



Final Report

**Project Name: Akınal Synthetic Textile **Wet Laid**  
**Production Line****

**Environmental and Social Management Plan (ESMP)**

February 2021

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## Environmental and Social Management Plan (ESMP)

February 2021

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## Acronyms/Glossary

AIIB	Asian Infrastructure Investment Bank
Akinal	Akinal Synthetic Textile Industry Trade Inc.
Company	Akinal Synthetic Textile Industry Trade Inc.
EIA	Environmental and Social Impact Assessment
ESAP	Environment and Social Action Plan
ESDD	Environment and Social Due Diligence
ESF	Environmental and Social Framework
ESMP	Environment and Social Management Plan
ESMU	Environment and Social Management Unit
ESS	Environmental and Social Standards
FPIC	Free, Prior, and Informed Consent
GHG	Greenhouse Gas
GRM	Grievance Redress Mechanism
HR	Human Resources
HS	Health and Safety
ICP	Informed Consultation and Participation
IFC	International Finance Corporation
ILO	International Labour Organization
MoEU	Ministry of Environment and Urbanization
MoTAT	Mobile Waste Tracking System
NP	Natural Park
OIZ	Organized Industrial Zone
OSBÜK	Organized Industrial Zones Supreme Organization
PCB	Polychlorinated biphenyls
PCT	Polychlorinated terphenyls
PDoEU	Provincial Directorate of Environment and Urbanization
PM	Particulate Matter
Project	Wetlaid Production Line Investment Project
PPE	Personal Protective Equipment



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PS	Performance Standard
SDS	Safety Data Sheet
SEP	Stakeholder Engagement Plan
TurkStat	Turkish Statistical Institute
WHO	World Health Organization



## 1.0 Introduction

The ESMP document summarizes the potential environmental and social impacts identified during ESAP study and assesses further environmental and social risks and impacts of the project. In addition, the report determines the necessary mitigation measures and summarizes the necessary management and monitoring plans to ensure that impacts are dealt with and mitigation measures are followed during the project activities.

This ESMP ensures that appropriate levels of environmental and social impact assessment are carried out as part of project design, including public consultation process. In addition to the management procedures and plans described in this document, reference is also made to the other live documents such as Environment and Social Action Plan (ESAP), Environment and Social Due Diligence (ESDD) Report including Gap Analysis and Stakeholder Engagement Plan (SEP) developed for this Project. These documents describe the detailed environmental and social protection plans and will be utilized as key guiding documents in all the proposed management, monitoring and mitigation measures outlined in this ESMP.

## 2.0 Scope of the ESMP

This ESMP is being prepared to manage the environmental and social impacts through and specific mitigation actions required to implement the project in accordance with the requirements of ESAP, applicable national legislation, Environmental and Social Policies of the Development Investment Bank of Turkey, the Performance Standards (PSs) defined by the IFC (International Finance Corporation)'s Environmental and Social Performance Standards published on 01<sup>st</sup> January 2012 and Environmental and Social Framework of Asian Infrastructure Investment Bank (AIIB) published in February 2016 and amended in February 2019.

It provides an overview of the environmental and social baseline conditions on the routes of the proposed second segment of the project, summarizes the potential impacts associated with the proposed construction and pavement works and sets out the management measures required to mitigate any potential impacts in a series of discipline specific ESMP. This ESMP is to be implemented by Akinal Synthetic Textile Industry Trade Inc. (Akinal or the Company) and the sub-contractors to be commissioned by Akinal for the **Wetlaid Production Line** Investment Project (the Project).

## 3.0 Purpose of ESMP

The project-Specific ESMP is a project-specific source document detailing the environmental and social protection requirements to mitigate and minimize the adverse impacts. The ESMP's primary purpose is to ensure that the environmental requirements and social commitments associated with the project are carried forward into implementation and operational phases of the project and are effectively managed. The specific objectives of this ESMP are as hereunder:

- Minimizing any adverse environmental, social and health impacts resulting from the project activities;
- Prevent or compensate for any loss of the affected persons;
- Conducting all project activities in accordance with the relevant Local Laws and IFC Performance Standards, policies and guidelines;
- Prevent environmental degradation as a result of either individual subprojects or their cumulative effects;
- Enhance positive environmental and social outcomes;
- Ensure that the ESMP is feasible and cost-efficient;
- To act as a guidance in order to ensure that the project impact mitigation measures are properly implemented and monitored;
- Develop methods and mechanisms to ensure that all stakeholders concerns are addressed;



- Increase environmental and social management performance of the project.

## 4.0 ESMP Structures

The ESMP comprises this document and a series of specific supporting plans which are provided as appendices to this document.

The ESMP outlines the environmental and social management processes and procedures applicable to the project and includes the topics which are common to all environmental and social disciplines.

The ESMP is structured as follows:

- Chapter 1 - Introduction
- Chapter 2 - Scope of the ESMP
- Chapter 3 - Purpose of ESMP
- Chapter 4 - ESMP Structures
- Chapter 5 - Intended Users
- Chapter 6 - Assumptions and Limitations
- Chapter 7 - Project Description
- Chapter 8 - Description of the Affected Environment
- Chapter 9 - Policies, Legal and Administrative Framework
- Chapter 10 - Environmental and Social Aspects/Impacts
- Chapter 11 - Workforce
- Chapter 12 - Public Consultations and Disclosure
- Chapter 13 - Grievance Redress Mechanism
- Chapter 14 - Health and Safety
- Chapter 15 - Organizational & administration requirements for environmental and social m
- Chapter 16 - Institutional Strengthening
- Chapter 17 - Environmental and Social Management Plan (ESMP)
- Chapter 18 - Monitoring Mechanism

## 5.0 Intended Users

The aim of this document is to communicate to the Project Team (including sub-contractors) about the potential environmental and social issues associated with the proposed scheme and the procedures and mitigation measures that are required to be implemented.

The Project Team will utilize this ESMP during project execution to achieve effective, appropriate environmental and social management.

In accordance with the IFCs Access to Information Policy (January 2012), this document will also be made available to the public via the Project website and in hard copies at specified locations.

## 6.0 Assumptions and Limitations

Certain limitations are imposed as a result of the translation from Turkish documents affecting the legibility of the report.

As part of the Environmental Impact Assessment “Indigenous Peoples” have not been identified in Turkey.

This ESMP should be regarded as a live document and should be reviewed and updated as impacts become apparent during the project life.





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## 7.0 Project Description

Wetlaid Production Line Investment Project (the Project) with a total capacity of 13,000 tonnes/year non-wooden fabric production is to be planned by Akınal Synthetic Textile Industry Trade Inc. (Akınal or the Company) within the existing textile factory of Akınal in the Gaziantep 4<sup>th</sup> Organized Industrial Zone (OIZ) in the Şehitkamil District of the Gaziantep Province.

Akınal was founded in 1999. With more than 1,000 employees in the existing plants and headquarter located in Gaziantep, the Company has been manufacturing nonwoven roll goods since the beginning of 2002. The Company is the first spunlace nonwoven roll-goods manufacturer in Turkey.

In addition to the factory in Gaziantep, a new facility of The Company was started production at the end of 2017 in Tallin, Estonia on 24,000 m<sup>2</sup> of land with a closed area of approximately 11,000 m<sup>2</sup>. This facility produces spunlace nonwoven products for diaper, personal care, medical, wet and dry wipes industries with an annual capacity of more than 18,000 tonnes. The Company exports the products to more than 50 countries in 5 different continents.

The existing textile factory is operated with a 43,941 tonnes/year non-woven fabric and 52,796 tonnes/year processed non-woven fabric production capacity. After realization of the Project, additional 13,000 tonnes/year non-woven fabric production is planned. Therefore, non-woven fabric production capacity of the factory will increase to 56,941 tonnes/year.

Layout of the factory is provided in Figure 7-1. The additional non-woven fabric production will be carried out in the building to be constructed next to the existing F block, which is here after called “F block addition” (Figure 7-2).

The existing factory is located on the block/parcel numbered 101/17 in the 4<sup>th</sup> OIZ. The area is owned by Akınal and total area of the parcel is approximately 418,804.74 m<sup>2</sup> according to the title deed. Existing closed area of the factory is approximately 173,527 m<sup>2</sup> according to the Capacity Report dated 31<sup>st</sup> July 2019. Construction of the F block addition will be conducted in approximately 6,500 m<sup>2</sup>, which is approximately 3.75% of the existing close area in the existing factory.





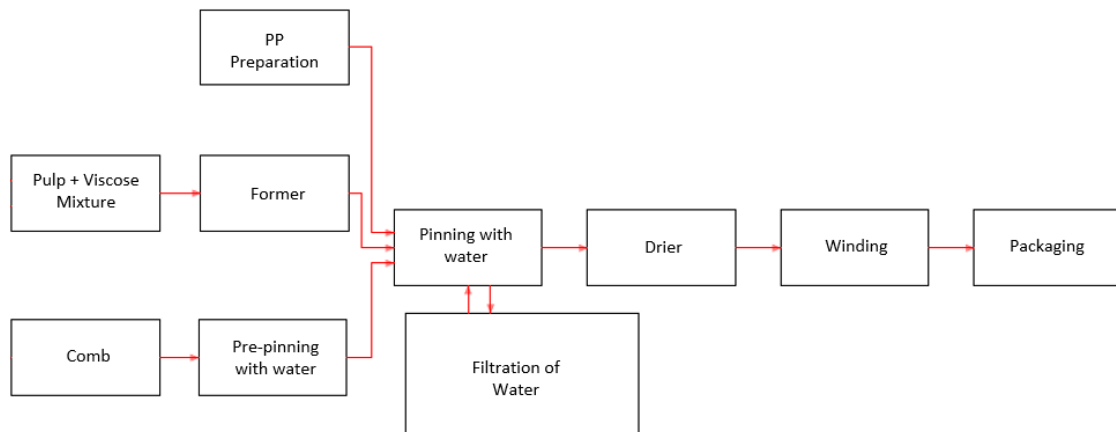
**Figure 7-1:** The general layout of the existing buildings and F block addition<sup>1</sup>



**Figure 7-2:** The Project Area (F Block Addition)

<sup>1</sup> The Project area is demonstrated in red, the building constructed within the scope of the Project is demonstrated in blue.

The non-woven fabric production with wetlaid process is demonstrated in Figure 7-3.



**Figure 7-3: Wetlaid process flow chart**

According to the information provided by the Company, preparations for the construction was started in December 2020 and construction will be completed in February 2021. After equipment purchase and montages, proposed date for start of production is November 2021.



## 8.0 Description of the Affected Environment

The project will be located in the South-eastern Anatolia Region of Turkey, Gaziantep Province, Şehitkamil District, Başpınar OSB Neighbourhood, Gaziantep 4<sup>th</sup> OIZ, block no: 101, parcel no: 17. The area is owned by Akinal and total area of the parcel is approximately 418,804.74 m<sup>2</sup> according to the title deed.

The new building to be constructed within the scope of the Project (F block addition) has approximately 6,500 m<sup>2</sup> area. This area is adjacent to existing factory buildings and is not used for any purposes, i.e., agriculture, grazing or industrial purposes. Therefore, there is no involuntary resettlement and no economic displacement as a result of the proposed project's construction and operation.

The proposed project area has been nominated as industrial area according to the 1/100.000 scale - Environmental Plan and 1/5000 scale – zoning plan.

Since the Project is located in OIZ, it is surrounded by industrial plants which are mainly textile plants. The industrial plants surrounding the Project area are demonstrated in Figure 8-1.

According to the Google Earth view, the closest settlements are the Karahüyük Neighbourhood which is approximately at a distance of 750 m east (the closest building), Atabek Neighbourhood which is approximately at a distance of 1.9 km east and Dülük Neighbourhood which is approximately at a distance of 2.5 km northwest of the Project area. Figure 8-2 shows the nearest residential areas to the project site.

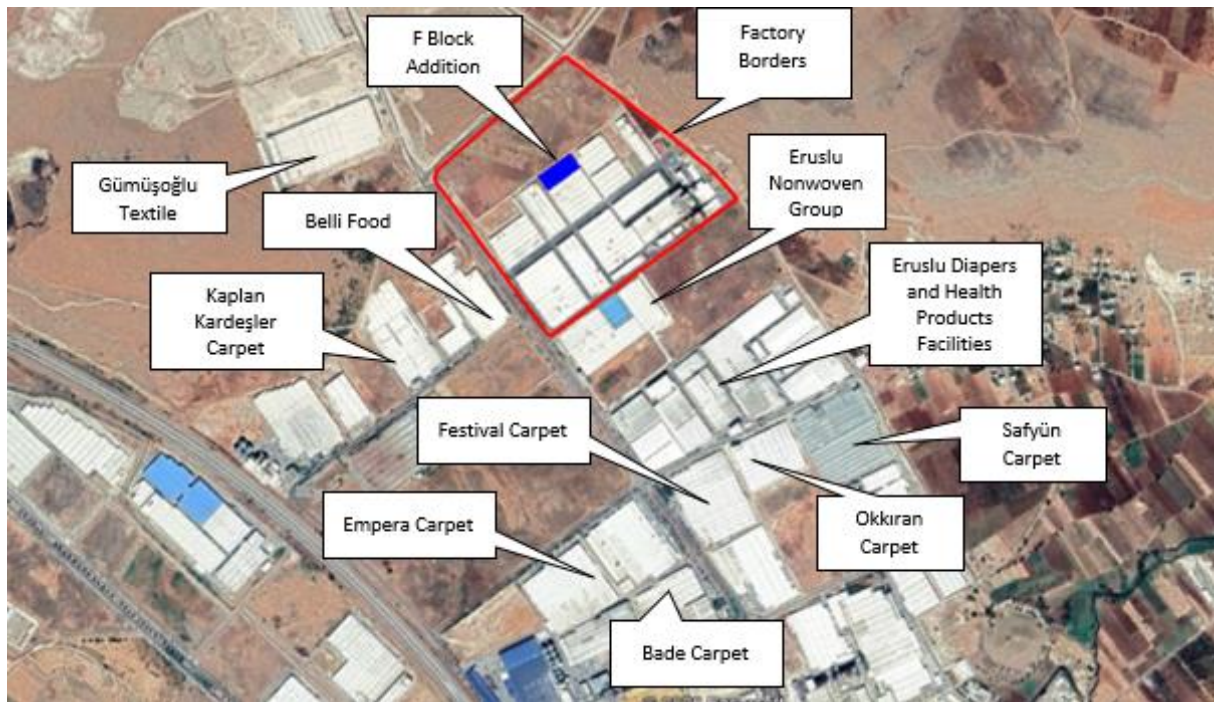


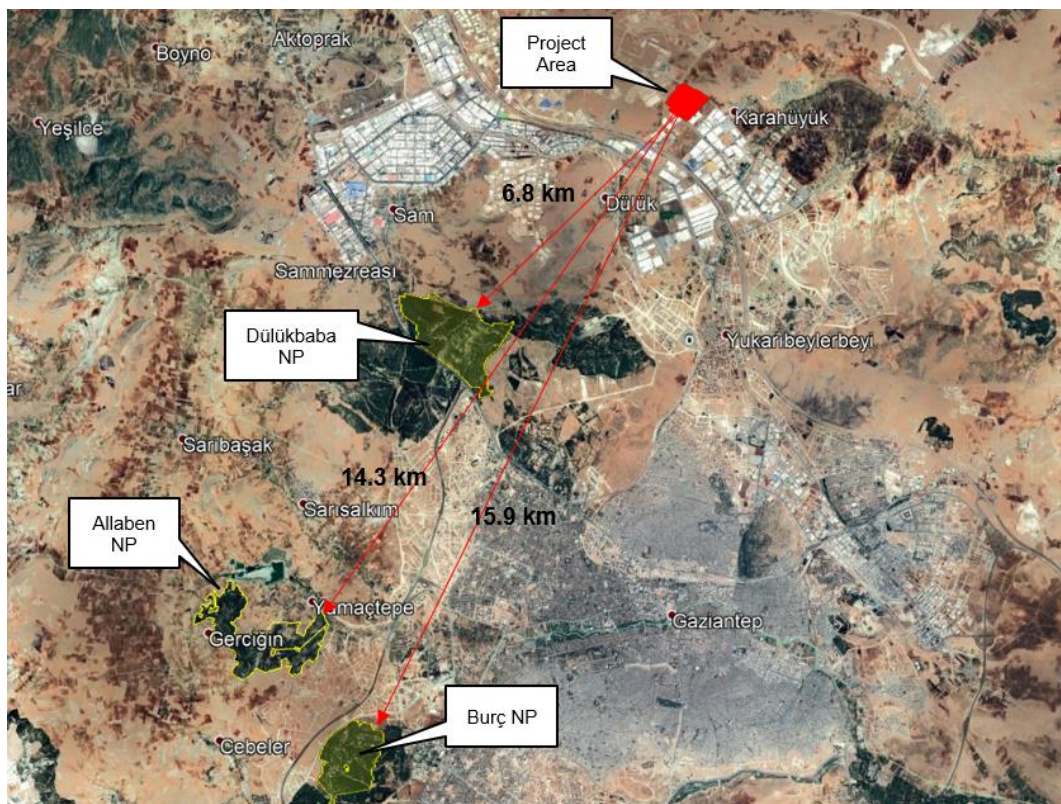
Figure 8-1: Industrial plants around Project location<sup>2</sup>

<sup>2</sup> Borders of the Akinal factory is demonstrated in red, the building constructed within the scope of the Project is demonstrated in blue.





