EXECUTIVE SUMMARY

Title & Location of the project

Subject project for which this Environmental Impact Assessment study has been conducted is for the proposed construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC Private) Limited, located at plot no 141-B, Quaid-e-Azam Business Park, Sheikhupura. The total area of the project site is 3.051 Acres. The production capacity of the proposed unit will be 150,000 per annum approximately. The estimated cost of the proposed project is 341 million Pkr.

The proposed project falls under Schedule II, Category J of Punjab Environmental Protection (Review of EIA and EIA) Regulations, 2022. TORs of the study under clause 5 (f) of policy and procedure for the filing, review and approval of environmental assessment are annexed as **Annexure – A.**

Location

Subject proposed project is located at plot no: 141-B, Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura having coordinates:

- **A:31°44'11.86"N, 74° 3'17.82"E**
- **B: 31°44'11.85"N, 74° 3'15.35"E**
- **C: 31°44'7.46"N, 74° 3'15.36"E**
- **D: 31°44'7.48"N, 74° 3'18.25"E**
- **E: 31°44'11.67"N, 74° 3'18.09"E**

East…….. Access Road

West…… Open Plot

North……... Access Road

South…….. Open Plot

Google map of site proposed for the construction of the subject project

Google map of site: For further details, layout map of the project is attached as **Annexure-B** with the report

Name of the proponent:

Name	Muhammad Rehman (CEO)
CNIC	35202-2809547-1
Mailing Address	Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura

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

Name of organization preparing the report:

World Wide Spectrum, as independent consultants, has been appointed by the proponent to conduct Environmental Impact Assessment (EIA) report.

Company office address: House no 476, Hunza Block, Allama Iqbal Town, Lahore.

Contact: +92 304 4452189

Email address: worldwidespec@gmail.com

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

Authority letter in the favor of the consultant is attached as with the report.

A brief outline of the proposal

Name of the project:	Proposed Construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC-Private) Limited
Location of the project:	Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura
Proposed Area:	Total area of the project is 3.051 Acres (Details of area are provided in the map attached as **Annexure-B**).
Nature of Project:	Nature of the project is proposed and construction will be started after getting the environmental approval.
Cost of the project:	The estimated of the proposed project is 341 million Pkr.
Project process:	Process will be the production of different models of Smart Mobile Phones.
Raw materials	Mobile Spares and Parts.
Production capacity	150,000 smart mobile phones of different models per annum.
Power Requirement:	50 K.W/H
Labor/ Workforce:	During construction: 15-20 persons During Operation: 74 persons.
Water Requirement:	During Construction: approximately 1800-2000 gallon per day

	for constructional and domestic uses. During Operation: maximum 1500 gallons/d for domestic only. Water will not be required in any production process of mobile manufacturing.
Solid waste:	During Construction: 150-200 kg/day construction and domestic waste During operation: Approximately 0.45 kg/capita/day of domestic waste and project related waste will be of 40-50kg per month whuch will be useable and will be used onsite or will be handed over to the contractor.

The major impacts

In order to identify all the activities associated with the project during construction and operation phase with potential to cause adverse environmental impacts and harm a thorough review has been conducted. Project will not have any significant adverse impacts on the nearby community and on environment. Overall the project will have positive impacts on the local population and country as a whole.

TABLE: ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED PROJECT OF MOBILE ASSEMBLING UNIT BY M/S WINTEL SMC-PRIVATE LIMITED

DURING CONSTRUCTIONAL PHASE				
Sr. No.	**Environmental Aspect**	**Impact**	**Mitigation Measures**	**Responsibility**
1.	**Dust Emissions**	Dust pollution affecting air quality	1. Regular water spraying on construction sites to reduce dust. 2. Use of dust suppression equipment. 3. Proper maintenance of construction vehicles to minimize exhaust emissions.	Site Manager / Construction Supervisor
2.	**Construction Noise**	High noise levels affecting surrounding areas	1. Use of quieter machinery and equipment. 2. Restrict construction work to daytime hours. 3. Provide hearing protection for workers. 4. Implement noise barriers around high-noise activities.	Site Manager / Health & Safety Officer
3.	**Solid Waste Management**	Generation of construction waste (solid and liquid)	1. Waste segregation (recyclables, non-recyclables, hazardous materials). 2. Dispose of waste in designated areas. 3. Use approved waste contractors for hazardous materials. 4. Set up temporary toilets for workers.	Site Manager/ Environmental Officer
4.	**Vegetation Loss/ Soil Erosion**	Soil erosion and loss of vegetation due to construction activities	1. Minimize land clearance and tree cutting. 2. Install silt fences and sediment traps. 3. Replant vegetation after construction to stabilize soil.	Site Engineer / Environmental Officer
5.	**Water Resources**	Overuse of water and potential contamination	1. Implement water-saving practices (e.g., low-flow equipment). 2. Use water efficiently for dust control.	Environmental Officer

			3. Ensure construction runoff is managed to prevent contamination of local water sources.	
6.	**Soil Contamination**	Risk of soil contamination from construction materials and waste	1. Proper storage and handling of chemicals and hazardous materials. 3. Ensure proper disposal of construction waste.	Site Manager / Environmental Officer
7.	**Socioeconomic Issues**	Disruption to local communities, traffic congestion, and potential loss of livelihoods	1. Develop a community engagement plan to inform nearby industries of construction timelines. 2. Minimize disruption by scheduling construction work at off-peak times. 3. Provide employment opportunities for locals during construction.	EHS Manager
8.	**Workers Safety**	Risk of accidents and injuries on-site	1. Provide PPE (Personal Protective Equipment) to all workers. 2. Conduct regular safety training and drills. 3. Implement health and safety protocols (e.g., first-aid stations, emergency exits).	Health & Safety Officer / Site Manager

DURING CONSTRUCTIONAL PHASE				
Sr. no.	**Environmental Aspect**	**Impact**	**Mitigation Measures**	**Responsibility**
1.	**Dust Emissions**	Dust from operations affecting air quality	1. Regular cleaning of floors and equipment. 2. Maintain proper ventilation to minimize dust buildup.	Operations Manager / Environmental Officer
2.	**Construction Noise**	Noise pollution affecting workers and surrounding areas	1. Install noise barriers and acoustic enclosures around noisy equipment. 2. Maintain equipment for noise reduction. 3. Conduct regular noise monitoring.	Operations Manager / Environmental Officer

3.	**Solid Waste Management**	Generation of industrial waste (plastic, metal, electronic waste)	1. Implement a comprehensive waste management system (recycling, reusing, and safe disposal). 2. Separate hazardous and non-hazardous waste. 3. Ensure waste is disposed of by certified contractors.	Environmental Officer
4.	**Vegetation Loss/ Soil Erosion**	Ongoing impact on vegetation and soil quality due to land use	1. Create buffer zones with vegetation around the plant. 2. Install erosion control measures (e.g., vegetation, mulch) around the facility.	Site Manager / Environmental Officer
5.	**Water Resources**	High water consumption and potential wastewater discharge	1. Install water-saving technologies (e.g., low-flow fixtures). 2. Implement water recycling systems for production processes. 3. Treat wastewater before discharge.	Operations Manager / Environmental Officer
6.	**Soil Contamination**	Risk of soil contamination from operational activities	1. Implement best practices for chemical storage and disposal. 2. Conduct regular soil testing. 3. Prepare for emergency response to spills and leaks.	Environmental Manager / Operations Manager
7.	**Socioeconomic Issues**	Impact on local communities, including employment opportunities and economic growth	1. Continue to provide local employment. 2. Support local suppliers and contractors. 3. Promote community engagement through local initiatives (e.g., education programs).	Community Liaison Officer / Operations Manager
8.	**Workers Safety**	Risk of workplace accidents and health issues	1. Implement regular safety training programs. 2. Ensure proper ventilation and lighting in all workspaces. 3. Provide adequate PPE and medical facilities on-site.	Health & Safety Officer / Operations Manager

Summary of Key Recommendations & Mitigation Measures:

1. **Dust Control**: Both phases should focus on minimizing dust emissions through proper site management and equipment maintenance.
2. **Noise Reduction**: Noise barriers, proper machinery maintenance, and regulating work hours are essential for minimizing noise pollution.
3. **Waste Management**: An effective waste management system should be established for segregation, recycling, and proper disposal of solid and liquid waste.
4. **Soil and Vegetation Protection**: During construction, land clearance should be minimized, and soil stabilization measures should be implemented. In the operational phase, buffer zones should be created around the facility to protect the surrounding environment.
5. **Water Use and Quality**: Implement water-saving technologies and ensure proper wastewater treatment to minimize environmental impact on water resources.
6. **Health & Safety**: Continuous monitoring of workplace safety through training and provision of appropriate protective measures is crucial for worker well-being.

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.
- **Water quality**

  Regular monitoring of water quality should be conducted on regular basis during construction and operation phases of the project and report should be submitted to EPA Punjab.

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

Proposed Environmental Monitoring Program:

Sr. No.	Parameters	Monitoring Schedules During Construction	Monitoring Schedules During Operation	Monitoring Duration
1	Stack Emission Analysis	Quarterly	Quarterly	As per PEQ's
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
4	Drinking water quality	Quarterly	Quarterly	Some parameters on site Others in lab
5	Waste Water	Quarterly	Quarterly	Some Parameters on Site Others in Lab

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).

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.

Identification of the project and proponent

The proposed project falls under Clause 1 of category J of Schedule II of Punjab Environmental Protection (Review of EIA and EIA) Regulations, 2022.

Proponent:

Name	Muhammad Rehman (CEO)
CNIC	35202-2809547-1
Mailing Address	Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura

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

Details of Consultant

World Wide Spectrum is an independent company, who conducts EIA, 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: World Wide spectrum

Company office address: House no 476, Hunza Block, Allama Iqbal Town, Lahore.

