریبی لیٹر بکس میں ڈال دیں



PAKISTAN National Identity Card  
ISLAMIC REPUBLIC OF PAKISTAN



Name  
Muhammad Bilal Ghaffar



Father Name  
Meher Abdul Ghaffar



Gender Country of Stay  
M Pakistan

Identity Number Date of Birth  
35403-9638920-5 15.08.1991

Date of Issue Date of Expiry  
08.06.2022 08.06.2032

Holder's Signature

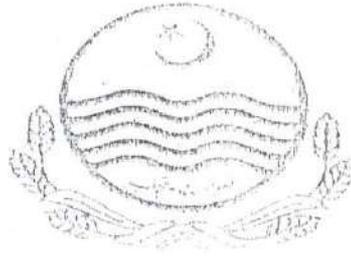
35403-9638920-5



Registrar General of Pakistan

گمشدہ کارڈ ملنے پر قریبی لیٹر بکس میں ڈال دیں

# Registrar of Firms Nankana Sahib



## FORM D [Vide Rule 9 (a)] MEMORANDUM ACKNOWLEDGING RECEIPT OF DOCUMENT

RS/ NNS/No. 149

OF

2022

The Registrar of firms, Nankana Sahib District hereby acknowledges the receipt of the under mentioned Documents and intimates that It has/ they have been filed pursuant to the provision of the Partnership act, 1932.

(Here enter description of Document):

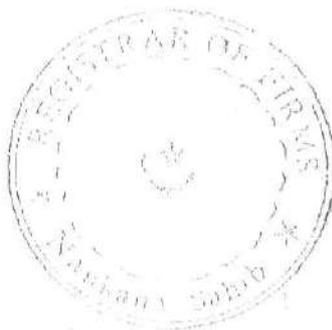
Form V 28-08-2021 received on 31-08-2021

Notice of change in the constitution w.e.f. / / of the firm

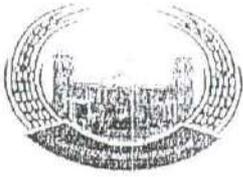
M/S KISAN SOAP FACTORY, SKM MAIN NANKANA ROAD  
SHAHWOT DISTRICT NANKANA SAHIB.

Pursuant to section 63 (1) of the Partnership Act, 1932.

Nankana Sahib  
Dated: 22/09/2021  
Dispatch No. RF (NNS)/267



*Regd*  
22/09/2021  
Registrar of Firms,  
Nankana Sahib



Subject: **FIRE SAFETY ARRANGEMENTS.**

Reference your letter/ request dated 20-06-2023 regarding above cited subject. It is certified that inspection regarding fire fighting arrangements conducted Muhammad Naeem Shahzad, Chief Instructor in Kisan Soap Factory, Main Nankana Sahib Road Shahkot, District Nankana Sahib on dated 22-06-2023.

**Fire Fighting Arrangements were found satisfactory and in working condition at the time of Inspection.**

*M. Naeem*

**Civil Defence Officer  
Nankana Sahib**



**OFFICE OF THE EXECUTIVE ENGINEER,  
FAISALABAD DRAINAGE DIVISION, FAISALABAD.**

Ph: # 041-9200471, E-mail: xen\_drainagefaisalabad  
@irrigation.punjab.gov.pk

No. 88017/W

Dated 19/7/2024

To

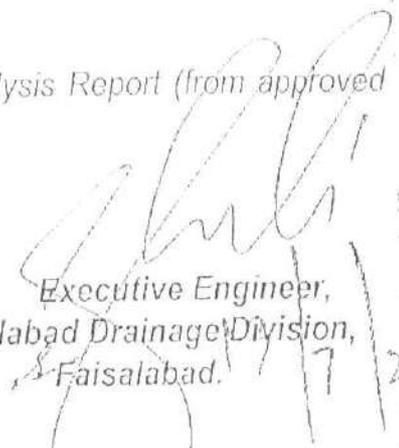
The Manager,  
Kisan Soap Factory,  
Nankana Sahib-Shahkot Road Faisalabad.

Subject:- PERMISSION FOR DEPOSITING THE EFFLUENT WATER INTO  
DALLAH JARMIAN DRAIN.

With reference the Agreement Forms on Judicial Stamp Paper of your Mill/  
Factory/ Unit registration for the year 2024-2025 for depositing the effluent water into drain  
has been examined thoroughly & accepted with the following terms/ conditions:-

1. Rs. 35,000/ per cusec per year be deposited with the Government for depositing  
the effluent water charges.
2. Your Mill/ Factory is also bound to fulfill all codal and legal formalities according  
to terms and conditions mentioned in the agreement as well as instructions  
made by the Government from time to time.

You are further directed to provide the Water Analysis Report (from approved  
Government organization) within 7-days to proceed further.

  
Executive Engineer,  
Faisalabad Drainage Division,  
Faisalabad.

C.C.

Sub Divisional Officer, Jaranwala Drainage Sub Division, Jaranwala for  
information and further necessary action

# KISAN SOAP FACTORY

Final Product	Production Capacity Per Day
Laundry Soap	25MT
Washing Powder	20MT
Dish Wash Bar	8MT
Bath Soap	2MT
<b>Total</b>	<b>55MT</b>



# KISAN SOAP FACTORY

## LIST OF MACHINERY

Description	Quantity
Packing Machine	22
Mixer Machine	5
Cutting Machine	3
Conveyor Machine	5
Grinder Machine	1
Duplex Machine	3
Milling Machine	1
Plotter Machine	1
Karay	8
Stamper	1
<b>Total</b>	<b>50</b>