**Figure 8-2:** The nearest residential areas to the Project location and the highway<sup>3</sup>



**Figure 8-3:** Protected areas around the Project location<sup>4</sup>

<sup>3</sup> Borders of the Akinal factory is demonstrated in red, the building constructed within the scope of the Project is demonstrated in blue.

<sup>4</sup> Source: Data Portal of the Ministry of Agriculture and Forestry



The Project area is not located within the borders or next to any wetland area. The nearest wetland is a stream which passes through approximately 2 m southeast of the Project location. Wastewater treated at the Gaziantep OIZ wastewater treatment plant is discharged to this creek (Figure 8-4). The wastewater treatment plant is located approximately 2 km southeast of the Project location.



**Figure 8-4:** Wetlands around Project location<sup>5</sup>

There is not any forest around the Project area. The closest forest area to the Project area is present next to the Dülük Baba NP which are located approximately at 5 km distance to the project location based on the Google Earth view (Figure 8-4). The nearest agricultural lands are located in Karahüyük Neighbourhood next to the OIZ (Figure 8-3).

## 9.0 Policies, Legal and Administrative Framework

### 9.1 National Legislation

The main environmental and social legislative documents in Turkey related to the Project are as follows:

- Constitution of the Republic of Turkey (Official Gazette no: 17863 on 09<sup>th</sup> November 1982)
- The Environmental Law No: 2872 (Official Gazette no: 18132 on 11<sup>th</sup> August 1983)
- The Occupational Health and Safety Law No: 6331 (Official Gazette no: 28339 on 30<sup>th</sup> June 2012)
- The Labor Law No: 4857 (The Official Gazette no: 25134 on 10<sup>th</sup> June 2003)
- The Law on Right to Information No: 4982 (Official Gazette no: 25269 on 24<sup>th</sup> October 2003)

<sup>5</sup> Borders of the Akinal factory is demonstrated in red, the building constructed within the scope of the Project is demonstrated in blue.

- The Civil Law No: 2721 (The Official Gazette no: 24607 on 08<sup>th</sup> December 2001)
- Organized Industrial Zones Implementation Regulation (Official Gazette no: 30674 on 02<sup>nd</sup> February 2019)
- Environmental Impact Assessment Regulation (Official Gazette no: 29186 on 25<sup>th</sup> November 2014)
- The Environmental Permit and Licenses Regulation (Official Gazette, issue 29115 dated 10<sup>th</sup> September 2014)
- Regulation on Industrial Air Pollution Control (Official Gazette, issue 27277, dated July 3<sup>rd</sup>, 2009)
- Regulation on Assessment and Management of the Environmental Noise (Official Gazette, issue 27601, dated 4<sup>th</sup> June 2010)
- Regulation on Waste Management (Official Gazette, issue 29314, dated 02<sup>nd</sup> May 2015, amended on 23<sup>rd</sup> March 2017 - 30016)
- Water Pollution Control Regulation (Official Gazette, issue 25687, dated 31<sup>st</sup> December 2004)

## **9.2 Other Relevant Policies, Frameworks and Standards**

### **9.2.1 Environmental and Social Policies of the Development Investment Bank of Turkey<sup>6</sup>**

The Development Investment Bank of Turkey announced the Environmental and Social Policy document, a basis for all its activities and services, to showcase to shareholders its point of view on the management and reduction of potential negative impacts and risks on social and environmental activities.

The Bank closely follows and implements national legislation, laws and regulations to manage its environmental and social impact while fulfilling its legal obligations. It consistently follows national and international developments within the industry and best practices in environmental and social issues. The Bank supports and joins all kinds of environmentally friendly activities and volunteering efforts particularly concerning education and the environment, along with all public and civil society organizations as well as other shareholders who enhance social prosperity and development.

While reducing its negative impact stemming from operational activities, the Bank supports positive environmental movements with its efforts to increase energy and resource efficiency. To this end, the Bank regularly monitors energy, water and paper use, air emissions, waste generation and greenhouse gas emissions and aims to improve its reduction performance.

The Environmental Management System targets the principles below:

- Reduce the use/waste of resources and the generation of waste while we carry out our activities and services without any loss in our quality of service,
- Create a positive environmental impact and awareness through the Bank's activities and services,
- Minimize our damaging impact on human health and the environment,
- Ensure sustainability and continuous improvement of the established system,
- Support all environmentally friendly activities and all kinds of volunteering activities,
- Establish a management system that is world-class and compliant with the TS-EN-ISO 14001 Environmental Management System Standards.

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<sup>6</sup> <https://kalkinma.com.tr/en/about-us/environmental-development/environmental-and-social-policies>



## 9.2.2 Environmental and Social Framework of AIIB<sup>7</sup>

Environmental and social sustainability is a fundamental aspect of AIIB's support for infrastructure development and enhanced interconnectivity in Asia. AIIB's Environmental and Social Framework (ESF) is approved in February 2016 and amended in February 2019. ESF is a system that supports the Bank and its clients in achieving environmentally and socially sustainable development outcomes. It does so by integrating good international practice on environmental and social planning and management of risks and impacts into decision-making on, and preparation and implementation of, Bank supported Projects.

Overarching Policy of AIIB is that the Bank recognizes that environmental and social sustainability is a fundamental aspect of achieving outcomes consistent with its mandate to support infrastructure development and enhance interconnectivity in Asia. The objective of this overarching policy is to facilitate achievement of these development outcomes, through a system that integrates sound environmental and social management into Projects.

Three associated mandatory environmental and social standards (ESSs) set out more detailed environmental and social requirements relating to the following:

- ESS 1: Environmental and Social Assessment and Management;
- ESS 2: Involuntary Resettlement; and
- ESS 3: Indigenous Peoples.

## 9.2.3 IFC Performance Standards<sup>8</sup>

The 2012 edition of IFC's Sustainability Framework, which includes the PSs, applies to all investment and advisory clients whose projects go through IFC's initial credit review process after 1st January 2012. IFC PSs are showed in Table 9-1.

**Table 9-1: IFC Performance Standards and objectives**

IFC Performance Standard (PS)	Objective
PS1 – Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> <li>- To identify and evaluate environmental and social risks and impacts of the project.</li> <li>- To adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment.</li> <li>- To promote improved environmental and social performance of clients through the effective use of management systems.</li> <li>- To ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately.</li> <li>- To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.</li> </ul>

<sup>7</sup> <https://www.aiib.org/en/policies-strategies/framework-agreements/environmental-social-framework.html>

<sup>8</sup> [https://www.ifc.org/wps/wcm/connect/Topics\\_Ext\\_Content/IFC\\_External\\_Corporate\\_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards](https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards)



IFC Performance Standard (PS)	Objective
PS2 – Labor and Working Conditions	<ul style="list-style-type: none"> <li>- To promote the fair treatment, non-discrimination, and equal opportunity of workers.</li> <li>- To establish, maintain, and improve the worker-management relationship.</li> <li>- To promote compliance with national employment and labor laws.</li> <li>- To protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain.</li> <li>- To promote safe and healthy working conditions, and the health of workers.</li> <li>- To avoid the use of forced labor.</li> </ul>
PS3 – Resource Efficiency and Pollution Prevention	<ul style="list-style-type: none"> <li>- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.</li> <li>- To promote more sustainable use of resources, including energy and water.</li> <li>- To reduce project-related greenhouse gas (GHG) emissions.</li> </ul>
PS4 – Community Health, Safety and Security	<ul style="list-style-type: none"> <li>- To anticipate and avoid adverse impacts on the health and safety of the Affected Community during the project life from both routine and non-routine circumstances.</li> <li>- To ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.</li> </ul>
PS5 – Land and Acquisition Involuntary Resettlement	<ul style="list-style-type: none"> <li>- To avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs.</li> <li>- To avoid forced eviction.</li> <li>- To anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.</li> <li>- To improve, or restore, the livelihoods and standards of living of displaced persons.</li> <li>- To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure<sup>5</sup> at resettlement sites.</li> </ul>
PS6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> <li>- To protect and conserve biodiversity.</li> <li>- To maintain the benefits from ecosystem services.</li> <li>- To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.</li> </ul>

IFC Performance Standard (PS)	Objective
PS7- Indigenous Peoples	<ul style="list-style-type: none"> <li>- To ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples.</li> <li>- To anticipate and avoid adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts.</li> <li>- To promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner.</li> <li>- To establish and maintain an ongoing relationship based on Informed Consultation and Participation Free, Prior, and Informed Consent (ICP) with the Indigenous Peoples affected by a project throughout the project's life-cycle.</li> <li>- To ensure the Free, Prior, and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples when the circumstances described in this Performance Standard are present.</li> <li>- To respect and preserve the culture, knowledge, and practices of Indigenous Peoples.</li> </ul>
PS8 – Cultural Heritage	<ul style="list-style-type: none"> <li>- To protect cultural heritage from the adverse impacts of project activities and support its preservation.</li> <li>- To promote the equitable sharing of benefits from the use of cultural heritage.</li> </ul>

## 10.0 Environmental and Social Aspects/Impacts

When construction works of the Project is completed and commissioning and production are started, most of the impacts created from the construction activities disappear. Therefore, within the scope of this ESMP, environmental and social impacts of the Project phases are considered separately. Potential environmental and social impacts were determined for each project phase and mitigation measures are developed in accordance with these impacts.

While assessing the environmental and social impacts of the Project, the following criteria were taken into consideration:

- duration of the impact;
- continuity or intermittent effect (occurrence at certain periods or times);
- size of the area where the impact can spread (Area of influence);
- all affected groups and their nature;
- affected structures (livelihoods, physical structures, transport, daily life, education/health etc.)
- negative results caused by the Project impacts (material, temporal or spiritual, in-kind losses / disruptions / obstacles).

According to the level of impacts revealed after the above mentioned assessment, mitigation measures have been determined to eliminate the impact completely or minimize the impacts when elimination is not possible.

OIZs are established for the organized and planned industrialization in a region where different types of industrial facilities can be operated. OIZs provide services to the facilities including infrastructure, transportation and waste management. Therefore, they can also be defined as tools which provide control of the environmental and social impacts of industrial activities and the space-based problems of the industry. These industrial zones have been established as an important instrument of industrialization in Turkey and managed by legislation and regulations according to their objectives and roles defined during the industrialization process. In this sense, by establishing the Project in an OIZ, several factors such as increase in industrial production, development of national industry, encouraging investments within the planned industrial areas in underdeveloped regions, preventing use of agricultural areas for industrial development, increase of employment and use existing infrastructure of the industrial zone can reduce negative environmental and social effects of the Project.

Project impacts can also change when there is any change in the phase of the Project or in the technique used during the Project activities including any technique used during construction. Existing impacts may disappear or new impact may be created. Therefore, as a result of any possible change in Project activities and/or construction technique, the previously identified project impacts, the extent of these impacts or the impact area and mitigation measures can be updated and revised.

In addition to the measures taken during construction and operation phases of the project, the measures taken during planning and design phases are the other tools that will ensure the elimination or minimization of the impacts. During design of the Project and Project activities, determination of the measures which aims to avoid potential impacts will provide an important benefit for elimination or minimization of the negative environmental and social impacts that may occur during the project lifecycle.

Moreover, interrelated management plans prepared within the scope of the Project will ensure that environmental and social impacts are closely monitored, mitigation measures are taken before any environmental or social risk occurs and impacts are minimized.

Continuous monitoring of potential impacts and managing effective stakeholder engagement will minimize the negative impacts of the Project. These will be provided by the ESMP which includes



sustainable, social and environmental oriented Project management plans. In addition, necessary studies will be carried out to develop and increase the benefits provided by the project.

## **10.1 Physical Environment**

### **10.1.1 Visual Impacts**

The closest residential areas around the project location, i.e., Karahüyük Neighbourhood (750 m - the closest building, Atabek Neighbourhood (1.9 km) and Dülük Neighbourhood (2.5 km) and the highway passing through approximately 1.3 km south of the Project area (Figure 1 2) will be critical receptors for possible impacts of the Project on landscape.

Since the existing landscape of neighbourhood of the Project area is changed by the industrial facilities and the Project includes construction of a building next to the existing F block within the factory area, any adverse impact is not expected on landscape.

Photo-impact simulations from significant or sensitive viewpoints (residential areas and highway) to assess the impact on landscape will be prepared and presented with local people during the Stakeholder meetings.

In case of any substantial and unacceptable impact, compensation/mitigation measures described in SEP will be carried out.

### **10.1.2 Air Quality**

Dust formation from earthmoving activities and other gas emissions from construction machinery will be the main sources of impacts on air quality during the construction phase of the project.

These impacts on the air quality, mainly due to dust emissions caused by excavation works and exhaust emissions from the vehicles will be temporary during the construction phase. Measures to mitigate the dust and exhaust emission generation, such as watering of the construction site, temporary maintenance of the vehicles, will be adequate for minimizing the possible environmental impacts. In conclusion, it can be said that there are no relevant critical aspects for the construction phase related to air emissions.

Natural gas is used in the existing facility for production activities. The existing factory has an Environmental Permit covering air emissions permit and according to the latest Emission Measurement Report dated 27<sup>th</sup> August 2019, the emission levels are compliant with the legislation limits. There will not be any change in the heating system of the factory after new investment and any critical aspects for the operation phase related to air emissions are not expected similar to the construction phase.

Details about the air pollution management measures are provided in Annex-I Air Quality Management Plan.

### **10.1.3 Water Quality**

Water will be used for potable water demand of workers, dust suppression and cleaning purposes during the construction phase. Water usage will be required during the operation phase for potable water demand of workers, cleaning purposes and production.

Drinking water demand will be purchased with water suppliers and the potable water will be purchased from the OIZ Directorate water network during construction and operation periods. Water to be used for production activities will be purchased from the OIZ Directorate, similar to the existing factory.