Contact: +92 304 4452189

Email address: worldwidespec@gmail.com

The current study was carried out by the following professionals:

Iftikhar Ahmed	**Environmental Specialist**
Ahmad Raza	Environmental Specialist
Nageen Quyyum	Environmentalist
Muhammad Ahmad	Environmentalist
Akhtar Ali	Environmentalist

Brief description of Nature, Size and Location of Project

Subject project for which this Environmental Impact Assessment study has been conducted is proposed construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC Private) Limited, located at Quaid-e-Azam Business Park, Sheikhupura.

The total area of the project site is 3.051 Acres. The production capacity of the proposed unit will be 150,000 per annum approximately. The estimated cost of the proposed project is 341 million Pkr.

Brief outline of the Subject Project:

Name of the project:	Proposed Construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC-Private) Limited
Location of the project:	Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura
Proposed Area:	Total area of the project is 3.051 Acres (Details of area are provided in the map attached as **Annexure-B**).
Nature of Project:	Nature of the project is proposed and construction will be started after getting the environmental approval.
Cost of the project:	The estimated of the proposed project is 341 million Pkr.
Project process:	Process will be the production of different models of Smart Mobile Phones.
Raw materials	Mobile Spares and Parts.
Production capacity	150,000 smart mobile phones of different models per annum.
Power Requirement:	50 K.W/H
Labor/ Workforce:	During construction: 15-20 persons During Operation: 74 persons.
Water Requirement:	During Construction: approximately 1800-2000 gallon per day for constructional and domestic uses. During Operation: maximum 1500 gallons/d for domestic only. Water will not be required in any production process of mobile manufacturing.
Solid waste:	During Construction: 150-200 kg/day construction and domestic waste During operation: Approximately 0.45 kg/capita/day of domestic waste and project related waste will be of 40-50kg per month whuch will be useable and will be used onsite or will be handed over to the contractor.

Location

Subject proposed project is located at plot no: 141-B, Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura having coordinates:

- **A:31°44'11.86"N, 74° 3'17.82"E**
- **B: 31°44'11.85"N, 74° 3'15.35"E**
- **C: 31°44'7.46"N, 74° 3'15.36"E**
- **D: 31°44'7.48"N, 74° 3'18.25"E**

- **E: 31°44'11.67"N, 74° 3'18.09"E**

East…….. Access Road

West…… Open Plot

North……... Access Road

South…….. Open Plot

The Google Earth Map is attached as **Annexure-E** with the report. And, for further details, layout map of the project is attached as **Annexure-B** with the report.

Screening

The proposed project falls under Clause 1 of category J of Schedule II of Punjab Environmental Protection (Review of EIA and EIA) Regulations, 2022.

CHAPTER # 2

DESCRIPTION OF THE PROJECT

Type and Category of the Project:

Subject project for which this Environmental Impact Assessment study has been conducted is the proposed construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC Private) Limited, located at Quaid-e-Azam Business Park, Sheikhupura.

The total area of the project site is 3.051 Acres. The production capacity of the proposed unit will be 150,000 per annum approximately. The estimated cost of the proposed project is 341 million Pkr.

The project falls under Schedule II, Category J, Clause 1 of Punjab Environmental Protection (Review of EIA and EIA) Regulations, 2022.

Objectives of the Project

Objectives of the construction of the subject project are:

- To meet the increasing market demands of mobile products.
- To enhance the business of the proponent.
- Contribution to the national economy.
- Compensate to help poverty by providing employment.

Alternative Considerations and Reasons for their Rejection:

Location alternatives:

To fulfill the industrial aspects of the project under reference of this EIA Report, it is to be sited at a place where industrial processing activity is either already going on or there are bright prospects of the same. The current project is proposed for construction of Mobile Parts Assembling Unit concurrently, it must also meet the legal requirements of the Punjab Environmental Protection Act, 1997 (Amended 2012). Availability of land at the best convenient place is equally important among other considerations for the site selection. Availability of access roads, communication facilities, electricity, basic infrastructure, sewerage etc. is yet the other necessary requirements.

Obviously, environmentally sound, neat and clean environment are the other considerations for site selection. The project will also facilitate the people of the area with increasing the opportunity of employment, and other related facilities.

Keeping these requirements and their feasibility and other basic infrastructural requirements, the selected site is ideally suited for Construction of the subject mobile parts assembling unit.

Location and site layout of the project:

Subject proposed project is located at plot no: 141-B, Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura having coordinates:

- **A:31°44'11.86"N, 74° 3'17.82"E**
- **B: 31°44'11.85"N, 74° 3'15.35"E**
- **C: 31°44'7.46"N, 74° 3'15.36"E**
- **D: 31°44'7.48"N, 74° 3'18.25"E**
- **E: 31°44'11.67"N, 74° 3'18.09"E**

East…….. Access Road

West…… Open Plot

North……... Access Road

South…….. Open Plot

Fig: Google map of site proposed for the construction of subject project

The Google Earth Map is attached as **Annexure-E** with the report. And, for further details, layout map of the project is attached as **Annexure-B** with the report.

Land Use on site

Site proposed for the construction of the subject project is an empty plot and it is the property of the proponent, reserved by the proponent for the construction of the subject project.

Road Access

Paved road at the front side of the project site connects it directly with the Lahore-Islamabad Motorway Sheikhupura Road.

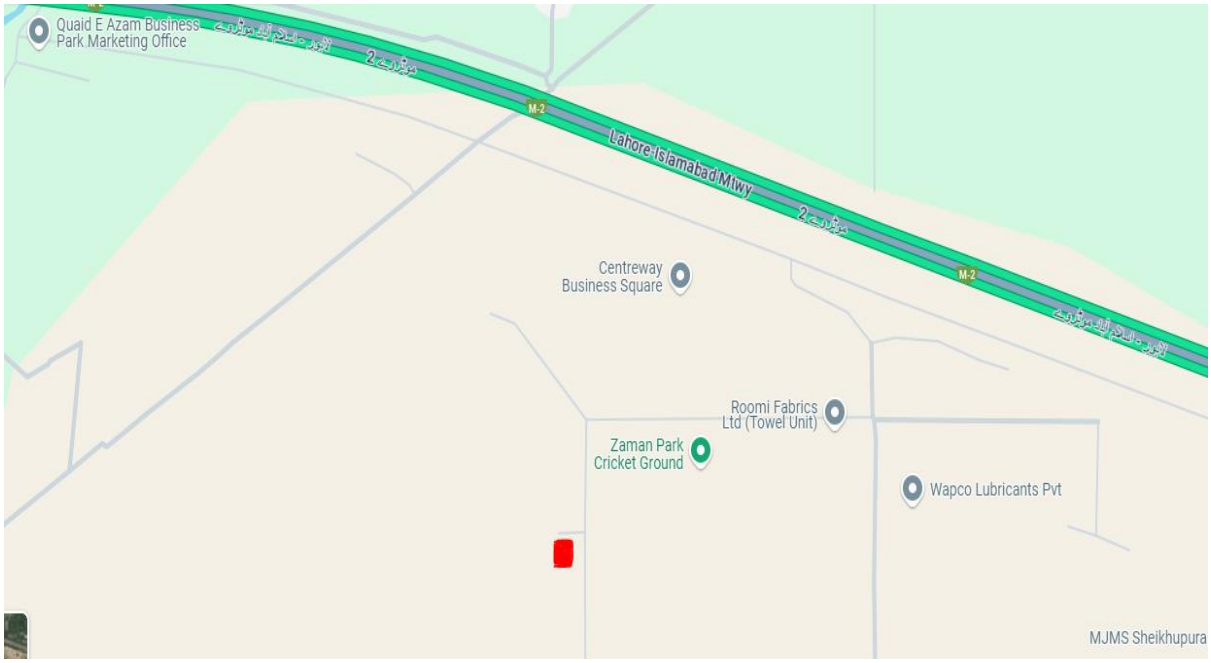


Fig: Access Road at the front side of the project site

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.

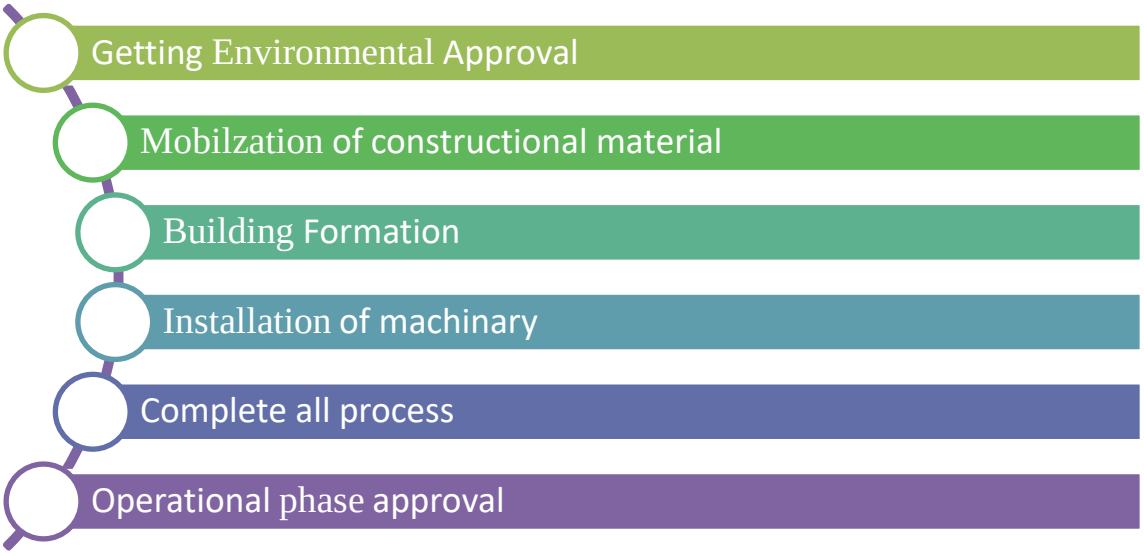
Cost and magnitude of the operation

Project site is located in the industrial area of District Sheikhupura. Process will include production of Mobiles. The total area of the project site is 3.051 Acres. The production capacity of the proposed unit will be 150,000 per annum approximately. The estimated cost of the proposed project is 341 million Pkr.