# Federal Board of Revenue



Federal Board of Revenue  
Revenue Division - Government of Pakistan



Registration No 5029540  
Reference No 5029540-7  
Registered for Sales Tax Yes. w.e.f. 05-JUL-19  
Name KISAN SOAP FACTORY  
Category Association of Persons  
PP/REG/INC No.  
Email kis\*\*\*\*apf\*\*\*ory@gmail.com  
Cell 00923\*\*606\*\*52  
Address PLOT KHEWAT NO.31, KHASRA NO. 5-6, 5 K.M. MAIN NANKANA ROAD SHAHKOT, Nankana Sahib Shahkot  
Registered On 05-SEP-2018  
Tax Office RTO LAHORE  
Registration Status Income Tax: Active , Sales Tax: OPERATIVE

Sr.	Business/ Branch Name	Business/ Branch Address	Principal Activity
1	KISAN SOAP FACTORY	PLOT KHEWAT NO.31, KHASRA NO. 5-6, 5 K.M. MAIN NANKANA ROAD SHAHKOT, Nankana Sahib Shahkot	202300-Manufacturing/Manufacture of other chemical products/Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations



E-STAMP



ID: PB-NNS-6764409D96DC7254  
 Type: Low Denomination  
 Amount: Rs 100/-

Scan for online verification

1632 - Gov

Description: WATER SUPPLY FOR THE NEW DEVELOPMENT OF THE DISTRICT OF FAISALABAD  
 Applicant: Muhammad Bilal Chaffar [35403 05259 015]  
 S/O: Bilal Chaffar Chaffar  
 Agent: Muhammad Mateen [25403 0226 009 01]  
 Address: Ward No 2 Shabkot  
 Issue Date: 11 Jul 2024 10:23:09 AM  
 Validity: 12 Jul 2024  
 Amount in Words: One Hundred Rupees Only  
 Reason: AGREEMENT OR MEMORANDUM  
 Vendor Information: Muhammad Saeed [PB-DUS 43 1] Manawala Bazar Shabkot

MUHAMMAD SAEED  
 STEMP VENDOR  
 License No. 43  
 Manawala Bazar Shabkot



Type of Stamp: 10 digit eStamp Number: 6764409D96DC7254

5. No solid material will be discharged into the drain, if concerned Sub Divisional Officer, report about disposal of solid waste by "Management" into the drain, "Government" through Executive Engineer Faisalabad Drainage Division Faisalabad is authorized to levy additional charges in accordance with section 138 (2) (a) of Punjab Irrigation, Drainage and River Act (PIDRA) 2023, on account of "usual cost of maintenance and operation of Drain".
6. The "Management" will not change the maximum discharge of the effluent and its quantity without prior approval of the "Government" and after making adjustments in the treatment and disposal arrangements as may be deemed necessary by the "Government" so as to control safe disposal and bring quality of the effluent within acceptable limits.
7. This agreement shall remain in force a period of 01.07.2024 to 30.06.2025. The agreement may also be renewed every year before the 30th June on such terms and conditions, as may be mutually agreed upon/ between the parties.
8. The "Management" shall be responsible to abide by all the laws / rules of the "Government" for the time being in force for the purpose of controlling pollution of water of natural / artificial streams, Nallahs, Drains etc.
9. In case the "Management" fails to comply with any term and conditions of this agreement, the agreement shall stand terminated after 'expiry of 30 days' notice given by the "Government". After such failure and in such event the "Management" will not be entitled to any compensation or claim damages whatsoever from the "Government".
10. This agreement may also be terminated by any party by giving 30 days' prior notice in writing to the other.
11. In case of any dispute or difference of opinion, in respect of this agreement or any matter it shall be referred to the relating thereto, arises between the parties, it shall be referred to the SUPERINTENDENT ENGINEER DRAINAGE CIRCLE FAISALABAD of the "Government" whose decision thereon shall be binding and final on the parties

IN WITNESS THEREOF the parties hereto have put their respective hands and seals on this agreement on the day, month and the year hereinabove mentioned

For and on behalf of "Government"

For and on behalf of "Management"

Bilal (owner)  
 Cell#0345-6060352

Witness

1.

Faisalabad, District Faisalabad.

2.

ATTESTE

Stamp of the official attesting the document.

DIRECTORATE OF LABOUR WELFARE  
GOVERNMENT OF THE PUNJAB  
LAHORE



No. DLW(N) /NNS /F/ 313

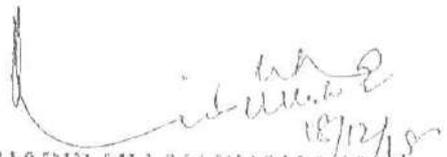
Dated 15-12-2018

## Registration Certificate

This is to certify that the premises Known as M/S. KISAN  
SOAP FACTORY, 5-Km Main Nankana Road Shahkot, 182-Borala,  
Nankana Sahib.

Falls within the definition of a "Factory" as given in Section 2(j) of the  
factories Act, 1934, and have been placed on the register of factories  
maintained for the purpose.

Seal

  
(HABIB ULLAH KHAN MIANJI)  
DIRECTOR LABOUR WELFARE  
LAHORE (NORTH)



Employees'  
Old-Age Benefits  
Institution

Under the control of Government of Pakistan,  
Ministry of Human Resource Development

## CERTIFICATE OF REGISTRATION\*

This is to certify that Mr. / Messers **KISAN SOAP FACTORY**  
Address **05-KM MAIN NANKANA ROAD SHAHKOT, NANKANA SAHIB**  
has / been registered as Employer / Establishment.  
Date of Applicability of this Act **Nov 1, 2018**  
Date of registration **Dec 17, 2018**  
Number of IPs at the time of registration **30**  
Registration Number **BKA01515**

Signature

Date

18/12/18

**Abid Hussain**

Regional Head  
EOBI, Sheikhpura Region

Number: 022313

Pakistan Standards



Government of Pakistan

# Registration Standards and Quality Control Authority

## Licence for the use of the Pakistan Standard Mark

License No. PS/L-4886/2017

Issued to: **Agro Soap Factory**

Address: **Plot # 123, Bawala Gidran, DS-352, Near, Yankun Road, Sialkot**

License valid from: **1-Jul-22**

to: **30-Jun-24**

Issued by: **Director General, Registration**

Signature: 