During construction and operation, domestic and industrial wastewater generated by project workers and production activities will be sent to the wastewater treatment plant of the OIZ.

The OIZ has storm water collection system with screeners and oil trappers. Since the Project is planned within the borders of the existing factory, this storm water collection system will be used and any additional action is not required for management of storm water during both construction and



operation phases.

The factory has devices flow rate measurements. Wastewater analysis and measurements including analysis of pollutant concentrations are conducted annually for the existing factory according to Akinal representatives. The analysis and measurements must be continued during construction and operation phases in according to the OIZ monitoring requirements.

Since the new investment will be constructed and operated using the water and wastewater networks of the OIZ and the existing factory has relevant permits, any critical aspects related to wastewater discharges are not expected.

Details about the wastewater management measures are provided in Annex-III Wastewater Management Plan.

#### **10.1.4 Topsoil and Soil Removal**

During the construction phase of the Project, the vegetative topsoil will be removed and stored in a separate designated area and will then be used for landscape rehabilitation activities after completion of the hard fill. The sub-soil excavation material will be used for levelling and filling of any necessary areas. Therefore, any excavation waste will not be created during the construction phase.

#### **10.1.5 Solid Waste**

Waste generation is expected as a result of construction and operation activities. It consists of domestic wastes, package wastes, construction wastes, including excavated materials, hazardous wastes and non-hazardous wastes.

Domestic wastes will be disposed in the landfill of the Gaziantep Municipality. The package wastes will be disposed via the licensed companies.

Similarly, hazardous wastes will be disposed by the licensed companies which have already been contracted by Akinal.

The existing factory has a temporary waste storage area which was approved by the PDoEU. Wastes which will be generated in scope of the Project will be stored in the existing temporary waste storage area. Therefore, any waste storage area will not be constructed during the construction and operation phase of the Project.

Since the new investment will be constructed and operated using the existing waste management structure of the Company and the existing factory has relevant permits, any critical aspects related to waste generation are not expected.

Details about the waste management measures are provided in Annex-II Waste Management Plan.

#### **10.1.6 Soil Erosion**

The Project area where F block addition will be constructed is approximately 6,500 m<sup>2</sup>, which is approximately 3.75% of the existing close area in the existing factory. Therefore, the construction works will be limited and soil erosion will not be an important issue due to the ground preparation, levelling and filling activities carried out during the construction period. The sub-soil excavation material will be used for levelling and filling of any necessary areas. Existing walls around the factory area will prevent landslides and erosion.

#### **10.1.7 Noise Emissions**

Noise emissions will be generated during construction due to earthmoving works, operation of construction machinery and equipment and construction of the new investment. Similarly, operation activities in the factory will generate noise.

The closest residential areas around the project location, i.e., Karahüyük Neighbourhood (750 m - the closest building, Atabek Neighbourhood (1.9 km) and Dülük Neighbourhood (2.5 km), will be critical receptors for noise generation.



Considering the small construction area, limited construction works, presence of walls around the factory borders and existing industrialized situation of the Project area (with possible high baseline noise level), impact of environmental noise generated from the construction works will be low.

The existing factory is exempt from the Noise Permit. The Regulation on Assessment and Management of the Environmental Noise will be followed both during the construction and operation phases. In any case, the Company will also need to carry out a noise measurement campaign during commissioning when all units are in operation, and in case of any complaint.

### 10.1.8 Cumulative Impacts

Since the Project is located in OIZ, it is surrounded by industrial plants which are mainly textile plants. The industrial plants surrounding the Project area are demonstrated in Figure 8-1. Environmental and social cumulative impacts such as air pollution, water consumption, employment, traffic etc. should be evaluated.

As it is discussed in Section 10.1.2, air emissions will be created during both construction and operation phases of the Project. The air emissions will create cumulative impact considering the existing emissions from the industrial facilities in the region, including the existing Akinal factory, and other air emissions sources like traffic, heating of the houses etc. Noise created during project activities may also increase ambient noise level and create cumulative impact. Similarly, project activities can create cumulative impacts on environmental and social compounds like traffic load, water pollution, landscape, biodiversity and employment.

Potential cumulative impacts are summarized in Table 10-1 and Table 10-2 for construction and operation phases.

There is no activity in the construction phase around the project area that may cause cumulative impacts due to impacts arising from construction activities.

**Table 10-1: Potential Cumulative Impacts during Construction Phase of the Project**

Activities	Traffic	Noise and Vibration	Air Pollution	Water Pollution	Landscape	Biodiversity	Employment
Wet Laid Production Line Project	X	X	X	X	-	-	X
Existing Akinal Synthetic Textile factory	X	X	X	X	-	-	X
Other industrial facilities operational	X	X	X	X	-	-	X
Settlements/rural activities	X	-	X	X	-	-	X
<b>Cumulative impacts</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>-</b>	<b>-</b>	<b>X</b>

**Table 10-2: Potential Cumulative Impacts during Operation Phase of the Project**

Activities	Traffic	Noise and Vibration	Air Pollution	Water Pollution	Landscape	Biodiversity	Employment
Akinal Synthetic Textile factory with the wet laid production line investment	X	X	X	X	-	-	X



Activities	Traffic	Noise and Vibration	Air Pollution	Water Pollution	Landscape	Biodiversity	Employment
Other industrial facilities	X	X	X	X	-	-	X
Settlements/rural activities	X		X	X	-	-	X
<b>Cumulative impacts</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>-</b>	<b>-</b>	<b>X</b>

Considering correct implementation mitigation measures provided in Table 17-1, any important cumulative impact from the Project activities is not expected.

### 10.1.9 Permitting

According to the supplied documents and licenses/permits which have already been obtained, the current situation is as follows:

- The Company has title deed for the area where the existing factory is located and the planned Wetlaid Production Line Investment Project is planned.
- Based on the provided documents, the Project area has approved 1/5000 scale – zoning plan.
- The Project is exempt from the EIA Regulation according to the 18<sup>th</sup> December 2020 dated letter of the Gaziantep PDoEU.
- A Preliminary Construction Permit was obtained from the OIZ Directorate on 17<sup>th</sup> December 2020.
- The existing factory has a Wastewater Connection Permit obtained from the Gaziantep OIZ Directorate. The permit is valid until 19<sup>th</sup> October 2023.
- The existing factory has an Environmental Permit dated 07<sup>th</sup> November 2019. The permit covers air emissions permit and it is valid for 5 years.

In case of a capacity extension of at least 1/3 of the total production capacity, the Environmental Permit must be renewed. Since the capacity extension with the new investment is below the threshold, existing Environmental Permit will be valid for the Project.

## 10.2 Biological Environment

There is not any biodiversity investigation to be conducted for the Project area since the Project is exempt from the EIA Regulation. Since the Project area is located in an OIZ, far away from the protected areas (Figure 8-3, Figure 8-4) and the new building will be constructed next to the existing F block within the factory borders (Figure 7-1), it is assumed that there will not be any important impact on biodiversity during construction and operation periods of the Project.

General environmental mitigation measures defined hereby in this report for the protection of biodiversity must be taken in timely manner in order to prevent or minimize possible impacts of the Project.

## 10.3 Socio-economic Aspects / Impacts

Environmental project impacts that occur during the Project lifecycle are considered from social, economic and cultural perspectives.

The impacts, restriction or pressures on the lands, private properties, livelihoods, cultural and archaeological sites, traffic and transport, public health and safety and impacts on vulnerable groups are assessed within the scope of the social impacts of the Project.

The social impacts of the Wetlaid Production Line Investment Project will differ between the construction and operational phases of the Project.



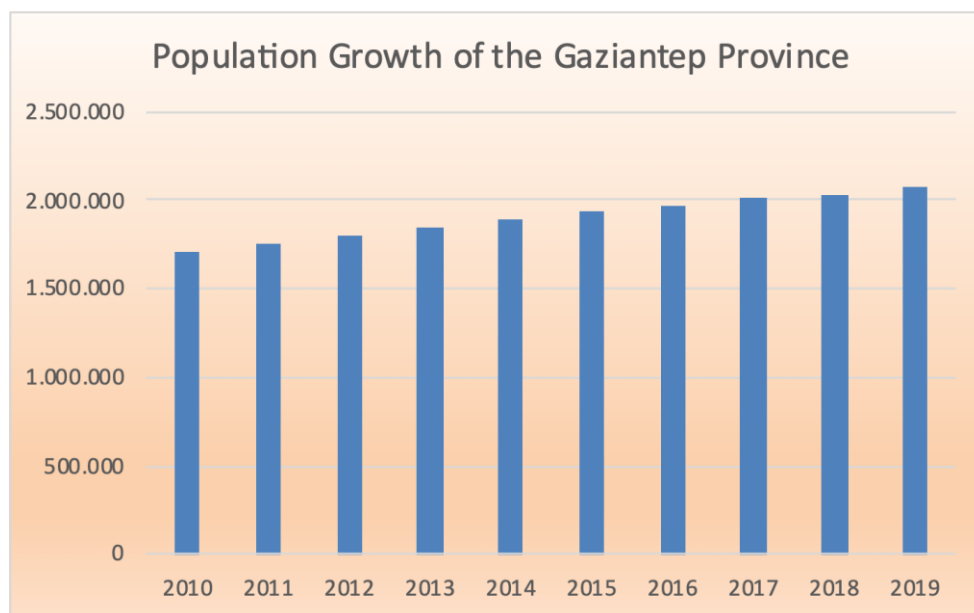
When the construction activities are completed, the impacts originating from the construction will disappear and the effects of the project activities that intensify during the operation period will begin. Therefore, the social impacts of the project and the measures defined for the elimination or prevention of the impacts have been planned by considering the different phases of the project.

Project impacts are assessed based on the magnitude of the impact and the sensitivity of the affected groups.

The social impacts of the project have been assessed in terms of the sociodemographic structure of the affected settlements as well as the differences between the project phases.

The Project Site will be located in the Southeast Region of Turkey, Gaziantep Province, Şehitkamil District, Gaziantep 4<sup>th</sup> OIZ.

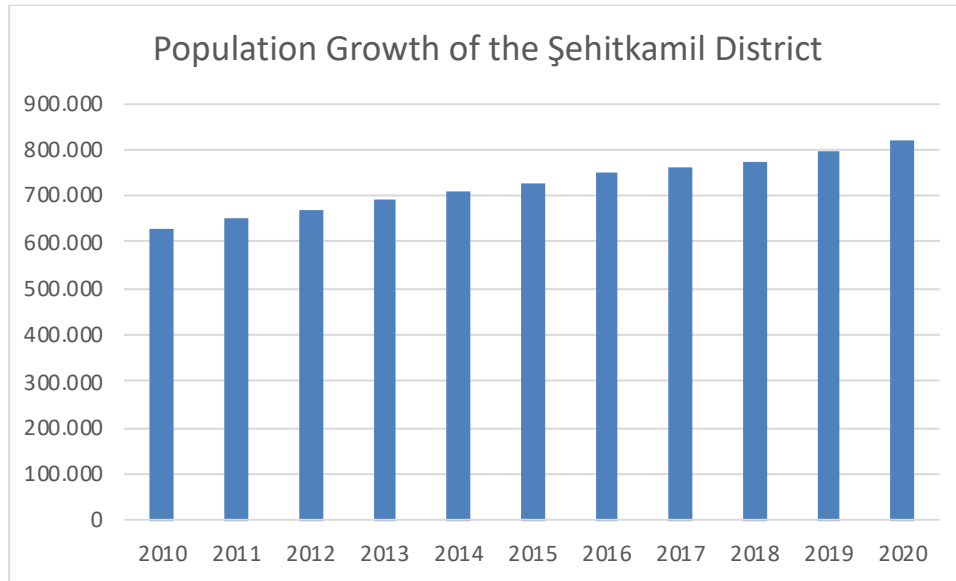
According to TurkStat (Turkish Statistical Institute), the population of the Gaziantep Province is 2,101,157 and the population of the Şehitkamil District is 817,412 in 2020.



**Figure 10-1:** Population of the Gaziantep Province by the years

The graphics below shows the population growth of Gaziantep Province and Şehitkamil District by the years. It has been seen that the population of both settlements has increased continuously for the last 10 years. It is seen that the population of Şehitkamil district has a higher rate of increase compared to the city in general.





**Figure 10-2: Population of the Şehitkamil District by the years**

The closest settlements to the Project Site are the Karahüyük Neighbourhood which is approximately at a distance of 750 m east, Atabek Neighbourhood which is approximately at a distance of 1.9 km east and Dülük Neighbourhood which is approximately at a distance of 2.5 km northwest of the Project area (Figure 8-2).

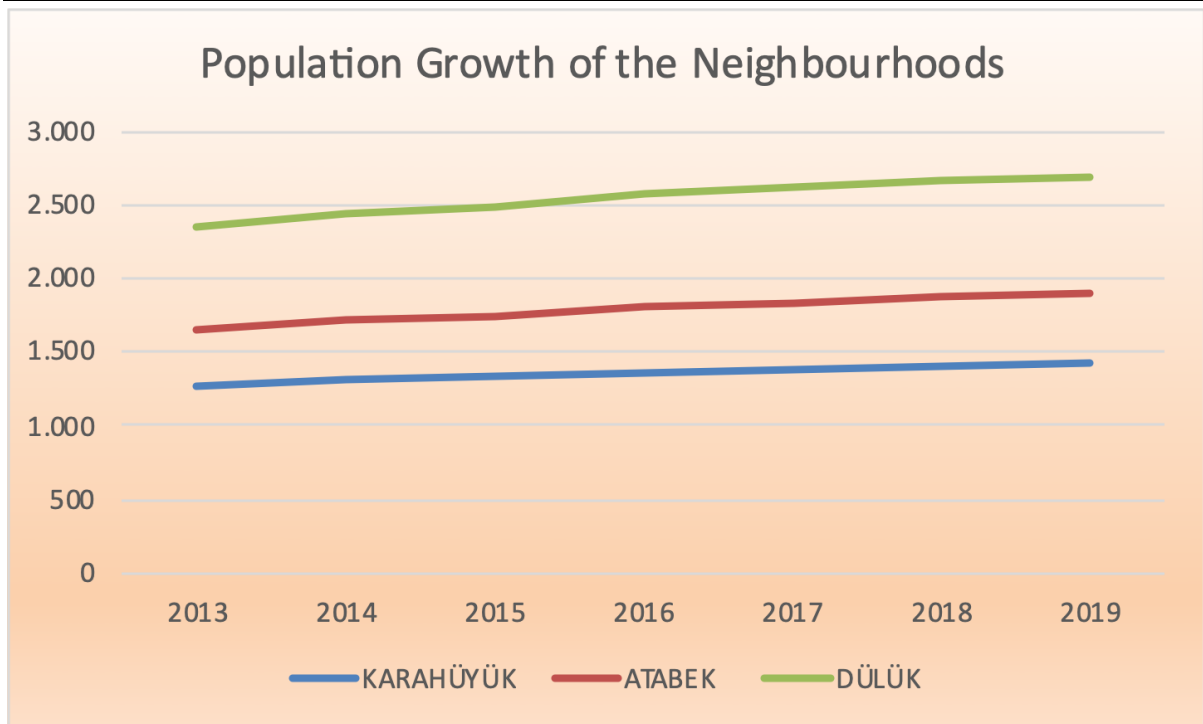
The highway connecting Osmaniye, Gaziantep and Şanlıurfa Provinces passes through approximately 1.3 km south of the Project area.

The population changes of the closest settlements to the project site over the years are given in the graphic below.