Schedule of Implementation

Detailed feasibility studies and designing of the project have been completed. Necessary legal, administrative and financial formalities are being finalized. The project is expected to be

completed within 10-12 months from the date of environmental approval. Subsequently the operational and maintenance aspects of the project will be undertaken by the proponent.



Description of the project:

Subject project for which this Environmental Impact Assessment study has been conducted is proposed construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC Private) Limited, located at Quaid-e-Azam Business Park, Sheikhupura. The total area of the project site is 3.051 Acres. The production capacity of the proposed unit will be 150,000 per annum approximately. The estimated cost of the proposed project is 341 million Pkr.

Name of the project:	Proposed Construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC-Private) Limited
Location of the project:	Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura
Proposed Area:	Total area of the project is 3.051 Acres (Details of area are provided in the map attached as **Annexure-B**).
Nature of Project:	Nature of the project is proposed and construction will be started after getting the environmental approval.
Cost of the project:	The estimated of the proposed project is 341 million Pkr.
Project process:	Process will be the production of different models of Smart Mobile Phones.
Raw materials	Mobile Spares and Parts.
Production capacity	150,000 smart mobile phones of different models per annum.
Power Requirement:	50 K.W/H
Labor/ Workforce:	During construction: 15-20 persons

	During Operation: 74 persons.
Water Requirement:	During Construction: approximately 1800-2000 gallon per day for constructional and domestic uses. During Operation: maximum 1500 gallons/d for domestic only. Water will not be required in any production process of mobile manufacturing.
Solid waste:	During Construction: 150-200 kg/day construction and domestic waste During operation: Approximately 0.45 kg/capita/day of domestic waste and project related waste will be of 40-50kg per month whuch will be useable and will be used onsite or will be handed over to the contractor.

Process Flow for Smart Mobile Parts Assembling Unit

1. **Raw Material Reception**
    - Inspect and verify raw materials (e.g., screens, circuit boards, batteries).
    - Store materials in designated areas.
2. **Pre-Assembly Inspection**
    - Check component quality (e.g., screen, battery, PCB).
    - Sort parts for assembly.
3. **Assembly Line Setup**
    - Organize assembly stations (screen, PCB, battery, etc.).
    - Calibrate tools and equipment.
4. **Assembly Process**
    - Screen Assembly: Attach screen to frame.
    - PCB Installation: Place and solder components to the PCB.
    - Battery Fitting: Install battery and connect to PCB.
    - Camera Installation: Fit and connect camera module.
    - Cover Assembly: Install back cover, buttons, and sensors.

- Functional Testing: Run performance and connectivity tests.

5. **Final Assembly Check**
    - Visual and functional inspection.
    - Quality Assurance (QA) testing.
6. **Packaging**
    - Package assembled units with accessories and labels.
    - Ensure proper labeling and documentation.
7. **Final Dispatch**
    - Store finished products for shipment.
    - Coordinate with logistics for distribution to customers.

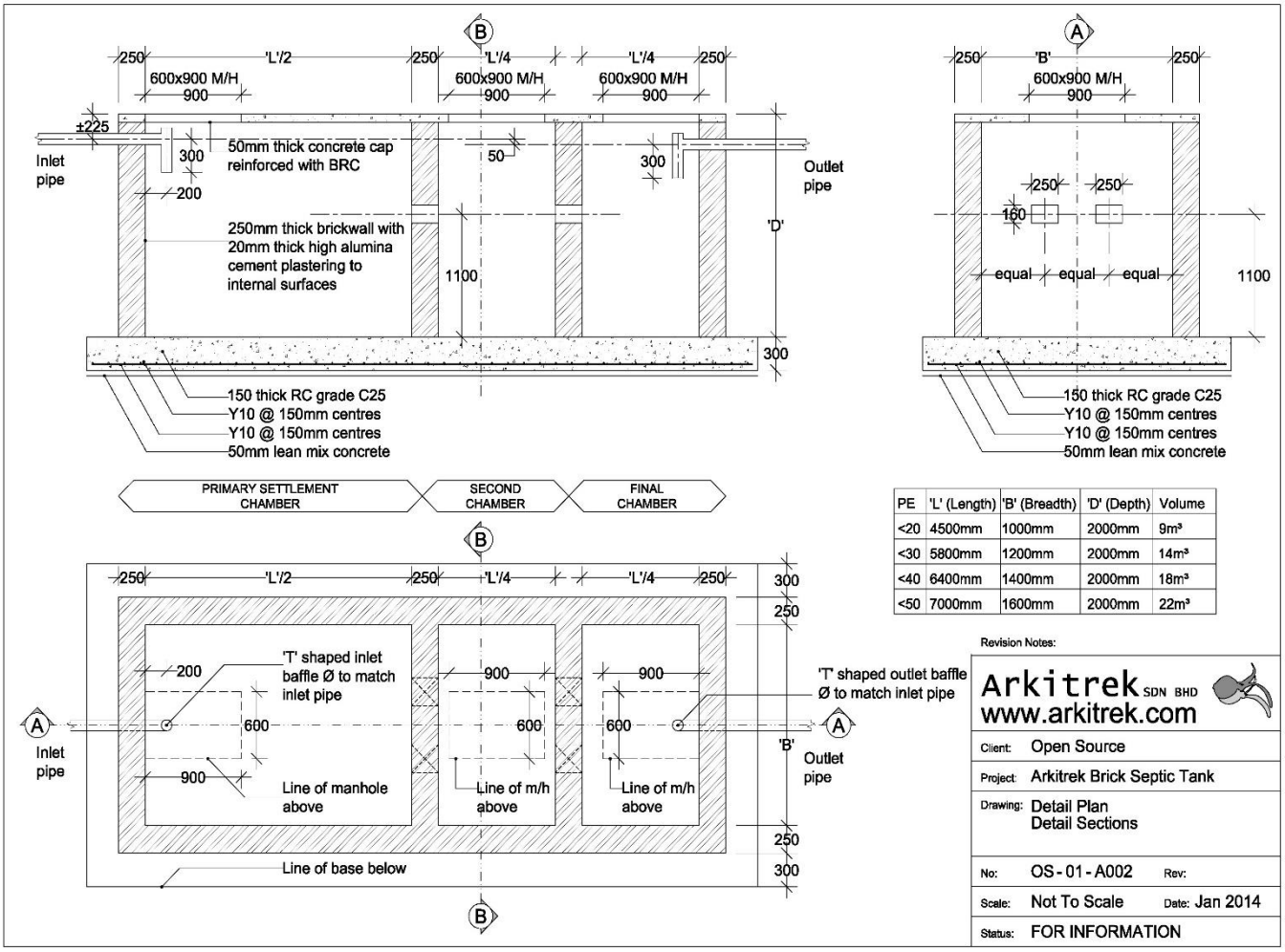
Water requirements:

During Construction: approximately 1800-2000 gallon per day for constructional and domestic uses. During Operation: maximum 1500 gallons/d for domestic purpose only. Water will not be required in any production process of mobile manufacturing.

Ground water will be used as a source of water to fulfill the water requirements during the construction and operation phases of the project.

Waste water treatment:

60-70% of the used water for domestic purposes will be the waste water which will be produced during the operation phase of the project. The generated wastewater will be treated in treatment facility (Septic Tank) of unit. Water after treatment will be disposed of in the nearby drain,



PE	'L' (Length)	'B' (Breadth)	'D' (Depth)	Volume
<20	4500mm	1000mm	2000mm	9m³
<30	5800mm	1200mm	2000mm	14m³
<40	6400mm	1400mm	2000mm	18m³
<50	7000mm	1600mm	2000mm	22m³

management will obtain approval for safe disposal and same will be submitted to EPA Punjab prior to operational phase of the project.

Solid waste:

During Constructional phase, 150-200 kg/day construction and domestic waste will be generated. Contructional solid waste will be reused for road filling purposes and domestic solid waste will be disposed off in environmentally friendly way.