**Eng. Muhammad Rizwan**  
DIRECTOR

Place: **Lahore**

Date: **10-Nov-22**

### THE FIRST SCHEDULE

PS Mark	Article / Process	Pakistan Standard(s)
1 	Synthetic Detergent for General Purposes (Economy) "Sario" Brand	PS: 4886/2017(R)

### THE SECOND SCHEDULE

Article / Process	Unit	Marking Fee Per Unit	Mode of Payment
1 Synthetic Detergent for General Purposes (Economy) "Sario" Brand	2	3 0.1%	4 Through Bank Draft Quarterly



**PUNJAB EMPLOYEES SOCIAL SECURITY INSTITUTION  
SUB OFFICE SHAHKOT**



Date : 23/07/2024

Voucher No. 2407025715

**ACKNOWLEDGMENT RECEIPT OF C1 SCHEDULE (UNDER SECTION 20)**

Month for which contribution paid	Reg No. of Employer/ No. of Workers	Name of Employer	Contribution payable under section 20(I)	Amount of any increase in period under section 25	Total
June, 2024	4-31-96A / 22	KISAN SOAP FACTORY	30,264		30,264

Received from the employer named above the Sum of Rupees THIRTY THOUSAND TWO HUNDRED SIXTY-FOUR RUPEES ONLY. Made up as shown above.

Respected Employer/Customer, Please accept System generated slip only.

**BOP**

- Bank Charges of Amount PKR 29 (25 + FED) will be paid by depositor/ employer at any branch of BOP (Bank of Punjab)
- In case of any complaint at BOP branch, please contact Mr. Sabah Hussain at Phone: 042-35484037, Email: sabah.hussain@bop.com.pk

**MCB**

- No bank charges will be paid by depositor/employer at any branch of MCB Bank Ltd.
- In case of any complaint at MCB Branch, Please contact Mr. Muhammad Umer Aftab at phone: 042-35790403, 042-35790360, Email: mcb1711@mcb.com.pk
- Detail of PESSI's MCB Collection Account ( Account Title: Commissioner PESSI Collection Account, Account No. 1153189231002327 )
- MCB Account Holders can also pay their monthly contributions through Internet Banking now.

**OTHER PAYMENT CHANNELS**



**Launch of**

- "Amnesty Scheme" - Upon clearance of arrears of social security contribution by 30-6-2021, "50% mandatory penalty" upon late payment shall be waived off. (More than Rs. 5.5 billion relief for the industry).
- "Self Assessment Scheme" for employers for payment of social security contribution being reintroduced with no sunset clause.
- "For further details contact your local office"

Besides BOP and MCB Bank Ltd, monthly contributions can now be paid through the below listed banks following the steps.

<b>Step-1</b> Go to Bill Payment	<b>Step-2</b> Select TBILL	<b>Step-3</b> Select Voucher/Invoice
<b>Step-4</b> Enter six-digit TBILL prefix "173774" followed by ten-digit PESSI Voucher No. e.g. 1737742407025715		
<b>Step-5</b> Verify bill details	<b>Step-6</b> Enter Pin/OTP	<b>Step-7</b> Pay amount

Bank Name	ATM	Internet Banking	Mobile Banking	Over the Counter
Allied	Live			
Askari Commercial	Live	Live	Live	
Bank Al Habib	Live	Live	Live	
Bank of Khyber	Live			
Bank of Punjab	Live		Live	Live
Dubai Islamic		Live	Live	
First Microfinance	Live		Live	
Habib Metro	Live	Live	Live	
MCB		Live		Live
Meezan	Live	Live	Live	
Mobilink Microfinance	Live	Live		
NRSP Microfinance	Live	Live	Live	
SAMBA		Live	Live	
Standard Chartered	Live	Live	Live	
Summit	Live	Live	Live	
UBL	Live			

# **Annexure**

Lab Reports and validations



Head Office: 46-M, Gulberg III, Lahore-Pakistan. Ph: +92-42-35441444 Cell: 0303-4442334

PGG/IMS/FF/063      Rev.#02      Rev date: 04-09-23

EPA Certified

Ref #: PGG/LAB/2025-3359/AA

## TEST REPORT

Issue date: 30-Apr-25

Name of Industry/Client: Kisan Soap Factory  
 Address Of Monitoring Site: 5-Km Main Nankana Road Shahkot District Nankana Sahib  
 Nature of Monitoring: Noise Level  
 Monitoring Time: Real Time  
 Monitoring Instrument: Land TEK SL 5868-P  
 Monitoring Date: 25-Apr-25  
 Validated by EPA Representative: Muhammad Nadeem, RO EPA (Lab), Lahore

### Results:

Sr. No.	Locations	Equivalent Noise Level dB (A)
1.	Point-01: East Side	59.3
2.	Point-02: West Side	61.7
3.	Point-03: North Side	63.7
4.	Point-04: South Side	57.1
PEQS (Day Time Residential Area)		55 dB(A)

..... End of Report.....

PEQS: Punjab Environmental Quality Standards

Remarks: Noise level at all points are in compliance with PEQs Limit.

### Terms & Conditions:

- Analysis was conducted on the request of project proponent for IEE/EIA Baseline study.
- Report cannot be used regarding compliance of any complaint, EPO or any other court case.
- This report should be reproduced as a whole and not in parts.
- The responsibility of the ethical use of the results reported in this report lies with the client. Consequently, the laboratory is absolved of its responsibility for any claim that may result through the use by the client or others of the results appearing in this report.
- The left-over sample (if so available) shall be retained for fifteen days after the issuance of the report unless otherwise negotiated between the client and the laboratory.
- The report is not valid for any negotiations.