Among the surrounding neighborhoods, Dülük Neighborhood is the settlement with the highest population. Dülük is followed by Atabek and Karahüyük neighborhoods. When the population changes of the neighborhoods over the years are evaluated, it is seen that all three neighborhoods have an increasing trend similar to Şehitkamil and Gaziantep.

Due to these neighborhoods located next to one of the largest OIZs in the region, population of the neighborhoods increase under the effect of the development results of the OIZ.

In addition, the fact that Gaziantep is a city that receives immigration continuously, in other words, it receives immigration from the less developed cities and rural areas in the surrounding area, is an important factor affecting the population increase of these neighborhoods.



**Figure 10-3:** Population growth of the neighbourhoods

### 10.3.1 Livelihood

The dominant sector in terms of Gross Value Added in the region where Gaziantep is located is the service sector with a share of 59.1%. Industry is the second sector in the region with 30.5% share and agriculture and livestock sector has 10.4% share. The main industrial activities in the Gaziantep Province are textile, food, metals and machine, chemicals, plastics, wood products, paper etc. The main industrial sectors in the Gaziantep OIZ where the Project is located are textile, medical products, construction, furniture, chemical, plastic, food and machine rug.

According to the data of OSBÜK (Organized Industrial Zones Supreme Organization), there are organized industrial zones in Gaziantep with detailed information in the table below<sup>9</sup>. The OIZ, which includes the project site and is located in the center of Gaziantep and consists of stages 1, 2, 3, 4 and 5, has been shown as Gaziantep OIZ.

When the data are evaluated, it shows that the industrial sector is still developing in Gaziantep. While the capacities of the organized industrial zones are filling, development continues by establishing new OIZs.

**Table 10-3:** Organized Industrial Zones of Gaziantep

Name of the Organized Industrial Zones	Area (Ha)	Total industry parcel	Allocated industrial parcel	Industrial parcel under construction
Gaziantep İslahiye	85,7	61	52	3
Gaziantep Nizip	226,28	92	92	4
Gaziantep Oğuzeli	94	225	136	6
Gaziantep OIZ	4.148,92	1406	2406	376
Gaziantep TDI	475	686	686	20

Gaziantep is a city where agriculture, husbandry and tourism sectors are developed together with the industrial sector. Agriculture and husbandry have very important role in Gaziantep. Gaziantep TDI, which is a Stock Organized Industrial Zone and the feasibility works for the establishment of the second

<sup>9</sup> <https://www.ika.org.tr/assets/upload/dosyalar/gaziantep.pdf>

Stock Organized Industrial Zone show the importance of the agricultural and husbandry activities in the Gaziantep economy.

The most important agricultural products in the province are wheat, barley, coral, chickpeas, watermelon, melon, onion, garlic, cotton, grape, tomato, pepper, eggplant, bean, radish and carrot. In addition, pistachio, olive and pomegranate are grown as trees.

When the land structure around the OIZ where the project site is located, and the location of the settlements are evaluated, it is seen that the agricultural lands are located on the border of the OIZ. This case shows that one of the main livelihoods of the surrounding residential areas is agricultural and husbandry activities. Therefore, the project impact has been assessed in a way to examine the usage patterns of the agricultural lands close to the settlements, the conditions of access to the lands, the impacts and pressures on the agricultural livelihoods.

**Table 10-4: Agricultural Products in Gaziantep**

Products	Production Area (ha)	Production Amount (tons)
Fruit	2.133.658	284.705
Vegetables	101.523	224.896
Field	1.197.546	500.546

Şehitkamil District is located in a region where agricultural activities are carried out. Within the agricultural support announced for 2020, Barley, Wheat, Lentil, Chickpea, Feed Crops, Olive - Olive oil production in Şehitkamil District were determined as priority agricultural products to be supported in the District<sup>10</sup>.

Gaziantep is a locomotive province for Southeastern Anatolian Region in the tourism sector. Development of the Gaziantep' tourism continues especially in the field of gastro tourism which has developed rapidly in recent years.

Gaziantep Zeugma Mosaic Museum which is one of the most important museums of the Gaziantep is in Şehitkamil District and about 10 km from the Project Site.

### 10.3.2 Land Use

Gaziantep Organized Industrial Zone, with the decision of the Council of Ministers T.C. Affiliated to the Ministry of Industry and Trade, it was established with the participation of the Province, Municipality, Special Provincial Administration, Chamber of Commerce, Chamber of Industry, Industry Business Chambers Association and Organized Industrial Zone Industrialists Association.

Turkey's largest organized industrial zone of Gaziantep is installed in 43 million 250 thousand m<sup>2</sup>. OIZ consists of 5 regions. The occupancy rate in regions 1, 2, 3 and 4 reached 100 percent, and in the 5th region the occupancy rate reached 40 percent.

The 4th Organized Industrial Zone, in which the project site is located, was established in 2002 on an area of 1,170 hectares. In the 4th Organized Industrial Zone, land has been allocated to enterprises that will produce mostly medium and large scale. There are 138 companies operating in the 4th Zone, and a total of 140 industrialists were allocated places.

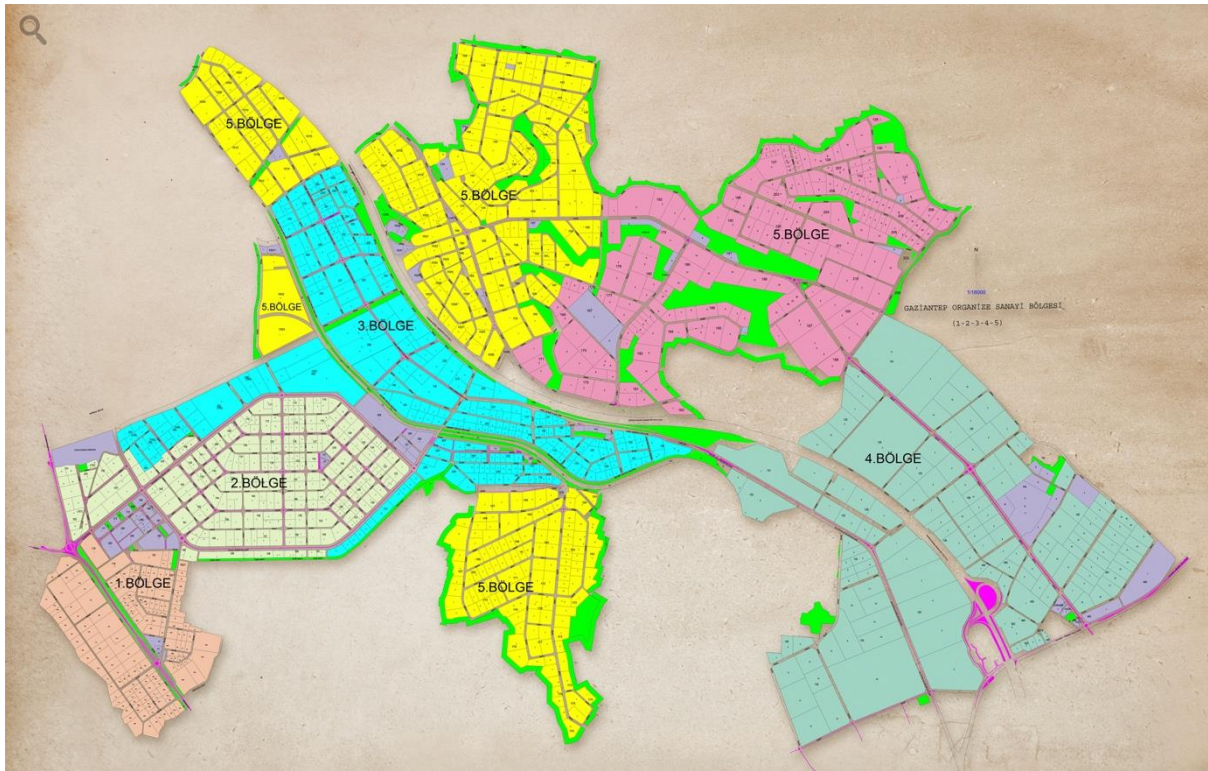
The industrial plants surrounding the Project area are demonstrated in the map below<sup>11</sup>.

<sup>10</sup>

<https://gaziantep.tarimorman.gov.tr/Belgeler/2019/2020%20YILI%20HAVZA%20BAZLI%20%C3%9CR%C3%9CN%20DESEN%20C4%B0.pdf>

<sup>11</sup> <https://www.gaosb.org.tr/genel-sayfa/bolgeler/bolge-krokisi-17.html>





**Figure 10-4: Map of the Gaziantep Organized Industrial Zone**

Project site has been nominated as industrial area according to the 1/100.000 scale - Environmental Plan and 1/5000 scale – zoning plan.

The new building to be constructed within the scope of the Project (F block addition) has approximately 6,500 m<sup>2</sup> area. This area is adjacent to existing factory buildings and is not used for any purposes, i.e., agriculture, grazing or industrial purposes. Project site has been nominated as industrial area according to the 1/100.000 scale - Environmental Plan and 1/5000 scale – zoning plan. Therefore, there is no involuntary physical or economical resettlement during the construction and operation phases of the Project.

When the land structure and settlements around the OIZ are assessed, it is seen that the agricultural lands are located on the border of the OIZ in Karahüyük Neighbourhood.

Based on this, it can be revealed that, before the establishment of the Gaziantep OIZ, the area was consist of agricultural lands which was using for the production of agricultural products. Therefore, the impacts of the Project activities on the agricultural lands and livelihood are assessed and will be monitored during the Project lifecycle as well.

### 10.3.3 Property Resources Issues

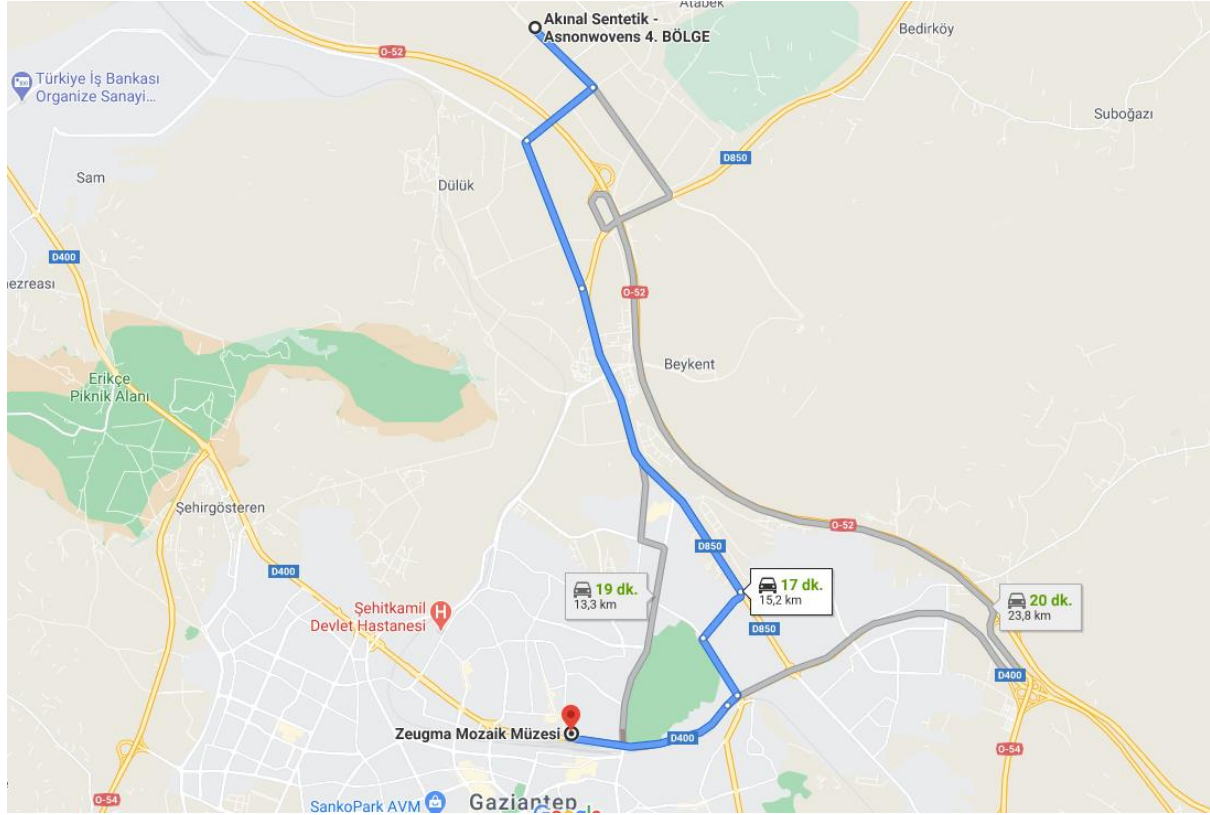
Since the Project site is located in the OIZ, Project does not have an impact on private properties during the preparation, construction or operation phase of the Project. No expropriation work has been carried out within the scope of the project.

### 10.3.4 Cultural and Archaeological Area

The project site is in the Gaziantep OIZ. There are no tangible and intangible cultural heritage sites or archaeological sites around the project site.

However, "Zeugma Mosaic Museum"<sup>12</sup>, the most important and most visited museum of Gaziantep, is located 10 km away from the Project area. The project has no direct or indirect impact on the museum, access road or visitors. This situation will be taken into account during the project process.

Distance between Zeugma Mosaic Museum and Project Site is shown on the map below.



**Figure 10-5: Distance between Zeugma Mosaic Museum and the Project Site**

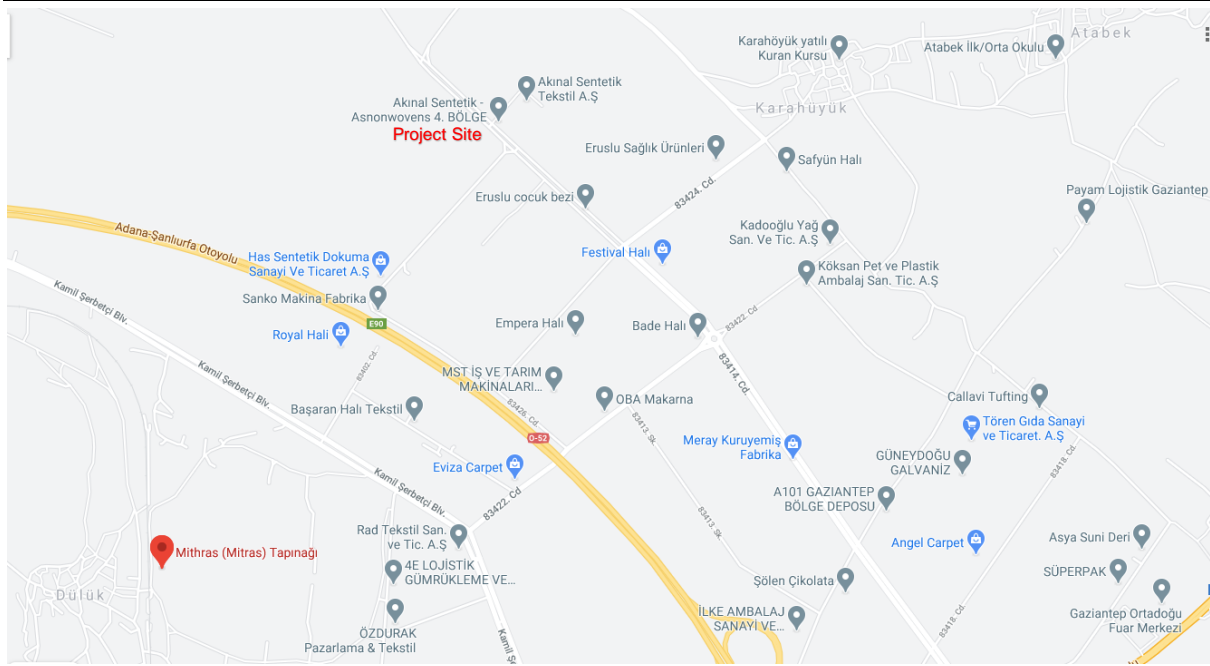
Additionally, besides the Zeugma Mosaic Museum; in Dülük Neighbourhood which is approximately at a distance of 2,5 km northwest of the Project area, Mithras Temple is located.