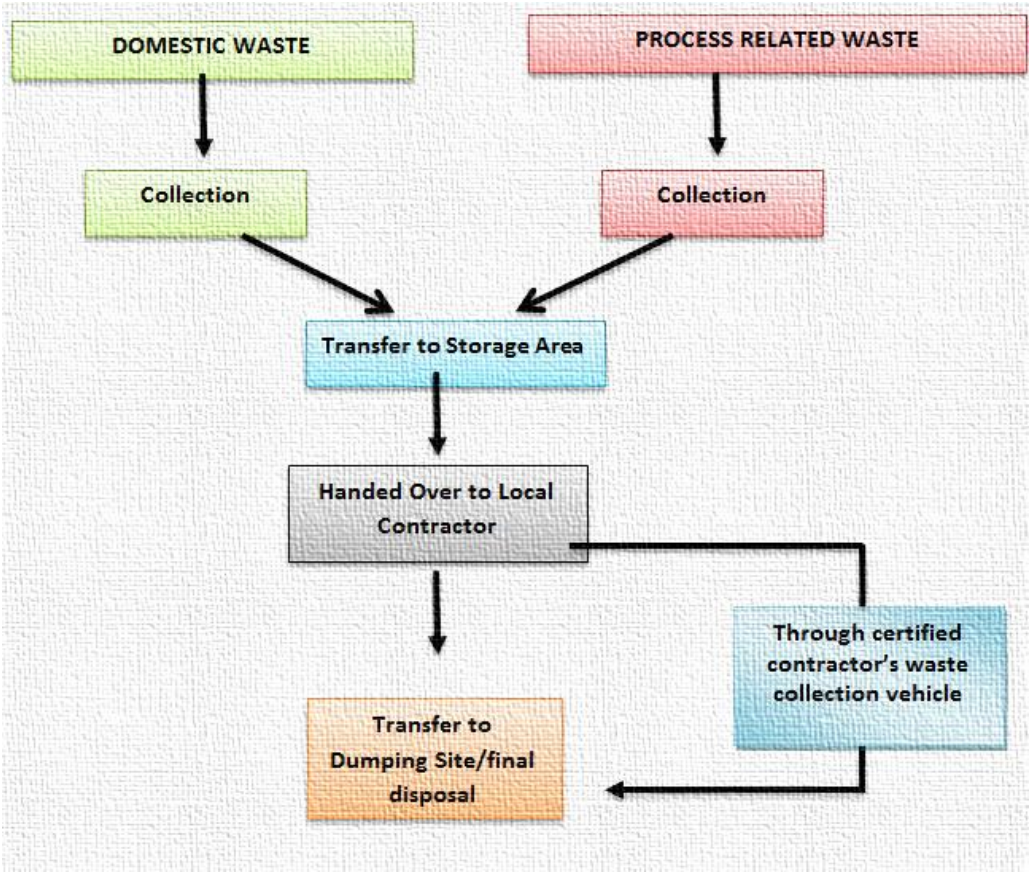
During operational phase, approximately 0.45 kg/capita/day of domestic waste and project related waste will be of 40-50kg per month which will be useable and will be used onsite or will be handed over to the contractor.

Solid waste management system/practices

The Solid waste will be managed in proper way by following operations:

1. Placement of separate waste bins for domestic and project related waste in all working halls and designated points.
2. Collection of waste from all the working halls at one designated point by the sanitary workers on daily basis.
3. Collected waste will be handed over to the solid waste contractors for its final disposal, from this point.

Flow chart of solid waste management plan:



Plantation

Area for plantation will be reserved within the premises of the project and plantation will be done within, outside and at the boundary wall of the unit.

Parking Area

Parking area will be made available within the unit for cars, motorcycles, trucks etc.

Fire Protection System

An addressable fire protection system with detection and alarm annunciation and other installations etc. would be provided to protect against any fire hazards. Fire buckets and fire extinguishers will be installed at all sensitive places within the unit.

Emergency Exits:

Emergency exit points will be made available for easy evacuation in case of any emergency.

Personal protective equipment:

Workers will be provided with Gloves, Masks & other personal protective equipment during the working hours to ensure personnel health & safety. Implementation of PPEs will be ensured by the proponent for the proposed project also.

Power sources and transmission:

The power requirements will be fulfilled by WAPDA. However, a diesel fired stand by generator (if needed) will also be used for emergency situations only.

Available Facilities

Available facilities at the proposed project site include:

- Electric supply from WAPDA
- Solid Management (SWM), Water supply, sewerage disposal and drainage systems
- Line and cellular telephone facilities

Restoration / Rehabilitation Plan

All possible precautions will be taken to prevent an untoward incident in terms of life and property losses. The demolition materials will possibly be reused and recycled. All excavated surfaces will be termite proofed.

One completion of the project, the debris will be removed from the site in order to maintain aesthetics of the project. All measures will be undertaken for ensuring occupational safety,

security and clean environment in the project area. Ornamental trees and flower plants will be planted on inside peripheral of the unit premises to restore the land.

Government approvals required by the project:

All the approvals will be obtained by the project proponent and will be submitted to EPA at the time of operation.

CHAPTER # 3

DESCRIPTION OF ENVIRONMENT

This section describes the baseline conditions, which cover the existing Physical, ecological and socio-economic environment of the project as well as study area. Data was collected by reviewing secondary data and field survey.

Physical Environment/ Resources

History:

Sheikhupura also known as Qila Sheikhupura is a city in the Pakistani province of Punjab. Founded by the Mughal Emperor Jehangir in 1607, Sheikhupura is now the 16th largest city in Pakistan, and is the headquarters of Sheikhupura District. Sheikhupura is also the headquarters of Sheikhupura Division. The city is an industrial center, and satellite town, located about 38 km northwest of Lahore. According to the 2017 Census of Pakistan, its population is 473,129.

The region around Sheikhupura was previous known as Virk Garh, or "Virk Fort", in reference to the Jat tribe that inhabited the area. The city, founded in 1607, was named by Mughal Emperor Jehangir himself - the city's first name is recorded in the Emperor's autobiography, the Tuzk-e-Jahangiri, in which he refers to the town as Jehangirabad. The city then came to be known by its current name, which derives from Jehangir's nickname Shekhu that was given to him by his mother, wife of Akbar the Great.

Mughal:

Mughal Emperor Jahangir laid the foundations of Sheikhupura in 1607 near the older town of Jandiala Sher Khan, an important provincial town during the early to middle Mughal era. He also erected the nearby Hiran Minar, Sheikhpura's most renowned site, between 1607 and 1620 as a monument to his beloved pet deer, Mansiraj, at a time when the area served as a royal hunting ground for the Mughal Emperor. Jehangir laid the foundation of the Sheikhupura Fort in 1607, which is situated in the city's centre.

Sikh

Following the collapse of Mughal authority, the city came under the control of the Bhatti tribe. The tribe struggled to maintain control of the area, as bandits and Sikhs began encroaching upon the area. In 1797, the Durrani king Shah Zaman briefly seized the city and fortress during his campaign to capture Lahore. The city's fort then was captured by the Sikh bandit, Inder Singh.

Sheikhupura was then captured from the Bhattis by the forces of Lehna Singh in 1799. Sheikhupura thus came under the rule of the Sikh Sukherchakia Misl state under Lehna Singh's ally, Ranjit Singh, forcing the Bhatti tribe to retreat to Pindi Bhattian and Jalalpur. Sheikhupura then changed hands several more times, before finally being captured by Ranjit Singh in 1808.

Sheikhupura remained under suzerainty of the Sikh Empire until 1847, when the British seized control of the area. The British imprisoned the last Queen of the Sikh Empire, Maharani Jind Kaur, at the Sheikhpura Fort for ten months until 1848 before ultimately condemning her to exile abroad.

British

Following establishment of British colonial rule, Bhatti possessions that had been seized by the Sikhs were restored. The large area between the Chenab and Ravi rivers were initially consolidated into a single district with Sheikhupura serving as its first headquarters, until 1851. The area around Sheikhupura attained District status in 1919, with M.M.L. Karry serving as its first administrator.

Partition

On the eve of the Partition of British India, Sikhs made up 19% of the district's population. Despite the area's Muslim majority, Sikhs had hoped that the boundary commission would award the area to India, given the proximity of Sheikhupura to the city of Nankana Sahib - revered as the birthplace of the founder of Sikhism, Guru Nanak. The city was spared the large-scale rioting that engulfed Lahore earlier in 1947, and the city's Sikh population did not shift to India before the Radcliffe Line that demarcated the border of the newly independent states of Pakistan and India was announced.

The Sikh population had not made arrangements to leave and remained trapped in the city until 31 August 1947. The city's Sacha Sauda refugee camp hosted upwards of 100,000 Sikh refugees who had come to the city after fleeing nearby Gujranwala and other surrounding areas earlier that year. Fierce violence erupted in the city, and an estimated 10,000 people were killed in Sheikhupura between 16 August and 31 August in communal rioting between Sikhs and Muslims. Large numbers of Sikh women were killed by Sikh men in an attempt to prevent Muslim rioters from reaching them.

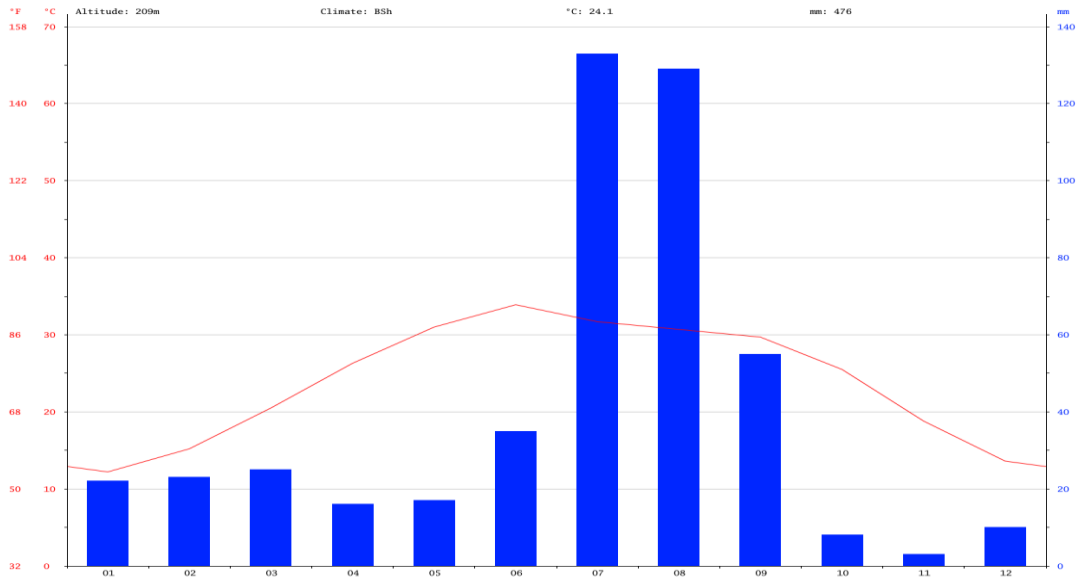
Geography and Climate

Sheikhupura is situated at a distance of about 36 Km from Lahore, the provincial headquarters. Sheikhupura lies 31°42'51.16"N latitude and 73°59'3.49"E longitude. The city is well

connected with its surrounding big urban centres like Faisalabad 94 Km, Sargodha 143 Km and Gujranwala 54 Km. Sheikhupura is also a railway junction. Sheikhupura is bounded by 6 other districts of Pakistani Punjab namely: Lahore, Nankana Sahib, Narowal, Hafizabad, and Gujranwala. The Bar jungle has almost disappeared owing to colonization and extension of canal irrigation.

