ENVIRONMENTAL IMPACT ASSESSMENT REPORT

M/S KHAKSAR TRADERS

ORDINARY SAND/GHASSAR NAMELY SHIRINWALA ZONE, DISTRICT SHEIKHUPURA

Prepared By:
Environmental Services Pakistan Private Limited (ESPAK)
Contact: 042-35154012, 0312-0849999
Office No. 731, Block 2, Sector D1, Shah jilani Road Township Lahore

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EXECUTIVE SUMMARY

Title & Location of the project

Subject project for which this Environmental Impact Assessment study has been conducted is mining lease for Sand over an area of 4292.766 Acres of land by Khaksar Traders owned by Ch. Muhammad Saif Ullah Tahir. Proponent holds a mining lease of sand located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura. The estimated cost of the project is Approx. 4 Crore rupees. The sand lease area is about 4292.766 Acres and was granted by Mines and Minerals Department, Government of the Punjab. Copy of lease agreement is attached as **Annexure-B.** The project is located along the bed of the Ravi River in District Sheikhupura, Punjab Province. The project site is situated along the Ravi River, targeting sand deposits.

The proposed project falls under category of Mining Projects mentioned in Schedule-II, Category C (Mining and Mineral Processing), Clause C (Commercial Extraction of sand using dredger) under Punjab Environmental protection (Review of IEE/EIA) Regulations, 2022.

Location

Subject proposed project is located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura having coordinates:

Points	Eastings (MTR)	Northings (MTR)	Latitude	Longitude
A.	3344571	837769	31°38'45.66"N	74°21'2.69"E
B.	3344004	838326	31°39'4.83"N	74°20'42.44"E
C.	3344878	849628	31°39'45.38"N	74°21'18.54"E
D.	3345463	840137	31°40'0.77"N	74°21'41.89"E
E.	3346231	840498	31°40'4.50"N	74°22'11.39"E
F.	3347308	840586	31°40'11.75"N	74°22'52.90"E
G.	3347989	840522	31°40'8.35"N	74°23'18.59"E
H.	3348429	840674	31°40'12.43"N	74°23'35.62"E
I.	334-8852	841112	31°40'25.81"N	74°23'52.67"E
J.	334-8971	84 1590	31°40'41.09"N	74°23'58.27"E
K.	334-8935	842987	31°41'3.22"N	74°23'58.46"E

Points	Eastings (MTR)	Northings (MTR)	Latitude	Longitude
L.	3349128	842987	31°41'26.11"N	74°24'7.42"E
M.	3349844	843917	31°41'54.89"N	74°24'36.71"E
N.	3349923	844385	31°42'9.92"N	74°24'40.78"E
O.	3351195	845341	31°42'38.45"N	74°25'31.24"E
P.	3354819	847100	31°43'28.40"N	74°27'52.82"E
Q.	3355110	846365	31°43'3.98"N	74°28'2.18"E
R.	3353681	844116	31°41'53.83"N	74°27'2.77"E
S.	3350656	842715	31°41'14.30"N	74°25'4.77"E
T.	3350226	843321	31°41'34.80"N	74°24'49.84"E
U.	3349693	842403	31°41'6.06"N	74°24'27.52"E
V.	3349731	841412	31°40'33.83"N	74°24'26.70"E
W.	3349433	840586	31°40'7.62"N	74°24'13.51"E
X.	3348809	839994	31°39'49.62"N	74°23'48.49"E
Y.	3348205	839767	31°39'43.44"N	74°23'25.06"E
Z.	3347000	839812	31°39'47.24"N	74°22'39.45"E
AA.	3346627	839772	31°39'46.67"N	74°22'25.21"E
BB.	3346000	839597	31°39'42.20"N	74°22'1.03"E
CC.	3345417	839083	31°39'26.66"N	74°21'37.75"E
DD.	3344852	838138	31°38'57.09"N	74°21'14.18"E

Google map of site proposed for the construction of the subject project is given below:

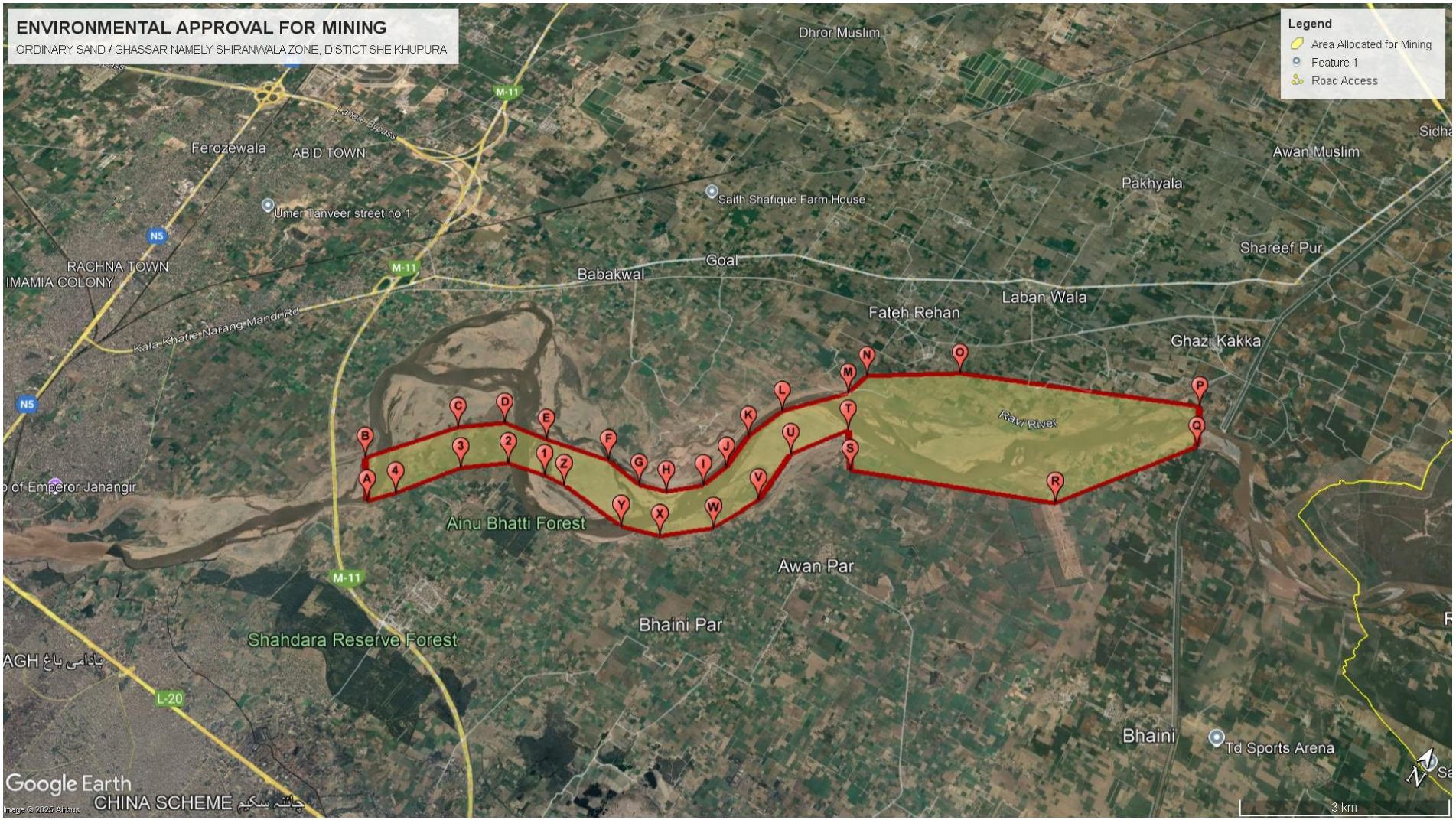

Figure 1-1: Google map of site

For further details, Google Map of the project is attached as **Annexure-D** with the report**.**

Details of proponent:

Name	Saif Ullah Tahir
CNIC	36502-3194914-9
Mailing Address	Chak # 2/4, L Road, Near Akbar Road, House # 8, Royal Palm Vilas, Okara

For further details CNIC of the proponent and other relevant documents are attached as **Annexure-B** with this report.

Name of organization preparing the report:

Environmental Services Pakistan Pvt Ltd (ESPAK), as independent consultants, has been appointed by the proponent to conduct Environmental Impact Assessment (EIA).

Company office address is Office No. 731, Block 2, Sector D1, Shah Jilani Road Township Lahore

Contact: 042-35154012, 0312-0849999

For detail company profile see the Chapter # 1 “Introduction”

A brief outline of the proposal

The mining of sand along the Ravi River is a project initiated by M/S Ch. Muhammad Saif Ullah Tahir to explore and extract sand.

The project entails the commercial extraction of sand from the alluvial deposits along the Ravi River using dredgers. The mining process will primarily rely on advanced dredging equipment to ensure efficiency and sustainability. Dredgers equipped with suction pumps, cutting tools, and discharge pipelines will be employed to extract sand from deeper riverbed deposits, enabling large-scale operations with precision. This mechanized approach is designed to optimize resource utilization and ensure seamless transportation of sand, all while adhering to sustainable practices to minimize environmental impact and maintain the ecological balance of the river ecosystem.

The project is expected to generate significant economic benefits, including job creation, increased revenue for the local and provincial governments, and infrastructural development in the surrounding communities.

Project Outline:

Project Area Division

The project site has been located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura. Each block has been assigned a specific area designated for sand mining activities, with an estimated sand resource volume for efficient extraction planning.

Resource Estimation

The sand resource for each block has been estimated based on the volume of alluvial deposits and their commercial value (measured in cubic meters) and the associated monetary potential in Pakistani Rupees. The detailed block-wise estimates are presented in table given below:

Points	Eastings (MTR)	Northings (MTR)	Latitude	Longitude
A.	3344571	837769	31°38'45.66"N	74°21'2.69"E
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Process and Technology

The sand extraction will be carried out using advanced dredging methods to ensure optimal recovery while minimizing environmental impacts. Commercial dredgers equipped with suction pumps, cutting heads, and conveyor systems will be employed to extract sand from deeper deposits in the riverbed. These dredgers enable efficient, large-scale operations with precise sand removal and streamlined transportation. This mechanized approach ensures the sustainable utilization of resources while adhering to environmental safeguards to maintain the ecological integrity of the river system.

Land Approved by Mines and Minerals

Approximately 4292.766Acres of land along the riverbed in District Sheikhupura will be utilized for sand extraction, processing, and temporary storage.

Major Impacts

The Environmental Impact Assessment Report (EIA) identified several potential environmental and social impacts associated with the project. These impacts have been categorized into positive and negative effects based on the nature and scale of the project activities. Key impacts include:

Positive Impacts:

- **Economic Development:** Creation of direct and indirect employment opportunities for local communities, contributing to improved livelihoods.
- **Revenue Generation:** The project will generate revenue for the provincial government through mining royalties and fees.
- **Local Infrastructure Development:** The project will lead to the development of access roads and basic infrastructure in remote areas.

Negative impacts:

- **Erosion:** Unregulated or excessive mining can cause riverbank erosion, reducing land stability and increasing flood risks.
- **Pollution:** Runoff from mining sites may carry sediment and contaminants into water bodies, affecting water quality and aquatic life.
- **Biodiversity loss:** Habitat disruption and fragmentation may occur, impacting local wildlife, riparian vegetation, and aquatic species.
- **Air and noise pollution:** Dust emissions and elevated noise levels due to the operation of machinery and transportation.
- **Community concerns:** Local communities may face health, safety, and livelihood challenges due to project activities.

Environmental impacts during Operational Stage

During the operational stage, the project will continue to pose certain environmental risks, particularly to water as well as the local ecosystem. Key impacts expected during this stage include:

Water contamination

- Sand mining often disrupts the riverbed or seabed, causing a large amount of sediment to be stirred up into the water. This increases the turbidity, making the water cloudy and less transparent.
- Increased sediment in the water reduces the amount of light that penetrates, which can harm aquatic plants and disrupt the ecosystem..

Soil and Land Degradation

- Sand mining typically involves the removal of sand from riverbanks, coastal areas, or other land-based sites. When the natural vegetation or protective soil cover is removed, the exposed soil becomes highly vulnerable to erosion, especially during rainfall or floods.
- Continuous and uncontrolled sand mining depletes the land's natural resources, making it barren and unproductive.

Biodiversity Displacement

- Disturbance to aquatic habitats due to changes in water flow and increased sedimentation.
- Disruption of terrestrial habitats along the riverbanks, impacting local flora and fauna.

Air and Noise Pollution

- In sand mining, dust is a common byproduct. Activities such as digging, loading, and transporting sand generate airborne dust, especially in dry conditions.
- Elevated noise levels from mechanical equipment and transportation, impacting both wildlife and local residents.

Waste management challenges:

Improper management of solid waste including machinery oils, debris, and tailings, could lead to land and water pollution.

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. Monitoring for following Environmental Parameters is recommended:

- Ambient Air
- Monitoring for ambient air should be conducted on regular basis during construction and operation phases of the project and report should be submitted to EPA Punjab.
- Noise
- Regular monitoring for noise level should be maintained periodically during construction and operation phases of the project and report should be submitted to EPA Punjab.

Biodiversity surveys:

Annual surveys to monitor changes in habitat conditions, species diversity, and population trends.

Frequency: Annually, with specific focus on riparian and aquatic species.

Community health and safety monitoring:

Conduct regular assessments of health and safety conditions, and track any reported incidents or grievances.

Frequency: Quarterly, with follow-up evaluations as needed.

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

Table 1: Proposed Environmental Monitoring Program:

Sr. No.	Parameters	Monitoring Schedules During Construction	Monitoring Schedules During Operation	Monitoring Duration
1	Ambient Air Monitoring (NO_x, CO_2, SO_2, PM_{10})	Quarterly	Quarterly	As per PEQ's
2	Noise Level	Quarterly	Quarterly	As per PEQ's

Chapter 1. INTRODUCTION

This Section of the report provides an overview of the rational of the Project, objective of project, requirement of the project, purpose of the report and approach adopted to conduct the Environmental Impact Assessment (EIA).

1.1 Purpose of the report

Environmental Impact Assessment (EIA) report is being submitted to the Environmental Protection Agency (EPA), Government of the Punjab, Lahore for the compliance of Section 12 of Punjab Environment Protection Act-1997 (Amended 2012) for obtaining No Objection Certificate (NOC) before starting the construction activity at the project site. The other relevant regulations and guidelines considered while preparing this EIA report include:

- Policy and procedures for filing, review and approval of environmental assessments.
- Guidelines for the preparation and review of environmental reports.
- Guidelines for public participation.
- Guidelines for sensitive and critical areas.
- Detailed sectoral guidelines

Various aspects like environmental, social, physical and other aspects of the project both during construction and its regular occupancy are highlighted in this EIA report. Measures necessary to be adopted to mitigate any environmental impacts on any part of the environment around are also described. All the important information is also provided as described under the format used to help decision makers, EPA Punjab in the present case, before issuing the desired Environmental Approval.

1.2 Identification of the project and proponent

The proposed project falls under category of Mining Projects mentioned in Schedule-II, Category C (Mining and Mineral Processing), Clause C (Commercial Extraction of sand using dredger) under Punjab Environmental protection (Review of IEE/EIA) Regulations, 2022.

1.3 Proponent:

Name	Ch. Muhammad Saif Ullah Tahir
CNIC	36502-3194914-9
Mailing Address	Chak # 2/4, L Road, Near Akbar Road, House # 8, Royal Palm Vilas, Okara

1.4 Detail of Proponent

For further details CNIC of the proponent and other relevant documents are attached as **Annexure-B** with this report.

1.5 Details of Consultant

Environmental Services Pakistan Pvt Ltd (ESPAK), is an independent company, who conducts IEE, EIA, EMP and other environmental investigations through its panel of environmental consultants, public participation practitioners and experienced environmental managers. The company has its own recommended instruments to check the baseline environmental data/PEQS and lab analysis facility for water, waste water priority parameters.

Contact: Environmental Services Pakistan Pvt Ltd (ESPAK)

Office No. 731, Block 2, Sector D1, Shah Jilani Road Township Lahore

Tel: 042-35154012, 0312-0849999

Email: info@espak.com.pk

The current study was carried out by the following professionals:

TEAM & QUALIFICATION EMPLOYEES			
Sr. No	Names	Designation	Qualification
	Ali Ramzan	Environmentalist	BS Environmental Science
	Nabiya Farrukh	Environmentalist	M.S Environmental Science
	Aruba Imran	Environmentalist	BS Environmental Science
	Shahzad Ahmad Khan	Business Development Manager	MBA Marketing

1.6 Brief description of Nature, Size and Location of Project

Subject project for which this Environmental Impact Assessment study has been conducted is mining lease for Sand over an area of 4292.766 Acres of land by M/s Ch. Muhammad Saif Ullah Tahir. M/s Ch. Muhammad Saif Ullah Tahir holds a mining lease of sand located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura. The estimated cost of the project is Approx. 50 Crore rupees. The sand lease area is about 4292.766 Acres and was granted by Mines and Minerals Department, Government of the Punjab. Copy of lease

agreement is attached as **Annexure-B.** The project is located along the bed of the Ravi River in District Sheikhupura, Punjab Province. The project site is situated along the Ravi River, targeting sand deposits.

Sand mining involves the extraction of sand for use in various industries, primarily construction. The time required to begin and sustain sand mining operations depends on several factors, including the scale of the operation, environmental regulations, and the type of deposit being mined.

1.7 Location

Subject proposed project is located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura.

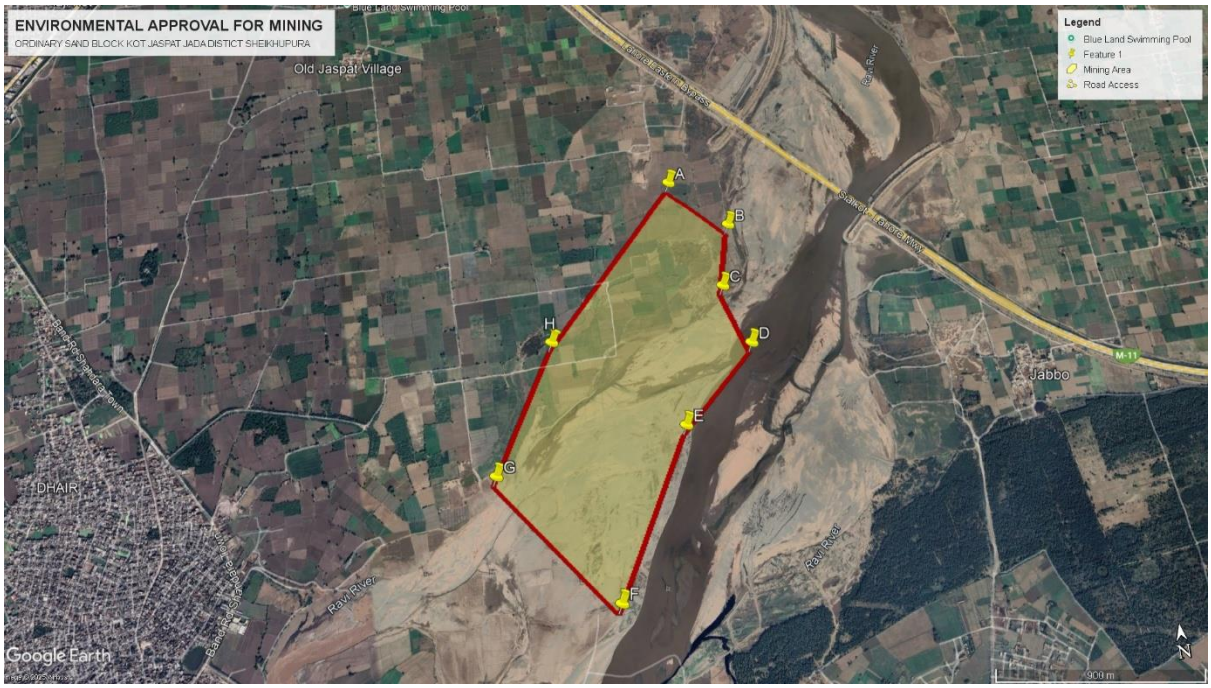

Figure: Google Earth Map of Project Site

For further details, Google earth map is attached as **Annexure-D**.