The project has no direct or indirect impact on the museum, access road or visitors, as well. This situation will be also taken into account during the project process.

Location of the Mithras Temple and Project Site is shown on the map below.

<sup>12</sup> <http://zeugma.org.tr/>





**Figure 10-6: Location of the Mithras Temple and the Project Site**

### 10.3.5 Access Problems and Traffic Disruption

Since the Project building will be constructed in the parcel which the existing factory has already been constructed and is in operation, no new road or any additional infrastructure construction will be necessary for the project. Existing infrastructure of the OIZ will be used for the construction and operation phases of the Project.

Impacts on traffic and transportation resulting from the activities of the Project will be evaluated in two different areas and in two different ways.

When traffic and/or transportation impacts on the access roads will be occurred OIZ, consultations meeting will be held with the OIZ management.

In this process, this process will be carried out in consultation and communication with two units within the OIZ. The Civil Works Department Construction and Infrastructure Services Directorate and the Gaziantep OIZ Technical Department are the contact units. When situations that will slow down or disrupt the traffic occur on the roads in the OIZ during the construction or operation process, the relevant stakeholders will be informed through the tools and methods specified in the Stakeholder Engagement Plan (SEP).

The highway connecting Osmaniye, Gaziantep and Şanlıurfa Provinces passes through approximately 1.3 km south of the Project area. Outside of the OIZ, in case of traffic density on the roads that intersect with the access roads of the surrounding residential areas which are Karahüyük, Atabek and Dülük Neighborhoods, information will be provided to the relevant stakeholders through the defined tools and methods in the SEP.

In the assessments regarding the surrounding areas and livelihoods in the above sections; it was stated that especially the Project Site is located close to, and there are agricultural lands on the northeastern border of the OIZ. Besides, in the closest settlements which are Karahüyük, Atabek and Dülük Neighborhoods, there are primary, secondary schools and high schools. Atabek Primary and Secondary School, Karahüyük Primary and Secondary School, Dülük Secondary School and Dülük 8 Şubat Anatolian Highschool are the nearest schools to the project site.

When traffic and/or transportation impacts will be occurred caused from the Project activities on the access roads or common roads used by the neighborhoods, agricultural activities or schools; measures



such as, the flagman, the reduction of speed limits, warning signs, rearranged of the traffic density hours according to schools will be implemented, especially for the surrounding access roads used by schools, residential areas and agricultural lands.



**Figure 10-7: Schools, agricultural lands and access roads around the Project site**

### 10.3.6 Health and Safety

Issues related to community health and safety are examined in Section 14.2.

## 10.4 Resource Efficiency

It is planned to achieve resource efficiency with the natural sources listed in **Hata! Yer işareti başvurusu geçersiz.** below or any other natural sources applicable to the Project activities. Measurements and records will be made every month and will be evaluated at the end of each year. It will be aimed to decrease use of the below parameters every month in accordance with the resource efficiency target.

**Table 10-5:** Resource efficiency parameters and summary of the benefits (this Table will be updated during the operation phase.)

BENEFIT BY MEASURE							
Natural Sources		Fuel savings (Fuel type)	Electricity savings	Heat savings	Renewable Heat Generation	Renewable Electricity Generation	Water or materials savings
1	Water	GJ/year	MWh/year	GJ/year	GJ/year	MWh/year	M3/year or tonnes/year
2	Electricity	GJ/year	MWh/year	GJ/year	GJ/year	MWh/year	M3/year or tonnes/year
3	Diesel/fuel	GJ/year	MWh/year	GJ/year	GJ/year	MWh/year	M3/year or tonnes/year
4	Measure name	GJ/year	MWh/year	GJ/year	GJ/year	MWh/year	M <sup>3</sup> /year or tonnes/year
SUMMARY OF EXPECTED BENEFITS							
<input type="checkbox"/> Greenhouse gas emissions avoided		(       ) tonnes of CO <sub>2</sub> equivalent/year					
<input type="checkbox"/> Adaptation Benefits							
<input type="checkbox"/> Total primary energy use avoided		(       ) GJ /year					
<input type="checkbox"/> Water savings		(       ) m <sup>3</sup> /year					
<input type="checkbox"/> Materials savings		Specify material type: (       ) (       ) tonnes /year					
<input type="checkbox"/> Other qualitative benefits							
<input type="checkbox"/> Total estimated cost savings		EUR       /year					

## 11.0 Workforce

### 11.1 Human Resources Policies and Procedures

Human Resources Policy<sup>13</sup> of Akinal Synthetic Textile Industry Trade Inc is based upon the human rights and also supporting of the vision, mission, principles and values of the Company.

Akinal's Core principles are included in the Human Rights Policy Document<sup>14</sup> and stated below;

- All employees are entitled to equal treatment without distinction of any kind, such as; race, nationally, color, age, sex, religion or disability,
- All employees have right to favorable conditions of work such as equal pay for equal work,
- Safe working conditions, reasonable limitation of working hours, maternity protection and periodic,
- Holidays with pay,
- All employees have the right to join a union, bargain collectively and take action,
- No employee should be exposed to harsh/degrading treatment or harassment,
- Prohibiting the use of forced or compulsory labor or child labor,
- The elimination of corruption in all its forms including bribery and extortion,
- The responsible consideration of the environments and communities in which we operate.

<sup>13</sup> Will be given reference following the development of the HRP document.

<sup>14</sup> Doc No. KYS.GNL.PLT.03 Human Rights Policy



It is committed to adopt a proactive approach based on risk analysis, to ensure the participation of all employees in occupational health work practices and to implement a working system that prioritizes the general health of the employees.

According to Human Resources Policy of the Akinal, in order to achieve the Company goals, employees-oriented labor and working conditions is one of the most important components.

To this respect, Akinal aimed to enhance the human resource policy on responsibly, effective, inclusive, non-discriminative, accessible, supportive and respectful the human rights. Regarding to this respect, Akinal;

- Prioritizes equality of opportunities,
- Adopts and implements the non-discrimination principle,
- Adopts and implements the "Right Person for the Right Job" principle,
- Considers the safety as the key aspect for the employees and working conditions. Towards to that aspect, takes essential measures for safety and healthy working conditions.
- Provides the employee friendly and safety technological systems to develop the efficiency and safety in the Company,
- Keeps up to date the human resources systems and procedures to comply with the changing conditions and requirements,
- Encourages the individual contributions to Company and common goals,
- Realizes the potentials of employees,
- Provides a clear, safety and accessible communication and engagement environment for the self-expression of the employees in any case,
- Supports and awards the individual works and team works in order to enhance the creative and effective participation,
- Supports the Company Units and employees to attend to efficient training and skill development programs.

Akinal Synthetic Textile Industry Trade Inc. has *Human Resources Policy* in the name of *Corporate Social Responsibility Policy*<sup>15</sup> which is based upon the human resources plans and procedures related to labor and working conditions, which include:

- Human Resources Process<sup>16</sup>
- Instructions for The Protection of Personal Data
- Non-Discrimination Policy<sup>17</sup>
- Human Rights Policy<sup>18</sup>
- Human Resources Permission Procedure
- Recommendation Procedure

These procedures and policy documents are also a part of the Human Resources Policy. The human resources documents stated above are updated and revised in order to include the changes required by changing needs, developing firm structure and/or human resources structure and working conditions.

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<sup>15</sup> Doc No. 1-PT-52.04-Rev2 Corporate Social Responsibility Policy

<sup>16</sup> Doc No. 2-SR-71.01 Human Resources Process

<sup>17</sup> Doc No. KYS.GNL.PLT.01 Non-Discrimination Policy

<sup>18</sup> Doc No. KYS.GNL.PLT.03 Human Rights Policy



These documents are living documents developed in line with the Company's Human Resources Policy and will be improved to comply the actual circumstances and requirements.

## **11.2 Working Conditions and Terms of Employment**

The reference documents on working conditions and terms of employment issues are *Human Resources Process* and *Corporate Social Responsibility Policy* documents.

The Human Resources Director is responsible for the management of the human resources process.

All stages of the human resources process have been developed as applicable and clearly stated in the Human Resources Process document.

Under the main titles of the process which are Inputs, Activities and Outputs; Recruitment, Personnel and Personnel Affairs- Wage and Advance Payment Process, Separation or Termination of Employment and Training processes have been defined. Workflow, explanation of activities, definition of responsible units, documents to be used during the workflow have been explained in detail.

The process has been designed and implemented according to the approach of providing the right person and anti-discrimination, equal opportunities for everyone and standardize the process.

The Corporate Social Responsibility Policy document has regulated working hours, wages and payments, and compensation as follows:

- Working hours: The applicable laws and obligations are complied with in determining working hours and overtime working. Overtime is voluntary.
- Wages and payments: Normal and overtime payments determined by law are made, and a minimum subsistence standard is provided according to ILO standards.
- Compensation: compensation is applied in accordance with the regulations determined within the framework of laws.

## **11.3 Workers Organizations**

The Company accept and declare the freedom of association of workers according to the article 2.10 in the document of Corporate Social Responsibility.

In accordance with the relevant article of the document, following article is stated:

"Within the scope of Union Freedom, the freedom of association and the right to collective bargaining are respected and the current legal regulations are followed in this regard"<sup>19</sup>.

## **11.4 Workers Accommodation**

The principles and standards accepted by Akınal within the scope of Ensuring Occupational Health and Safety are also valid in accommodation of workers. It is committed to adopt a proactive approach based on risk analysis, to ensure the participation of all employees in occupational health work practices and to implement a working system that prioritizes the general health of the employees in the Company document of Corporate Social Responsibility.

In the project, if it's needed, accommodation area will be provided for the workers/ employees who will come from outside the city. Company will provide workers with safe and healthy working accommodation conditions, taking into account Covid-19 pandemic, certain hazard classes in the work areas, including physical, chemical, biological and radiological hazards.

For workers, routine training and recruitment procedures will be implemented. In addition, communication with local communities training will be provided as well to workers/ employees from out

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<sup>19</sup> Doc No. 1-PT-52.04 Corporate Social Responsibility Policy



of the district. With the works carried out in the project, necessary measures will be taken to prevent any social or cultural problems between local communities living in the vicinity of the Project site and workers from outside.

## **11.5 Non-Discrimination and Equal Opportunity**

In the Human Rights Policy of the Company Human Rights has been defined as "All human beings are born free and equal in dignity and rights" which is included in UN Declaration of Human Rights.

Human Rights Policy, Non-Discrimination Policy and Corporate Social Responsibility Policy are the main documents on the non-discrimination issue.

Non-Discrimination Policy is defined as "a policy and commitment of Akınal that it does not discriminate on the basis of race, age, color, sex, national origin, physical or mental disability or religion" in the reference document<sup>20</sup>.

Equal employment opportunity and discriminatory harassment are two main issues of the document. Akınal has demonstrated in the document that Company will comply with the principle of equality pursuant to these two articles and that in case of noncompliance, immediate investigation and reporting will be initiated and sanctions will be applied, and discrimination is not tolerated.

In the Corporate Social Responsibility Policy document of the Company includes the article regarding the preventing discrimination stated is below: People are employed on the basis of their ability to do the job, not based on race, language, religion, ethnic origin, political opinion, color, gender, age, marital status discrimination. In addition, remuneration, social assistance and promotions are also non-discriminatory.

In addition, The Corporate Social Responsibility Policy document includes the Prevention of Forced Employment, Child Labor Prevention, Discipline / Maltreatment and Prevention of Harassment, Preventing Discrimination issues.

On these issues, Akınal accept and decelerate the following articles:

**Prevention of Forced Employment:** It is agreed with our employees through the employment contract, forced or involuntary workers are not employed. Employees have the right to terminate the employment contract within a legally determined time frame.

**Child Labor Prevention:** In our company, in accordance with the legal regulations, the procedures and principles of employing children and young workers are followed and no workers under the age of 18 are employed.

**Discipline / Maltreatment and Prevention of Harassment:** We respect the personality and dignity of every employee. Verbal, physical or psychological abuse or coercion is not allowed. It is acted in accordance with the relevant legal regulations.

**Preventing Discrimination:** People are employed on the basis of their ability to do the job, not based on race, language, religion, ethnic origin, political opinion, color, gender, age, marital status discrimination. In addition, remuneration, social assistance and promotions are also non-discriminatory.

## **12.0 Public Consultations and Disclosure**

Within the scope of the Project, Stakeholder Engagement Plan (SEP) contains and defines the public consultation and disclosure activities.

Akınal SEP has been developed as one of the management plans of the Project and in accordance with the ESMP. It is designed as a separate document as one of the important tools in managing the social and environmental impacts of the project.

SEP document has been developed to ensure healthy, trust-based and transparent stakeholder engagement regarding to achieve the successful management as a part of this ESMP. SEP document

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<sup>20</sup> Doc No. KYS.GNL.PLT.01 Non-Discrimination Policy



has been developed to manage the stakeholder engagement process in line with the background and objectives of the Project.

The aims of the SEP are;

- Identifying and defining all current and potential stakeholders for the construction and operation phases of the project,
- To establish the stakeholder engagement strategy and approach of the project,
- To design stakeholder engagement tools and methods according to the cultural, social and economic characteristics of the stakeholders,
- Identifying the roles and responsibilities of key stakeholders in implementing and managing the stakeholder engagement plan;
- To establish an information, communication and consultation framework that will ensure that stakeholders can access information on project activities in a timely and understandable manner,
- Identifying disadvantaged groups affected by the project and ensuring that these groups are included in stakeholder engagement processes,
- To define the structure of the Grievance Redress Mechanism, which is one of the important tools of the stakeholder engagement process, where the opinions, complaints and suggestions from the stakeholders are received and assessed,
- To improve monitoring and reporting procedures

Stakeholder engagement is the process in which a project involves people who may be affected by its decisions, activities, results or who can influence the project implementation. Maintaining the communication and relations established with the project stakeholders in a constructive, open and trust-based manner is one of the success indicators of the project. Therefore, the strategy and approach, methodology and tools of the SEP, implementation and monitoring of the Stakeholder Engagement Plan is defined in the SEP document in detail.

## **12.1 Stakeholders**

Stakeholder identification is the basis of stakeholder engagement which is a process carrying out the whole Project.