Climate:

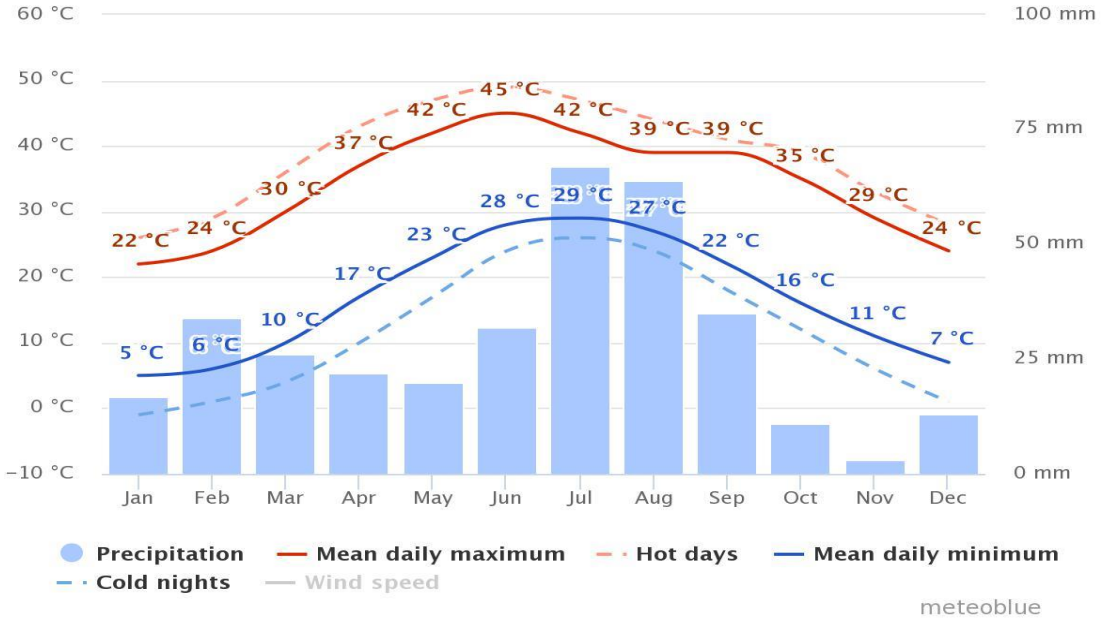
The climate here is considered to be a local steppe climate. In Sheikhupura, there is little rainfall throughout the year. This climate is considered to be BSh according to the Köppen-Geiger climate classification. The temperature here averages 24.1 °C. Precipitation here averages 476 mm. The driest month is November, with 3 mm of rain. With an average of 133 mm, the most precipitation falls in July. June is the warmest month of the year. The temperature in June averages 33.9 °C. January has the lowest average temperature of the year. It is 12.2 °C. There is a difference of 130 mm of precipitation between the driest and wettest months. During the year, the average temperatures vary by 21.7 °C.



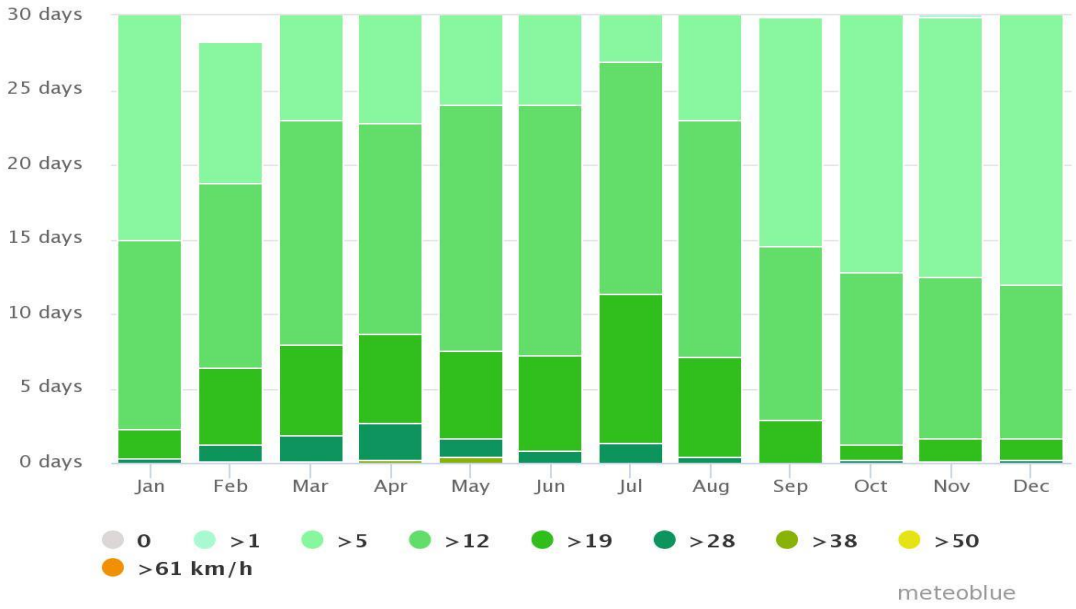
Source: https://en.climate-data.org/asia/pakistan/punjab/sheikhupura-3511/

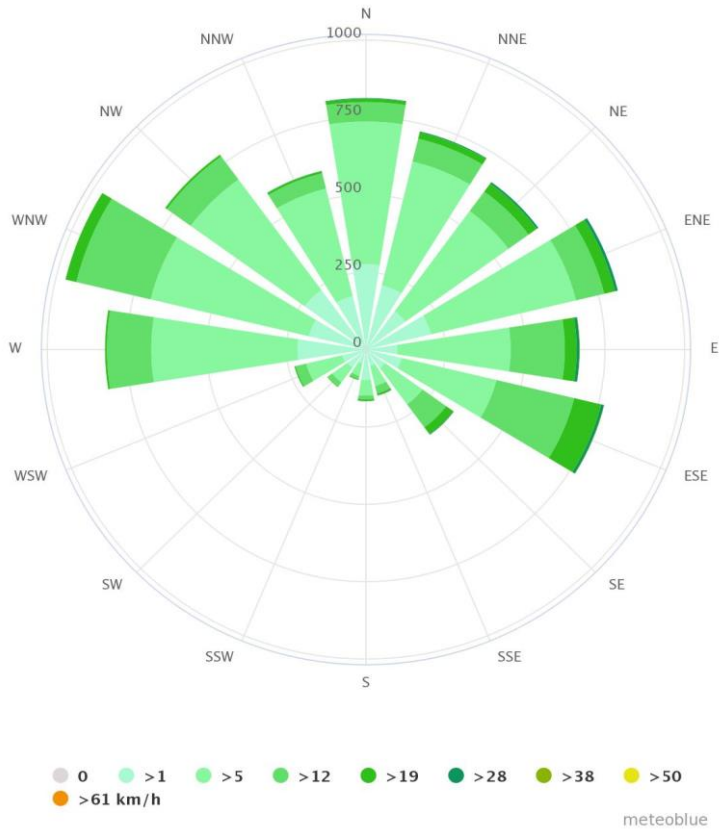
Muridke Climate:

The "mean daily maximum" (solid red line) shows the maximum temperature of an average day for every month for Muridke. Likewise, "mean daily minimum" (solid blue line) shows the average minimum temperature. Hot days and cold nights (dashed red and blue lines) show the average of the hottest day and coldest night of each month of the last 30 years.



Graphical representation of weather conditions of the area





Source:
https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/muridke_pakistan_1169692

Topography

Topography of Sheikhupura District is plain. The area is a part of Rechna Doab and consists of Sub-recent sediments brought by spill channel from the Chenab River. There are some old channel levees remnants and old basins filled up with clay materials. The material is probably of Late Pleistocene age derived from mixed calcareous sedimentary and metamorphic rocks of Lower Himalayas. Seepage from the canals in the Area has considerably raised the water table resulting in water logging and salinity.

Soils:

These are river transported deposits (alluvium), which are quite thick and fairly homogeneous in extent. The top soil consists of brown, soft to firm clayey silt / silty clay having slight plasticity and contents of dissolved salts. The top layer is likely to extend about 3 to 6 meter below natural ground, where it is underlain by silty fine sand/fine sand. This layer generally

continues to deeper depths. These layers of silty clay and sandy gravel may also exist below 10 meter depth.

Air Quality:

Ambient air monitoring at the project site was conducted by the team of Pak Green Laboratories. Lab reports are annexed as **annexure-D.**

Noise Level:

Major source of noise generation is vehicular traffic (particular loaded and unloaded truck, van) along the main road. Noise levels were monitored at different location of the project site.

Lab reports are annexed as **annexure-D.**

Noise Level Monitoring:

Basic Environmental conditions:

During the measurement following conditions were prevailed on workplace:

Metrological Conditions:

During the noise level monitoring weather was dry and sky was clear. Air was blowing at normal speed.

Monitoring Instrument:

The description of the instrument used for the noise level monitoring is given below:

Name: Digital sound level meter

Model: AR824

Company: Intel Instruments plus

Frequency Range: 31.5 Hz to 8 kHz

Methodology adopted:

Noise level was monitored at four points; lab results are attached as **Annexure-D.**

Ground water:

The underground water will be used as a source of water at the project site. Sample was taken from the tube well near the project area to test its parameters. Lab results are attached as **Annexure-D.**

Fisheries:

The project area is almost free from any commercial fishing activity. There are no lakes, even natural water ponds in the vicinity. Therefore, Fishery or any worth mentioning aquatic biology in this area is out of question.