Field. Analyst	Chief Analyst	Laboratory Incharge





# PAK GREEN ENVIRO-ENGINEERING (PVT) Ltd.

ISO/IEC 17025:2017 Accredited Testing Lab, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

Head Office: 46-M, Gulberg III, Lahore-Pakistan. Ph: +92-42-35441444 Cell: 0303-4442334

PGG/IMS/FF/063 Rev.#02 Rev date: 04-09-23

EPA Certified

## TEST REPORT

Ref #: PGG/LAB/2025-3357/AA

Issue date: 30-Apr-25

Name of Industry/Client: Kisan Soap Factory  
 Address Of Monitoring Site: 5-Km Main Nankana Road Shahkot District Nankana Sahib  
 Nature of Monitoring: Ambient Air  
 Monitoring Instrument: AQMS  
 Monitoring Date: 25-Apr-25 to 26-Apr-25  
 Validated by EPA Representative: Muhamamad Nadeem, RO EPA (Lab), Lahore

### Results:

Parameters	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>
Methodology	Non-Dispersive Infrared Absorption (NDIR)	Reduced Pressure Chemiluminescence (CLD)	Reduced Pressure Chemiluminescence (CLD)	UV fluorescence (UVF)	Integrated Sampling Technique	Integrated Sampling Technique
Results	1.69	6.73	38.51	50.28	149.2	41.5*
PEQS for Ambient Air	05 8-Hrs	40 24-Hrs	80 24-Hrs	120 24-Hrs	150 24-Hrs	35 24-Hrs

End of Report

PEQS: Punjab Environmental Quality Standards

Remarks: Parameters with \* are exceeding PEQS Limit.

### Terms & Conditions:

- Analysis was conducted on the request of project proponent for IEE/EIA Baseline study.
- Report cannot be used regarding compliance of any complaint, EPO or any other court case.
- This report should be reproduced pas a whole and not in parts.
- The responsibility of the ethical use of the results reported in this report lies with the client. Consequently, the laboratory is absolved of its responsibility for any claim that may result through the use by the client or others of the results appearing in this report.
- The left-over sample (if so available) shall be retained for fifteen days after the issuance of the report unless otherwise negotiated between the client and the laboratory.
- The report is not valid for any negotiations

Field. Analyst	Chief Analyst	Laboratory Incharge





EPA Certified

PGG/IMS/FF/159	Rev.#00	Rev date: 04-09-23
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## TEST REPORT

Ref #: PGG/LAB/2025-3358/AA

Issue date: 30-Apr-25

Name of Industry/Client: Kisan Soap Factory  
 Address Of Monitoring Site: 5-Km Main Nankana Road Shahkot District Nankana Sahib  
 Nature of Sample: Ground Water  
 Sampling By: Pak Green Laboratories  
 Sample Source: Motor Pump  
 Date of sampling: 25-Apr-25  
 Sample Receiving Date: 25-Apr-25  
 Testing Facility: Pak Green Laboratories  
 Testing Date: 25-Apr-25 to 29-Apr-25  
 Validated by EPA Representative: Muhammad Nadeem, RO EPA (Lab), Lahore

### Results:

Sr. No.	Parameters	Unit	WHO	PEQS	Method / Technique	Results
1.	Taste	-	Non-Objectionable / Acceptable	Non-Objectionable / Acceptable	APHA-2160 C	Non-Objectionable
2.	Odor	-	Non-Objectionable / Acceptable	Non-Objectionable / Acceptable	APHA-2150 B	Non-Objectionable
3.	Color	TCU	≤ 15	≤ 15	APHA-2120 C	0.000
4.	Turbidity	NTU	< 5	< 5	APHA-2130 B	0.32
5.	Total Hardness <sup>^</sup>	mg/L	-	< 500	APHA-2340 C	280
6.	Total Dissolved Solids <sup>^</sup>	mg/L	< 1000	< 1000	APHA-2540 C	670
7.	pH <sup>^</sup>	-	6.5-8.5	6.5-8.5	APHA-4500-H <sup>+</sup> B	7.719 at 23.9°C
8.	Chloride (Cl <sup>-</sup> ) <sup>^</sup>	mg/L	250	< 250	APHA-4500-Cl <sup>-</sup> B	180
9.	Electrical Conductivity (EC) <sup>^</sup>	µS/cm	-	-	APHA-2510 B	1931
10.	Sodium (Na) <sup>^</sup>	mg/L	-	-	APHA-3111 B	150.7168

End of Report

PEQS: Punjab Environmental Quality Standards WHO: World Health Organization ^ PNAC Accredited

Remarks: All parameters are in compliance with the PEQS Limit.

### Terms & Conditions:

- Analysis was conducted on the request of project proponent for IEE/EIA Baseline study.
- Report cannot be used to comply with any complaint, EPC, or other court case.
- This report should be reproduced as a whole and not in parts.
- The values represent the sample conditions when sampling/monitoring was carried out.
- The Environmental Conditions while performing testing activities are (Temp=23.0-24.5°C) and (RH=45.8-59.6%)
- The Sampling was done as per the sampling and preservation protocol method APHA 1060-B&C
- The responsibility of the ethical use of the results reported in this report lies with the client.
- The leftover sample (if so available) shall be retained for fifteen days after the issuance of the report unless otherwise negotiated between the client and the laboratory.
- The report is not valid for any negotiations.
- Dually calibrated instruments were used during monitoring and testing activities.

Lab. Analyst	Chief Analyst	Laboratory Incharge





4520

**Validation for Monitoring / Sampling of Stack Emission, Noise, Ambient air, Vehicular emissions**  
(Read conditions of certificate along with Regulation 9(1)(d) of CELR, 2000)

Cautions Related to scope, use & legal foundation of Validation

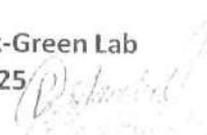
1. The Validation is quality control check under Regulation 9(1)(d) for sampling & monitoring.
2. The Sampling / monitoring performed under Regulation 3(a) by Technical & Scientific Staff of private Laboratory as allowed through Conditions of Certificate.
3. The Scope of quality check of validation does not cover quality check of results declared with Report.
4. "The validated sampling / monitoring of the tests report is for non-punitive actions such as baseline study EIA/IEE, Self-monitoring, reporting under conditions of EIA/IEE, etc. while the report is not valid for Court cases, EPO, compliance reporting for operational Phase approvals, punitive actions such as Smog prevention & control Rules, 2023, complaint cases, etc". The same shall be exhibit at top of Report during its issuance under Regulation 12.
5. The tests Report cannot be used as evidence against any non-compliance SMR /report issued by EPA official Laboratory.
6. The EPA officer as well as certified Laboratory should also comply directions issued by authority vide letter No. 01-DD(Labs)/EPA dated 25.07.2022 while considering test report.