The classification and definition of the stakeholders has been determined according to the approach and steps described above. Stakeholders of the Project are given below:

Internal Stakeholders:

- Financial Institutions
  - TKYB
- Company employees
  - Akinal project staff and managers
  - Akinal Employees
- Subcontractors
- Consultant (Stantec)

External Stakeholders:

- Government agencies
  - Gaziantep Governorship

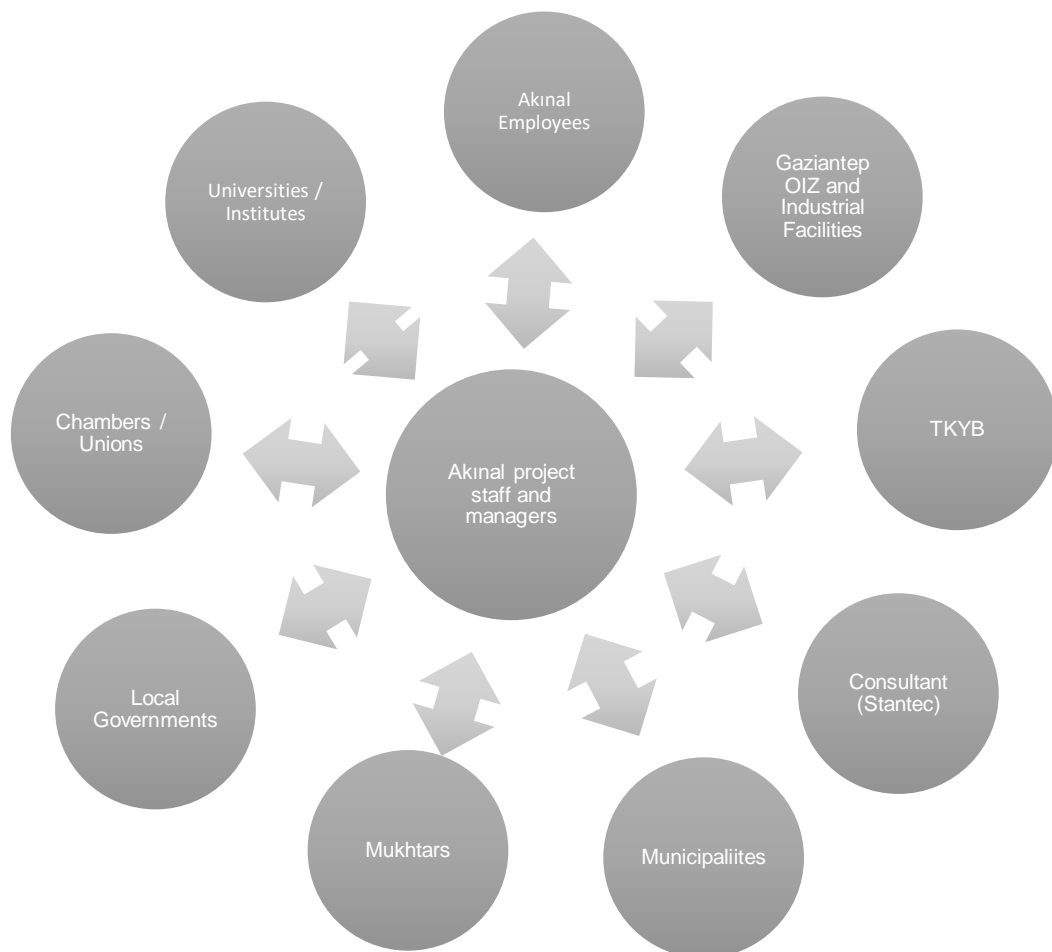


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- Şehitkamil District Governorship
    - Ministry of Environment and Urbanization Gaziantep Provincial Directorate
    - Ministry of Industry and Trade Gaziantep Provincial Directorate
  - Chambers / Unions
    - Gaziantep Chamber of Industry
    - Gaziantep Chamber of Commerce
  - Local Governments
    - Gaziantep Metropolitan Municipality
    - Şehitkamil Municipality
  - Settlements
    - Karahüyük Neighborhood
    - Dülük Neighborhood
    - Atabek Neighborhood
  - Mukhtars
    - Karahüyük Neighborhood
    - Dülük Neighborhood
    - Atabek Neighborhood
  - Gaziantep Organized Industrial Zone (OIZ)
    - Gaziantep OIZ Directorate
    - Institutions and organizations in Gaziantep OIZ
    - Factories and companies in the immediate vicinity and/or neighboring parcels in Gaziantep OIZ
  - Universities / Institutes
    - Gaziantep University
    - Gaziantep University Vocational School of Technical Sciences
    - Hasan Kalyoncu University
  - Potential Stakeholders
    - Suppliers / service providers
    - Firms located in other parts of the Gaziantep OIZ
    - Buyers / customers / traders in the operation and production phases
    - Vulnerable Groups: Project-affected persons with disabilities, female-headed households, landless-poor households / persons, ethnic minorities, migrants, refugees, etc. in all project affected settlements and groups.

Key stakeholders of the Project: Key Stakeholders are significantly affected by the project and have a direct and significant impact on the project. Key Stakeholders can consist of both internal and external stakeholders. Identifying key stakeholders is one of the important stages in the stakeholder analysis process.



The diagram below shows the key stakeholders of the Project



**Figure 12-1: Key Stakeholders of the Project**

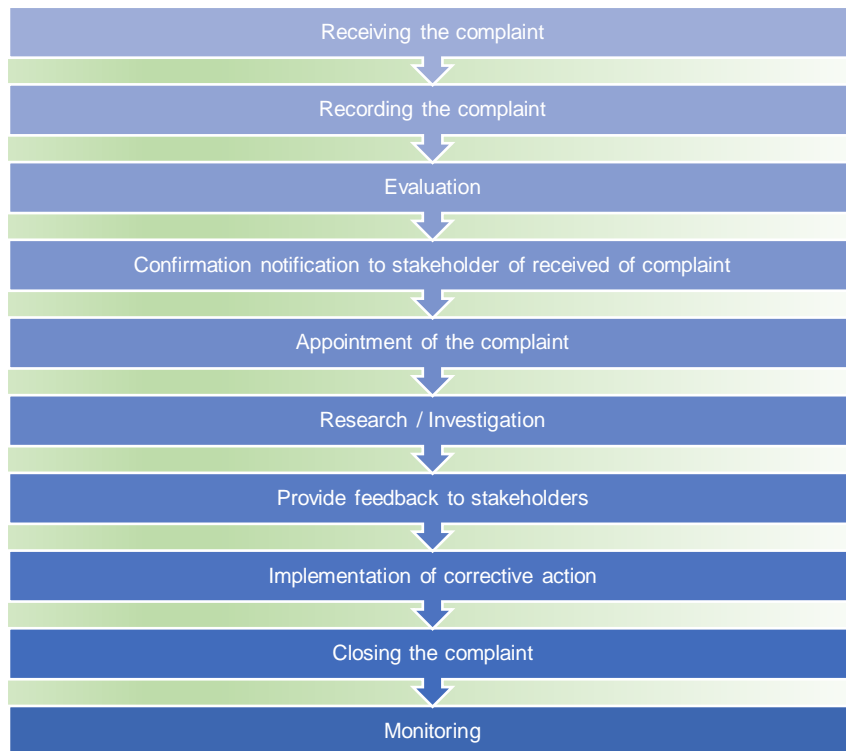
## 13.0 Grievance Redress Mechanism

The Grievance Redress Mechanism (GRM) Procedure is one of the basic elements of stakeholder engagement management. The project's GRM procedure is a component of the Stakeholder Engagement Plan developed as a part of the ESMP. The GRM procedure is described in detail in the SEP document.

GRM is a tool of the stakeholder engagement management process that enables stakeholders to convey their problems, complaints and concerns about the project to the relevant units of the project, and to resolve the complaints submitted with the right methods and in a healthy communication.

The grievance redress mechanism is also a tool that supports stakeholder engagement process.

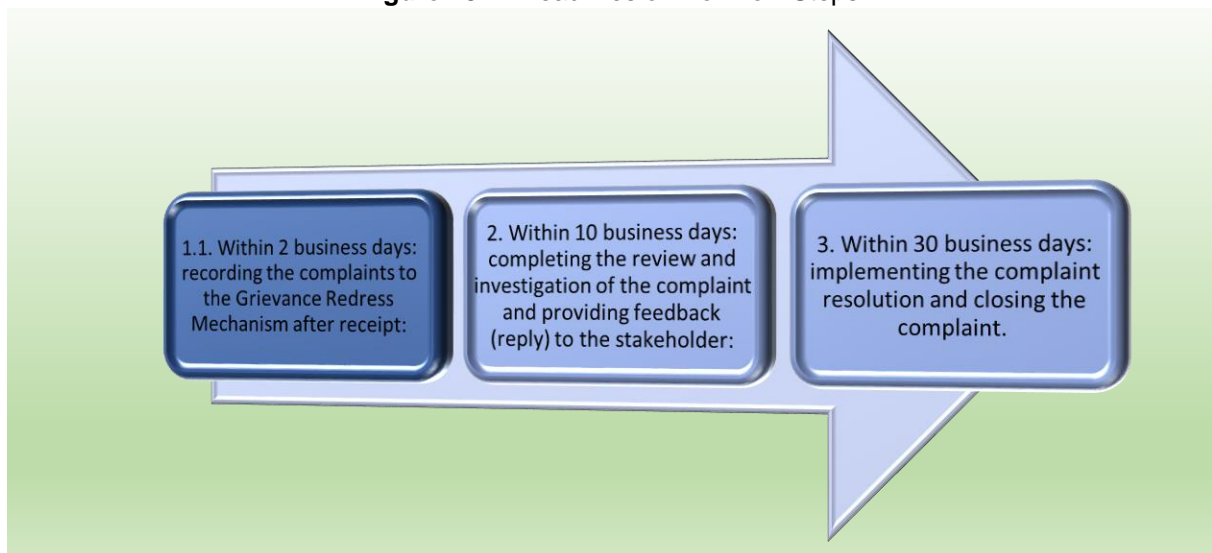
- Stakeholder notifications and opinions are received and recorded.
- Communication, interviews and interactions with stakeholders are kept with location and time information.
- Stakeholder meeting reports are prepared and kept.
- Provide a database for monitoring and reporting of the Project
- The functioning of the grievance redress mechanism is shown in the diagram below.



**Figure 13-1: Grievance Redress Mechanism Workflow Chart**

One of the standards required for the successful implementation of the grievance redress mechanism is the completion of the workflow within the defined deadlines. The main purpose of GRM is not to respond quickly to the complaint or to resolve the complaint quickly. However, complaints that are resolved late or not responded in time may cause new problems.

**Figure 13-2: Deadlines of Workflow Steps**



Grievance Redress Mechanism is not only services for open complaints, also includes anonymous complaints. Receiving and assessment of anonymous complaints are carried out as follows:



When both external and internal stakeholders experience problems, concerns, or difficulties in providing their contact information, identification information, complaints submitted by stakeholders will be initially evaluated and recorded as anonymous complaints or anonymous suggestions. Stakeholders can send all their wishes and complaints, without specifying their names, to the wish-complaint boxes placed at specific points for external stakeholders or via Akinal telephone hotline.

Grievances are received anonymously and assessed by applying the steps defined in the workflow. Within the scope of the complaint, it will be evaluated through investigation / examination processes and each stage will be recorded in the complaint mechanism system. Third parties will not be informed about complaints that need to be kept confidential.

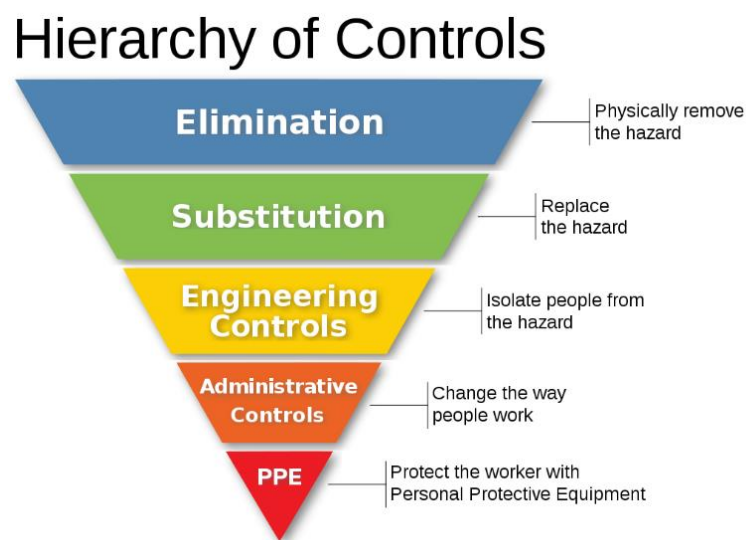
## 14.0 Health and Safety

### 14.1 Occupational Health and Safety

Measures will be planned and implemented in accordance with the relevant legal regulations and IFC requirements in order to determine the hazards related to occupational health and safety (OHS) that may occur during the construction and operation phases of the project, and to evaluate, eliminate, reduce associated risks and protect the employees. Some of the relevant legislation are: The Occupational Health and Safety Law No: 6331 (Official Gazette Date: 30.06.2012, No: 28339), Regulation on Occupational Safety and Health in Construction (Official Gazette Date: 05.10.2013, Number: 28786), Occupational Health and Safety Risk Assessment Regulation (Official Gazette Date: 29.12.2012, Number: 28512), Occupational Health and Safety Services Regulation (OG Date: 29.12.2012, Number: 28512). In addition, IFC Performance Standard 2: Labor and Working Conditions was also taken into account in determining the framework for the project's occupational health and safety.

The identification of the hazards that may occur during the construction and operation phases of the project and the evaluation of the risks associated with them are evaluated in detail in the Risk Assessment document, and the execution principles of occupational health and safety activities, duty-responsibilities and trainings are evaluated in the Occupational Health and Safety Plan and emergencies are evaluated in the Emergency Response Plan.

The control hierarchy given below is taken into account when implementing control measures for the hazards that may arise as a result of the project's activities and the risks associated with them. Accordingly, prevention of hazards at their source is a priority and the use of personal protective equipment (PPE) is a control measure that should be applied last.



**Figure 14-1:** Hierarchy of hazard controls



Some important hazards that may arise as a result of the project activities;

Construction Activities:

- Working at height
- Movement of construction machines and vehicles in the site
- Working with electrical equipment
- Lifting operations
- Communicable diseases
- Inadequate hygiene measures in common areas
- Hot works and fire hazard
- Excavation works
- Noise

Operation Activities;

- Working with chemicals
- Contact with abrasive liquids
- Working with electrical equipment
- Vehicle such as machines, trucks etc. maneuvers
- Noise
- Working at height
- Hazards related to the moving and rotating parts of the machinery
- Fire

## **14.2 Community Health and Safety**

With regard to community health and safety, the activities during the construction and operation phases of the project will be evaluated separately, and identification of risks and mitigation measures will be developed. IFC Performance Standard 4: Community Health, Safety and Security document has been taken into account in determining the measures to be taken regarding public health and safety. Communicable diseases, emergencies, safety and security, traffic safety issues examined under the following headings in detail.

The fact that the Project is within the OIZ and that it has a limited and controlled interaction with the residential areas ensures that the risks on the community health and safety of the Project activities are at a low level. Preventive measures to be taken on important issues related to community health and safety are defined as mitigation measures in the plan prepared in Section 17.0 developed within the scope of the ESMP and added to the environmental and social management process of the project.

### **14.2.1 Communicable Diseases**

During the construction and operation phases of the project, possible sources, control measures, hygiene requirements for communicable diseases that may affect community health and safety, especially COVID-19, were examined within the scope of community health and safety. It has been assessed that communicable diseases that can be seen during the construction and operation phases of the project may adversely affect the health of the nearby settlements that interact through employees and service providers. Prompt detection of communicable diseases, identification and planning of control measures, providing the necessary medical support, taking hygiene measures especially in common areas during construction and operation phases are important issues to be considered during the project activities.



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### **14.2.2 Emergency**

Emergency situations regarding community health and safety are presented in Section 14.3.

### **14.2.3 Safety and Security**

There are various risks related to the construction and operation phases of the project that may pose a threat to community health and safety. Communicable diseases and Traffic issues are examined in the related sections. Safety and security risks that may arise during construction and operation phases are as follows;

Construction phase:

- Traffic
- Noise
- Communicable diseases
- Dust emission

Operation phase:

- Traffic
- Noise
- Gas and dust emissions
- Fire
- Hazardous chemicals
- Communicable diseases

Actions to eliminate and / or reduce these effects are defined in the relevant plan.