Biodiversity:

Natural capital of a country mainly includes all of the country's wilderness areas and scenic landscapes, including also with their associated flora and fauna. Pakistan has a total of nine major ecological zones. The contribution of the "Natural Capital" is recognized at three distinct levels: species, genera, and communities (habitat and ecosystem) both collectively and within each level, the range or variety of the resources are referred to as the "Biological Diversity". The term has relevance for each of Pakistan's administrative units district, province, and particularly country. The more the number of species, genera, and habitats and ecosystems present within these units, the greater is said to be the Biodiversity. The biodiversity of the area, with this background, is discussed as under.

Flora:

Project site is free from any protected species.

Fauna:

Project site is free from any protected species.

Rare or endangered species:

There are no game reserves or protected lands/areas or endangered or rare species either in the area in the range of 5km from the project site.

Social and Cultural Study

Demographics

Muridke is a city and headquarters of Muridke Tehsil in Sheikhupura District of Punjab, Pakistan. It is the 2nd largest city in Sheikhupura Division. It is situated near the city of Lahore, at an elevation of 205 m (675 ft) and is situated on the Grand Trunk Road. In 2005 Muridke became the headquarters of the newly created Muridke Tehsil of Sheikhupura District. According to the 2017 Census of Pakistan, its population is 166,652. It is ranked 53rd in the List of most populous cities in Pakistan. Chand Bagh School is situated on the Muridke-Sheikhupura road.

Industries:

A variety of important industrial units are operating in district Sheikhupura including leather tanneries, rice mills, fertilizer, chemicals, polyester fibre/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.

Demand Based Industries:

District Sheikhupura is one of the major industrially developed districts of the country. It possesses requisite physical/social infrastructure facilities and developed industrial base. Therefore, in view of overall provincial/national requirements and export potential, there exists good prospects for pharmaceutical, cosmetics, disposable syringes, glass ampoules, artificial leather, fibre glass, boilers, pumps and compressors, ball bearing, generators, foundry and forging, automobile transmission, etc.

List of Identified Projects:

The following industrial units have been identified for investment in district Sheikhupura

- Auto Parts
- Artificial Leather
- Automobile Transmission
- Corn Oil
- Cosmetics
- Furniture
- Fertilizer
- Fiber Glass
- Foundry and Forging
- Leather Products
- Packaging Unit
- Pharmaceutical
- Wood Pulp for Paper Industry

Livestock:

There are 28 tanneries, one milk processing unit, one ice cream unit, 11 leather products units and 5 leather shoes units already operating in the district. In view of the above, there exist good

prospects for dairy farms, cattle/goat/sheep fattening farms, leather garments, leather products, etc.

Agriculture:

Major crops and fruit of district Sheikhupura are sugarcane, wheat, rice and guava. A variety of vegetables are also grown in the district. There are 23 flour mills, 93 rice mills, 4 fruit juices, 4 solvent extraction units and 15 vegetable ghee/cooking oil units already operating in the district. In view of the availability of various raw-materials and existing industries, there exist little additional scope for flour mills and rice husking units. However, there exist good prospects for fructose from rice bran, rice husk briquettes, corn oil, furfural from maize cobs, fruit juice/pickles/squashes and vegetables dehydration units.

Education:

Chand Bagh School is an independent boarding school for boys at Muridke in Sheikhupura District, Punjab, Pakistan, approximately 40 km north of Lahore. The school opened in September 1998, having been conceived as a Pakistani version of The Doon School of India. The name "Chand Bagh" refers to the Doon School's estate at Dehradun, India. The origins of the school lie in the independence of Pakistan in 1947 and the series of Indo-Pakistani wars and conflicts which have since followed. In 1985 a group of Pakistan's "Ex-Doscos", alumni of the Doon School, who had attended it in the days of British India, travelled to Dehradun in India to attend the school's 50th anniversary celebrations. On their return they formed a Doon School Society of Pakistan, which aimed to create a Pakistani version of their old school. After many years in gestation, the school was finally founded by Lieutenant General Ghulam Jilani Khan, a former Governor of the Punjab Province, himself a Dosco, and ten fellow-trustees. In many respects Chand Bagh is modelled on Doon School, Dehradun.

The name "Chand Bagh" means "moon garden" and was chosen in memory of the original Doon School, which had been established in 1935 on the Chand Bagh estate at Dehradun, now in the Indian state of Uttarakhand.

The principal architect of the new buildings, which have Romanesque influences, was Kamil Khan Mumtaz. The school opened its doors in September 1998 and occupies a campus of some 190 acres. Around the campus are the Chand Bagh Farms, a further 270 acres.

Archaeological sites of the District:

Sheikhupura, on the outskirts of Lahore, derived its name from a nickname for Prince Jahangir. It was one of Jahangir's princely dominions during his father Akbar's reign, just north of Sheikhupura town lies a hunting complex known as the Hiran Minar. Hunting grounds were an important part of the physical environment of Mughal emperors, and the Hiran Minar is one of the best known and most beautiful of such sites. Sheikhupura has a number of historical places in the city which attracts visitors to the city:

- Hiran Minar
- Sheikhupura Fort (Qila Sheikhupura)
- Company Bagh
- Shrine of Shah Jamal
- Muqadssa-e-Mariam
- Sacha Sodha
- Tomb of Mian Sher Muhammad Sharaqpuri

Notable persons:

Aaqib Javed; played as fast bowler for Pakistan cricket team.

Anjum Saeed; played one Olympics for Pakistan hockey team.

Anzhelika Tahir; Miss Pakistan World 2015, a beauty queen from Pakistan.

Ghulam Jilani Khan; the founder of the Chand Bagh School

Kulwant Singh Virk; author

Mohammad Asif; a right arm medium fast bowler in cricket

Muhammad Javed Butta; a former justice of Supreme Court of Pakistan

Nawab Kapur Singh; one of the pivotal figures of the Sikh Confederacy and founder of the Singhpuria Misl.

Rana Naved-ul-Hasan; player for the Pakistan National Cricket Team

Rana Tanveer Hussain; Federal Minister

Saeed Anwar; played three Olympics for Pakistan hockey team.

Sheikh Salim Chishti; Sufi saint of the Chishti Order during the Mughal Empire

Waris Shah; A Great Punjabi Sufi Poet

Zaka Ullah Bhangoo; Pakistani army aviator

Zia Ullah Khan; attributed with major contributions in the military such as serving as Corps Commander of XII Corps Quetta<ref>'XII Corps (Pakistan)'

Quality of Life Values:

Recreational Resources and Development:

The project area has not any private recreational facilities.

Aesthetic Values:

Like the general trend among the citizens of area, most of the people have low awareness about environment. Even then, some people take cleanliness and neatness of the environment lightly. Some people throw municipal solid wastes (MSWs) on the streets. Sense of personal responsibility to keep the environment clean as good citizens is even now lacking among a few people.

Archaeological and Historical Treasures:

Archaeological or historical treasures within the project area are not available.

CHAPTER # 4

CONSIDERATION OF ALTERNATIVES

Site alternatives:

To fulfill the commercial aspects of the project under reference of this EIA Report, it is to be sited at a place where commercial processing activity is either already going on or there are bright prospects of the same. Concurrently, it must also meet the legal requirements of the Punjab Environmental Protection Act, 1997 (Amended 2012). Availability of land at the best convenient place is equally important among other considerations for the site selection. Availability of access roads, communication facilities, electricity, basic infrastructure, sewerage etc. is yet the other necessary requirements.

Obviously, environmentally sound, neat and clean environment are the other considerations for site selection. The project will also facilitate the people of the area with increasing the opportunity of employment, and other related facilities.

Keeping these requirements and their feasibility and other basic infrastructural requirements, the selected site is ideally suited. Along with this, no other site is considered as alternative site, because the management is intended to initiate this project at plot allotted by Quaid e Azam Business Park, Sheikhupura,

Technology Alternatives:

The proposed development will be constructed using modern, locally and internationally accepted technology and materials to achieve public health, safety, security and environmental aesthetic requirements. Equipment that saves energy will be given first priority without compromising on cost or availability factors.

M/s Wintel SMC-Private Limited is an Environmental conscious company which intends to use modern and state of art machinery with minimum impacts on Environment.

Environmental alternative

The project is located in the Business Park of Sheikhupura District. The site is located in an Industrial Area. Various industries have already been constructed on the industrial estate that are complying with the PEQS standards by installing various pollution controls devices. Construction of this project in this area will have minimal impact on the daily life people living in Sheikhupura. The project proponent is recommended to make sure the regular maintenance of septic tanks during the project operations to keep the effluent within the PEQS limits. Also,

the proponent ensured that project vehicles related to assembling unit operation will be maintained so they don't cause any vehicular emissions.

Economic Alternatives

The project proponent intends to do assembling of Smart Mobile Phones. The establishment of this project will lead to the project towards sustainability as the project will not release any untreated wastewater into the drains and will not cause any air pollution or other major impacts on thr environment. This will improve the project brand in the international market and attract international investment.

This project will provide employment during construction phase and managerial staff at operation phase as laborer's workers and managerial staff. This project will accelerate the economic development of the district Sheikhupura and in turn Pakistan.

CHAPTER # 5

SCREENING OF POTENTIAL ENVIRONMENTAL IMPACTS & THEIR MITIGATIONMEASURES

ENVIRONMENTAL IMPACTS DUE TO PROJECT LOCATION

Project is present in the industrial area of the District Sheikhupura. No nearby human settlement exists within the radius of 500 meter. Unit is proposed for construction of Mobile Assembling unit; site does not fall in the category of sensitive area and no environmentally sensitive localities exist within radius of study area. The only issue which can arise due to the location of the subject project could be the issue of traffic congestion due to transportation of the construction material at the project site. If the project proponent maintain HSE conditions and comply with the PEQS limits than, there will not be any significant impacts of the project on the environment.