1.8 Screening

The proposed project falls under category of Mining Projects mentioned in Schedule-II, Category C (Mining and Mineral Processing), Clause C (Commercial Extraction of sand using dredger) under Punjab Environmental protection (Review of IEE/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 attached as **Annexure-A** with this EIA report.

Chapter 2. ANALYSIS OF ALTERNATIVES

2.1 Site Alternatives, their Selection and Rejection Criteria

In the context of mining projects, site selection is a crucial process influenced by geological, environmental, and socio-economic factors. For sand mining at the **Ravi River** beds in District **Sheikhupura**, the chosen site is based on a comprehensive geological study conducted by experts, which highlights the presence of significant alluvial deposits suitable for sustainable extraction.

The project involves the extraction of sand through open mining within the riverbed zone, utilizing modern techniques to minimize environmental impact. The mining process includes sediment extraction and sieving to achieve usable sand particles, ensuring efficiency while maintaining environmental and safety standards. The area selected is remote, with negligible or no health, safety, or environmental concerns, making it an ideal location for responsible mining operations.

2.1.1 Key Factors for Site Selection:

- **Geological Favourability:**

Proven presence of substantial alluvial deposits of high-quality sand as identified through geological surveys.

- **Infrastructure Availability:**

The site benefits from existing infrastructure, including access roads, water supply, and proximity to labor resources, which facilitate efficient mining operations.

- Environmental Considerations:
- Minimal ecological sensitivity in the selected riverbed area, reducing the potential for adverse environmental impact.
- The project adheres to sustainable practices, ensuring minimal disruption to the river's natural flow and aquatic ecosystems.

- **Land Use Policies:**

The land use in the project area is compatible with mining activities, ensuring compliance with local regulations and policies.

No alternative sites were considered for the sand mining project because the chosen location along the **Ravi River** beds in District **Sheikhupura** is already established as suitable for sand

extraction due to its favorable geological characteristics. The abundance of high-quality sand deposits supports the project's viability, and the site selection was made after careful consideration of key factors, supported by the findings of a comprehensive feasibility study. This study evaluated the geological, environmental, and socio-economic aspects of the project area, confirming its suitability for sustainable sand mining operations.

2.1.2 Factors Favouring the Selected Site:

1. Abundance of alluvial sand deposits with consistent replenishment from the river's natural flow.
2. Favorable sediment composition, ensuring the availability of sand suitable for construction and industrial purposes.
3. Existing infrastructure for ease of access and transportation.
4. No displacement or relocation of human settlements is required.
5. Local job creation and enhancement of socio-economic status.
6. Safe distance from sensitive ecological and community areas.
7. The geological profile supports ongoing mining activities.

Based on these considerations, it is concluded that the selected site is optimal for the proposed mining activities.

2.2 Design/technology alternatives, their selection and rejection criteria

The extraction of sand from the alluvial deposits of the **Ravi River** can be achieved through various methodologies. The two main approaches evaluated for this project include:

2.2.1 Manual Traditional Mining:

- This method involves extracting sand directly from the riverbed using traditional tools such as shovels, sieves, and wheelbarrows.
- Manual mining is effective for localized operations and ensures minimal disruption to the riverine ecosystem.
- It aligns with sustainable practices, making it suitable for smaller-scale sand collection while maintaining low environmental impact.

2.2.2 Mechanical Mining:

- To complement manual methods, the project may incorporate mechanical machinery to enhance efficiency.

- Equipment such as dredgers and portable pumps will facilitate the removal of larger quantities of sand from the riverbed.
- Mechanical mining enables large-scale operations while adhering to sustainability practices, ensuring controlled extraction and minimal environmental disruption.
- Dredgers provide raw sand material for sieving, allowing for the separation of usable sand particles from sediment.

2.2.3 Selection and Rejection Criteria:

After thorough evaluation, the primary approach will focus on mechanical mining using dredgers due to its efficiency and suitability for large-scale operations. However, manual methods may still be employed in localized areas to supplement the process and ensure flexibility.

Both methods ensure minimal environmental impact due to the simple sieving process employed for sand separation. In this process:

- Sand is gradually sieved to remove finer particles, utilizing water washing to isolate heavier or coarser material.
- The dredger machine plays a key role by providing raw sediment material for sieving after excavation.
- Environmental impacts on local flora, fauna, and human habitation are negligible, as the process avoids the use of chemicals and relies on inertial separation techniques.

By adopting this blended approach, the project optimizes operational efficiency while adhering to environmental and sustainability standards. The selected methods align with best practices for sand mining in riverine environments, ensuring responsible resource utilization and minimal ecological disturbance.

2.3 Environmental Alternatives, their selection and rejection criteria

The Mining of Sand along **Ravi River** involves extraction activities within the riverbed, which poses potential risks to the surrounding environment, including water quality, sedimentation, and habitat disruption. Given the sensitivity of the riverine ecosystem, several environmental management alternatives were considered to minimize adverse impacts and enhance sustainability.

2.3.1 Alternatives Considered:

1. **Minimized Use of Heavy Machinery:**

Description:

Limiting the use of heavy machinery to reduce sediment disturbance and protect aquatic habitats. This approach prioritizes manual or small-scale techniques for sediment extraction.

Rejection Criteria:

While environmentally favorable, this method alone was not selected due to its lower economic efficiency and extended project timelines. Instead, a selective approach will be adopted, combining manual and mechanical methods. Heavy machinery will be deployed only where large-scale extraction is necessary to balance environmental and economic considerations.

2. **Implementation of Sediment Control Structures:**

Description:

Installing sediment control measures such as silt fences, sediment traps, and diversion channels to mitigate excess sedimentation and protect sensitive aquatic habitats downstream.

Selection Criteria:

This alternative was selected as a mandatory environmental management practice due to its effectiveness in maintaining water quality and ecological stability. These measures will be integrated into the Environmental Management Plan (EMP) and strictly enforced throughout the project lifecycle.

3. **Zero Discharge Policy:**

Description:

Implementing sedimentation ponds to manage wastewater generated from sand washing and sieving processes. The wastewater will be treated through gravity sedimentation to remove suspended particles and then recycled for reuse in mining operations.

Rejection Criteria for Zero Discharge Policy: A zero-discharge policy was considered but deemed impractical due to location constraints and operational scale. Instead, strict wastewater treatment and monitoring protocols will be enforced to meet environmental quality standards without discharging pollutants into the river.

4. **Resurfacing of Excavated sites:**

Description:

Rehabilitating the excavated sites by refilling them with sediments recovered from the sedimentation ponds. This process will restore the riverbed to its near-original state, minimizing long-term ecological impacts.

Selection Criteria:

This measure is mandatory for ensuring the sustainability of mining operations and will be implemented as part of the rehabilitation plan.

5. **Seasonal Operational Restrictions:**

Description:

Restricting mining activities during ecologically sensitive periods, such as fish breeding and migration seasons, to minimize disruption to local aquatic fauna.

Selection Criteria: This alternative was partially adopted. Operations will be suspended during peak breeding seasons for key fish species, in consultation with environmental authorities, to ensure minimal ecological disturbance.

2.4 Economic Alternatives, their Selection and Rejection Criteria

The selected methodology for mining sand is designed to be economically viable while ensuring environmental sustainability. The mining of sand is expected to yield substantial economic benefits, including:

1. Job Creation: The project will generate employment opportunities for local residents, contributing to community development.
2. Local Economic Growth: Increased economic activity from mining operations will benefit local businesses and contribute to the regional economy.
3. Sustainable Practices: The use of environmentally friendly equipment and techniques aligns with current economic trends favoring sustainable resource management.

The Management of M/S **Ch. Muhammad Saif Ullah Tahir** is responsible for managing the economic considerations of the project during the EIA stage. The mining of sand will bring significant economic benefits to the region by creating jobs and contributing to the local economy.

No alternative economic approaches were considered, as the current methodology has been designed to be cost-effective and environmentally sustainable. The Department's approach ensures that the project will be economically viable while adhering to environmental and social obligations.

Chapter 3. DESCRIPTION OF THE PROJECT

3.1 Type and Category of the Project:

Subject project for which this Environmental Impact Assessment study has been conducted is mining lease for Sand over an area of 4292.766Acres of land by M/s Ch. Muhammad Saif Ullah Tahir. M/s Ch. Muhammad Saif Ullah Tahir holds a mining lease of sand located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura. The estimated cost of the project is Approx. 12 Crore rupees. The sand lease area is about 4292.766Acres and was granted by Mines and Minerals Department, Government of the Punjab. Copy of lease agreement is attached as **Annexure-B.** The project is located along the bed of the Ravi River in District Sheikhupura, Punjab Province. The project site is situated along the Ravi River, targeting sand deposits.

Sand mining typically requires 6 to 12 months for small-scale operations and 12 to 24 months for medium to large-scale projects to become fully operational. The process begins with feasibility studies and site evaluations, followed by regulatory approvals and environmental impact assessments, which can take several months depending on local regulations. Once permits are secured, infrastructure development, including setting up access roads and equipment, may take another 1 to 3 months. The actual extraction and processing of sand commence after these phases. The timeline can vary significantly based on the scale of the operation, location, accessibility, and compliance with environmental and legal requirements.

The proposed project falls under category of Mining Projects mentioned in Schedule-II, Category C (Mining and Mineral Processing), Clause C (Commercial Extraction of sand using dredger) under Punjab Environmental protection (Review of IEE/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 attached as **Annexure-A** with this EIA report.

3.2 Objectives of the Project

Objectives of the subject project are:

- It helps to supply sand for building foundations, roads, bridges, and other infrastructure projects.
- It helps to generate revenue and employment opportunities in the mining, transportation, and construction sectors.
- It helps to Meet the growing demand for sand in an environmentally responsible manner.
- To contribute to the national economy of the country.
- Compensate to help poverty by providing employment.

3.3 Location and site layout of the project:

Subject proposed project is located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura having coordinates:

Points	Eastings (MTR)	Northings (MTR)	Latitude	Longitude
A	3343257	837602	31°38'42.78"N	74°20'12.48"E
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E	3343194	836404	31°38'4.03"N	74°20'7.38"E
F	3342815	835651	31°37'40.33"N	74°19'51.31"E
G	3342311	836259	31°38'1.03"N	74°19'33.57"E
H	3342616	836854	31°38'19.75"N	74°19'46.48"E

For further details, Google earth map is attached as **Annexure-D**.

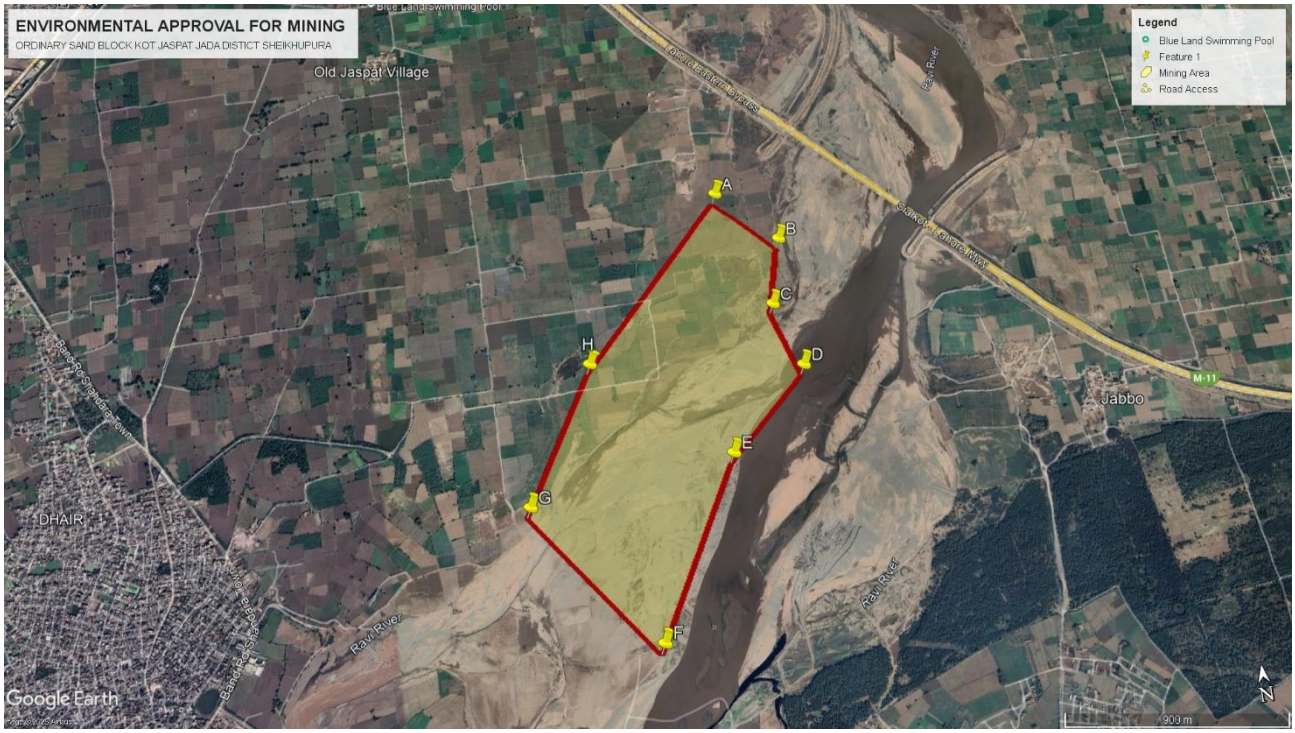


Figure 3-1: Google map of site proposed for the subject project

3.4 Land Use on site

The areas proposed for sand mining are currently underutilized and have minimal productive value. Most of the identified sand mining sites consist of riverbeds, floodplains, and barren land, ensuring that the operations do not result in any loss or degradation of fertile or agricultural land. Additionally, the sand is extracted using environmentally sensitive methods, which maintain the natural topography and minimize surface-level disturbances. These measures ensure that the sand mining process remains sustainable and causes minimal impact on the surrounding environment.

3.5 Road Access

The lease site is easily accessible from Lahore Sialkot Motorway.

3.6 Vegetation features of the project

Land proposed for the subject project is clear and free of dense vegetation, only shrubs like Few and scattered amount of vegetation will help to avoid land clearing at the project site.

3.7 Cost and magnitude of the operation

The mining of sand can be done over an area of 4292.766Acres subject to favorable reserves and sand quality. The details of sand mining project costing is presented in table below:

Table: Cost of the Sand Mining Project

Sr.	Description	Amount
1	Land Cost	3,75,90,000
2	Infrastructure Cost	236,80,000
3	Machinery Cost	
Total Development Cost		Approx 07 Crore

The magnitude of operation includes:

- Detailed site survey, planning and demarcation of the various regions in the project area
- Site suitability assessment
- Process of mine designing
- Purchase and delivery of equipment
- Mine development
- Testing and commissioning
- Plantation of various ecologically important species on the designated green space

3.4 Schedule of Implementation

The mining operations are conducted with due care and vigilance not to pollute the environment or inflicting any kind of danger/threat to environments downstream. The impact of mining is being analyzed in the subsequent chapters. In case of any adverse impact the mitigating measures will be suggested for implementation and its schedule shown at respective chapter. The time schedule for the Key Activities in Sand Mining Operations is shown in table below:

Table 2:Time Schedule for the Key Activities in Sand Mining Operations

Sr.	Description	Months
1	Cost of exploration work	03
2	Office and Labor Shed	03
3	Access road	04
4	Mining site Development	05
5	Machinery & Equipment Procurement	02

3.5 Description of the project:

Subject project for which this Environmental Impact Assessment study has been conducted is mining lease for Sand over an area of 4292.766Acres of land by M/s Ch. Muhammad Saif Ullah Tahir. M/s Ch. Muhammad Saif Ullah Tahir holds a mining lease of sand located at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura. The estimated cost of the project is Approx. 12 Crore rupees. The sand lease area is about 4292.766Acres and was granted by Mines and Minerals Department, Government of the Punjab. Copy of lease agreement is attached as **Annexure-B.** The project is located along the bed of the Ravi River in District Sheikhupura, Punjab Province. The project site is situated along the Ravi River, targeting sand deposits.

3.6 Activities Of The Project

3.6.1.1 List of Machinery

Sr. No.	Machinery	Function
1.	Dredger	Extracts sand and sediments from the riverbed by creating a suction flow or cutting through the surface deposits.
2.	Pumps	Used for extracting sand and water from the riverbed to the dredger.
3.	Conveyor System	Transfers the extracted sand from the dredger to onshore processing units or directly to transport vehicles.

4.	Excavators	Used for additional digging or reshaping of the riverbed to maintain dredging efficiency
5.	Mechanical Sieves/Vibrating Screens:	Separate sand based on size and remove impurities like stones or organic material.

3.6.1.2 Process Description of Sand Mining

Commercial sand mining using a dredger involves a systematic and highly mechanized process to efficiently extract sand from riverbeds, primarily targeting alluvial deposits. The process is designed to maximize output while minimizing environmental impact, using advanced equipment and techniques.

3.6.1.3 1. Site Selection and Preparation:

Geological Survey:

Before starting the mining operation, a detailed geological survey is conducted to identify areas with high-quality sand deposits. The riverbed is assessed for sand composition, depth, and sediment characteristics.

Environmental Assessment:

Environmental impact assessments (EIA) are carried out to ensure compliance with regulations and minimize disruption to local ecosystems.

Site Setup:

Access roads are cleared, and dredger anchoring points will be established. Sedimentation ponds and water recycling systems will also set up to manage waste water and ensure the sustainability of operations.

Mobilization of Dredging Equipment:

Dredger Mobilization:

The dredger will be deployed to the designated site. Dredgers can be cutter suction or hydraulic, depending on the type of riverbed and sediment. The dredger will be anchored and positioned to begin sand extraction.

Auxiliary Equipment:

Pumps, conveyors, and support vessels are brought in to assist the dredger. Pumps create the suction needed to move the slurry (a mixture of water and sand) from the riverbed to the surface.

Extraction Process (Dredging):

Dredger Operation:

The dredger uses its suction pipes or cutting mechanism to remove sand from the riverbed. Cutter suction dredgers use a rotating cutter head to loosen and extract the sand, while hydraulic dredgers use suction pumps to pull the sand and water mixture from the riverbed.

Slurry Creation:

The extracted sand is mixed with water to form a slurry. This slurry is then pumped through pipelines to the onshore facilities for further processing or to sedimentation tanks.

Depth Control:

Advanced GPS ensure the dredger maintains the correct depth and avoids damage to the riverbed ecosystem.

Sediment Transport and Handling:

Pumping System:

The slurry is transported via large pumps through pipelines or conveyor systems to shore. These systems are equipped to handle large volumes of slurry efficiently.

Flow Monitoring:

Flow rate and slurry composition are monitored to ensure optimal sand recovery and to avoid excess sedimentation in the river or onshore area.

Water and Sand Separation:

Sedimentation Tanks:

Once the slurry reaches the shore, it is directed into large sedimentation tanks. These tanks allow suspended particles to settle. Heavier sand particles fall to the bottom, while lighter impurities are removed.