In addition, measures will be taken to prevent a possible disproportionate use of force against employees and / or communities in the impact area, while the security personnel to be assigned during the construction and operation phases of the project perform their duties. Another issue to be considered regarding security personnel is that confirming these personnel is not involved in any disproportionate force use incident previously.

### **14.2.4 Traffic Management**

Traffic is one of the important factors that can affect public health and safety. It has been evaluated that the equipment and machinery used in the construction and operation phases of the project, excavation and other trucks to be used in the production process, waste transportation vehicles and employee transportation shuttles will increase the existing traffic load in the region. In addition, proper traffic management is an important priority in terms of community health and safety, since the surrounding roads are used by the close settlements.

In order to prevent increase in traffic load in local settlements, thus decrease probability of traffic accidents, routes of vehicles and trucks will be properly managed, and drivers will be informed about recommended routes. Both inside and outside the plant required signage will be put in place to direct traffic.

## **14.3 Emergency Response**

Within the scope of the project, emergencies that may arise during the construction and operation phases, occupational health and safety and community health and safety issues are evaluated together in detail within the Emergency Action Plan.

Some of the emergencies that may arise during the construction and operation phases of the project and that may affect the community and occupational health and safety are as follows:

- Fire
- Explosion



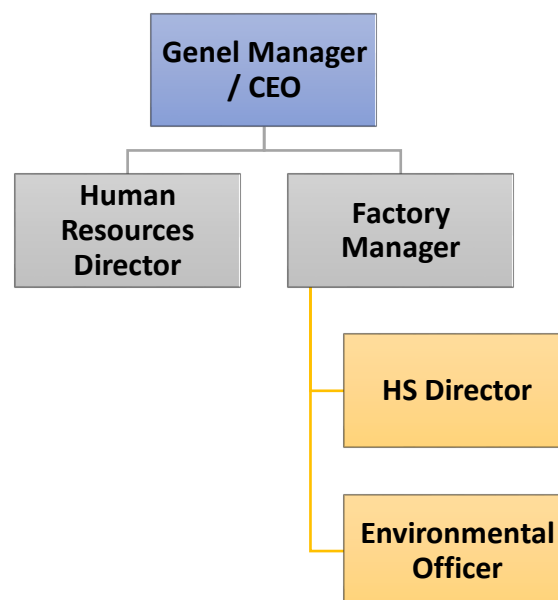
- Natural disasters
- Spreading, spilling of dangerous chemicals
- Sabotage
- Traffic accidents

For specified and other emergencies, determination of preventive and mitigation measures, response and evacuation method, necessary equipment, determination of emergency teams, training, drills and documentation issues will be examined in detail in the relevant plan. Since the Emergency Action Plan is prepared to cover employee and community health and safety, this issue will be taken into account in determining the roles and responsibilities and emergency teams within the plan.

## 15.0 Organizational & administration requirements for environmental and social management

In the execution of the Project, the Company will be responsible for the implementation of the Environmental & Social mitigation measures through their sub-contractors who would be accountable to the company. Therefore, under the Company, the Environmental and Social Management Unit (ESMU) has been established. The ESMU will be working under the close supervision of the Company and reporting to the Executive Director of the Company.

A structure of the ESMU is outlined below.



**Figure 15-1: Roles and responsibilities**

General Manager has responsibility of overall management of ESMP. The ESMU includes a Human Resources Director who is responsible for management of social issues (grievance mechanism, stakeholder engagement etc.). HS Officer and Environmental Officer deals with the health, safety and environmental issues in the factory.

Human Resources Director, HS Officer and Environmental Officer are responsible for regular supervision and monitoring of ESMP implementation in the Project site. During the construction phase of the project, personnel responsible for environmental, social and HS activities of the sub-contractors will be present at site and he/she will be responsible for compliance with the ESMP. The ESMU will work closely with the personnel introduced by the sub-contractors.

The ESMU will ensure that all personnel and employees of the Company and sub-contractor who involve in the implementation of the project are aware of their environmental and social

responsibilities within the scope of the ESMP. All responsible staff will have environmental and social awareness trainings at the beginning of the Project and throughout the construction and operation phases.

### **15.1 Contractual**

All sub-contractors will be responsible for compliance with implementation of the ESMP. Compliance of sub-contractor activities with the legal legislation and ESMP requirements will be included in contracts.

### **15.2 Supply Chain**

The Company will ensure compliance with the objectives of the ESAP and ESMP by all suppliers and sub-contractors. Their compliance will be monitored by Akinal. During the contract phase, necessary information will be provided to the companies and approval will be obtained. Necessary trainings will be provided periodically to suppliers and sub-contractors.

## **16.0 Institutional Strengthening**

Akinal must identify the knowledge and skills necessary for implementation of the management systems and programs and identify training requirements for personnel of the organization.

All persons responsible for undertaking work during the life of the project must be trained on the contents of the ESMP. Akinal is responsible for identifying the knowledge and skills necessary for the implementation of the ESMP and associated standards and to identify training requirements for the workers and staff involved in the implementation of the action plan.

Ensure that all site personnel have a basic level of environmental and social awareness training. Topics covered should include:

- What is meant by “Environment”?
- Why does the environment need to be protected and conserved?
- How can construction activities impact on the environment?
- What can be done to mitigate against such impacts?
- Awareness of emergency and spills response provisions.
- What are the dangers and risks related to occupational health and safety that may occur during construction and operation phases?
- What precautions should be taken against hazards and risks?
- What are the roles and responsibilities of the employees?
- What are work accidents and occupational diseases?
- How do the social impacts of construction activities happen?
- Why is management of social and environmental impacts important?
- Social responsibility during construction e.g., being considerate to local residents.

## **17.0 Environmental and Social Management Plan (ESMP)**

Summary of the Environmental and Social Management Plan (ESMP) is presented in a tabular format at the end of this section in Table 17-1. The objective of this ESMP is to establish a mechanism to implement mitigation measures for the identified negative impacts and to monitor the efficiency of these mitigation measures.



**Table 17-1:** Environmental and Social Management Plan

<b>Environmental and Social Management Plan</b>		
<b>A Stand-Alone Plans</b>		
<b>ESMS Standards</b>	<b>Triggered</b>	<b>Main issues, how they will be addressed and whether a stand-alone plan is required (e.g., Resettlement Action Plan, Process Framework etc.)</b>
Involuntary Resettlement and Access Restrictions	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The Project activities will not cause involuntary resettlement and access restrictions.
Indigenous Peoples	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There is not community including indigenous people around the Project area.
Cultural Heritage	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There is not any possibility to find a cultural heritage in the Project area.
Biodiversity Conservation and Sustainable Use Natural Resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The impact of the Project on biodiversity and natural resources will be limited.

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Construction Phase								
Air Quality	Dust emission from excavation and unpaved roads  Emissions from vehicles and construction equipment	Unnecessary speeding will be prevented to reduce dust formation.  Water will be sprayed regularly during dry weather to prevent generation for dust.  Periodic maintenance will be done periodically by authorized institutions.  For details, please see Annex-I.	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Continuous  Maintenance: Automotive – every 2 years  Other vehicles – once a year			Site inspections, presence of grievance  Exhaust emission reports

<sup>21</sup> The ESMP has to confirm that proposed mitigation measures are feasible, that they are effective in providing mitigation for all affected groups and sustainable. In this column either describe how feasibility is confirmed or put ✓ to confirm that feasibility has already been proven elsewhere and indicate where to find evidence.



Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Noise	Noise created from construction equipment and vehicles	<p>Periodic maintenance of the construction equipment and vehicles will be done periodically in authorized institutions and night works will be avoided.</p> <p>If equipment and machines with high noise levels are used, the noise level will be reduced by taking the most appropriate measures (isolation, silencer etc.).</p> <p>It will be prohibited to leave unused vehicles and equipment running.</p>	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Continuous			Site inspections, presence of grievance
Water Quality	Wastewater created from the construction works	<p>Domestic wastewater generated by the Project workers will be sent to the wastewater treatment plant of the OIZ.</p> <p>Contamination of storm water by chemicals, oil or any other hazardous</p>	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	<p>Continuous</p> <p>Discharged Wastewater Analysis – once requested by</p>			Site inspections, annual wastewater analysis reports

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		materials will be prevented. Wastes and other hazardous materials will be stored in closed areas where storm water cannot be contacted.  For details, please see Annex-III.			the OIZ (at least yearly)			Discharged Wastewater Analysis
Waste	Waste generation during construction works	Wastes will be stored in the existing temporary waste storage area of the factory.  Domestic wastes will be disposed in the landfill of the Gaziantep Municipality. The package wastes will be disposed via the licensed companies.  Hazardous wastes and non-hazardous wastes will be disposed by the licensed companies.  For details, please see Annex-II.	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Continuous			Site inspections, waste receipts and records

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Resource efficiency	Climate Change and Sustainability	Quantity of natural sources used during the project works will be recorded and it will be aimed to decrease use of the natural sources every month in accordance with the resource efficiency target.	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Monthly			Records of natural sources and benefits
Storage of hazardous materials	Soil and groundwater contamination	If fuels, oil and other chemicals cannot be stored in a central storage area or with a spill control reservoir, they will be stored in a manner to prevent any risk to soil and groundwater spills. As a minimum, drip trays will be used; however, additional measures will be taken depending on the nature of the substance or on the sensitivity of the receiving environment.	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Continuous			Site inspections, environmental incident reports

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		Spill kits will be placed at the locations where hazardous materials are stored.						
Community health and safety	Risks arising from excavation and transportation of excavated materials	<ul style="list-style-type: none"> <li>- Appropriate vehicles will be used in the excavation or transportation of excavated materials</li> <li>- In order to eliminate risks such as spill during transportation, the cargo section will be covered with tarp.</li> </ul>	PS1, PS2, PS3 and PS4	Akinal Environmental Officer, OHS Officer, Contractors	During shipping or transportation activities			Field observations, Internal/external monitoring reports, Grievance mechanism records,
Community health and safety	Risks arising from stocking excavation materials	<ul style="list-style-type: none"> <li>- The sub-soil excavation material will be used for levelling and filling of any necessary areas.</li> <li>- In the vicinity of the storage areas built in the project site, all kinds of measures such as net, barriers, which will prevent overflows, will be taken.</li> </ul>	PS1, PS2, PS3 PS4 and Local Legislation; Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer, Contractors	Before and during the stockpiling			Field observations, Internal/external monitoring reports, Grievance mechanism records,

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<ul style="list-style-type: none"> <li>- To prevent landslides due to raining or structure of soil, storage and stockpiling excavation materials which are piled on top of each other will be avoided.</li> <li>- Storage and stockpiling of excavated materials will be on areas that will not pose a risk to other plants, roads etc.</li> </ul>						
Occupational and community health and safety	Traffic accidents	<ul style="list-style-type: none"> <li>- Drivers will ensured to have driving license and other required documentation,</li> <li>- Reversing will be avoided as much as possible inside and at the entrance of the plant.</li> <li>- Proper signage will be put in place.</li> </ul>	PS1, PS2, PS3 PS4 and Local Legislation; Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer, Contractors	During construction			Accidents, near misses, Grievance mechanism records,



Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<ul style="list-style-type: none"> <li>- A speed limit of 20 km/hr will be enforced inside the plant.</li> <li>- OIZ speed limit will be followed outside the plant.</li> </ul>						
Occupational and community health and safety	Fire and explosion	<ul style="list-style-type: none"> <li>- Flammable materials and wastes will be stored away from source of ignition and hot works,</li> <li>- Required amount and type of fire extinguishers will be provided,</li> <li>- Pressurized gas cylinders will be stored in upright position and restrained securely in places out of direct sun light. Cylinders valve caps will be removed just before use and flammable and oxidizing gas cylinders will be stored separately.</li> </ul>	PS1, PS2, PS4 and Local Legislation; Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer, Contractors	During construction			Inspections and monitoring of flammable materials storage areas and gas cylinder storage area.

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Occupational and community health and safety	Risks associated to the management of worker's and community health and safety	<p>The Company is required to implement health and safety requirements for workers and communities according to the Turkish Law No. 6331 on Occupational Health and Safety and related regulations, and also relevant IFC policies and best practices.</p> <p>In any case, the Company is required to provide the following documents;</p> <ul style="list-style-type: none"> <li>• Risk Assessment;</li> <li>• Health and Safety (H&amp;S) Plans;</li> <li>• Emergency Response Plans (ERPs),</li> </ul> <p>The above documents must be updated for the project and revised periodically.</p>	PS1, PS2, PS3 PS4 and Local Legislation; Health and Safety Law and related regulations	Akınal Environmental Officer, OHS Officer, Contractors	During construction			Workers and community health and safety plan/program prepared, and mitigation measures implemented (including the use Personnel Protective Equipment (i.e. ear protection etc.) for the workers and visitors).

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<p>The H&amp;S Plan shall cover induction for all workers, work specific instructions, periodic training, supervision and also provision of first aid and medical response. The Company shall implement safe and healthy working conditions for all workers. Additionally, all health and safety documentation must be prepared by considering Covid-19 pandemic impacts, risks, precautions, and measures and must be implemented during all phases of the Project.</p> <p>Company is required to provide Personnel Protective Equipment (i.e. ear protection etc.) to all workers and visitors in areas where the indoor noise level exceeds the</p>						

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		legal limits.						
Occupational and community health and safety	Infections due to Communicable diseases such as Covid-19	<ul style="list-style-type: none"> <li>- Covid-19 precaution plans and procedures will be implemented in the project work area and facilities, eating area, construction site, office areas and accommodation areas provided for employees,</li> <li>- Communication and information tools defined within the scope of Covid-19 measures in the SEP will be used in Project studies regarding Stakeholder Engagement.</li> </ul>	PS1, PS2, PS3, PS4 and Local Legislation, Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer, HR Department, Contractors	During Covid-19 pandemic			Health controls, Internal/external monitoring reports, Grievance mechanism records,
Occupational health and safety	Hazards to the health and safety of employees and community	- Health and Safety procedures will be developed and implemented according to laws, regulations and best practices,	PS1, PS2, PS3 PS4 and Local Legislation,	Akinal OHS Officer, HR Department, Contractors	Continuous			Incident, near miss, health and safety board records,

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<ul style="list-style-type: none"> <li>- Akinal will ensure that appropriate Health and Safety services and experts are provided.</li> <li>- All the measures defined in health and safety documentation regarding fire safety, working at heights, electrical safety, manual handling, hazardous material etc. will be implemented on site.</li> <li>- A copy of risk assessment which is conducted by contractors and subcontractors will be requested.</li> <li>- Risk assessment document will be updated during construction phase, if required (after accidents, near misses, installation of new equipment, change in method statements etc.)</li> </ul>	<p>Health and Safety Law and related regulations</p> <p>International Labour Organization (ILO) Standards</p>					



Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<ul style="list-style-type: none"> <li>- Considering Covid-19 pandemic, risk assessment document will be updated to include risks and measures and will be implemented through construction phase</li> </ul>						
Livelihood	Potential construction impacts on agricultural lands used as livelihood and lands where livestock activities are maintained close to the project site.	<ul style="list-style-type: none"> <li>- Project impacts on land used as livelihood will be monitored within the framework of stakeholder engagement.</li> <li>- By meeting with stakeholders, grievance mechanism and stakeholder participation process will be informed.</li> <li>- Corrective measures and/or actions and compensations, if necessary, will be fulfilled, regarding the possible damage.</li> </ul>	PS1		During the construction, when needed, according to stakeholder complaints			Internal and external monitoring reports, grievance redress mechanism records, stakeholder engagement activity records