If the mitigation measures are effectively implemented, the residual impact of the Subject project activities on the area's geophysical environment is expected to be insignificant.

Impact significance: Low or may be positive

Nature of impact: Direct

Duration: Long-term

Timing: construction phase

Reversibility: NA

Likelihood: Low (unlikely),

Consequences: Mild or may be positive

Mitigation Measures for location phase impacts

- Project site should have good road infrastructure and efficient road infrastructure already exists there that is used currently to access the site and there is no issue of the road congestion due to the wide, good and paved road named Raiwind Road Lahore.
- Location can be considered as the positive impacts due to utilization of the product in the same District.
- The project will provide the jobs to the local residents as well as to those from the suburban areas.

ENVIRONMENTAL IMPACTS DUE TO THE PROJECT DESIGN

Subject project for which this Environmental Impact Assessment study has been conducted is proposed construction of Mobile Assembling Unit under the name of M/S Wintel (SMC-Private) Limited, at Plot No: 141-B, Quaid-e-Azam Business Park, Sheikhupura .

Firefighting plan, health & safety plan, tree plantation plan, emergency response plan will be incorporated during the design phase of the project. The subject project will consist of;

- Office building
- Leather Store
- Cutting area
- Packaging area
- Quality Assurance office
- Separate water storage taken for the firefighting and domestic purposes
- Firefighting instrument room
- Parking area

Following are the major Environmental impacts due to the development related to the design:

- Structural stability of the proposed project.
- Soil structure and soil bearing capacity
- Road infrastructure design
- Emergency exit in the proposed project
- Firefighting system
- Rain water harvesting capacity of the drainage system
- Electricity hazards

Impact significance: moderate to high or may be negative

Nature of impact: direct

Duration: Long-term

Timing: Constructional phase & Operation phase

Reversibility: NA

Likelihood: moderate to high

Consequences: moderate to high or may be negative

Mitigation measures and recommendations

Following are the mitigation measures and recommendations to minimize the anticipated impacts:

- Emergency exist points should be marked within the project building.
- Firefighting system should be designed for the emergency situations.
- Electricity system should be design safe and sound.
- Electricity wires should be covered by thick plastic/electricity resistant covers.

ENVIRONMENTAL IMPACTS DURING THE CONSTRUCTION PHASE

Impacts related to the construction phase of the subject project are discussed below:

- **Grubbing and stripping**

Grubbing and stripping may be a minor and short term impact on the physical environment during the construction phase. It may also be a health and safety hazard for the people at or near the project site.

- **Leveling and compaction of the land**

Leveling and compaction of the land is also a short term and minor impact on the physical environment and it may also be a health and safety hazard for the workers.

- **Demarcation of project building and other facilities**

It may also be a minor impact on the physical environment due to the subject project.

- **Generation of dust during loading and unloading of construction materials**

It is also a minor and short term impact on the physical environment and also for health and safety, which may arise during the construction phase.

- **Generation of noise on account of vehicular use and construction activities**

It is also a minor and short term impact on the physical environment and also for health and safety, which may arise during the construction phase.

- **Gaseous emission due to the vehicles and stand by generator (if any)**

It may also be a minor impact on the physical environment during the construction phase, if vehicles and generators are not properly tuned.

- **Local flooding due to over-use of water and leakage of pipes**

It may be a minor and short-term impact on the physical environment if precautionary measures have not been taken.

- **Safety of construction workers, people in the surroundings and passersby**

Health and safety issues may arise during the construction phase if proper precautionary measures will not be taken.

- **Any outbreak of fire due to electrical and other failures**

This issue may arise due to carelessness or improper management, and it may be a serious hazard which may affect the environment or may also cause the loss of property or life.

- **Solid waste generation due to domestic and construction activities**

Solid waste generation due to domestic and construction activities may be a negative impact on environment if not managed properly.

- **Wastewater generation from the domestic and constructional activities**

Wastewater generation due to domestic and construction activities may be a negative impact on environment if proper wastewater treatment and management system will not be implemented.

- **Ground water quality**

Ground water quality may be affected by the development if proper mitigation measures will not be implemented.

- **Impacts on Fauna and Flora**

Construction will impact the flora/ vegetative cover and fauna present at the project site.

- **Security threat**

Security issue is a major socioeconomic impact which may arose during the construction phase.

- **Impact on land value**

Construction of the subject project may cause positive or negative impact on the land value.

- **Dislocation of the people**

Construction of the subject project may cause the dislocation of the local people if any, which is a negative impact on the socioeconomic environment.

- **Loss of public and private infrastructure**

Construction of the subject project may cause loss of public and private infrastructure if any, which is also a negative impact on the socioeconomic environment.

Impact significance: moderate to high or may be negative

Nature of impact: direct

Duration: Short Term

Timing: Construction phase

Reversibility: NA

Likelihood: moderate

Consequences: moderate

Mitigation Measures and Recommendations

- Precautionary measures should be adopted to save the environment from the impacts of grubbing, stripping, leveling and compaction and health and safety of workers should be ensured during the construction phase.
- Demarcation of the project building and other facilities should be according to the laws and regulations.
- Sprinkling of water on dusty tracks is recommended to avoid the generation of dust on dusty tracks.
- Vehicles should be properly tuned to reduce the impacts of dust and noise.
- Mitigation measures should be taken to meet the PEQS at the stack of generators.

- Proper mitigation measures should be taken to reduce the noise generation during the construction activities.
- PPEs i.e. ear muffs, helmets and masks etc. should be provided to workers to ensure their health and safety during the construction activities.
- Precautionary measures should be taken to reduce the local flooding due to over-use or leakage of pipes.
- Health and safety of construction workers, people in the surroundings and passersby must be ensured.
- Precautionary measures should be taken to avoid any outbreak of fire due to electrical and other failures.
- Constructional waste should be used for landfilling purposes.
- Domestic solid waste should be kept in dust bins and should be handed over to local contractors.
- Add more vegetation to restore the land by more plantations.
- Essential services like water supply, sewerage disposal and solid waste management must be in working condition.
- Construction timings should be scheduled to cause minimum disturbance to neighbors.
- Because of presence of security guards round the clock the security at the project site will be improved as well as in its vicinity. Impact will be moderate positive.
- Land value in the surrounding area will increase due to completion of the present project. Impact will be moderate positive.
- The project does not involve dislocation of the people. There is no requirement of resettling a single person. Impact is nil.
- No movable or immovable property and infrastructure of public and private sectors will be lost or damaged during construction and operation stages. Impact will be nil.

ENVIRONMENTAL IMPACTS DURING OPERATION STAGE

Main environmental issues associated with Project operation are as follows.

- Health and safety issues for workers may arise during the project process e.g. Particulate matter may be generated during the Mobile Assembling, which may cause the health issues for the workers and noise of machinery can also be a negative impact on the health of workers.
- Waste water due to domestic and process activities.
- Fire due to short circuits and other activities.

- Solid waste generation due to domestic and project related activities.
- Noise pollution from generator and other machinery.
- Health hazards including the electricity hazards.
- Vehicle access is required especially for transportation. The site is well served with the road network. Heavy traffic will be allowed only during night time during operational phase. The traffic issues at any stage of project life cycle will not arise.

Impact significance: moderate to high or may be negative

Nature of impact: direct

Duration: Long-term

Timing: operational phase

Reversibility: NA

Likelihood: moderate to high

Consequences: moderate to high or may be negative

Recommendations

- Safety of workers should be ensured through proper training and PPEs must be ensured during the working hours.
- A well design firefighting system will be constructed to cope with fire situations in the subject project.
- Solid waste bins should be installed at designated processes and Installed Solid waste bins should regularly cleaned and solid waste must be handed over to the EPA Approved contractor.
- Noise levels should not exceed the PEQS.
- Project proponent should submit all the monitoring report in the EPA Punjab Office for the compliance of the PEQS.

POTENTIAL ENVIRONMENTAL ENHANCEMENT MEASURES

The proposed project will be installed with all precautionary measures to enhance and safe the environment. Following necessary measures will be adopted during construction and operation:

- Sprinkling of water will be done on dusty roads and tracks.
- PPEs will be provided during construction activity.
- Constructional waste and domestic solid waste will be disposed-off or utilized properly.
- Local people will be informed in advance when work is about to start in an area.
- Machinery will never be left unattended.

- Efforts should also be made to discuss traffic conditions so that regular traffic is not disturbed. Transporters engaged for the project would be forced to adhere to the load specifications of the access road. No overloading would be allowed in any case.
- Safety signs and boards will be placed during construction.
- Air pollution controlling devices must be installed within the project during operation.
- Machinery will be kept maintained.
- Waste water will be treated through waste treatment facility (septic Tank) that will be installed within the premises of the subject project.
- Proper SOPs will be followed with proper schedule along with the HSE conditions.
- Area will be restored with native plants. A proper tree plantation plan will be formulated to save the environment.
- Solid waste will be handed over to contractors and agreement will be made.
- Noise will be controlled by adopting proper measures.
- PPEs will be provided to workers during working.
- Firefighting equipment's and system will be installed.
- Safety signs will be placed at all locations where required.
- Hygienic conditions will be ensured and proper quality will be maintained by quality control testing.
- First aid facilities will be made available.

PURPOSE OF MITIGATION MEASURES

Purpose of mitigation measures should include:

- What is the problem i.e. in terms of "major environmental impacts" which may arise by the subject project activity?
- When the problem will occur and when it should be addressed?
- Where the problem should be addressed?
- And how the problem should be addressed?

The major impacts may arise by the subject project, particulate matter, dust, noise, odor and solid waste. Other impacts are of minor importance. These impacts will arise during construction and operation but precautionary measures will be adopted prior to start the activity, during the activity and post activity.