Nature Of Sample	Stack Emissions	Ambient Air✓	Vehicular Emission	Ambient Noise
Description of monitored source / Site	Ambient Air, Noise Level			
Name and category of Unit	Kisan Soap Factory Located at 5-KM, Main Nankanasahib Road shahkot, chal No. 182 R.B. Borala, District Nankana Sahib.(Baseline)			
Standard Method	NDIR+UV			
Equipment, Model,	AQMS, Noise Meter			
Field Tested Parameters ,	CO, NO, NO <sub>2</sub>	Lab Tested Parameters (Not Validated)	Results	
<b>Industrial Gaseous Emissions</b>				
Values of tested Field Parameters: CO .....mg/nM3, NOx ...mg/nM3 , excess air (%age):				
(i) 5 min Ramp-Up phase (ii) flow rate & EC Temp- measured during calibration- & testing (iii) Data recorded with 15-min interval (iv) complied all QA/QC checks			Yes	NO
<b>Stack Particulate Matter (PM) Monitoring / Sampling under USEPA Method 5 / 17</b>				
(i) Sample train is complete (ii) Leak Test Performed (iii) data sheet filled (iv) "K" & "Y" calculated (v) QA/QC complied (vi) suitability of filter ensured			Yes	No
<b>Stack SOx sampling as per Method 8 (Thorin Indicator Method)</b>				
(i) Absorbent solution available (ii) Flow rate as per method (iii) sampling as per Method			Yes	No
<b>Ambient Air Quality Monitoring by Automatic Monitors for CO, O3, SO2, NOx, PM2.5 &amp; PM10</b>				
Zero/span check is performed (ii) CE of NOx 96% - 104.1% , Compliance of Critical Criteria (iii) Compliance of operational Criteria (iv) Comply PEQS measuring technique			Yes✓	No
<b>Ambient Air Sampling of SPM, PM10, Pb by High Volume Sampler</b>				
(i) The flow rate of sampler 1.1m3/min, (ii) Calibration performed			Yes	No
<b>Vehicular Emissions &amp; Noise Measurement</b>				
Vehicle emissions and noise measurement performed as per method			Yes✓	No

Remarks:-

  
Research Officer  
Environment Protection Agency  
Punjab Labors

M-Basharat: Pak-Green Lab  
Dated: 25-04-2025




4520

**Validation for Sampling of Wastewater & Drinking Water / Ground water**

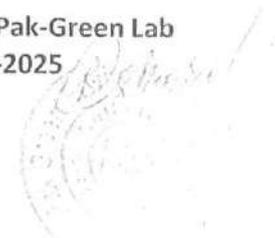
(Read conditions of certificate along with Regulation 9(1)(d) of CELR, 2000)

Nature Of Sample	<b>Waste Water</b>		<b>Drinking Water / Ground Water</b> ✓			
Description of Sample source /Site			Ground Water			
Name and category of Project /Unit	Kisan Soap Factory Located at 5-KM, Main Nankanasahib Road shahkot, chal No. 182 R.B. Borala, District Nankana Sahib.(Baseline)					
Standard Method used for Sampling	EPHA-1060					
Field Tested Parameters ,	Field Tested parameter		Temp, PH, etc.		Lab Tested Parameters (Not validated)	
Waste Water Treatment facility	Primary		Secondary		Tertiary	
Total WW collected Sample	.....NA		Total Collected Drinking water samples.....01			
Sample Tag for testing parameter is assigned on sample container			Yes ✓		NO NA	
Sample is preserved properly for each testing parameter			Yes ✓		NO NA	
Sample size is adequate for testing the target parameters			Yes ✓		NO NA	
Wastewater Flow Measurement performed to ensure sample representativeness			Yes		NO ✓ NA	
No. of Waste Water outlets	Waste Water Flow m <sup>3</sup> /hr from each outlet (Optional)	Water intake m <sup>3</sup> /hr(Optional)	Water Mass balance (Optional)	Sample Type		
			Yes No	Grab ✓ Composite		
Parameter	Matrix W WW		Container	Sample Size	Preservation	Yes NO NA
Coliform, Total or Fecal	✓		Sterile Container	100mL	Refrigerate 6C	✓
Coliform, Total or Fecal, Chlorinated Water	✓		Sterile Container	100mL	0.008% Thiosulphate & cooled 6C	✓
Color, Turbidity	✓		P,G	500mL	Cool 6C	✓
Hardness, Total	✓		P,G	500ml	HNO <sub>3</sub> to pH < 2	✓
Nitrogen, Nitrate + Nitrite, Phenolic Compounds, Oil & Grease, COD, NH <sub>3</sub> Metals, General	✓		P,G	2000 mL	H <sub>2</sub> SO <sub>4</sub> topH < 2, Cool 6C	
Cyanide, Total	✓		P,G Rinsed 1.1 HNO <sub>3</sub>	500mL	HNO <sub>3</sub> topH < 2	✓
Pesticides, General	✓		P,G	500mL	NaOH topH > 12, Cool 6C	
	✓		Glass	1 Liter	Cool 6C	
<b>Field Parameters</b>						
Field parameter			PH Meter, Model Make	Measurement Method	Calibrated in Field	Measured value
pH			AS 218	APHA 4500 B	Yes ✓ NO	
Temp						
Cl						

Remarks / Caution: (1) The Validation is quality control check under Regulation 9(1)(d) for sampling & monitoring. (2) The Sampling / monitoring performed under Regulation 3(a) by Technical & Scientific Staff of private Laboratory as allowed through Conditions of Certificate (3) The Scope of quality check of validation does not cover quality check of results declared with Report (4) The validated sampling / monitoring of the tests report is for non-punitive actions such as baseline study EIA/IEE, Self-monitoring, reporting under conditions of EIA/IEE, etc. (5) The tests Report cannot be used as evidence against any non-compliance SMR / report issued by EPA official Laboratory (6) The EPA officer as well as certified Laboratory should also comply directions issued vide letter No. 01-DD(Labs)/EPA dated 25.07.2022 while considering test report.