Screening and Sieving:

After sedimentation, the sand may undergo screening or sieving processes to further separate it based on particle size, removing any larger debris, stones, or organic materials.

Sand Storage and Transportation:

Storage:

Processed sand is stored in piles or silos, where it can be further sorted or dried if necessary.

Transportation:

The sand is then loaded onto trucks or conveyor belts and transported to the final distribution sites, such as construction zones or commercial suppliers.

Environmental Management:

Water Recycling:

Water used in the dredging process is filtered and recycled through gravity sedimentation ponds or other water treatment methods to minimize waste and avoid pollution. The water is returned to the river or used again in the dredging process.

Sediment Control:

Sediment control measures such as silt fences, sediment traps, and diversion channels are implemented to prevent excess sediment from entering nearby aquatic habitats or downstream areas.

3.6.1.4 Site Rehabilitation:

After extraction, the riverbed is rehabilitated. Excavated areas are refilled with sediments from the sedimentation ponds or from nearby sources to restore the riverbed's structure and prevent erosion.

3.6.1.5 Monitoring and Compliance:

Environmental Monitoring: Continuous monitoring of water quality, sediment levels, and biodiversity around the mining site ensures that the project remains within regulatory environmental standards.

Compliance with Regulations: The operation follows local and national mining and environmental regulations. Periodic inspections are carried out to ensure that the mining process adheres to best practices for sustainability.

3.6.1.6 Final Rehabilitation and Closure:

Site Rehabilitation:

After the mining process concludes, the site undergoes rehabilitation, including the restoration of riverbed structure and surrounding areas. This may involve refilling excavated areas and planting vegetation to prevent erosion.

Monitoring Post-Closure:

Long-term monitoring ensures that the river ecosystem recovers and that the site remains safe and sustainable for future generations.

Process description of the said project is attached as **Annexure-E.**

3.7 Water requirements:

The main water supply requirement is for drinking water and nothing in the mining process. The workers are being provided 2-3 liters of water per capita per day. For the workers camp, the quantity of water required is about 100-150 liters per day.

3.8 Solid waste:

In sand mining, solid waste is primarily generated from the removal of overburden, which includes soil, rocks, and other materials that cover the sand deposits. These materials are typically discarded or used for reclamation purposes to restore the mining site. Machinery maintenance also contributes to waste, including used oils, lubricants, worn-out parts. Regular maintenance ensures the proper disposal of used oils and equipment parts.

3.9 Plantation

Plantation will be carried out at the sand mining site to restore the ecosystem and prevent soil erosion. Native plant species will be used to ensure long-term environmental sustainability.

3.10 Health, Safety & Hygiene

Health, Safety & Hygiene includes the following:

3.11 First Aid Facility

At workplace workers and employers have enough information, knowledge and training regarding first aid treatment in case of any emergency.

3.11.1 Safety Trainings

Workers and all the staff is provided with proper training about the work and safety practices.

3.11.2 Use of Drugs and Narcotics

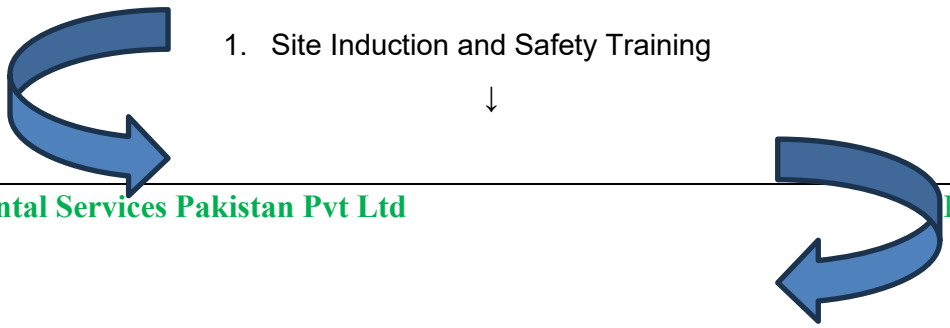
Drugs and narcotics are strictly prohibited. Smoking will be only allowed in rest timings at properly isolated places.

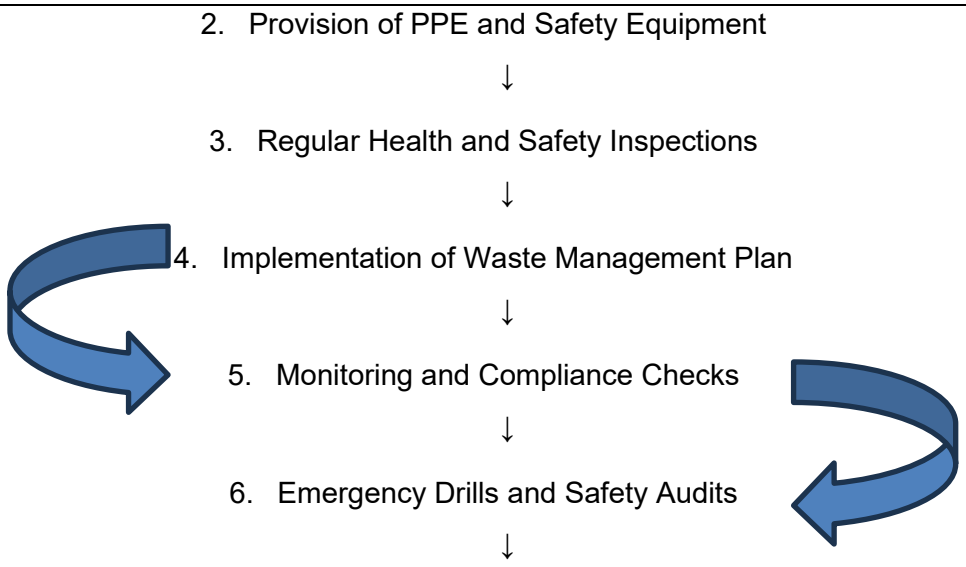
3.11.3 Personal Protective Equipment

To control any health and safety risk and to reduce the magnitude of any adverse impact, the workers are required by law to have the PPE such as safety helmet, safety googles, rubber gloves, long shoes, safety lamps/ torches etc. The company will provide the requisite PPEs to its employees where required.

3.12 Process Flow Chart

The following process flow chart outlines the key steps in ensuring health, safety, and hygiene at the project site:





3.13 Continuous Improvement and Feedback

This flow chart will be displayed at prominent locations throughout the site to ensure that all personnel are aware of the safety protocols and operational procedures.

3.14 Restoration and Rehabilitation Program

Following measures can be adopted hypothetically to restore and rehabilitate the site:

There exists no human settlement within safe radius of the selected project site to be displaced owing to the mining operations. No structure of any significance stands at the site to be relocated or dismantled. Mine is already awarded to proponent, hence, no relocation and rehabilitation is required.

The process of mining employed will be surface mining process in which least disturbance to the vegetation features and the infra-structure at the project site will occur.

- The importance of the site is due to economic activity, otherwise. It is a replica of a barren land. The question of rehabilitation therefore doesn't arise except re- coursing the land formed by the cavities of the mined-out area
- The isolated site can be used for geo-tours to the visitors for generating alternate economic activity once the reserves are exhausted.
- The site can be used for the re-creational purposes.

- Trees will be planted at the project area by using dry afforestation technique and the overall ecology of the area will be improved significantly.

Reclamation practice varies widely, depending on the type of mine, its location and the applicable legal requirements. The proponent will strictly follow the provisions of Environmental Protection Act, 1997 and the Punjab Mining Concession Rules, 2002.

Considering its importance proponent will operate to the highest environmental standards of environmental management within the context of sustainable development. Each mine requires a particular solution depending on the region where it is situated, the type of mine and the mining methods applied.

Table 3::Restoration and Rehabilitation Program

Measures for Land Rehabilitation & Restoration	Timeframe	Responsible Party
There exists no human settlement within safe radius of the selected project site to be displaced owing to the mining operations. No structure of any significance stands at the site to be relocated or dismantled. Mine is already awarded to proponent, hence, no relocation and rehabilitation is required.	-	-
The details of the land lease documents are attached at the end of this EIA Report. The process of mining employed will be underground mining process in which least disturbance to the vegetation features and the infra-structure at the project site will occur.	-	-
The importance of the site is due to economic activity, otherwise. it is a replica of a barren land. The question of rehabilitation therefore doesn't arise except re-coursing the land formed by the cavities of the mined-out area	After Mining	Proponent
The isolated site can be used for geo-tours to the visitors for generating alternate economic activity once the reserves are exhausted.	After Mining	Proponent
The site can be used for re-stocking the livestock.	After Mining	Proponent/ Livestock Department
Trees will be planted at the project area by using dry afforestation technique and the overall ecology of the area will be improved significantly.	Till Lease Tenure	Proponent
The land will be available for agricultural use.	After Mining	Proponent/ Concerned Authority

The site can be used for re-creational purposes.	After Mining	Proponent/ Concerned Authority

Chapter 4. DESCRIPTION OF ENVIRONMENT

This section provides the description of the baseline conditions of the Project as well as the area of influence. The existing environmental conditions of the proposed area of influence will also be a benchmark to be used for a comparison of before and after installation and operation of the Petroleum Storage Unit by Agha & Siraj Trading Company. This baseline will also provide the datum for assessing the impacts and suggesting the mitigation measures, which will be implemented effectively at various phases of the Project activities.

4.1 PHYSICAL ENVIRONMENT:

4.1.1 Topography

Sheikhupura district is a district located in Lahore division of Punjab Province, Pakistan. Sheikhupura is the headquarters of Sheikhupura district. According to the 1998 census of Pakistan, the district had a population of 3,321,029 of which 25.45% were urban. In 2005 one of its subdivisions was split off to form the new Nankana Sahib District. The predominant language of the district is Punjabi, which according to the 1998 census results for the tehsils of Sheikhupura, Ferozewala and Safdarabad, is the first language of 98% of the population, while Urdu is the first language of 1.1%. Average elevation of Sheikhupura is 206 meters.

According to the 2017 census of Pakistan, most populous cities of the district are Sheikhupura, Muridke, Kot Abdul Malik and Ferozewala. The topography is marked by, local depression and grounds.

4.2 LAND USE

The land use of the Project Area is mainly industrial as it is an industrial estate.

4.3 GEOLOGY AND SOILS

The surface soil is grey to brown in color and medium textured i.e., silty clay/ clay loamy or sandy loam at the site, at all the locations, and generally continues up to a depth of 6-14 feet. This sub-stratum contains fine sand. Topographically, the area is almost plain.

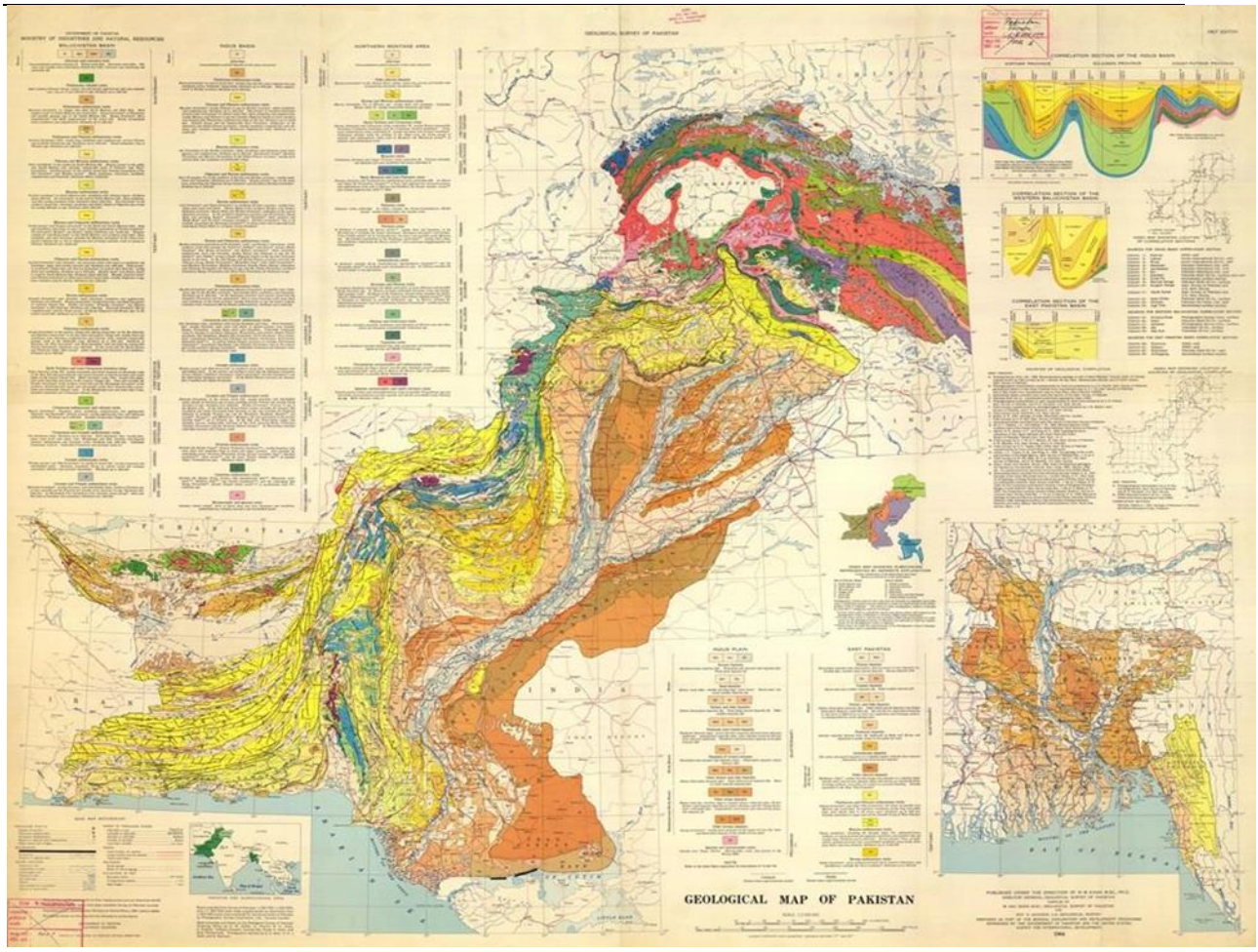


Figure 4-1: Agro-Ecological Map of Pakistan

4.4 SEISMOLOGY

An earthquake is generated by tectonic processes in the upper part of the Earth called the lithosphere, which is divided into several rigid parts called “Plates”. Due to the movements of these plates, stress builds up takes place and results in the deformation of the crustal mass.

On the basis of Peak Ground Acceleration (PGA) values obtained through Pakistan Seismic Hazard Assessment (PSHA), Pakistan is divided into 5 seismic zones in line with the Uniform Building Code (UBC) 1997, and the seismic zone of Sheikhupura is A2.

The boundaries of these zones are defined on the basis as shown in Table 5.1.

Table 4-1: Probabilistic Ground Acceleration (PGA) Values of Seismic Zones of Pakistan

Horizontal Zone	PGA (g)
1	0.05-0.08
2A	0.08-0.16

2B	0.16-0.24
3	0.24-0.32
4	>0.32

As per the Building Code of Pakistan (BCP) 2007 (Seismic Provisions), the proposed Project falls entirely in zone 2A, which is the region of moderate seismic risk (Figure). Hence, all the applicable provisions related to Soil and Foundations, Structural Design Requirements and the Structural Concrete of BCP should be considered in the design of the structures.

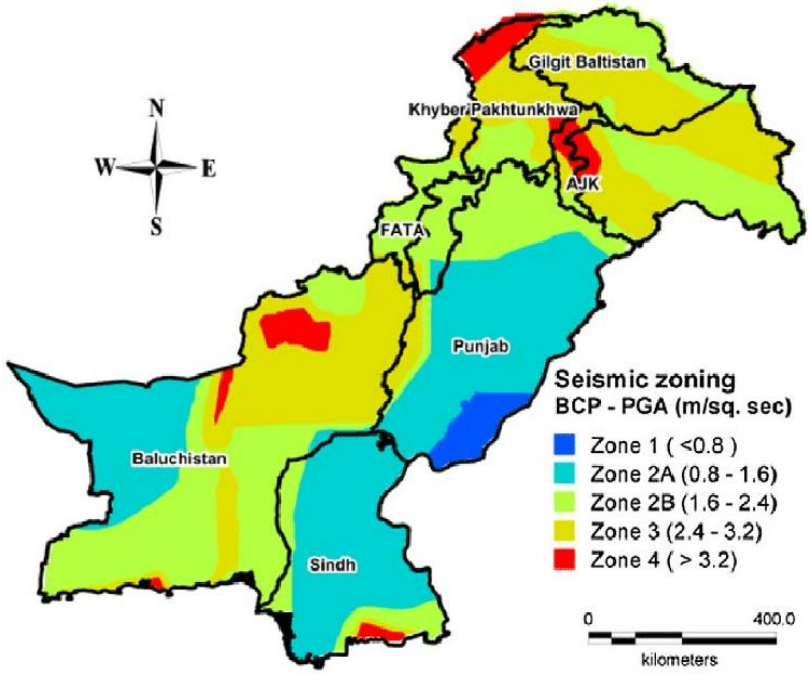
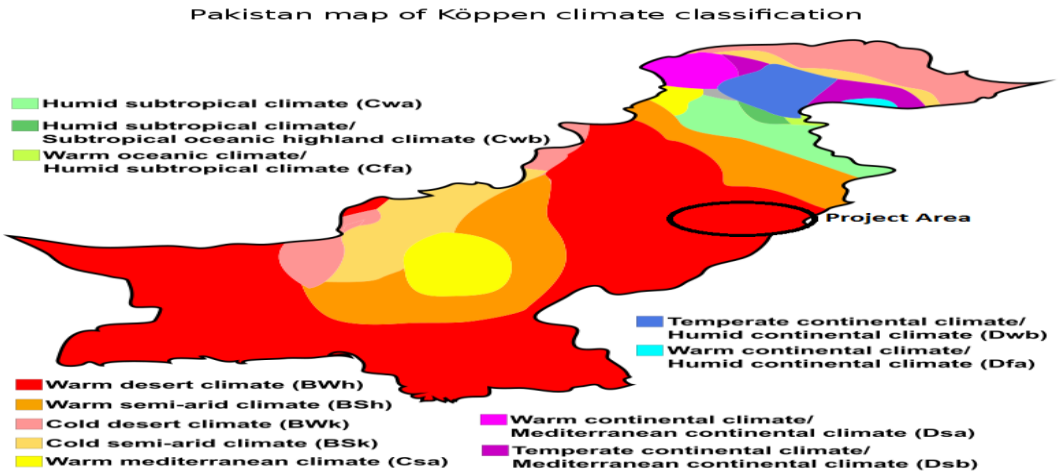


Figure 4-2: Seismic Map of Pakistan

4.5 Climate



The temporal division of the country is exhibited below:

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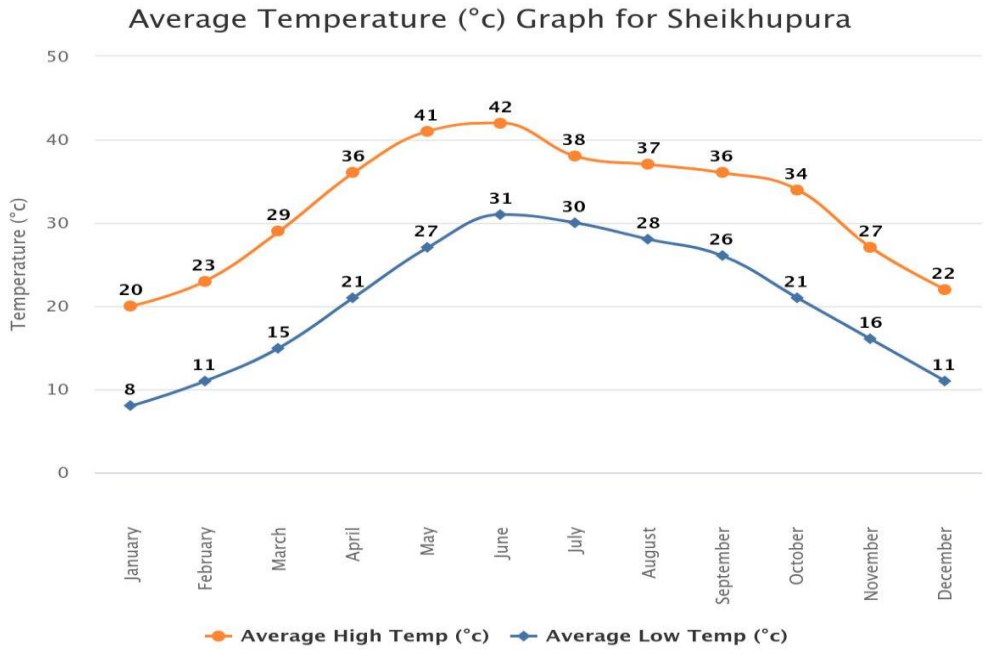


Figure 4-3:Graphical Representation of Average Yearly Temperature

4.6 WATER RESOURCES

4.6.1 Surface Water

The major surface water sources in Sheikhupura District are canals derived from the River Chenab and River Ravi, which form part of the extensive irrigation network of Punjab. These canals provide a perennial supply of water for agriculture and other uses. During the monsoon

season, heavy rainfall and increased upstream flows may raise water levels in the canal system, occasionally leading to localized flooding in low-lying areas of the district.