Any impact that would arise due to the subject project activity will be addressed on site. Trainings will be conducted onsite prior to start work while other precautionary measures will also be adopted to make the project safe and environmental friendly.

HSE manager/environmental manager along with site manager will be appointed to assess any impact that could be arisen during both phases. He would be responsible to address the problem and to mitigate it.

WAYS OF ACHIEVING MITIGATION MEASURES

By adopting proper mitigation measures, any anticipated major or minor environmental impacts could be controlled or mitigated. The details of impacts and mitigation measures have been discussed in previous chapters.

Management of M/S Wintel (SMC-Private) Limitedshall take appropriate measures to provide pollution free and safe environment during the proposed project activity by implementing improved management practices and monitoring techniques suggested in EMP.

M/S Wintel (SMC-Private) Limitedwill adopt such plan that will assure the minimum impact on the environment and health by implementing proper mitigation measures. Design of the project will assure the structure stability and project life in a long run.

M/S Wintel (SMC-Private) Limitedwill develop Restoration/ reclamation or tree plantation plan to restore the project area. Maximum Plantation will be done with native species within the unit, along the boundary wall and along the roadside if directed by EPA. Also, in-front of main area, horticulture plan will be formulated and area for this will be kept reserved.

CHAPTER # 6

ENVIRONMENTAL MANAGEMENT AND MONITORING PROGRAM

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:

1. Ensure the complete implementation of all mitigation measures.
2. Ensure the effectiveness of the mitigation measures.
3. Provide a mechanism for taking timely action in the face of unanticipated environmental situations
4. Identify training requirements at various levels.

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.

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

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.

Training of building contractor

Training of building contractor & workers will be the part of the TORs regarding the construction of the scheme. The provisions given in EIA Report Chapter 4 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:

1. Handling of Machineries in a safe way
2. Use of PPEs
3. Maintenance of vehicles and submission of Environmental Monitoring Reports
4. Maintenance of Water Consumption records
5. Testing of water and waste water and submission of Environmental Monitoring Reports.
6. Placement of safety signs/boards during construction
7. Sprinkling of water on the roads and dusty tracks
8. Monitoring of generator emissions

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

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.

TABLE: ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED PROJECT OF MOBILE ASSEMBLING UNIT BY M/S WINTEL SMC-PRIVATE LIMITED

DURING CONSTRUCTIONAL PHASE				
Sr. No.	**Environmental Aspect**	**Impact**	**Mitigation Measures**	**Responsibility**
9.	**Dust Emissions**	Dust pollution affecting air quality	1. Regular water spraying on construction sites to reduce dust. 2. Use of dust suppression equipment. 3. Proper maintenance of construction vehicles to minimize exhaust emissions.	Site Manager / Construction Supervisor
10.	**Construction Noise**	High noise levels affecting surrounding areas	1. Use of quieter machinery and equipment. 2. Restrict construction work to daytime hours. 3. Provide hearing protection for workers. 4. Implement noise barriers around high-noise activities.	Site Manager / Health & Safety Officer
11.	**Solid Waste Management**	Generation of construction waste (solid and liquid)	1. Waste segregation (recyclables, non-recyclables, hazardous materials). 2. Dispose of waste in designated areas. 3. Use approved waste contractors for hazardous materials. 4. Set up temporary toilets for workers.	Site Manager/ Environmental Officer
12.	**Vegetation Loss/ Soil Erosion**	Soil erosion and loss of vegetation due to construction activities	1. Minimize land clearance and tree cutting. 2. Install silt fences and sediment traps. 3. Replant vegetation after construction to stabilize soil.	Site Engineer / Environmental Officer
13.	**Water Resources**	Overuse of water and potential contamination	1. Implement water-saving practices (e.g., low-flow equipment). 2. Use water efficiently for dust control.	Environmental Officer

			3. Ensure construction runoff is managed to prevent contamination of local water sources.	
14.	**Soil Contamination**	Risk of soil contamination from construction materials and waste	1. Proper storage and handling of chemicals and hazardous materials. 2. Use spill containment methods and regular spill response drills. 3. Ensure proper disposal of construction waste.	Site Manager / Environmental Officer
15.	**Socioeconomic Issues**	Disruption to local communities, traffic congestion, and potential loss of livelihoods	1. Develop a community engagement plan to inform nearby industries of construction timelines. 2. Minimize disruption by scheduling construction work at off-peak times. 3. Provide employment opportunities for locals during construction.	EHS Manager
16.	**Workers Safety**	Risk of accidents and injuries on-site	1. Provide PPE (Personal Protective Equipment) to all workers. 2. Conduct regular safety training and drills. 3. Implement health and safety protocols (e.g., first-aid stations, emergency exits).	Health & Safety Officer / Site Manager

DURING CONSTRUCTIONAL PHASE				
Sr. no.	**Environmental Aspect**	**Impact**	**Mitigation Measures**	**Responsibility**
9.	**Dust Emissions**	Dust from operations affecting air quality	1. Install air filtration systems in the facility. 2. Regular cleaning of floors and equipment. 3. Maintain proper ventilation to minimize dust buildup.	Operations Manager / Environmental Officer
10.	**Construction Noise**	Noise pollution affecting workers and surrounding areas	1. Install noise barriers and acoustic enclosures around noisy equipment.	Operations Manager / Environmental Officer

			2. Maintain equipment for noise reduction. 3. Conduct regular noise monitoring.	
11.	**Solid Waste Management**	Generation of industrial waste (plastic, metal, electronic waste)	1. Implement a comprehensive waste management system (recycling, reusing, and safe disposal). 2. Separate hazardous and non-hazardous waste. 3. Ensure waste is disposed of by licensed contractors.	Environmental Officer
12.	**Vegetation Loss/ Soil Erosion**	Ongoing impact on vegetation and soil quality due to land use	1. Create buffer zones with vegetation around the plant. 2. Install erosion control measures (e.g., vegetation, mulch) around the facility.	Site Manager / Environmental Officer
13.	**Water Resources**	High water consumption and potential wastewater discharge	1. Install water-saving technologies (e.g., low-flow fixtures). 2. Implement water recycling systems for production processes. 3. Treat wastewater before discharge.	Operations Manager / Environmental Officer
14.	**Soil Contamination**	Risk of soil contamination from operational activities	1. Implement best practices for chemical storage and disposal. 2. Conduct regular soil testing. 3. Prepare for emergency response to spills and leaks.	Environmental Manager / Operations Manager
15.	**Socioeconomic Issues**	Impact on local communities, including employment opportunities and economic growth	1. Continue to provide local employment. 2. Support local suppliers and contractors. 3. Promote community engagement through local initiatives (e.g., education programs).	Community Liaison Officer / Operations Manager
16.	**Workers Safety**	Risk of workplace accidents and health issues	1. Implement regular safety training programs. 2. Ensure proper ventilation and lighting in all workspaces. 3. Provide adequate PPE and medical facilities on-site.	Health & Safety Officer / Operations Manager

Summary of Key Recommendations & Mitigation Measures:

7. **Dust Control**: Both phases should focus on minimizing dust emissions through proper site management and equipment maintenance.
8. **Noise Reduction**: Noise barriers, proper machinery maintenance, and regulating work hours are essential for minimizing noise pollution.
9. **Waste Management**: An effective waste management system should be established for segregation, recycling, and proper disposal of solid and liquid waste.
10. **Soil and Vegetation Protection**: During construction, land clearance should be minimized, and soil stabilization measures should be implemented. In the operational phase, buffer zones should be created around the facility to protect the surrounding environment.
11. **Water Use and Quality**: Implement water-saving technologies and ensure proper wastewater treatment to minimize environmental impact on water resources.
12. **Health & Safety**: Continuous monitoring of workplace safety through training and provision of appropriate protective measures is crucial for worker well-being.

Equipment Maintenance Detail

The subject project is the proposed construction of Mobile Parts Assembling Unit under the name of M/S Wintel (SMC Private) Limited, located at Quaid-e-Azam Business Park, Sheikhupura. The total area of the project site is 3.051 Acres. The production capacity of the proposed unit will be 150,000 per annum approximately. The estimated cost of the proposed project is 341 million Pkr.

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.

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.

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 the construction of the proposed unit.

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;

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.

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.

Responsible Authority

Management of M/S Wintel (SMC-Private) Limited is the responsible authority to take all measures prior to start the activity.

Other departments and agencies

For the impact analysis detailed meetings were held with the management of M/S Wintel (SMC-Private) Limited 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.

Affected & Wider Community

There is no affected community present in the radius of our study area. PGEE team has consulted with the inhabitants of the different villages. They provided positive remarks regarding the subject project and in the favor of the subject activity for the proposed plant.

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.

Categories of stakeholders interviewed in the project area:

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

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.

Findings of the Overall Discussion:

- After the completion of the proposed project the site will be used for industrial activities.
- 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.
- Construction of the proposed project will be completed in the designated timeframe to limit adverse impacts of construction.

- 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 construction of 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:

CONCLUSIONS

- The EIA study reveals that the project is economically viable, socially acceptable and environment friendly.
- It will generate additional jobs during construction and operation phases.
- The proponent has committed to implement the project in the environment friendly manner.
- M/S Wintel (SMC-Private) Limited has secured allotment letter from the QABP.
- M/S Wintel (SMC-Private) Limited will prepare and implement very comprehensive Emergency Preparedness and Response Standard Operating Procedures.
- M/S Wintel (SMC-Private) Limited will prepare and implement very comprehensive Security and Fire Fighting Standards Operating Procedures.

RECOMMENDATIONS

In view of the comprehensive screening process and findings of the present study there is no need of conducting further investigations. Following recommendations shall be followed to minimize any negative impact on the environment and workers or stakeholders.

- Tree plantation inside the unit and near the unit is recommended.
- The untreated wastewater will not be reused for irrigating the vegetation and lawns.
- 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 Wintel (SMC-Private) Limitedwill 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.