*(Signature)*  
Research Officer  
Environment Protection Agency  
Punjab Labors

M-Basharat: Pak-Green Lab  
Dated: 25-04-2025

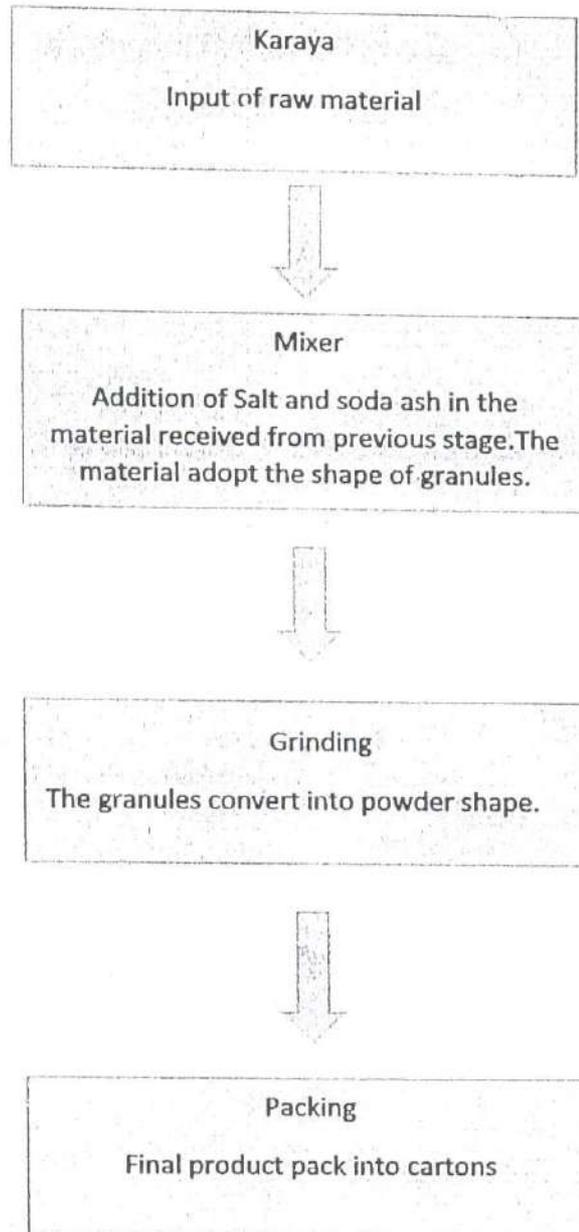


# **Annexure**

## **Process Flow**

# Kisan Soap Factory

## Process Flow Washing Powder



+92 345 606 035 2  
+92 301 313 212 9  
056 371 004 1

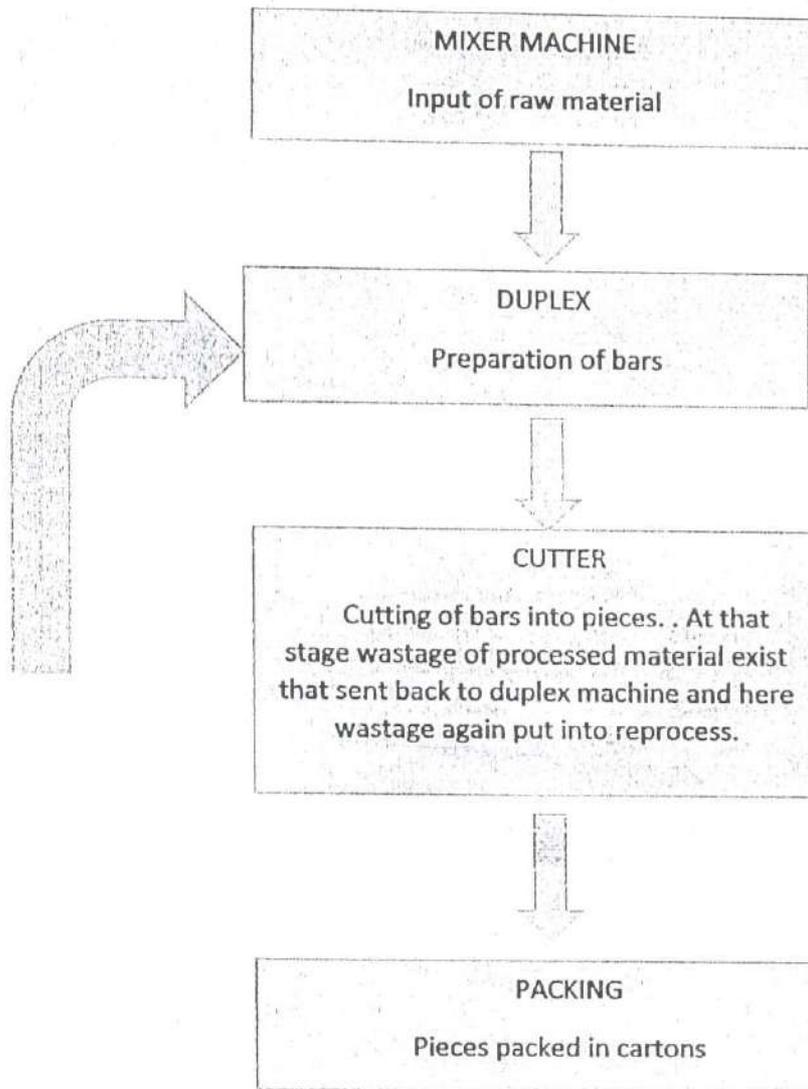


Kisansoap@gmail.com



5 K.M. Main Nankana Road Shahkot

## Kisan Soap Factory Process Flow Dish Bar



+92 345 606 035 2  
+92 301 313 212 9  
056 371 004 1



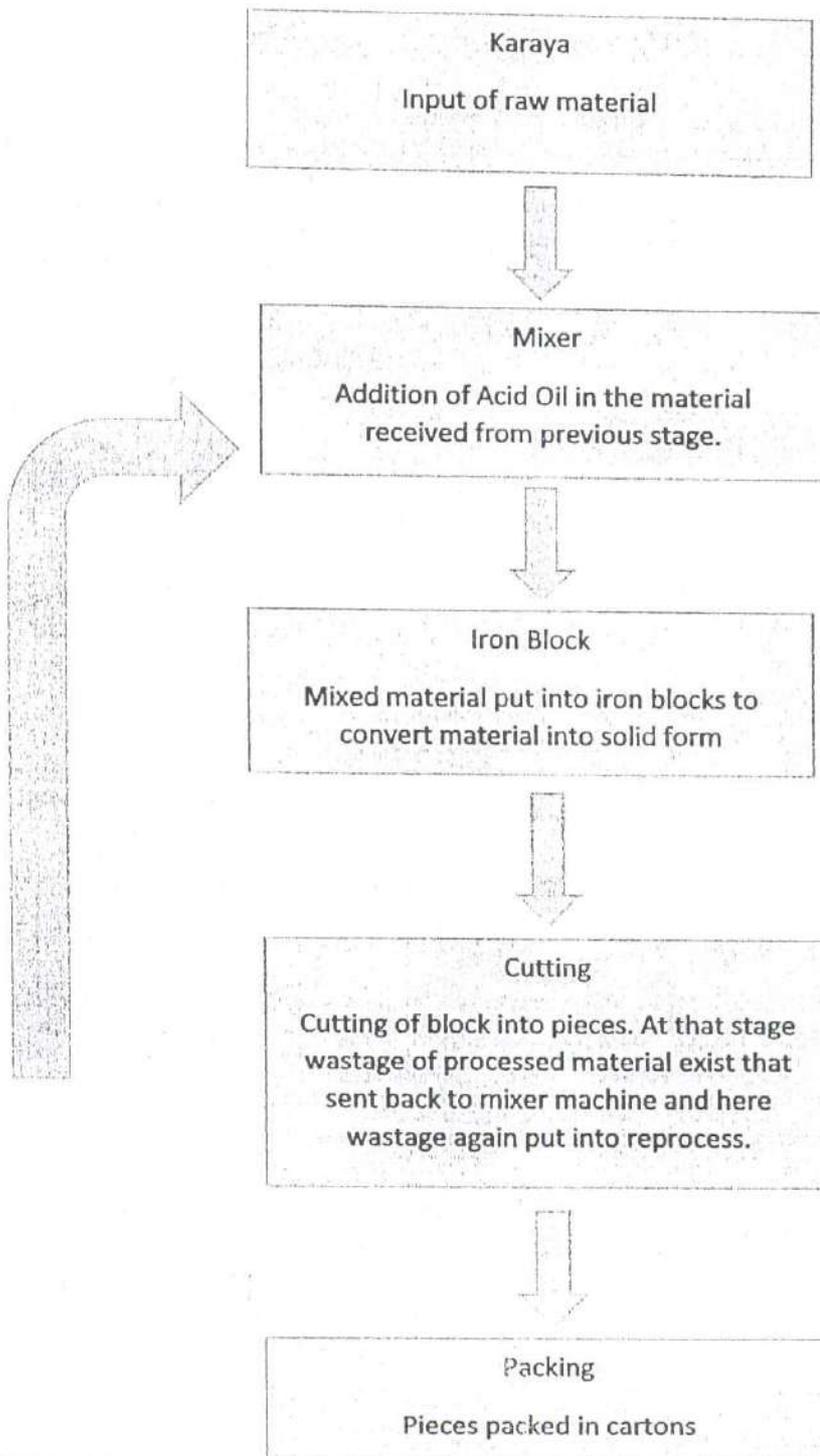
Kisansoap@gmail.com



5 K.M. Main Nankana Road Shahkot

# Kisan Soap Factory

## Process Flow Laundry Soap



+92 345 606 035 2  
+92 301 313 212 9  
056 371 004 1



Kisansoap@gmail.com



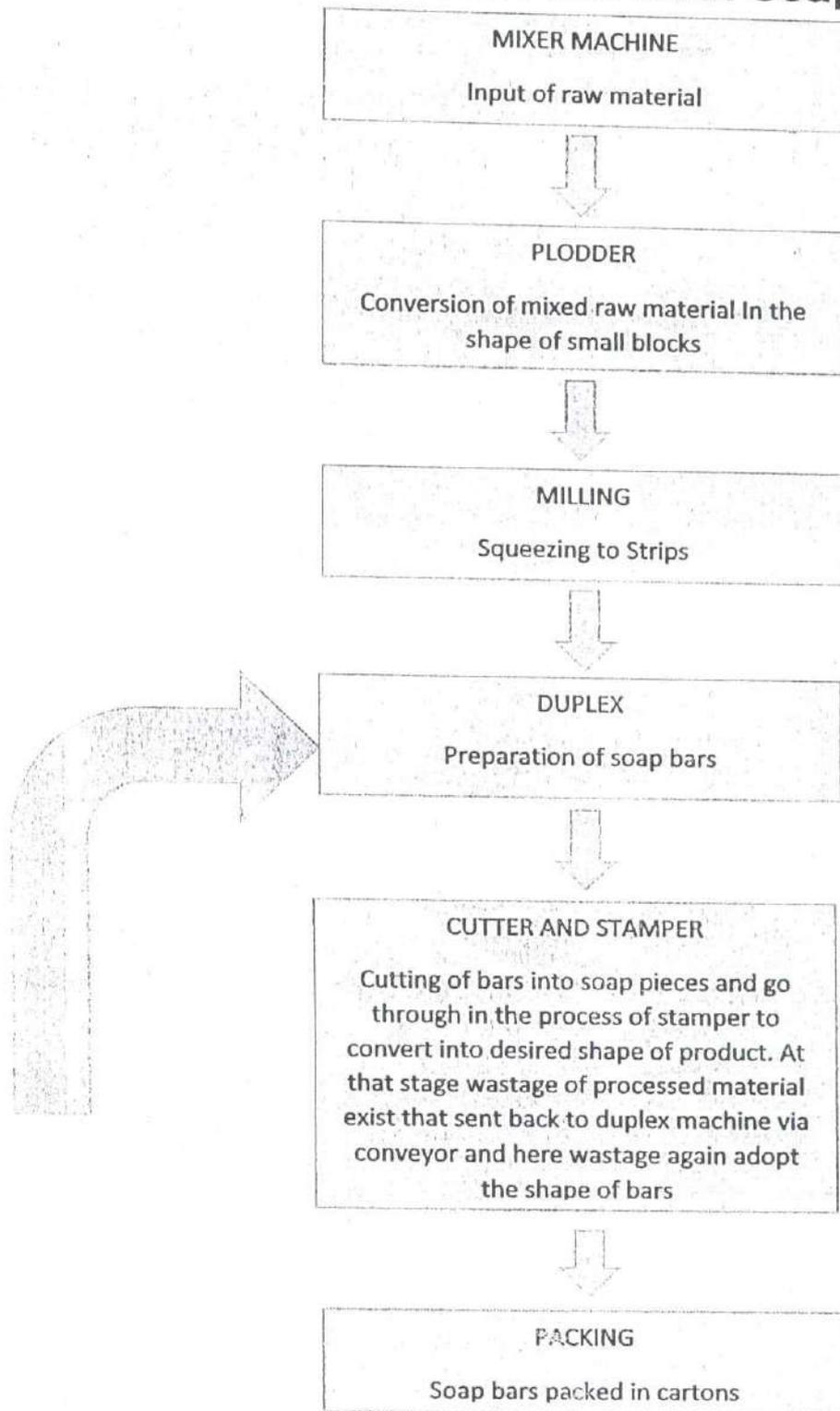
5 K.M. Main Nankana Road Shahkot



**KISAN SOAP**  
STAY CLEAN. STAY PURE.

## Kisan Soap Factory

### Process Flow Bath Soap



+92 345 606 035 2  
+92 301 313 212 9  
056 371 004 1



Kisansoap@gmail.com



5 K.M. Main Nankana Road Shahkot

# **Annexure**

## Stakeholder Performa's

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Shehyan*

Residence: *Nankana Sahib*

Gender:  M  F

Qualification: *Natue*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Shehyan*

Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Ammar*

Residence: *Nankana sahib*

Gender:  M  F

Qualification: *Matric*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Ammar*

**Signature of Interviewer**

**Public Consultation/ Stakeholder Participation Regarding EIA**  
M/S Kisan Soap Factory

Name: *Taru*  