4.6.2 Ground Water

The chemical quality of groundwater in Sheikhupura varies with location and depth. Irrigation supplies are largely supported by perennial canals, supplemented by tube wells to meet additional demand. The aquifer consists of alluvial deposits, with a water table generally found at depths of 25–35 meters. It remains stable year-round due to recharge from rivers and canal systems passing near the district. Laboratory analysis of groundwater samples from the project area indicates that the quality is within permissible limits for both biological and chemical parameters. The Lab reports of water, ambient air and noise have attached.

4.7 Ecological Environment

This section describes the biodiversity existing ecosystem and existing ecological conditions in the project area of influence.

4.7.1 Flora

The area is located in alluvial plain which is highly fertile. Naturally grown shrubs are also present on the land. There were no trees seen on the project land. Green fields of rice, gandum and other vegetables are found in abundance in the surroundings of the project area.

4.7.2 Fauna

Fauna within the Project area includes following:

Mammals	Birds
○ Jackels (Canisaureus)	○ Field rats (Rattusnorvegitus)
○ Field rats (Rattusnorvegitus)	○ Shikra (Accipiter badius)
	○ Crow (Corvussplendens)
	○ Common kite (Milbusmigrans)
	○ Sparrow (Passer domesticus)
	○ Pigeons (Columba livia)
	○ Dove (Stratopielia SSP.)

There are no migratory birds reported in or around the project area. Domestic animals of significance include cows/ bulls, buffaloes, goats, donkeys, and sheep.

There are no endangered species reported in the project area by the Wildlife Department of Punjab.

4.8 Socioeconomic Environment:

4.8.1 General

This section deals with the social conditions of the Project Area. During the desk/ office study, available reports/ documents were comprehensively studied. During the field survey interviews with the residents, shopkeepers, students, pedestrians, drivers, and school employees were held, and observations were taken after giving due consideration to the desk/ office study results.

4.8.2 Demographics

According to the 1998 census of Pakistan, the district had a population of 3,321,029 of which 25.45% were urban. In 2005, one of its subdivisions was split off to form the new Nankana Sahib District. The predominant language of the district is Punjabi, which, according to the 1998 census results for the tehsils of Sheikhupura, Ferozewala and Safdarabad, is the first language of 98% of the population, while Urdu is the first language of 1.1%Religion.

Islam is the common heritage in the region with a 97.22% Muslim majority according to the 1998 Pakistan census report and 2001 population data sheet. Islamic influences are evident in the fundamental values of various inhabitants including cultural traditions, marriage, education, diet, ceremonies, and policies which may reflect stark differences in rural villages as compared to urban areas. People live in tight-knit joint families, although a nuclear family system is emerging due to changing socio-economic conditions. Ancient Pakistani culture prevails in most marriage practices in the region, as do certain restrictions related to ethnicity and caste. Prevalent minorities, particularly Hindus and Christians, feel a sense of vulnerability because of their religious beliefs.

4.8.3 Public Transport

Sheikhupura is well-connected by rail and road. Public transportation in Sheikhupura includes auto-rickshaws, buses, and railways.

4.8.4 Railways

The railway station “Chichon ki Maliyan” is the nearest railway station to the grid station (Project site). Rail services are operated by Pakistan Railways, owned and operated by the Ministry of Railway.

4.9 Industrial Importance

A variety of important industrial units are operating in district Sheikhupura including fertilizer, chemicals, polyester fiber/yarn and rayon yarn, tractor and motor cycle assembling, electric domestic appliances, tyres and tubes (trucks, buses, cars and light vehicles), jute products, ceramics, electrical goods, pharmaceutical, cotton/woolen textile, etc. Paper and paper board industry is also concentrated in district Sheikhupura.

4.10 Environmental Parameters for Monitoring

The environmental monitoring of parameters like ambient air quality, noise level and groundwater help us to analyze the prevailing environment conditions in and around the study area, and to protect it from any adverse activities due to the proposed Project implementation.

4.10.1 Air Quality

The environmental monitoring activities were carried out by **EPA-certified laboratory ESPAK**, and the detailed findings of ambient air quality assessments are provided in **Annexure D.**

4.10.2 Noise Level

Noise level monitoring was undertaken by **ESPAK, an EPA-approved laboratory**. The recorded data has been compiled and the results are included in **Annexure D** for reference.

4.10.3 Ground Water Quality

The quality of drinking and groundwater was also analyzed through **EPA-certified laboratory ESPAK**. The comprehensive test results, outlining key parameters of water quality, are presented in **Annexure D**.

Chapter 5. SCREENING OF POTENTIAL ENVIRONMENTAL IMPACTS & THEIR MITIGATIONMEASURES

This section discusses the potential environmental impacts associated with the Mining of Sand at Ordinary Sand/Ghassar Namely Shiranwala Zone, District Sheikhupura. It outlines methodologies for impact identification, the characteristics of impacts including nature, magnitude, extent, location, timing, duration, reversibility, and risk. The assessment is based on potential impacts on various environmental receptors within the project area.

5.1 Methodology for Impact Identification

The potential impacts from mining activities can be both positive (beneficial) and negative (adverse), depending on the resources and receptors involved, as well as other parameters such as geographical scope (magnitude and extent), temporal scope (duration), and reversibility.

5.2 Positive Impacts:

The project is anticipated to yield positive outcomes in sectors such as the economy, employment generation, and foreign exchange earnings. These benefits will contribute to the local and national economic growth.

5.3 Negative Impacts

While there are positive impacts, the project may also lead to negative impacts that are of short-term duration and transient in nature, such as temporary disturbances to water quality and increased noise levels during extraction activities.

- **Erosion:** Unregulated or excessive mining can cause riverbank erosion, reducing land stability and increasing flood risks.
- **Pollution:** Runoff from mining sites may carry sediment and contaminants into water bodies, affecting water quality and aquatic life.
- **Biodiversity loss:** Habitat disruption and fragmentation may occur, impacting local wildlife, riparian vegetation, and aquatic species.
- **Air and noise pollution:** Dust emissions and elevated noise levels due to the operation of machinery and transportation.
- **Community concerns:** Local communities may face health, safety, and livelihood challenges due to project activities.

5.4 Impacts Analysis and Prediction

The analysis of impacts on various environmental settings was conducted through consultations with environmental experts and stakeholders. Their views were recorded and incorporated into the assessment. A comprehensive list of stakeholders and individuals consulted will be provided in the chapter on Stakeholder Consultation.

Impacts were characterized on the basis of following parameters:

Nature	Direct: The environmental parameter is directly changed by the project. Indirect: The environmental parameter changes as a result of a change in another parameter.
Duration of Impact	Short-term: Lasting only for the duration of the project, e.g., noise from construction activities. Medium-term: Lasting for a few months to a year before naturally reverting to the original condition, e.g., loss of vegetation due to site clearing. Long-term: Lasting for a period much greater than medium-term before reverting to the original condition, e.g., soil erosion.
Geographical Extent	Local, Regional, National, Global
Reversibility of Impact	Reversible: The receptor resumes its pre-project condition. Irreversible: The receptor does not or cannot resume its pre-project condition.
Likelihood of the Impact	High: Impact expected to occur under most circumstances. Moderate: Impact will probably occur under most circumstances. Low: Impact could rarely occur.

5.5 5.3 Significance of Impact

The significance of impacts is categorized as Positive or Negative based on the consequence, likelihood, reversibility, geographical extent, duration, level of public concern, and conformance with legislative or statutory requirements.

Significance of impact	Categorized as Positive or Negative. Based on the consequence, likelihood, reversibility, geographical extent, and duration; the level of public concern; and conformance with legislative of statutory requirements.

The impacts characterization for the project has been given in Table below:

Table 2: Characterization of Impacts

Environmental Component	Impacts	Nature of Impact	Duration	Spatial Boundaries	Likelihood	Reversibility
Water Resources	Changes in water quality due to sedimentation and potential contamination	Negative	Short-term to Long-term	Local	High	Partially Reversible
Land Resources	Alteration of riverbed topography and soil erosion	Negative	Short-term to Long-term	Local	High	Partially Reversible
Air Quality	Increased dust and emissions during mining operations	Negative	Short-term	Local	High	Reversible
Climate Change	Contribution to greenhouse gas emissions	Negative	Long-term	National	Low	Irreversible
Noise	Elevated noise levels from machinery and operations	Negative	Short-term	Local	High	Reversible
Solid Waste	Generation of waste materials during extraction	Negative	Medium-term	Local	Moderate	Partially Reversible
Wastewater	Contamination of local water bodies due to runoff	Negative	Medium-term	Local	Moderate	Partially Reversible
Flora & Fauna	Disruption of habitats and potential loss of biodiversity	Negative	Medium-term	Local	Moderate	Partially Reversible
Community Amenity	Potential changes in local land use and amenities	Negative	Medium-term	Local	Moderate	Partially Reversible
Afforestation	Restoration of disturbed areas post-mining	Positive	Long-term	Local	High	Reversible

Environmental Component	Impacts	Nature of Impact	Duration	Spatial Boundaries	Likelihood	Reversibility
Local Economy, Community Development and Employment	Job creation and economic benefits	Positive	Long-term	Local	High	Reversible
Resettlement	No direct impacts expected	Nil	Nil	Nil	Nil	Nil
Health & Safety	Risks associated with mining operations	Negative	Short-term	Local	Moderate	Partially Reversible

5.6 Screening of Potential Environmental Impacts

The screening process involves evaluating various environmental components to identify potential impacts resulting from the mining activities. The following sections detail the anticipated impacts on different environmental parameters:

5.7 Water Resources

Potential Impacts:

Contamination of surface and groundwater due to sediment runoff . Alteration of water quality parameters such as pH, turbidity, and total dissolved solids.

Mitigation Measures:

- Implement sediment control measures such as silt fences and sediment traps to prevent sediment runoff into water bodies
- Regular water quality monitoring to ensure compliance with environmental standards.

5.8 Land Resources

5.8.1 Potential Impacts:

- Erosion and alteration of the riverbed topography due to excavation activities.
- Loss of soil structure and fertility in disturbed areas.

5.8.2 Mitigation Measures:

- Implement erosion control measures, including vegetation cover and contouring of disturbed areas.

- Use of geotextiles and other stabilization techniques to prevent soil erosion.
- Rehabilitate disturbed areas post-mining to restore natural landforms and prevent erosion.

5.9 Air Quality

5.9.1 Potential Impacts:

- Increased dust emissions from mining operations, transportation, and equipment usage
- Release of exhaust emissions from machinery.

5.9.2 Mitigation Measures:

- Implement dust suppression measures such as water spraying on access roads and during excavation activities.
- Maintain equipment in good working condition to minimize emissions.
- Conduct regular air quality monitoring to assess particulate matter levels and other pollutants.

5.10 Noise

5.10.1 Potential Impacts:

Elevated noise levels from heavy machinery and transportation activities affecting nearby communities and wildlife.

5.10.2 Mitigation Measures:

- Schedule noisy operations during daylight hours to minimize disturbance to local residents.
- Use noise barriers and soundproofing techniques where feasible to reduce noise levels.
- Conduct regular noise monitoring to ensure compliance with established noise regulations by the lessee.

5.11 Flora & Fauna

5.11.1 Potential Impacts:

- Disruption of habitats and potential loss of biodiversity due to mining activities.
- Potential for disturbance to local wildlife from noise and human activity.

5.11.2 Mitigation Measures:

- Conduct a detailed ecological survey to identify sensitive habitats and species before mining begins.
- Implement buffer zones to protect critical habitats and minimize disturbances.
- Develop a biodiversity management plan to enhance local flora and fauna during and after mining operations.

5.12 Community Amenity

Potential Impacts:

Changes to local land use and potential displacement of community amenities due to mining operations.

Mitigation Measures:

- Engage with local communities to discuss potential impacts and address concerns.
- Develop a Community Development Plan to enhance local amenities and provide benefits to affected communities.
- Ensure that access routes and community infrastructure are maintained during mining operations.

5.13 Summary of Potential Impacts

The summary of the positive and negative impacts observed on the environment due to the Mining of Sand is provided in Table Below. Impacts are assessed using a magnitude scale ranging from 0 to 5.

Scale Range	Magnitude
0	No Impact
1	Low
2	Minor
3	Intermediate
4	Moderate
5	Major

Positive impacts are given (+) sign while (-) sign is used for negative impacts. The mitigation measures will be explained after a short while. The magnitude of positive and negative impacts is given in Table below:

Table 3: Environmental Impacts and their Description

Component	Environmental Issue	Magnitude	
		Positive	Negative
Physical Environment			
Water	Sedimentation and Turbidity Increase	0	-3
	Channel Water Discharge Variation	0	-1
	Groundwater Quality Changes	0	-1
	Groundwater Level Fluctuation	0	-1
	Riverbed Degradation (from extraction)	0	-3
	Surface Run-Off and Soil Contamination	0	-2
Land	Soil Erosion	0	-3
	Riverbank Instability	0	-2
	Land Use Change	0	-2
	Loss of Productive Land Area (if disturbed)	0	-1
	Land Utility / Productivity Enhancement	+5	0
Solid Waste	Improper Waste Disposal (e.g., used oils, debris)	0	-2
Wastewater	Water Pollution from Improper Handling	0	-2
Climate	Micro-climate Changes	0	0
	Climate Change	0	0

Atmosphere	Dust Generation from Operations	0	-3
	Noise Pollution (from heavy machinery)	0	-3
Sub-Total		**+5**	**-29**
Biological Environment			
Flora	Loss of Riparian Vegetation	0	-2
	Habitat Disturbance for Terrestrial Vegetation	0	-1
Fauna	Disruption of Mammal Habitats	0	-2
	Displacement of Birds and Aquatic Species	0	-2
	Disturbance to Reptile Communities	0	-1
	Habitat Fragmentation	0	-2
Sub-Total		**0**	**-10**
Socio-economic Environment			
Social	Population	+1	0
	Land Ownership Issues (disputes)	0	-1
	Land Lease	+2	0
	Security Concerns	0	-1
	Social Cohesion / Attitude	+1	0
	Food / Nutrition	+1	0
	Health & Safety Hazards (machinery, dust)	0	-3
	Education	+1	0
Economic	Income Levels	+2	0
	Employment	+3	0
	Land Value	+2	0
Institutional	Institutional	+1	0

	Activities/Effectiveness		
Relocation/ Resettlement	Land Lease	0	-1
	Potential Population Dislocation	0	-1
	Loss of Local Property (if mismanaged)	0	-1
	Loss of Infrastructure	0	-1
Sub-Total		**+25**	**-2**
Grand Total		**+27**	**-41**

Potential Environmental Enhancement Measures, Responsibilities of the relevant stakeholders for implementation of the environmental enhanced measures are delineated in the Table below. These measures are subject to the tenure of the lease holder.

Table: Positive Environmental Enhancement Measures

Positive Impacts	Enhancement Measures	Implementing Agencies
Improving Land Utility	Optimize use of recovered land. Consolidation of land After conclusion of mining activities, geo-tours can be arranged. Forest Cultivation can also be taken.	Agricultural Department Revenue Department Proponent
Improvement of land activity	Education of farmers on modern techniques of agriculture. Use timely inputs for suitable soil conditioners.	Agricultural Department Formers
Improvement of Economic Conditions	Provision of more jobs to locals with efforts on integration of project products.	Lease Owner NGOs
Improvement of institutional performance	Arrangements of credit facilities for agro based business encourage establishment	Agricultural

	of NGOs for improvement of socio environmental and literacy condition. Persuade schools, banks and other departments to be effective and provide facilities to locals.	Development Bank/ Schedule Bank/ NGOs/ Education Department
Improvement of agriculture and forestry	Adopt modern techniques for agro-productivity to use optimal inputs. Plant trees and crops with lesser water requirement	Agricultural Department Forest Department Farmers
Community Development	Educate and train resident of villages on improvement of local conditions through NGO. Encourage local participation in social education and health activities and programs.	NGOs Locals

5.12 Other Potential Environmental Enhancement Measures

- All vehicles used in the mining will be regularly inspected and maintained.
- Extracted material will be transported to the market places according to proper management practices.
- Vegetative buffers will be maintained regularly to keep them in good condition.
- The labor force will be trained to use personal protective equipment to avoid any accident/ near miss at site.
- The vehicles used for transportation will be properly designed, covered and cleaned to avoid any risk while departing to and from the project site.
- Extensive plantation will be done in and around the project site to enhance the environmental quality.
- Environmental Management and Monitoring Plan (EMMP) will be strictly operational throughout the project life. All monitored data will be reported to the EPA Punjab, Lahore for scrutiny at their end.

Chapter 6. ENVIRONMENTAL MANAGEMENT AND MONITORING PROGRAM

6.1 Purpose and Objectives of the EMP:

The primary objectives of the EMP are to:

- Facilitate the implementation of the mitigation measures identified in the EIA.
- Define the responsibilities of the project proponent.
- Define a monitoring mechanism and identify monitoring parameters in order to:
- Ensure the complete implementation of all mitigation measures.
- Ensure the effectiveness of the mitigation measures.
- Provide a mechanism for taking timely action in the face of unanticipated environmental situations
- Identify training requirements at various levels.

6.2 Management Approach:

The overall responsibility for compliance with the environmental management plan rests with the project proponent. A certain degree of redundancy is inevitable across all management levels, but this is in order to ensure that compliance with the environmental management plan is crosschecked.

6.3 Institutional Capacity

Following functionaries will be involved in the implementation of EMP:

- Project Proponent
- HSE/Project Manager
- In-Charge Administration
- Supervisor of project
- Environmental Engineer

6.4 Training Schedules

Training for the management/contractors/engineers and workers on environmental aspects of the project will be arranged. It will be imparted by a team of experienced trainers.

6.5 Training of contractor

Training of contractor & workers will be the part of the TORs regarding the mining scheme. The provisions given in EIA Report Chapter 5 Screening of Potential Environmental Impacts & Their Mitigation Measures will be followed.

TORs will be including the training and submission of reports in the following area:

- Handling of Machineries in a safe way
- Use of PPEs
- Maintenance of vehicles and submission of Environmental Monitoring Reports
- Placement of safety signs/boards during construction
- Sprinkling of water on the roads and dusty tracks
- Monitoring of generator emissions

Training regarding all other aspects of HSE will be ensured by the contractor during the construction phase.

6.6 Responsibility of EMP

Overall responsibility for implementation of EMP will be that of project proponent. He will appoint a HSE/Project Manager of relevant qualification. HSE/Project Manager will act as Environmental Manager and will manage the all HSE condition at the PEQS.

6.7 EMMP for Operation Phase

The EMMP for installation phase of the project includes following:

- Air quality management & monitoring plan
- Noise management & monitoring plan
- Solid Waste management & monitoring plan
- Health and safety management & monitoring plan

6.8 Equipment Maintenance Detail

The subject project is the mining lease for Sand over an area of 4292.766Acres of land under the name of M/S s Ch. Muhammad Saif Ullah Tahir. The company will maintain the records for Health Safety & Environment and will hire HSE manager to check and deal with the HSE issues. The company shall maintain PPEs, medical facilities.

6.9 Environmental Budget

The cost which is required to effectively implement the mitigation measures is important for the sustainability of the Project in operation stage of the Project.

Company has allocated the Environmental Budget is 2% of capital cost for the Training, maintenance and management of Environment that will include filling and maintenance of equipment's, restoration, plantation, and availability of PPEs, strategic planning to cope with any emergency situation and formulate the disaster management plan to cope with natural disaster. Any equipment or devices failure or replacement will not be included in this budget.

6.10 6.11 Environmental Management Plan

Environmental Aspect	Potential Impact	Mitigation Measures	Monitoring Activities	Responsibility	Frequency
Water Resources	Sedimentation and increased turbidity	Install silt fences and sediment traps to control runoff	Monitor turbidity and suspended solids in river water	Environmental Monitoring Specialist	Bi-Annually
	Contamination from fuel spills	Use spill containment measures	Regular inspection for leaks and spills	Environmental Manager	Weekly
	Degradation of groundwater quality	• Use closed-loop systems for water management • Line storage ponds	Monitor groundwater quality parameters	Third Party Consultant	Quarterly
	Surface runoff impacting water bodies	• Implement drainage channels • Create buffer zones near water bodies	Visual inspection of buffer zones	Third-Party Consultant	Quarterly
Land Resources	Soil erosion and loss of topsoil	• Apply soil stabilization techniques • Limit land clearance to necessary areas	Inspection of erosion control measures	Environmental Manager	Weekly during construction
	Contamination from improper waste disposal	• Designate waste disposal sites • Properly manage and dispose of solid waste	Designate waste disposal sites Properly manage and	• Designate waste disposal sites • Properly	Designate waste disposal sites

Environmental Aspect	Potential Impact	Mitigation Measures	Monitoring Activities	Responsibility	Frequency
			dispose of solid waste	manage and dispose of solid waste	Properly manage and dispose of solid waste
	Land degradation and habitat loss	• Rehabilitate disturbed areas • Re-vegetate cleared areas with native species	Monitor re-vegetation success rate	Biodiversity Specialist Bi-Annually	Biannually
Air Quality	Dust emissions during mining operations	• Water spraying on unpaved roads and during excavation • Use dust suppressants	Measure PM10 and PM2.5 levels at sensitive receptors	Environmental Monitoring Specialist	Monthly
	Emissions from machinery	• Maintain machinery and vehicles • Use low-emission machinery	Monitor NOx, Sox, and CO levels	Third-Party Consultant	Quarterly
Noise	Increased noise levels from machinery	• Install noise barriers where applicable - Schedule noisy activities during daytime	Measure noise levels at project boundary	Environmental Monitoring Specialist	Monthly
	Disturbance to local communities	• Restrict operation hours • Use mufflers on heavy equipment	Conduct community surveys	Community Liaison Officer	Quarterly
Biodiversity	Habitat disturbance	• Establish buffer zones around sensitive habitats • Avoid work during breeding seasons	Monitor habitat changes and species population	Biodiversity Specialist	Annually
	Loss of riparian vegetation	• Implement a riparian buffer restoration program	Regular vegetation monitoring and habitat surveys	Biodiversity Specialist	Annually
	Fauna displacement	• Create wildlife corridors	Monitor fauna movement and	Biodiversity Specialist	Fauna displacement

Environmental Aspect	Potential Impact	Mitigation Measures	Monitoring Activities	Responsibility	Frequency
		• Install bird nesting platforms	nesting patterns		
Waste Management	Improper solid waste disposal	• Segregate waste at source • Implement recycling program	Inspect waste segregation and storage areas	Waste Management Officer	Monthly
	Accumulation of hazardous waste	• Store hazardous waste in sealed containers • Regular removal and disposal	Maintain hazardous waste inventory	Waste Management Officer	Monthly
Water Management	Over-extraction of water resources	• Use water-efficient technologies • Recycle and reuse process water	Measure water consumption rates	Environmental Manager	Monthly
	Water contamination	• Implement wastewater treatment units • Regularly check containment systems	Monitor effluent quality	Environmental Monitoring Specialist	Monthly
Health & Safety	Health risks to workers	• Provide PPE and safety training • Conduct regular health checkups	Audit health and safety protocols	EHS Officer	Weekly
	Accidents and injuries	• - Develop and implement an Emergency Response Plan	- Incident reporting and investigation	EHS Officer	As needed
	Spread of diseases	• Regular health screening for workers • -Provide health awareness training	Health status monitoring	EHS Officer	Quarterly
Community Relations	Loss of community trust	• Regular stakeholder engagement • Establish grievance redress	Monitor grievances and resolution status	Community Liaison Officer	Monthly

Environmental Aspect	Potential Impact	Mitigation Measures	Monitoring Activities	Responsibility	Frequency
		mechanisms			
	Lack of community benefits	• Develop Community Development Programs	-Conduct community satisfaction surveys	Community Liaison Officer	Bi-Annually
Rehabilitation & Restoration	Degraded site post-mining	• Develop a comprehensive site restoration plan • Rehabilitate with native flora	Monitor vegetation cover and soil quality	Environmental Manager	After Mining Operations

Chapter 7. STAKEHOLDERS PARTICIPATION

Social acceptability of the project and the area is a key to success. Consultation with the stakeholders is a tool for managing two-way communication between the project proponent and the affected public. Its goal is to improve decision making and built understanding by actively involving individuals, groups and organizations, which have stake in the project. This involvement increases project's long term viability and enhances its benefits to locally affected people and other stakeholders.

In order to evaluate the socioeconomic and environmental impacts, filed surveys are extremely essential. In addition to the surveys at the preliminary stage, consultation with the community and their active participation plays a vital role in successful implementation of the project. To identity the different types of stakeholders and ascertain their perceptions about the project, an Environmental Impact Assessment was conducted. Informal group discussions were also held as an additional tool for obtaining feedback from the stakeholders that are being discussed in the following pages.

7.1 Objectives of Consultation

Public consultation plays a vital role in studying the effects of the project on the stakeholders and in the successful implementation and execution of the proposed project. Public involvement is a compulsory feature of environmental assessment, which leads to better and more acceptable decision making. The objective of the consultation with stakeholders is to help verify the environmental and social issues that have been presumed to arise and to identify those which are not known or are unique to Sand Mining.

The important general objectives of the consultation process are:

- Information dissemination, education and liaison;
- Identification of problems and needs;
- Collaborative problem solving;
- Reaction, comment and feedback on proposed project;
- Documenting mitigation measures proposed by the stakeholders;

7.2 Methodology of consultation:

The EIA team carried out public consultations at various locations around the Project Site. The stakeholder's consultation during this phase of the work targeted the project area, administrative and private offices, Govt. offices, shops, etc. near the Project area:

- Selection of the stakeholders for consultation, reconnaissance of the proposed project site and initial discussions with the neighboring factory workers, villagers, shopkeepers, drivers etc.
- Environmental consultants and social specialists and documenting the opinions of the stakeholders expressed during the meetings etc.

7.3 Proponent

Possible impacts and mitigation measures related to the subject project were discussed with the project proponent and management. They assured to take all suggested mitigation measures to control any discrepancy arose by the project and to make the project environmental friendly.

7.4 Responsible Authority

Ch. Muhammad Saif Ullah Tahir is the responsible authority to take all measures prior to start the activity.

4.2.1 Other departments and agencies

For the impact analysis detailed meetings were held with the management of M/S Ch. Muhammad Saif Ullah Tahir, local community, education institutes, health institutes, hospital and NGOs. Issues were discussed that may affect the environment and also the implementation of proposed project. All possible mitigation measures were considered and incorporated in the Environmental Management Plan.

Scoping sessions, focused group discussion and way side consultations were held with the relevant stakeholders in the area. The purpose of such consultations is to obtain the feedback from the relevant persons.

7.5 Affected & Wider Community

There is no affected community present in the radius of our study area. ESPAK team has consulted with the inhabitants of the different areas. They provided positive remarks regarding

the subject project and in the favor of the subject activity for the proposed project. Stakeholders participation Performa's and socioeconomic questionnaire were get filled by the inhabitants to evaluate the project socio-economic impacts. List of respondents and socioeconomic questionnaires are attached as **Annexure-F** with the report.

Table 4:Categories of stakeholders interviewed in the project area:

Sr. No.	Stakeholder Category
1.	Neighboring factory workers.
2.	Nearby residents
3.	Shopkeepers.
4.	Drivers.

7.6 Issues Discussed:

Following issues were discussed during the stakeholder consultation:

- Overall activities of the project;
- Possible impacts on natural vegetation, air, land and properties;
- Possible mitigation measures;
- Benefits of the project specifically for the local people.

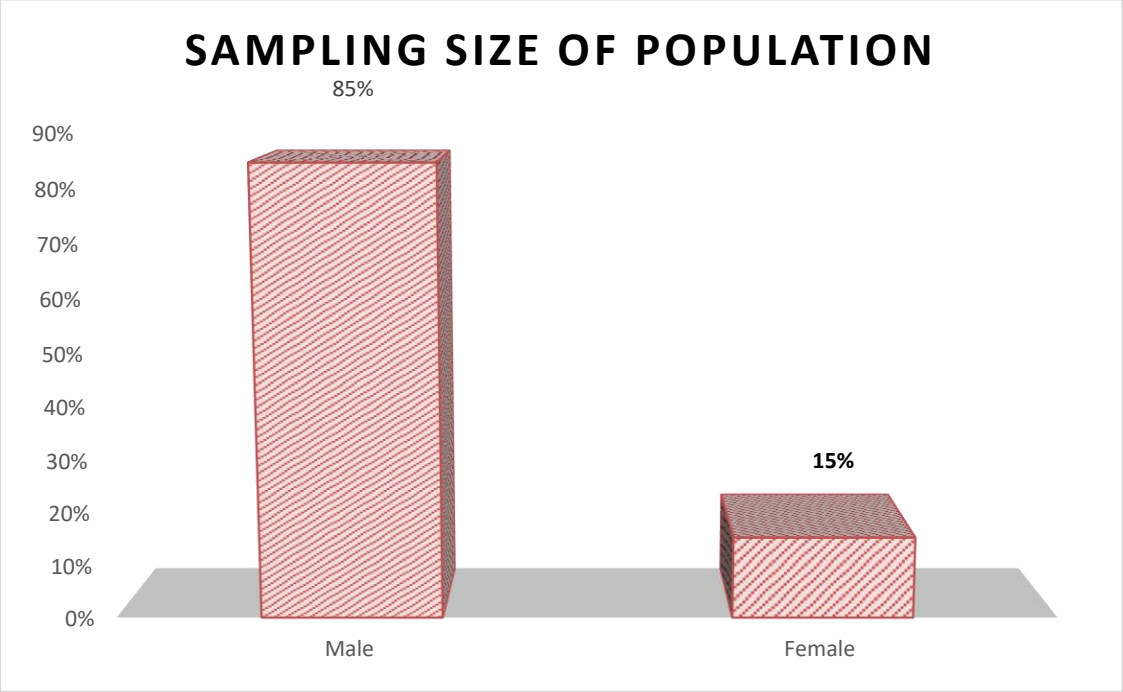
7.7 Sample Size

Sample size of 30 respondents was selected by the Team of consultants for conducting the socioeconomic survey. Women were also consulted for the said survey; some of their names are mentioned in the above list of respondents while most of them were not willing to give personal information.

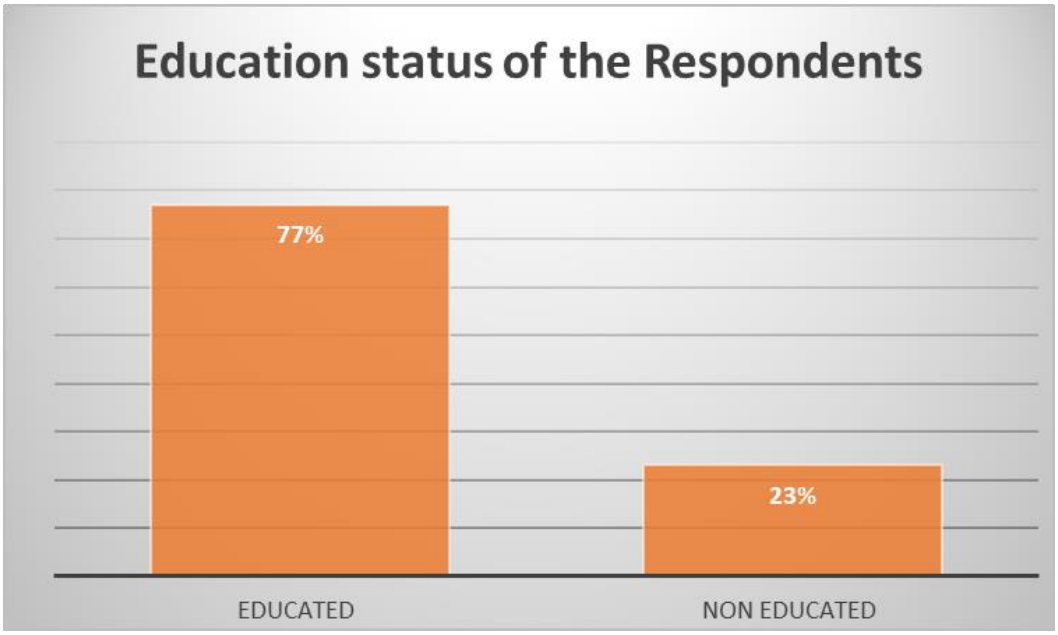
7.8 Statistical Analysis

SPSS 19.0 has been used for the statistical analysis of the data collected during the visit of study site area through questionnaires, List of questionnaires is attached herewith.

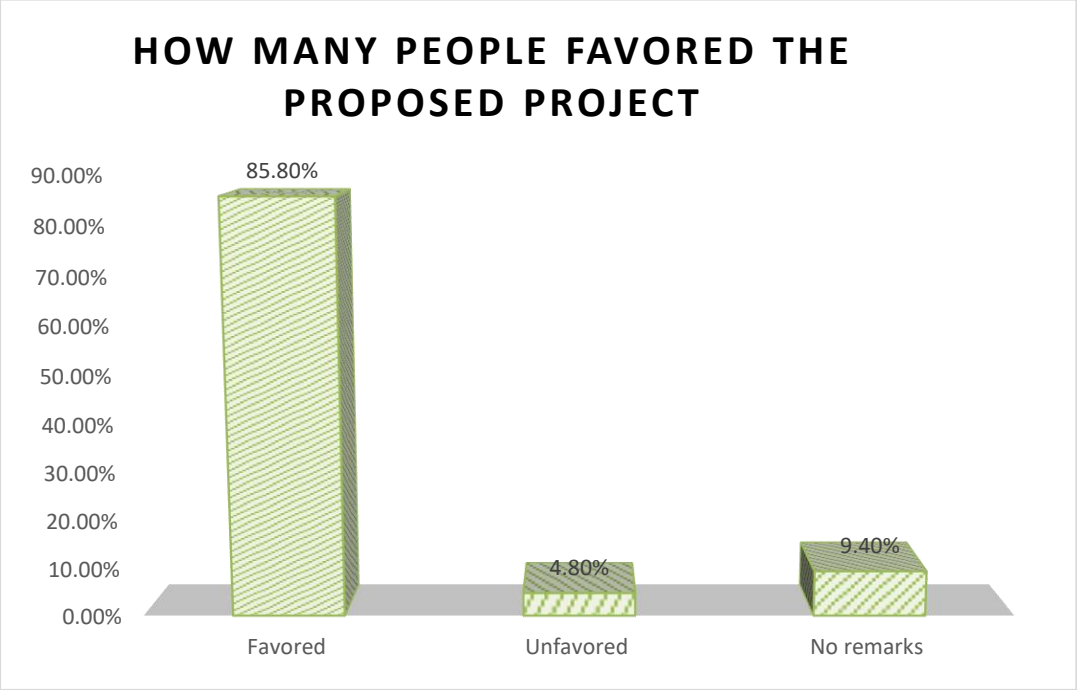
Graphical representation of analysis is given below:

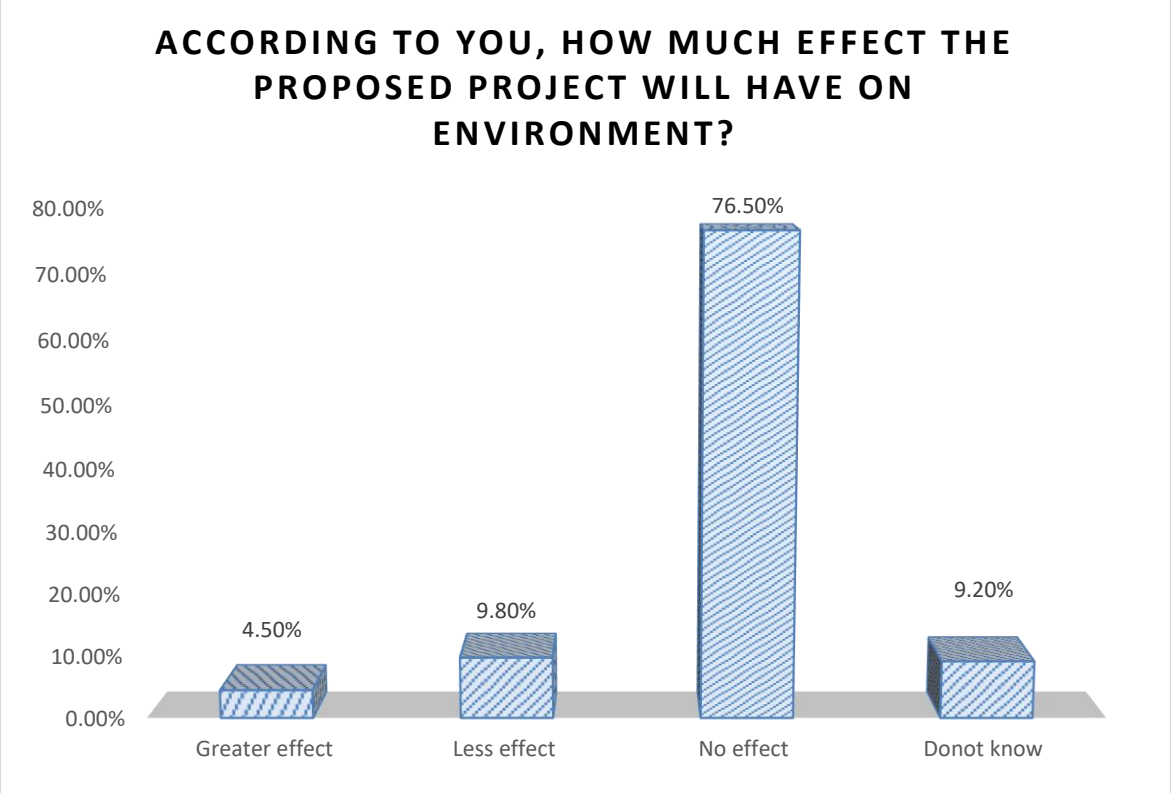


In the sampled population, 85% respondents were male while 15% respondents were female. The number of female respondents is less as compared to male respondents because according to the social binding female hesitates to respond or communicate comfortably.