Residence: *Nawabpura Sahib*  
Gender:  M  F  
Qualification: *PSC*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Shahay*  
Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Zubair*

Residence: *Naullana Sahib*

Gender:  M  F

Qualification: *PSC*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input type="checkbox"/> ✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*gullhans*

Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Fatima bibi*  
Residence: *Nanleawa, Near guduwara*  
Gender:  M  F  
Qualification: *MJ.*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Alham*  
Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Payyab*  
Residence: *Naukhana sahib*  
Gender:  M  F  
Qualification: *Farmer*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Alkhans*

Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Pansal*

Residence: *Naulkawa Sabh*

Gender:  M  F

Qualification: *labour*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Shekhar*  
↙

**Signature of Interviewer**

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Ahmed*

Residence: *Nankana sahib*

Gender:  M  F

Qualification: *BSES*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Ahmed*

Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Akhilou*

Residence: *Naubana sahib*

Gender:  M  F

Qualification: *BSES*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*gkhanw*

Signature of Interviewer

**Public Consultation/ Stakeholder Participation Regarding EIA**  
**M/S Kisan Soap Factory**

Name: *Pshfaq Khan*

Residence: *Naurana Sais, Near Gudhwasara*

Gender:  M  F

Qualification: *Matric*

**REMARKS**

	Strongly agree	Agree	No comments	Disagree	Strongly disagree
Are you in favor of the proposed construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project increase the importance of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project help to improve the living standards of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Will the project affect the environment of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of satisfaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Pshfaq Khan*

Signature of Interviewer

**Annexure**

**Glossary**

## GLOSSARY

Words	Dictionary
Discrepancies	A difference between conflicting facts, claims or opinions
Mitigation	The action of lessening in severity or intensity
Evaluated	Estimate or determine the nature, value, quality, ability, extent, or significance
Legislation	law enacted by a legislative body
Aspects	A distinct feature or element in a problem
Compliance	Acting according to certain accepted standards
Flora	All the plant life in a particular region or period
Fauna	All the animal life in a particular region or period
Demarcated	Separate clearly, as if by boundaries
Screening	The display of a motion picture
Substitutions	An event in which one thing is substituted for another
Regulations	An authoritative rule
Stakeholders	A person or organization with an interest or concern in something
Vulnerable	Susceptible to attack
Annunciation	A formal public statement
Rehabilitation	The conversion of wasteland into land suitable for use of habitation or cultivation