In the sampled population, 77% respondents were educated while 23% were uneducated. Overall education status of the area is good.

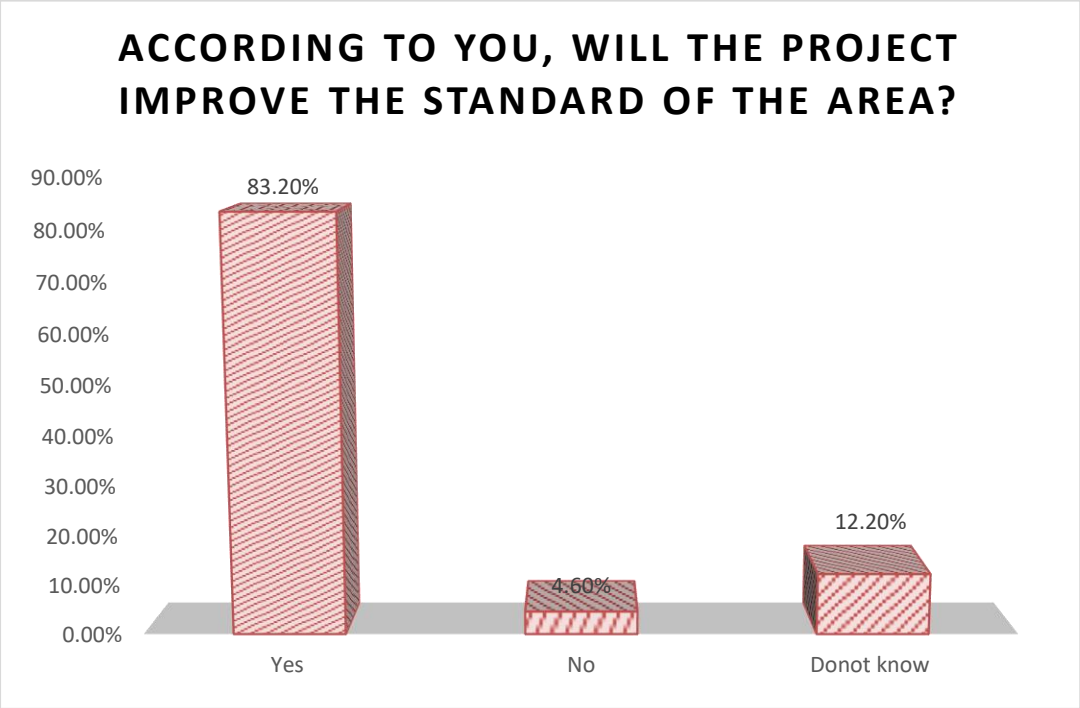




As per survey, 85.80 % people favored the project and they gave positive remarks regarding

the subject project. While 9.40% respondents had no opinion regarding the project and 4.80% respondents were not satisfied with the project because they think that development will affect the natural aesthetics of the area.

As per survey, 4.50% respondents said that subject project will affect the environment of the area, 9.8% said that there will be less effect on the environment, 76.50% respondents said that the project will not affect the environment and 9.20% said that they have no idea regarding the subject project. Most of the population was not aware about the environmental importance; they were giving their remarks according to their own knowledge



As Per survey, 83.2 % people said that the project will improve the standard of the area, 4.60% said that it will have no impact on the area while 12.20 % respondents gave no remarks.

7.9 Findings of the Overall Discussion:

- It will enhance the socio-economic conditions/values of the area.
- Project will increase revenue generation for the Government.
- It will create employment opportunities.
- Local people will be given preference for employment in the proposed project.

- There will be no significant additional load on the existing infrastructure i.e. utilities of water, telephone, electricity etc. due to the development of the proposed project.

Majority of people favored the proposed project in a sense that the said project will generate employment opportunities for local people and revenue for the government, will enhance the socioeconomic conditions of the area and automatically will contribute to the national economy of the country.

Chapter 8. CONCLUSION AND RECOMMENDATIONS

Based on the study conducted for Environmental Impact Assessment (EIA) for the subject project, the following conclusions are made:

8.1 CONCLUSIONS

- The EIA study reveals that the project is economically viable, socially acceptable and environment friendly.
- It will generate additional jobs during operation phase.
- The proponent has committed to implement the project in the environment friendly manner.
- M/S Ch. Muhammad Saif Ullah Tahir intends to register the project with local Government.
- M/S Ch. Muhammad Saif Ullah Tahir has prepared and implemented very comprehensive Emergency Preparedness and Response Standard Operating Procedures.
- M/S Ch. Muhammad Saif Ullah Tahir has prepared and implemented very comprehensive Security Procedures.

8.2 RECOMMENDATIONS

- In view of the comprehensive screening process and findings of the present study there is no need of conducting further investigations.
- Tree plantation inside the unit and near the unit is recommended.
- High standards of bio-security and safety will be enforced during operation stage. Safety of the workers will be top priority for the management.
- The management of M/S Ch. Muhammad Saif Ullah Tahir will 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 present project.

ANNEXURE-A

TERM OF REFERENCES (TORS)

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:

Subject project for which this Environmental Impact Assessment study has been conducted is mining lease for Sand over an area of 2805.435 Acres of land by M/s Rabia Mining Solutions. M/s Rabia Mining Solutions holds a mining lease of sand located at Ordinary Sand Zone No 6 Near Talib Wala District Sargodha. The estimated cost of the project is Approx. 12 Crore rupees. The sand lease area is about 2805.435 Acres and was granted by Mines and Minerals Department, Government of the Punjab. The project is located along the bed of the Chenab River in District Sargodha, Punjab Province. The project site is situated along the Chenab River, targeting sand deposits.

Cost of Project:

The estimated initial cost of the project will be Approx. 12 crore rupees.

Area of the Project:

Total area of the land is 2805.435 Acres.

Name & Address of proponent

Name: Ms. Rabia

Environmental Consultant & Client

Proponent has appointed the Environmental Services Pakistan Pvt Ltd (ESPAK), as the Consultant for the subject project to conduct the EIA. M/S Environmental Services Pakistan Pvt Ltd (ESPAK), will be called as "Consultant" and M/s Rabia Mining Solutions as the "Client".

Objective of the EIA study

The Objective of study includes Compliance of section 12 of PEPA 1997 (Amended 2012) & 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

ANNEXURE-B

CNIC & LEASE DOCUMENTS

REGISTERD

No. DD(M&M)/ML-SKP-ORD-SAND(SHIRINWALA ZONE)/2025/3547

OFFICE OF THE
DEPUTY DIRECTOR MINES AND MINERALS
LAHORE REGION, LAHORE

Dated 03-09-2025

To,

Ch. Muhammad Saif Ullah Tahir S/O Abdul Raziq,
R/O Chak No.2/4-L, Near Akbar Road, House No.8, Royal Villaz, Okara.

SUBJECT: - **ASSIGNMENT OF MINING LEASE OF ORD. SAND / GHASSAR NAMELY SHIRINWALA ZONE OVER AN AREA OF 4292.766 ACRES IN DISTRICT SHEIKHUPURA IN FAVOR OF CH. MUHAMMAD SAIF ULLAH TAHIR S/O ABDUL RAZIQ R/O CHAK NO.2/4-L, NEAR AKBAR ROAD, HOUSE NO.8, ROYAL VILLAZ, OKARA UNDER RULE 220 & 221 OF PUNJAB MINING CONCESSION RULE 2002.**

Please refer to the subject cited above.

It is to inform you that Licensing Authority, Minor Minerals, Punjab, Lahore has approved the assignment of subject mining lease in your favor under Rule 220 & 221 of Punjab Mining Concession Rules, 2002 on the following conditions: -

1. That you will submit 15 % security amount of Rs. 4,50,15,035/- in shape of CDR of your name with in a period of 07 days from the date of issuance of this letter.
2. That period of said mining lease shall remain the same as mentioned in original allotment letter.
3. That you shall abide by all terms and condition contained in original allotment letter and IEE approval for said mining lease.
4. That you will restrain from any mining activity that cause public nuisance. In case of any serious public complaint, you will resolve the issue at your end otherwise legal action will be taken.
5. That you shall be responsible for discharging all the past, present and future liabilities, financial and legal apropos of the assigned the mining lease.
6. That you shall not be entitled to claim any relief whatsoever for period before the assignment of subject mining lease in your favor.
7. That you shall hand over the possession of mining lease in good order to this office at the end of its original two year period i.e on 27.06.2027.

Assistant Director Mines and Minerals
Lahore Region, Lahore

A copy is forwarded to:-

1. The Director Licensing (Minor Minerals), Punjab, Lahore with reference to your order dated 03.09.2025.
2. The Director Information, Mines & Minerals, Punjab, Lahore.
3. M/S. Khaksar Traders, R/O 38-A Satluj Block, Allama Iqbal Town, Lahore ex-lessee of Shirinwala Zone with reference your assignment appiication in favour of Ch. Muhammad Saif Ullah Tahir S/O Abdul Raziq dated 03.09.2025.

فون نمبر 042-35974590

(رجسٹری)

نمبر۔ایم ایل/ای ڈی ایم ایڈ ایم۔شیخوپورہ۔عام ریت/بھسر/گھسر (شیریں والا زون)(ترمیمی)/2025/3157

دفتر ڈپٹی ڈائریکٹر مائنز اینڈ منرلز، لاہور ریجن، لاہور۔

بنام: میسرز خاکسار فرینڈز،
مکان A-38 بلاک علامہ اقبال ٹاؤن لاہور۔

مورخہ: 28.06.2025

عنوان: معدنی پٹہ برائے نکاسی/کانکنی عام ریت/گھسر/بھسر شیریں والا زون برقبہ 4292.766 ایکڑ، تحصیل و ضلع شیخوپورہ۔

بسلسلہ نیلام عام ادائی معدنیات بذریعہ E آکشن مورخہ 04.06.2025 (ریزرو پرائس: مبلغ -/11,00,00,000) لائسنسنگ اتھارٹی نے آپ کی بولی مبلغ -/30,01,00,232 روپے (مبلغ تیس کروڑ ایک لاکھ دو سو بتیس روپے صرف) بابت معدنی پٹہ بعنوان بالا منظور کرتے ہوئے پٹہ ہذا برائے عرصہ دو سال از 28.06.2025 تا 27.06.2027 بپنجاب معدنی مراعاتی قوانین مجریہ 2002 اور ان میں کی گئی مروجہ ترامیم و درج ذیل شرائط کے تحت عطا کرتی ہے۔

(1) یہ کہ آپ کی بولی کا زر چہارم ادا شدہ رقم مبلغ -/7,50,25,058 روپے (مبلغ سات کروڑ پچاس لاکھ پچیس ہزار اٹھاون روپے صرف) بطور پہلی قسط وصول ہو گئی ہے۔ اور اس کے علاوہ آپ بقایا رقم مبلغ -/22,50,75,174 روپے (مبلغ بائیس کروڑ پچاس لاکھ پچہتر ہزار ایک سو چوہتر روپے صرف) جو کہ تین قسط مبلغ -/7,50,25,058 روپے (مبلغ سات کروڑ پچاس لاکھ پچیس ہزار اٹھاون روپے صرف) کے حساب سے نیچے دی گئی تواریخ میں ادا کرنے کے پابند ہیں۔ مندرجہ ذیل اقساط جمع کروانے کے بعد ٹریژری چالان کا اصل پرت دفتر ھذا کو خود یا بذریعہ ڈاک ارسال کرنا ہو گا۔ علاوہ ازیں ہر قسط کے ہمراہ زر قسط کا 10% مبلغ -/75,02,506 روپے جمع کروا کر اس کی اصل رسید چالان دفتر ھذا کو مہیا کرنا ہو گی۔

HEAD OF ACCOUNT	
"CO3808 Receipts under the Mines and Oil-Fields and Minerals Development Act 01 Receipt from Rents and Royalties, Annual Fees, Charges, Fees, Application Fee, Cost of Plans, etc."	دوسری قسط کی تاریخ ادائیگی 27.12.2025 تیسری قسط کی تاریخ ادائیگی 27.06.2026 چوتھی قسط کی تاریخ ادائیگی 27.12.2026

(2) اگر آپ مذکورہ بالا اقساط میں سے کوئی قسط مقررہ وقت پر جمع کروانے اور ٹریژری چالان دفتر ھذا میں وصول کرانے میں ناکام رہے تو لائسنسنگ اتھارٹی پنجاب معدنی مراعاتی قوانین مجریہ 2002 کے قاعدہ 207(2) کے تحت ذاتی شنوائی کا موقع فراہم کرتے ہوئے آپ کا پٹہ منسوخ کر کے قبضہ بمعہ سرکار وصول کر سکتی ہے۔ ایسی صورت میں زیر قاعدہ 207(3) آپ کی جمع شدہ سیکیورٹی ضبط کر لی جائے گی۔

(3) یہ کہ پٹہ معدن جہاں ہے اور جیسے ہے کی بنیاد پر عطاء کیا جا رہا ہے۔ حسب شرائط نیلام، آپ نے معدن کے ذخائر کا معائنہ کر کے بولی دی ہے۔ لہٰذا پٹہ حذا الاث ہونے کے بعد اس بارے آپ کا کوئی اعتراض قابل پذیرائی نہ ہو گا۔

(4) کامیاب بولی دہندہ پٹہ سے نکاسی معدن کرنے کا پابند ہو گا۔ اگر بلا وجہ کوئی پٹہ دار پٹہ سے نکاسی معدن نہ کرے گا تو اسکا پٹہ بپنجاب معدنی مراعاتی قوانین مجریہ 2002 کے قاعدہ نمبر 207B(2) کے تحت منسوخ کر دیا جائے گا۔

(5) پٹہ دار کو پٹہ الاٹ ہونے کی صورت میں پٹہ دار کو پٹہ سے دستبردار ہونے کا اختیار نہ ہو گا۔

(6) یہ کہ آپ الاٹمنٹ لیٹر کے اجراء سے پندرہ دن کے اندر اندر اپنے خرچہ پر عطا شدہ رقبہ کی حد بندی کرا کر تمام کونوں پر حد بندی ستون لگائیں گے۔ جس کی اونچائی سطح زمین سے کم از کم ایک میٹر ہو گی اور ان ستونوں کی بنیاد کی موٹائی نصف میٹر قطر یا نصف میٹر مربع سے کم نہیں ہو گی۔ اگر آپ سرکاری طور پر رقبہ کی حد بندی کرانا چاہیں تو اس کے لیے حکومت کی طرف سے مقرر کردہ فیس سرکاری خزانے میں جمع کرا کر اصل چالان ہمراہ باقاعدہ درخواست دیں گے سروے فیس کے بغیر حد بندی کی درخواستیں بے معنی سمجھی جائیں گی اور ان پر کوئی کارروائی نہیں کی جائے گی۔ اور کسی قسم کا عذر قبول نہیں کیا جائے گا۔ حد بندی کے ستون خشک فرشہ اور نیچے دی گئی سروے تفصیلات کے مطابق ہونی چاہیں

Assistant Director
Mines & Minerals
Lahore Region, Lahore.

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بولی مبلغ۔/30,01,00,232 (مبلغ تیس کروڑ ایک لاکھ دو سو بتیس روپے صرف) بنام: میسرز خاکسار ٹریڈرز مکتبہ A-38 بلاک علامہ اقبال ٹاؤن لاہور

Scale: 1:50000 Survey Sheet No.44-I/6

Ordinary Sand Shirinwala Zone (Revised), District Sheikhupura.

Points	Easting (Meters)	Northing (Meters)	Points	Easting (Meters)	Northing (Meters)
A	3344571	837769	P	3354819	847100
B	3344004	838326	Q	3355110	846365
C	3344878	839628	R	3353681	844116
D	3345463	840137	S	3350656	842715
E	3346231	840498	T	3350226	843321
F	3347308	840586	U	3349693	842403
G	3347989	840522	V	3349731	841412
H	3348429	840674	W	3349433	840586
I	3348852	841112	X	3348809	839994
J	3348971	841590	Y	3348205	839767
K	3348935	842270	Z	3347000	839812
L	3349128	842987	1A	3346627	839772
M	3349844	843917	1B	3346000	839597
N	3349923	844385	1C	3345417	839083
O	3351195	845341	1D	3344852	838138
TOTAL AREA: 4292.766 ACRES					

(7) یہ کہ معیاد پٹہ ختم ہونے کے بعد آپ کو رقبہ کا قبضہ فوری طور پر خود بخود سرکار واگزار کرنا ہوگا۔ جس کے بعد آپ کسی طور پر بھی رقبہ میں کام کرنے کے مجاز نہ ہونگے۔

(8) یہ کہ پٹہ کی مدت ختم ہونے یا پٹہ کی منسوخی کی صورت میں آپ کو رقبہ کا قبضہ فوری طور پر از خود لائسنسنگ اتھارٹی یا اس کے مجاز نمائندے کے حوالے کرنا ہوگا۔ نیز آپ کو مدت پٹہ ختم ہونے یا اسکی منسوخی کے ایک ماہ کے اندر موقع پر سے عمارت، مشینری، نکاسی شدہ معدن یا دیگر اشیاء کو پٹہ شدہ رقبہ سے ہٹانا ہوگا۔ اگر آپ ایسا نہیں کریں گے تو آپ کے معاوضے کے حق کو تسلیم کیے بغیر حذ کردہ بالا اشیاء بحق لائسنسنگ اتھارٹی ضبط تصور ہونگی، لائسنسنگ اتھارٹی جس طرح مناسب سمجھے گی ان اشیاء کو موقع سے ہٹانے کی مجاز ہوگی۔

(9) پنجاب معدنی مراعاتی قوانین 2002 کی شق 2(XXIV) کے تحت عام ریت، سینڈ سٹون، سلٹ سٹون، سلیٹ سٹون اور گریول ادنیٰ معدنیات کہلاتے ہیں۔ ادنیٰ معدنیات کو الاٹ کرنے اور ریگولیٹ کرنے کے لیے پنجاب معدنی مراعاتی قوانین کا Part-4 مختص ہے۔ جو کہ پنجاب معدنی قوانین 191 تا 236 پر مشتمل ہے۔

(10) یہ کہ لینڈ ریونیو ایکٹ 1967 کی شق نمبر 49 کے تحت تمام معدنیات حکومت کی ملکیت ہیں۔ جبکہ مائنز اینڈ آئل فیلڈ اینڈ منرل ڈویلپمنٹ ایکٹ 1948 کی دفعہ (2) کے تحت حکومت پنجاب کو معدنیات (ماسوائے آئل، گیس، نیوکلیر منرل) کے انتظام و انصرام کرنے کا اختیار حاصل ہے۔ اور اسی ایکٹ کی دفعہ (2) کے تحت

Assistant Director
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Lahore Region, Lahore.

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حکومت پنجاب نے معدنیات کو الاٹ کرنے اور ریگولیٹ کرنے کے لیے پنجاب مائننگ کنسیشن رولز 2002 وضع کیے ہیں۔ ان قوانین کی دفعہ 218 کے تحت بغیر پٹہ معدن حاصل کیے نکاسی معدن کرنے یا باضابطہ پٹہ دار کے نکاسی معدن کے کام میں رُکاوٹ ڈالنے والے کو تین سال قید یا پچاس ہزار روپے جرمانہ یا دونوں سزائیں ہو سکتی ہیں۔

(11) یہ کہ آپ ریلوے لائن، سڑک، پانی کے ذخائر، بجلی کی لائن، سوئی گیس کی پائپ لائن یا دیگر مفاد عامہ کی تنصیبات یا آثار قدیمہ کی اہمیت والی جگہ وغیرہ سے 100 میٹر تک نکاسی معدن کا کام نہیں کریں گے، البتہ آپ لائسنسنگ اتھارٹی سے تحریری اجازت حاصل کر کے اور عائد شدہ شرائط کے تابع متذکرہ بالا جگہوں سے 100 میٹر کے اندر تک کام کرنے کے مجاز ہو سکتے ہیں۔

(12) یہ کہ اگر آپ کے زیر تصرف حکومت کی ملکیتی زمین ہو تو ایسی صورت میں آپ متعلقہ حکومت کے ریونیو قوانین یا متعلقہ ضلع میں لاگو قوانین کے تحت مقرر کردہ ریٹ کے مطابق مالکانہ ادا کریں گے اور پرائیویٹ مالک اراضی سے نکاسی معدن کے لیے اسکی باہمی رضامندی سے مالکانہ ادا کر کے نکاسی معدن کریں گے۔ فریقین کے درمیان باہمی رضامندی نہ ہونے کی صورت میں پنجاب معدنی قاعدہ 208 کے تحت لائسنسنگ اتھارٹی کی طرف سے مقرر کردہ ریٹ اور طریقہ کار کے مطابق مالکانہ کی ادائیگی کریں گے، لائسنسنگ اتھارٹی کا ریٹ کے بارے میں کیا گیا فیصلہ حتمی تصور ہو گا۔

(13) یہ کہ اگر معدنی نکاسی کے کسی کام کی وجہ سے کسی شخص کو نقصان یا پریشانی کا سامنا کرنا پڑے تو ایسی صورت میں آپ متعلقہ اتھارٹی کی طرف سے قانون کے مطابق طے کردہ معاوضہ متعلقہ شخص کو ادا کرنے کے پابند ہوں گے۔

(14) اگر حکومت مروجہ قانون کے تحت لیز ہولڈر کے بلاک / زون کے کسی حصہ کو حاصل (Acquire) کرتی ہے تو آپ اسی حد تک بولی کی رقم میں واپسی کا دعویٰ کر سکتا ہیں بشرطیکہ محکمہ اس حصول شدہ اراضی (acquired land) کا قبضہ حاصل کرے، اور پٹہ دار کو اس علاقے سے معدنیات اٹھانے سے مؤثر طریقے سے روک دے۔ اس کے سوائے کسی صورت میں، بولی کی رقم یا سیکورٹی کو کم یا واپس نہیں کیا جائے گا۔

(15) یہ کہ آپ اپنی کمپنی یا فرم کے دستور (Constitution) میں لائسنسنگ اتھارٹی کی طرف سے پیشگی تحریری اجازت حاصل کیے بغیر کسی قسم کی تبدیلی کرنے کے مجاز نہ ہوں گے۔

(16) یہ کہ آپ معدنی پٹہ کے تحت حاصل شدہ حقوق یا معدنی پٹہ کا رقبہ یا اس کا کوئی حصہ لائسنسنگ اتھارٹی سے پیشگی تحریری اجازت کے بغیر کسی دیگر شخص کو منتقل نہیں کر سکیں گے۔ اگر آپ اپنا معدنی پٹہ کسی دیگر شخص کو منتقل کرنا چاہیں گے تو آپ میعاد پٹہ ختم ہونے سے کم از کم تین ماہ پیشتر درخواست برائے منتقلی پٹہ معہ مقرر کردہ فیس ذاتی طور پر لائسنسنگ اتھارٹی یا اسکے نامزد آفیسر کے پاس جمع کرائیں گے درخواست پر آپ کے اور پٹہ حاصل کرنے والے شخص کے دستخط کسی مجاز آفیسر کے سامنے ضروری ہیں۔ لائسنسنگ اتھارٹی کی طرف سے پٹہ کی منتقلی کی منظوری کے بعد آپ (Assignor) کی طرف سے پہلے سے جمع کرائی گئی سیکورٹی صرف اس وقت آپ کو واپس کی جائے گی جب پٹہ حاصل کرنے والا شخص (Assignee) کی طرف سے نئی سیکورٹی محکمہ کے پاس جمع کرا دی جائے گی۔ وگرنہ نتائج کی ذمہ داری آپ پر ہو گی۔

(17) یہ کہ آپ اس وقت تک الاٹ شدہ رقبہ سے معدن کی روانگی نہیں کریں گے جب تک آپ اپنے دستخطوں یا اپنے نامزد نمائندہ کے دستخطوں سے ایسی ڈسپیچ سلپ جو کہ لائسنسنگ اتھارٹی کی طرف سے مقرر کی گئی ہو جاری نہیں کریں گے جس پر آپ کا نام، پٹہ کا نام یا نمبر اور محل وقوع، گاڑی کا نمبر، ڈسپیچ سلپ کا نمبر شمار، تاریخ اجراء اور بھیجی جانیوالی معدن کی مقدار، قیمت اور شیڈول ریٹ پرنٹ ہو۔ اگر آپ مجوزہ ڈسپیچ سلپ جاری کرنے میں ناکام رہے تو لائسنسنگ اتھارٹی یا اسکی طرف سے نامزد آفیسر آپ پر حکومت کی طرف سے مقرر کیا گیا جرمانہ عائد کر سکے گا اور مسلسل خلاف ورزی کی صورت میں قاعدہ 229(3) کے تحت پٹہ منسوخ کر دیا جائے گا (نمونہ ڈسپیچ سلپ، شیڈیول ریٹ و مالکانہ پرنٹ شدہ ہے)۔ پٹہ دار حکومت کی طرف سے عام ریت، گریول، سینڈ سٹون / بسالٹ / ڈائیوریائیٹ / لف اور سلیٹ سٹون کے لیے مقرر کردہ کھدان کا ریٹ یا اسکی عدم موجودگی میں مقرر کردہ انتہائی صارف قیمت (Maximum Consumer Price) کے تناسب سے ایسی قیمت فروخت وصول

Assistant Director
Mines & Minerals
Lahore Region, Lahore.

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بولی مبلغ۔/30,01,00,232 (مبلغ تیس کروڑ ایک لاکھ دو سو بتیس روپے صرف) بنام: میسرز خاکسار ٹریڈرز مکتبہ A-38 سٹیج بلاک علامہ اقبال ٹاؤن لاہور

کرنے کا مجاز ہو گا جس کے نتیجہ میں صارف کو انتہائی مقرر کردہ قیمت پر معدن دستیاب ہو سکے۔ زائد وصولی کی صورت میں پٹہ دار کے خلاف حسب قواعد بالا کاروائی عمل میں لائی جا سکتی ہے اور پٹہ منسوخ بھی کیا جا سکتا ہے۔

(18) یہ کہ آپ موقع پر چیک پوسٹ کے محل وقوع اور اپنے مجاز نمائندہ کے تمام کوائف بمعہ نمونہ دستخط الاٹمنٹ لیٹر کے اجراء سے اندر دس یوم دفتر ہذا کو مطلع کرائیں گے، صرف مجاز نمائندہ ہی ڈسپیچ سلپ پر دستخط کرے گا، مجاز نمائندہ کی تقرری میں بعد ازاں اگر کوئی تبدیلی کی گئی ہو تو اسکی اطلاع دفتر ہذا کو اندر تین یوم فراہم کرنا ہو گی وگرنہ نتائج کی ذمہ داری آپ پر ہو گی۔

(19) یہ کہ محکمہ آبپاشی کی طرف سے بنائے گئے ایسے حفاظتی بندوں، سپروں (Spurs)، تربت گاہوں اور دیگر تنصیبات وغیرہ سے 100 میٹر تک عام ریت کی نکاسی کا کام کرنے کے مجاز نہ ہوں گے۔ تاہم حکومت کی طرف سے بذریعہ نوٹیفکیشن ممنوعہ قرار دیے گئے فاصلہ تک بھی نکاسی معدن کے مجاز نہ ہوں گے۔

(20) یہ کہ آپ آبی گزر گاہوں کے درمیان کوئی ایسی تعمیر یا تنصیبات نہ کریں گے اور نہ ہی معدنی نکاسی کا کام اس طریقے سے کریں گے جس سے پانی کے بہاؤ اور آبی گزر گاہوں میں کسی قسم کی رکاوٹ پیدا ہو سکتی ہو۔

(21) یہ کہ آپ دریا یا ندی نالوں میں بارش یا سیلاب کی وجہ سے کام متاثر ہونے کی صورت میں یا خطرناک کانکنی کی بناء پر کام متاثر ہونے کی وجہ سے کسی قسم کی رعایت کے حقدار نہ ہونگے۔ الاٹمنٹ میں درج تاریخ سے پٹہ کی تاریخ اور قبضہ پٹہ تصور ہو گا اور آپکو اس میں کسی قسم کی ترمیم کا حق حاصل نہ ہو گا۔

(22) آپ مائنز ایکٹ 1923ء کی ریگولیشن کے مطابق کام کریں گے، نیز چیف انسپکٹر آف مائنز پنجاب کی طرف سے وقتاً فوقتاً جاری کی گئی ہدایات پر عمل کرنے کے پابند ہونگے۔

(23) آپ تمام اقسام کے ٹیکس ہائے جو حکومت پاکستان، حکومت پنجاب، کی منظوری سے لاگو ہوں گے ادا کرنے کے پابند ہونگے۔ نیز آپ حکومت پنجاب اور حکومتِ پاکستان کی طرف سے لاگو کردہ قوانین کے پابند ہوں گے۔

(24) عطاشدہ تمام رقبہ میں معدن کا پایا جانا ضروری نہیں۔ نیز زیر پٹہ رقبہ کے کسی حصہ پر ہونے والا کام پورے عطاشدہ رقبہ میں کام تصور ہو گا۔

(25) عطاشدہ رقبہ میں پہلے سے تنصیب شدہ کریشرز، عمارات یا دیگر کسی قسم کی تنصیبات کی بناء پر پٹہ دار کسی رعائیت کا حقدار نہ ہو گا۔

(26) پٹہ دار حکومتِ پنجاب کی طرف سے مقرر کردہ شیڈول ریٹ سے زائد، سینڈ سٹون / بساٹ / ڈائیورائٹ / لف اور عام ریت / گھسر کی قیمتِ فروخت وصول نہیں کرے گا اور اگر ایسا کرتا ہوا پایا گیا تو اس کے خلاف مروجہ قوانین کے تحت کاروائی کی جائے گی۔

(27) یہ کہ کسی بھی پٹہ سے نکاسی عام ریت بذریعہ ڈریجر مشین کی ہرگز اجازت نہ ہو گی۔ البتہ دریائی ریت کے پٹہ جات میں بہتے پانی میں محکمہ ماحولیات کی اجازت لینے کے بعد ڈریجر مشین سے نکاسی ریت بمطابق شرائط محکمہ ماحولیات ہو گی۔ شرط ہذا کی خلاف ورزی پر فوری طور پر پٹہ منسوخ کر دیا جاوے گا۔

(28) یہ کہ آپ کو ورک آرڈر / الاٹمنٹ مراسلہ ھذا کے ساتھ محکمہ ماحولیات ضلع قصور کی طرف سے متعلقہ رقبہ زیر پٹہ منظور شدہ IEE رپورٹ مورخہ 16.04.2025 کے مطابق شرائط منسلک کی جا رہی ہیں جن کو بوقت نیلام آپ نے ملاحظہ و منظور کر کے دستخط کئے ہیں پر مکمل عملدرآمد کے پابند ہوں گے۔ آپ کی جانب سے ان شرائط کی خلاف ورزی کی صورت میں پنجاب معدنی مراعاتی قوانین مجریہ 2002ء اور محکمہ ماحولیات کے متعلقہ نافذ العمل قواعد و شرائط کے مطابق کاروائی عمل میں لائی جا سکتی ہے۔

(29) اگر پٹہ ہذا کا کل رقبہ یا اس کا کچھ حصہ محکمہ جنگلات کے زیر قبضہ اراضی میں واقع ہو تو آپ نکاسی معدن / ریت کرنے سے قبل متعلقہ مہتمم جنگلات سے نکاسی معدن کا معاہدہ کریں گے جس میں:

i) ریت کی نکاسی صرف آبی راستہ (خشک یا بندی) والے رقبہ سے ہی کی جائے گی اور متعلقہ مہتمم جنگلات ریت نکالنے والے رقبہ کی نشاندہی کرے گا اور آپ صرف نشاندہی والے رقبہ سے ہی ریت نکالنے کے مجاز ہوں گے۔ اگر مہتمم جنگلات کسی بھی جنگل کی اراضی سے معدن کی نکاسی کی اجازت نہ دے تو آپ وہاں سے نکاسی نہ کرنے کے پابند ہوں گے۔

ii) آپ محکمہ جنگلات کے ساتھ تخمینہ شدہ مقدار ریت کا مالکانہ جو محکمہ مائنز اینڈ منرلز وقتاً فوقتاً مقرر کرتا ہے کے مطابق ادا کرنے کے پابند ہوں گے۔ اور رقم مالکانہ پیشگی ادا کرنے کے پابند ہوں گے۔

Assistant Director
Mines & Minerals
Lahore Region, Lahore.

نمبر۔ایم ایل۔ڈی ڈی ایم اینڈ ایم۔شیخوپورہ۔عام ریت / بھسر / گھسر (شیریں والا زون) (ترمیمی) / 2025 / از مورخہ 28.06.2025 تا 27.06.2027

بولی مبلغ -/30,01,00,232 (مبلغ تیس کروڑ ایک لاکھ دو سو بتیس روپے صرف) بنام: میسرز خاکسار ٹریڈرز مکنہ A-38 متصل بلاک علامہ اقبال ٹاؤن لاہور

iii) ٹکاسی ریت کے لیے متعلقہ مہتمم جنگلات راستہ کا تعین کرے گا جس کا Surface Rent محکمہ جنگلات اور محکمہ مائنز اینڈ منرلز کے تعین شدہ شرح کے مطابق پیشگی ادا کرنے کا پابند ہو گا۔

iv) ٹھیکیدار ٹکاسی ریت والے اس روٹ کی توڑ پھوڑ کی وقتاً فوقتاً مرمت اور ٹھیکہ کی منسوخی کے بعد مکمل طور پر اس کی مرمت کا ذمہ دار ہو گا۔

v) ٹھیکیدار ٹکاسی ریت متعلقہ مہتمم جنگلات کے پاس راستہ کی بحالی کے لیے مقررہ سیکورٹی بحساب فی ایکٹر زجمع کرائے گا جو غیر تسلی بخش بحالی کی صورت میں قابل ضبطگی ہو گی۔

vi) اگر ٹھیکیدار یا اس کا نمائندہ کسی قسم کے نقصان جنگل کا مرتکب ہوا تو اس کے خلاف فاریسٹ ایکٹ 1927 ترمیم شدہ 2010 کے تحت تادیبی کاروائی کی جائے گی۔

تفصیل 15٪ سیکورٹی

نمبر شمار	سی ڈی آر نمبر	رقم مبلغ	بنک	برائے
1	14994626	1,50,00,000/-	الائیڈ بنک لمیٹڈ۔ مرکز اسلام آباد (0584)	09.12.2024
2	15171026	2,87,50,000/-	الائیڈ بنک لمیٹڈ۔ مرکز اسلام آباد (0584)	05.05.2025
3	15134962	12,65,035/-	الائیڈ بنک علامہ اقبال ٹاؤن لاہور (0688)	25.06.2025
کل مبلغ -/4,50,15,035 روپے				

سیکرٹری ضلعی نیلام کمیٹی / اسسٹنٹ ڈائریکٹر مائنز اینڈ منرلز، لاہور ریجن، لاہور

Assistant Director
Mines & Minerals
Lahore Region, Lahore.

تکمیر مراسلہ نمبر۔ایم ایل۔ڈی ڈی ایم اینڈ ایم۔شیخوپورہ۔عام ریت / بھسر / گھسر (شیریں والا زون) / 2025 مورخہ 28.06.2025 مندرجہ بالا۔

نقل برائے اطلاع:۔

1. بخدمت جناب ڈائریکٹر جنرل مائنز اینڈ منرلز، پنجاب، پوسٹ بکس ہاؤس ملتان روڈ لاہور۔
2. بخدمت جناب ڈائریکٹر انفارمیشن، مائنز اینڈ منرلز، پنجاب، پوسٹ بکس ہاؤس ملتان روڈ، لاہور۔
3. جناب ڈپٹی کمشنر شیخوپورہ۔
4. جناب ڈپٹی سیکرٹری ٹیکنکل مائنز اینڈ منرلز ڈیپارٹمنٹ پنجاب لاہور۔
5. جناب منیجر جی آئی ایس صدر دفتر لاہور۔
6. جناب منیجر آئی ٹی صدر دفتر لاہور۔
7. جناب انسپکٹر / جونیئر انسپکٹر آف مائنز لاہور۔
8. جناب ڈویژنل فارسٹ آفیسر، شیخوپورہ۔
9. جناب ایگزیکٹو انجینئر (محکمہ انہار)، ضلع شیخوپورہ۔
10. جناب ڈپٹی ڈائریکٹر محکمہ ماحولیات، شیخوپورہ۔
11. مسل نیلام ضلع شیخوپورہ۔

سیکرٹری ضلعی نیلام کمیٹی / اسسٹنٹ ڈائریکٹر مائنز اینڈ منرلز، لاہور ریجن، لاہور

Assistant Director
Mines & Minerals
Lahore Region, Lahore.

نمبر۔ ایم ایل۔ڈی ڈی ایم اینڈ ایم۔ شیخوپورہ۔عام ریت / بجر / گھسر (شیریں والا زون) (ترمیمی) / 2025 / از مورخہ 28.06.2025 تا 27.06.2027

بولی مبلغ۔/30,01,00,232 (مبلغ تیس کروڑ ایک لاکھ دو سو بتیس روپے صرف) بنام: میسرز خاکسار ٹریڈرز سکنہ A-38 متصل بلاک علامہ اقبال ٹاؤن لاہور

رسید گی رسید

منظور شدہ شیڈول حکومت پنجاب

ضلع: شیخوپورہ

عام ریت = مبلغ _____ فی سیکڑہ

بجر / گھسر = مبلغ _____ فی سیکڑہ

نام پٹہ دار: میسرز خاکسار ٹریڈرز

پٹہ نمبر ایم ایل۔ڈی ڈی ایم اینڈ ایم۔ شیخوپورہ۔عام ریت / بجر / گھسر (شیریں والا زون)

تاریخ _____ ٹرک / ٹریکٹر ٹرالی نمبر _____

مقدار معدن _____ رقم وصول شدہ _____

دستخط نمائندہ / منشی پٹہ دار _____

رسید بابت لوڈنگ + مٹی ہٹانا + راستہ ہموار کرنا وغیرہ

نام پٹہ دار: میسرز خاکسار ٹریڈرز

پٹہ نمبر ایم ایل / ڈی ڈی ایم اینڈ ایم۔ شیخوپورہ۔عام ریت / بجر / گھسر (شیریں والا زون)

تاریخ _____ ٹرک / ٹریکٹر ٹرالی نمبر _____

مقدار معدن _____ رقم وصول شدہ _____

دستخط نمائندہ / منشی پٹہ دار _____

رسیدات بابت مالکانہ

منظور شدہ شیڈول حکومت پنجاب

ضلع: شیخوپورہ

عام ریت = مبلغ _____ فی سیکڑہ

بجر / گھسر = مبلغ _____ فی سیکڑہ

پٹہ نمبر ایم ایل / ڈی ڈی ایم اینڈ ایم۔ شیخوپورہ۔عام ریت / بجر / گھسر (شیریں والا زون)

نام پٹہ دار / مالک اراضی: _____ ٹرک / ٹریکٹر ٹرالی نمبر _____

مقدار معدن _____ رقم وصول شدہ _____

دستخط نمائندہ / منشی پٹہ دار _____

Assistant Director
Mines & Minerals
Lahore Region, Lahore

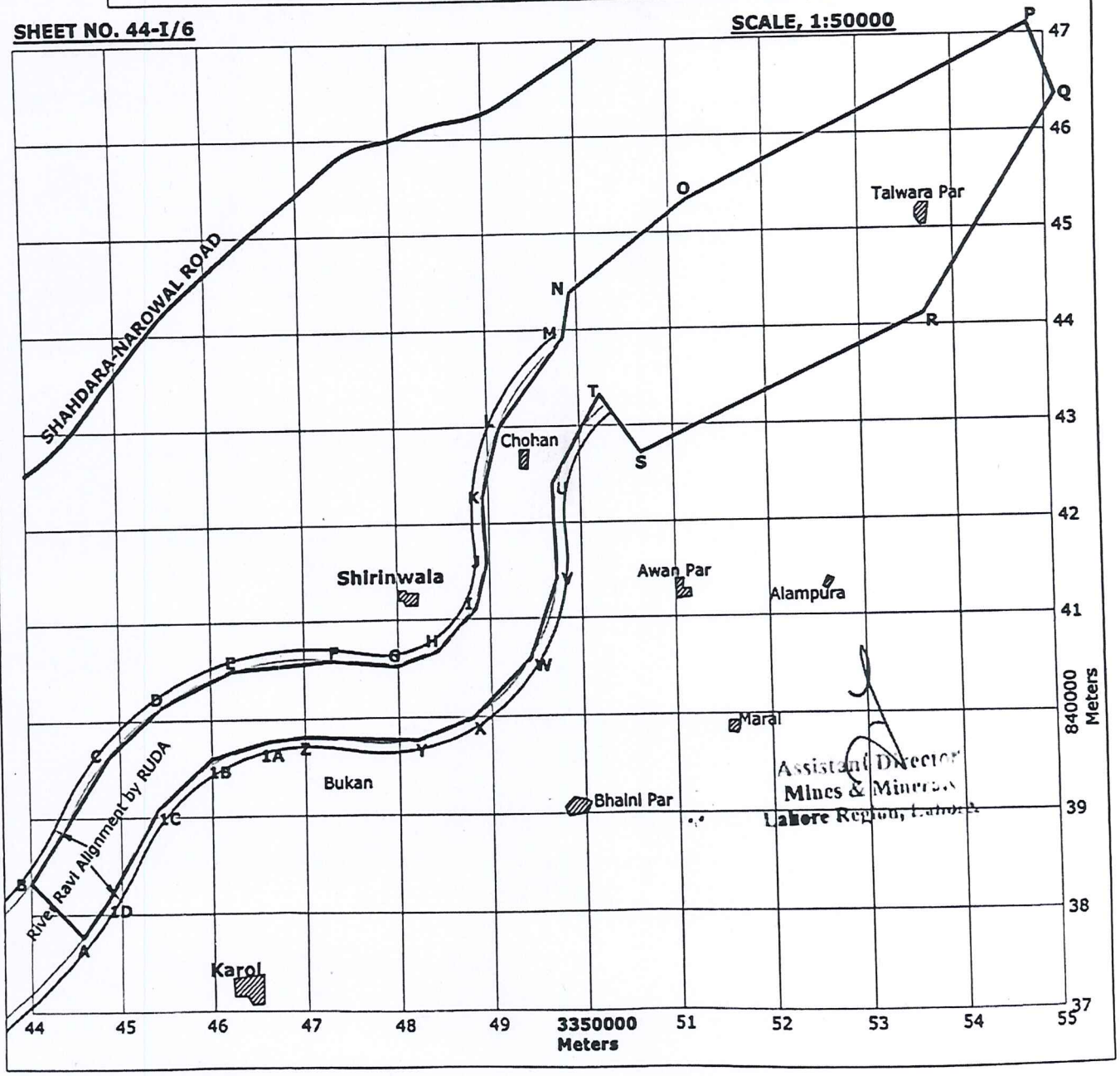
REVISED PLAN SHOWING THE AREA OF ORDINARY SAND SHIRINWALA ZONE IN RAVI RIVER DISTRICT SHEIKHUPURA.

POINTS	EASTING (METERS)	NORTHING (METERS)	POINTS	EASTING (METERS)	NORTHING (METERS)
A.	3344571	837769	P.	3354819	847100
B.	3344004	838326	Q.	3355110	846365
C.	3344878	839628	R.	3353681	844116
D.	3345463	840137	S.	3350656	842715
E.	3346231	840498	T.	3350226	843321
F.	3347308	840586	U.	3349693	842403
G.	3347989	840522	V.	3349731	841412
H.	3348429	840674	W.	3349433	840586
I.	3348852	841112	X.	3348809	839994
J.	3348971	841590	Y.	3348205	839767
K.	3348935	842270	Z.	3347000	839812
L.	3349128	842987	1A.	3346627	839772
M.	3349844	843917	1B.	3346000	839597
N.	3349923	844385	1C.	3345417	839083
O.	3351195	845341	1D.	3344852	838138

TOTAL AREA=4292.766 ACRES

SHEET NO. 44-I/6

SCALE, 1:50000



Assistant Director
Mines & Minerals
Lahore Region, Lahore

PAKISTAN National Identity Card

ISLAMIC REPUBLIC OF PAKISTAN

Name
Chaudhary Muhammad Saif Ullah Tahir

چوہدری محمد سیف اللہ طاہر

Father Name
Abdul Razzaq

عبدالرزاق

Gender	Country of Stay
M	Pakistan

Identity Number	Date of Birth
36502-3194914-9	16.11.2001

Date of Issue	Date of Expiry
25.08.2020	25.08.2030

Holder`s Signature

36502-3194914-9

موجودہ پتہ: چک نمبر 2/4 ایل روڈ نزد اکبر روڈ، مکان نمبر 8، محلہ رائل پام ولاز، اوکاڑہ

مستقل پتہ: چک نمبر 2/4 ایل روڈ نزد اکبر روڈ، مکان نمبر 8، محلہ رائل پام ولاز، اوکاڑہ

108491226614

Usman Y. Mobin

Registrar General of Pakistan

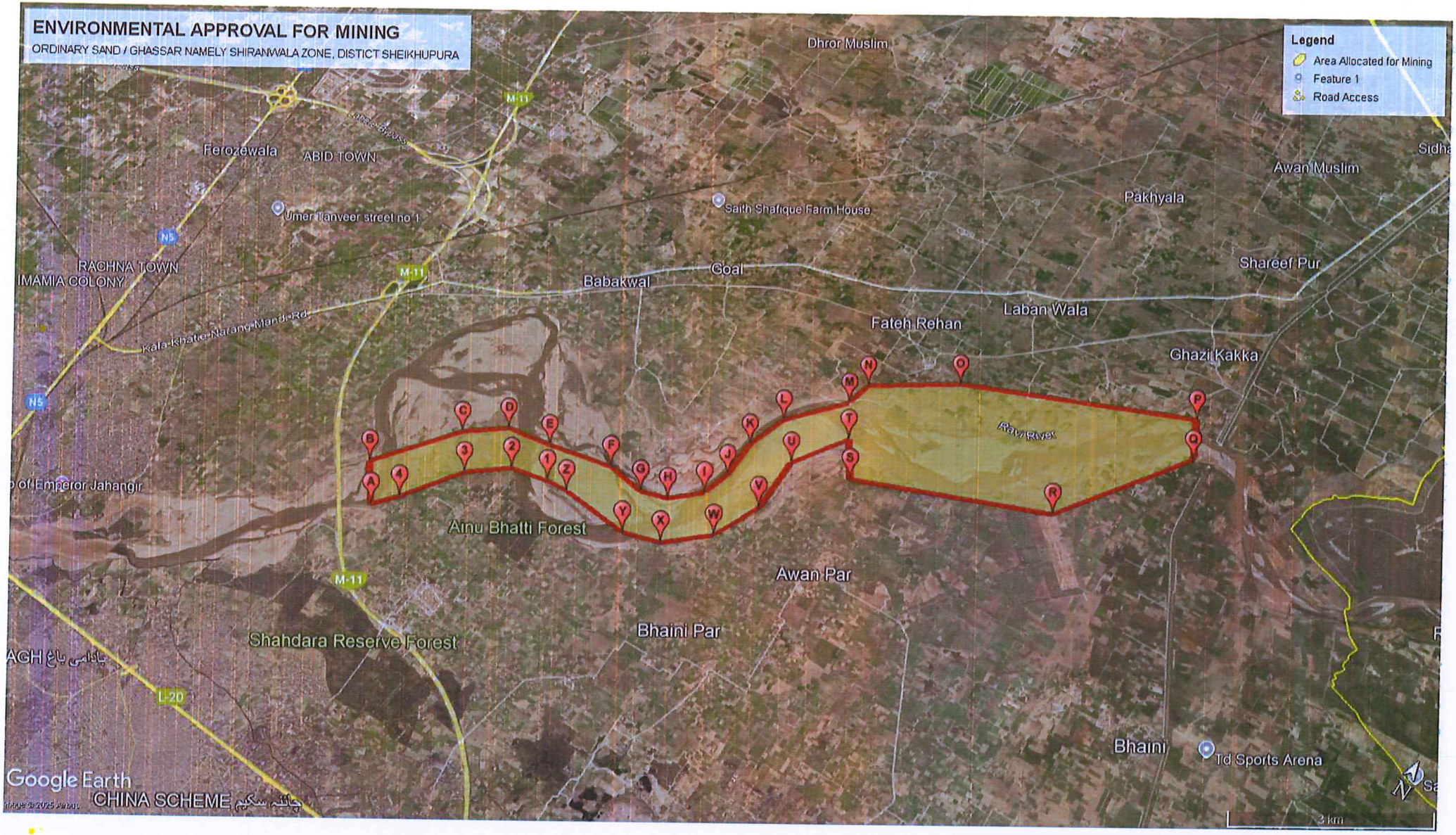
گمشدہ کارڈ ملنے پر قریبی لیٹر بکس میں ڈال دیں

ANNEXURE-C

LAB REPORTS (AIR, NOISE, WATER)

ANNEXURE-D

GOOGLE EARTH MAP


ENVIRONMENTAL APPROVAL FOR MINING
ORDINARY SAND / GHASSAR NAMELY SHIRANWALA ZONE, DISTICT SHEIKHUPURA
Legend
Area Allocated for Mining
Feature 1
Road Access
Dhror Muslim
Ferozewala
ABID TOWN
Umer Tanveer street no 1
Saith Shafique Farm House
Awan Muslim
Pakhyala
RACHNA TOWN
IMAMIA COLONY
Babakwal
Goal
Shareef Pur
Laban Wala
Fateh Rehan
Ghazi Kakka
Kala-Khatai-Narang-Mandi-Rd
Ravi River
Ainu Bhatti Forest
Awan Par
Bhaini Par
Shahdara Reserve Forest
Bhaini
Td Sports Arena
CHINA SCHEME
Google Earth
3 km
N5
M-11
L-20

ANNEXURE-E

PROCESS DESCRIPTION

2.8.1 Process Description of Sand Mining

Exploration and Site Assessment

- **Objective:** Identify suitable sand deposits that can be mined with minimal environmental impact.

2. Site Preparation

Objective: Prepare the site for extraction, ensuring the safety of the workers and the efficiency of mining operations.

Activities:

- **Identify Potential Routes:** Start by surveying the area around the mining site to identify possible routes. Look for existing trails, paths, or roads that can be utilized or modified.
- **Labor Shed & Facilities Setup:** Establish worker accommodations, including a small office, labor sheds, and first-aid facilities.
- **Environmental Protection Measures:** Set up erosion control measures like silt fences and plant grass to reduce soil erosion in the mining area.

3. Extraction

Objective: Extract sand from the mining site and transport it for further processing or sale.

Activities:

➢ **Excavation:**

- Use machinery like **excavators** or **shovels** to dig and remove sand from the pit. The extraction is done layer by layer to avoid excessive disturbance to the surrounding environment.
- In some cases, **manual labor** may be used in small-scale operations, especially in areas where machinery access is limited.

➢ **Loading:**

- Once extracted, the sand is loaded into **wheel loaders** or directly onto **dump trucks** for transport.

- **Sorting:**
- If necessary, the sand is sorted using screens or sieves to remove larger particles or debris.

4. Sorting and Cleaning

Objective: Ensure the extracted sand meets quality standards by removing impurities like clay, silt, stones, or vegetation.

5. Transporting

Objective: Move the mined and processed sand to the marketplace or storage.

Activities:

- **Loading:**

The cleaned sand is loaded onto **dump trucks** or transported via **conveyor belts** to designated storage or delivery areas.

- **Transport:**

Trucks are dispatched to transport sand to customers or nearby construction projects. The transport logistics must be managed to ensure timely deliveries and avoid overloading trucks.

6. Post-Mining Reclamation

Objective: Restore the mined area to a safe and environmentally stable condition.

Activities:

- **Filling Excavated Areas:**

Refill the mined pits with sand or other materials, ensuring the area is stable and prevents erosion.

- **Revegetation:**

Plant grass, trees, or other vegetation to prevent soil erosion and help restore the ecosystem.

- **Monitoring:**

ANNEXURE-F

STAKEHOLDER' CONSULTATION FORMS

PUBLIC CONSULTATION / STAKEHOLDER PARTICIPATION REGARDING EIA OF "MINING LEASE FOR SAND"

Name: Mehmood

Residence: Awan Pur

CNIC:

Gender: ☑ Male ☐ Female

Qualification: B.Com

Profession: Accountant

	Strongly Agree	Agree	No Comments	Disagree	Strongly Disagree
Are you in favor of project?	☐	☑	☐	☐	☐
Will the project increase the importance of the area?	☐	☑	☐	☐	☐
Will the project help to improve the living standards of the area?	☑	☐	☐	☐	☐
Will the project affect the environment of the area?	☐	☐	☐	☑	☐
Level of satisfaction?	☑	☐	☐	☐	☐
Will the project affect the plant species of the area?	☐	☐	☐	☑	☐
Will the project cause any type of pollution in the area?	☐	☐	☐	☐	☑

Signature of Interviewed

Signature of Interviewer

PUBLIC CONSULTATION / STAKEHOLDER PARTICIPATION REGARDING EIA OF "MINING LEASE FOR SAND"

Name: Waleed

Residence: Mari Par

CNIC:

Gender: ☑Male ☐Female

Qualification: Matric

Profession: Worker

	Strongly Agree	Agree	No Comments	Disagree	Strongly Disagree
Are you in favor of project?	☐	☑	☐	☐	☐
Will the project increase the importance of the area?	☑	☐	☐	☐	☐
Will the project help to improve the living standards of the area?	☐	☑	☐	☐	☐
Will the project affect the environment of the area?	☐	☐	☐	☑	☐
Level of satisfaction?	☐	☑	☐	☐	☐
Will the project affect the plant species of the area?	☐	☐	☐	☑	☐
Will the project cause any type of pollution in the area?	☐	☐	☐	☑	☐

Signature of Interviewed

Waleed.

Signature of Interviewer

PUBLIC CONSULTATION / STAKEHOLDER PARTICIPATION REGARDING EIA OF "MINING LEASE FOR SAND"

Name: Ashfaq.

Residence: Awan Par

CNIC:

Gender: ☑Male ☐Female

Qualification: B.A.

Profession: Teacher.

	Strongly Agree	Agree	No Comments	Disagree	Strongly Disagree
Are you in favor of project?	☐	☑	☐	☐	☐
Will the project increase the importance of the area?	☐	☑	☐	☐	☐
Will the project help to improve the living standards of the area?	☑	☐	☐	☐	☐
Will the project affect the environment of the area?	☐	☐	☐	☐	☑
Level of satisfaction?	☐	☑	☐	☐	☐
Will the project affect the plant species of the area?	☐	☐	☐	☐	☑
Will the project cause any type of pollution in the area?	☐	☐	☐	☑	☐

Signature of Interviewed Ashfaq

Signature of Interviewer

PUBLIC CONSULTATION / STAKEHOLDER PARTICIPATION REGARDING EIA OF "MINING LEASE FOR SAND"

Name: Anayat Ullah

Residence: Mari Par

CNIC:

Gender: ☑Male ☐Female

Qualification: F.A

Profession: Workee.

	Strongly Agree	Agree	No Comments	Disagree	Strongly Disagree
Are you in favor of project?	☑	☐	☐	☐	☐
Will the project increase the importance of the area?	☐	☑	☐	☐	☐
Will the project help to improve the living standards of the area?	☐	☑	☐	☐	☐
Will the project affect the environment of the area?	☐	☐	☐	☑	☐
Level of satisfaction?	☐	☑	☐	☐	☐
Will the project affect the plant species of the area?	☐	☐	☐	☑	☐
Will the project cause any type of pollution in the area?	☐	☐	☐	☐	☑

Signature of Interviewed

Signature of Interviewer

PUBLIC CONSULTATION / STAKEHOLDER PARTICIPATION REGARDING EIA OF "MINING LEASE FOR SAND"

Name: Muhammad Nadir

Residence: Awan Pur

CNIC:

Gender: ☑ Male ☐ Female

Qualification: Matric.

Profession: Farmer

	Strongly Agree	Agree	No Comments	Disagree	Strongly Disagree
Are you in favor of project?	☐	☑	☐	☐	☐
Will the project increase the importance of the area?	☑	☐	☐	☐	☐
Will the project help to improve the living standards of the area?	☐	☑	☐	☐	☐
Will the project affect the environment of the area?	☐	☐	☐	☑	☐
Level of satisfaction?	☑	☐	☐	☐	☐
Will the project affect the plant species of the area?	☐	☐	☐	☑	☐
Will the project cause any type of pollution in the area?	☐	☐	☐	☑	☐

Signature of Interviewed

Signature of Interviewer

ANNEXURE-G

LIST OF ABBREVIATIONS

LIST OF ABBREVIATIONS

W & D	Works and Development
OSHA	Occupational Safety and Health Administration
EPA Punjab	Environmental Protection Agency, Punjab
EIA	Environmental Impact Assessment
IEE	Initial Environmental Examination
PEQS	Punjab Environmental Quality Standards
PEPA	Punjab Environmental Protection Act
TORs	Term of references
WAPDA	Water And Power Development Authority

ANNEXURE-H

GLOSSARY

GLOSSARY

Words	Dictionary
Mitigation	The action of lessening in severity or intensity
Legislation	law enacted by a legislative body
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

ANNEXURE-I

STUDY TEAM

STUDY TEAM

#	Name of Team Members	Designation	Qualification
1	Ali Ramzan	Senior Environmentalist	BS Environmental Sciences
2	Nabia Farrukh Sohail	Environmentalist	MS Environmental Sciences
3	Aruba Imran	Reporting Manager	BS Environmental Sciences
4	Shahzad Ahmad Khan	Project Coordinator	MBA Marketing

ANNEXURE-J

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REFERENCES

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