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Traffic	Increasing the heavy vehicle traffic density during the excavation, equipment and material transportation process on the roads outside the OIZ, which includes the access road of primary / secondary schools, also used by the neighborhoods of Karahüyük, Dülük and Atabek	<ul style="list-style-type: none"> <li>- On project dates when excavation, material and equipment transportation is intense due to construction works; Headmen of settlements using high-traffic roads will be notified 1 week and 1 day in advance.</li> <li>- The roads used by the nearby neighborhoods and school bus routes will be used at a minimum or, where possible, not used at all.</li> <li>- At busy roads that intersect with residential areas and access roads to schools; Necessary precautions will be taken with flagman, signboards, pointers,</li> <li>- Heavy vehicle traffic that may increase the traffic</li> </ul>	PS1, PS2, PS 4		During the construction, when there is transportation or shipment activity that will increase the traffic density; 1 week and 1 day ahead.			Field observation report, Internal monitoring reports, Grievance redress mechanism records

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		density of the surrounding residential areas at school entrance / exit hours will be shifted to other hours of the day.						
Traffic	In case of other ongoing project activities or possible road works within the OIZ; occurring impacts on traffic or transportation within the OIZ, caused from the heavy vehicles, construction activities and project vehicles.	<ul style="list-style-type: none"> <li>- A written notification will be made to the OIZ management 1 week and 1 day in advance for the dates when traffic intensity will occur,</li> <li>- Speed limits of project vehicles and heavy vehicles, and traffic density within the OIZ will be monitored,</li> <li>- Employees will be informed and activities will be monitored in order not to restrict the roads inside the OIZ during construction and transportation activities.</li> </ul>	PS1, PS2, PS 4		During the construction, when there is transportation or shipment activity that will increase the traffic density; 1 week and 1 day ahead.			Field observation report, Internal monitoring reports, Grievance redress mechanism records,

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Labour and Working Conditions	Risk associated to the management of workers' fundamental principles and rights.	<p>The Company is required to comply with the fundamental principles and standards embodied in the national labour, social security and occupational health and safety laws and the ILO conventions 29 and 105 (forced labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour).</p> <p>Human Resources Policy must include information relating to:</p> <ul style="list-style-type: none"> <li>• Maintaining a good worker management relationship;</li> <li>• Promoting the fair treatment, non-</li> </ul>	PS1, PS2, Local Legislation	Akinal OHS Officer, HR Department, Contractors	During the construction,			<p>Labour and working conditions plan/program prepared and implemented;</p> <p>Internal grievance mechanism.</p>

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<p>discrimination and equal opportunities for workers;</p> <ul style="list-style-type: none"> <li>Preventing use of child and forced labor.</li> </ul> <p>The implementation of the Policy will be checked during the monitoring phase.</p> <p>The company is required to establish an internal grievance mechanism (i.e. Personnel Request Forms, suggestion / complaints boxes etc.) for workers.</p>						
Labour and Working Conditions	Prevention / resolution of loss of rights and disputes that may arise during the	To provide detailed and clear information on dismissal process that will occur after the construction phase and on the rights of employees in accordance with the date specified in	PS1, PS2, Local Legislation	Akinal OHS Officer, HR Department, Contractors	At the end of the construction phase,			Labour and working conditions plan/program prepared and implemented; Internal



Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
	dismissal process	the labor law. To evaluate the demands and complaints of the workers according to GRM to prevent loss of rights.  to make the necessary negotiations between the employees and the Company.						grievance mechanism.
Operation Phase								
Air Quality	Stack gas emissions Permitting	Emission measurements will be conducted periodically,  Filters or other stack gas treatment methods will be used if concentrations above the limit values are measured.  Article 11 of the Environmental Permit and License Regulation related to changes in the facility will be complied with and	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Every 2 years  Continuous			Emission measurement report

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		necessary applications related to revision of the Environmental Permit will be done.  For details, please see Annex-I.						
Noise	Noise created from operational activities	Periodic maintenance of the operational equipment and will be done periodically in authorized institutions.  If equipment and machines with high noise levels are used, the noise level will be reduced by taking the most appropriate measures (isolation, silencer etc.).  It will be prohibited to leave unused vehicles and equipment running.	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Continuous			Site inspections, presence of grievance

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Water Quality	Wastewater created from the operation phase	<p>Domestic and industrial wastewater generated by the Project workers will be sent to the wastewater treatment plant of the OIZ.</p> <p>Contamination of storm water by chemicals, oil or any other hazardous materials will be prevented. Wastes and other hazardous materials will be stored in closed areas where storm water cannot be contacted.</p> <p>The connection Permit of wastewater will be renewed once expired and necessary analysis required by the OIZ will be made by the accredited laboratories.</p> <p>For details, please see Annex-III.</p>	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	<p>Continuous</p> <p>Wastewater Connection Permit – once per 3 years</p> <p>Discharged Wastewater Analysis – once requested by the OIZ (at least yearly)</p>			<p>Site inspections, annual wastewater analysis reports</p> <p>Wastewater Connection Permit</p>

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Waste	Waste generation during operation phase	<p>Wastes will be stored in the existing temporary waste storage area of the factory.</p> <p>Domestic wastes will be disposed in the landfill of the Gaziantep Municipality. The package wastes will be disposed via the licensed companies.</p> <p>Hazardous wastes and non-hazardous wastes will be disposed by the licensed companies.</p> <p>For details, please see Annex-II.</p>	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	<p>Continuous</p> <p>Industrial Waste Management Plan – once per 3 years</p> <p>Annual waste declaration</p>			<p>Site inspections, waste receipts and records</p> <p>Industrial Waste management Plan sent to the PDoEU</p> <p>Waste declaration via MoEU online system</p>
Resource efficiency	Climate Change and Sustainability	Quantity of natural sources used during the project works will be recorded and it will be aimed to decrease use of the	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Monthly			Records of natural sources and benefits

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		natural sources every month in accordance with the resource efficiency target.						
Storage of hazardous materials	Soil and groundwater contamination	<p>If fuels, oil and other chemicals cannot be stored in a central storage area or with a spill control reservoir, they will be stored in a manner to prevent any risk to soil and groundwater spills. As a minimum, drip trays will be used; however, additional measures will be taken depending on the nature of the substance or on the sensitivity of the receiving environment.</p> <p>Spill kits will be placed at the locations where hazardous materials are stored.</p>	PS1, PS3, ESS 1 and national legislation	Akinal Environmental Officer	Continuous			Site inspections, environmental incident reports

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Occupational and community health and safety	Risk associated to the management of worker's and community health and safety	<p>The Company is required to implement health and safety requirements for workers and communities according to the Turkish Law No. 6331 on Occupational Health and Safety and related regulations, and also relevant IFC policies and best practices.</p> <p>In any case, the Company is required to provide the following documents;</p> <ul style="list-style-type: none"> <li>• Risk Assessment Analysis;</li> <li>• Health and Safety Plans (HS);</li> <li>• Emergency Response Plans (ERPs),</li> </ul> <p>The above documents must be updated for the project and revised</p>	<p>PS1, PS2, PS3 PS4 and Local Legislation;</p> <p>Health and Safety Law and related regulations</p>	Akınal Environmental Officer, OHS Officer, Contractors	During the operation			Workers and community health and safety plan/program prepared, and mitigation measures implemented (including the use Personnel Protective Equipment (i.e. ear protection etc.) for the workers and visitors).



Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<p>periodically.</p> <p>The H&amp;S Plan shall cover induction for all workers, work specific instructions, periodic training, supervision and also provision of first aid and medical response. The Company shall implement safe and healthy working conditions for all workers. Additionally, all health and safety documentation must be prepared by considering Covid-19 pandemic impacts, risks, precautions, and measures and must be implemented during all phases of the Project.</p> <p>Company is required to provide Personnel Protective Equipment (i.e. ear protection etc.) to all workers and visitors in areas where the indoor</p>						

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		noise level exceeds the legal limits.						
Occupational and community health and safety	Traffic accidents	<ul style="list-style-type: none"> <li>- Drivers will ensured to have driving license and other required documentation,</li> <li>- Reversing will be avoided as much as possible inside and at the entrance of the plant.</li> <li>- Proper signage will be put in place.</li> <li>- A speed limit of 20 km/hr will be enforced inside the plant.</li> <li>- OIZ speed limit will be followed outside the plant.</li> </ul>	PS1, PS2, PS3 PS4 and Local Legislation; Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer, Contractors	During the operation			Accidents, near misses, Grievance mechanism records,
Occupational and community health and safety	Fire explosion and	<ul style="list-style-type: none"> <li>- Flammable materials and wastes will be stored away from source of ignition and hot works,</li> <li>-Required amount and type of fire extinguishers will be provided,</li> </ul>	PS1, PS2, PS4 and Local Legislation; Health and Safety Law	Akinal Environmental Officer, OHS Officer, Contractors	During the operation			Inspections and monitoring of flammable materials storage areas and gas cylinder storage area.

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		- Pressurized gas cylinders will be stored in upright position and restrained securely in places out of direct sun light. Cylinders valve caps will be removed just before use and flammable and oxidizing gas cylinders will be stored separately.	and related regulations					
Community health and safety	Risks arising from raw material storage	<p>Prevent interaction with surrounding environment in storages areas, with the use of nets, barriers and walls</p> <p>- Storage area safety and stability will be ensured</p> <p>- Chemical will be stored in areas where spill prevention and containment measures are implemented. Spill kits will be provided.</p>	PS1, PS2, PS3, PS4 and Local Legislation, Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer,	During the operation			Filed observations, Community health and safety records.

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Occupational health and safety	Risks arising from working with machines and equipment	<ul style="list-style-type: none"> <li>- Guards and barriers to prevent employees contact will be provided.</li> <li>- Unauthorized use of machines and equipment will be prohibited.</li> </ul>	PS1, PS2, PS3, PS4 and Local Legislation, Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer,	During the operation			Filed observations, health and safety records.
Occupational health and safety	Risk arising from working with chemicals	<ul style="list-style-type: none"> <li>- Measures will be taken according to Safety Data Sheets (SDS) and hazard control hierarchy.</li> <li>- Appropriate type and amount of PPE will be provided to employees.</li> </ul>	PS1, PS2, PS3, PS4 and Local Legislation, Health and Safety Law and related regulations	Akinal Environmental Officer, OHS Officer	During the operation			Filed observations, health and safety records
Labor and Working Conditions	Pandemic risk caused by Covid-19	- Covid-19 precaution plans and procedures prepared in the project work area and facilities,	PS1, PS2, PS3, PS4		During Covid-19 risk			Health control records, grievance redress

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		dining hall, construction site, office areas and accommodation provided for employees from outside the city will be implemented, - Communication and information tools defined within the scope of Covid-19 measures in the SEP will be used in Project studies regarding Stakeholder Engagement.	and Local Legislation • Occupational Health and Safety Law and related regulations, ILO					mechanism records, internal and external monitoring reports
Labour and Working Conditions	Taking necessary measures to ensure equal opportunity in the recruitment process	To provide detailed and clear information on recruitment process for all candidates, especially to provide information for the vulnerable groups living close to the Project area.  Conducting a transparent and procedural recruitment process.	PS1, PS2, Local Legislation	Akinal OHS Officer, HR Department, Contractors	At the beginning of the Operation Phase / at times of recruitment			Labour and working conditions plan/program prepared and implemented, recruitment evaluation reports, ToRs

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		To provide equal opportunities to all candidates.						Internal grievance mechanism.
Traffic	Increasing the heavy vehicle traffic density during the material transportation process on the roads outside the OIZ, which includes the access road of primary / secondary schools, also used by the neighborhoods of Karahüyük, Dülük and Atabek	<ul style="list-style-type: none"> <li>- On project dates when, material and equipment transportation is intense; Headmen of settlements using high-traffic roads will be notified 1 week and 1 day in advance.</li> <li>- The roads used by the nearby neighborhoods and school bus routes will be used at a minimum or, where possible, not used at all.</li> <li>- At busy roads that intersect with residential areas and access roads to schools; Necessary precautions will be taken with flagman, signboards, pointers,</li> </ul>	PS1, PS2, PS 4		During the operation, when there is transportation or shipment activity increased			



Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		- Heavy vehicle traffic that may increase the traffic density of the surrounding residential areas at school entrance / exit hours will be shifted to other hours of the day.						
Traffic	In case of other ongoing project activities or possible road works within the OIZ; occurring impacts on traffic or transportation within the OIZ, caused from the heavy vehicles, and project vehicles.	<ul style="list-style-type: none"> <li>- A written notification will be made to the OIZ management 1 week and 1 day in advance for the dates when traffic intensity will occur,</li> <li>- Speed limits of project vehicles and heavy vehicles, and traffic density within the OIZ will be monitored,</li> <li>- Employees will be informed and activities will be monitored in order not to restrict the roads inside the OIZ during transportation activities.</li> </ul>	PS1, PS2, PS 4		During the operation, when transportation or shipment activity increased			

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
Labour and Working Conditions	Risk associated to the management of workers' fundamental principles and rights.	<p>The Company is required to comply with the fundamental principles and standards embodied in the national labour, social security and occupational health and safety laws and the ILO conventions 29 and 105 (forced labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour).</p> <p>Human Resources Policy must include information relating to:</p> <ul style="list-style-type: none"> <li>• Maintaining a good worker management relationship;</li> <li>• Promoting the fair treatment, non-</li> </ul>	PS1, PS2, Local Legislation	Akinal OHS Officer, HR Department, Contractors	During the operation,			<p>Labour and working conditions plan/program prepared and implemented;</p> <p>Internal grievance mechanism.</p>

Key Social and Environmental Impacts and related Mitigation Measures								
Compound	Social & Environmental Impacts	Mitigation measures	Reference (IFC PS etc.)	Responsibility	Schedule	Feasibility, effectiveness and sustainability <sup>21</sup>	Cost	Monitoring Indicators
		<p>discrimination and equal opportunities for workers;</p> <ul style="list-style-type: none"> <li>Preventing use of child and forced labor.</li> </ul> <p>The implementation of the Policy will be checked during the monitoring phase.</p> <p>The company is required to establish an internal grievance mechanism (i.e. Personnel Request Forms, suggestion / complaints boxes etc.) for workers.</p> <p>The Company shall consider Covid-19 measures during all phases of the project. EBRD's Briefing Note regarding PR2 would be considered as a guidance.</p>						

Other ESMS provisions				
Compound	Activities to comply with ESMS policy and provisions	Implementation Responsibility	Schedule	Cost
<b>Stakeholder Engagement</b>	SEP has been prepared and stakeholder engagement activities will be carried out during the construction - operation periods.	Akinal and Consultant	During the construction process; As project phases or activities change, as needed depending on impacts During the operation process; as necessary	
<b>Grievance Mechanism</b>	GRM has been prepared and all complaints from stakeholders will be recorded and managed according to the procedure.	Akinal and Consultant	During the entire construction and operation period	
<b>Gender Mainstreaming</b>	In recruitment, priority will be given to increasing women's employment in skilled and unskilled jobs, especially in surrounding settlements.	Akinal HR	During construction and operation	

## 18.0 Monitoring Mechanism

Summary of the Environmental and Social Monitoring is presented in Table 18-1 at the end of this section of this report. The monitoring, auditing and reporting procedure has been established in order to ensure proper implementation of mitigation measures, and maintain or improve the environmental and the socio- economic characteristics of the area during the construction and operation phases of the project. The monitoring procedure will focus on noise impact, air quality, water quality, soil and groundwater quality plus any emerging socio-economic adverse effects. The monitoring activity will monitor the application of environmental and social mitigation measures and the result of monitoring activities shall be reflected in the monthly reports. An institutional framework and strategy for the involved official institutions is suggested in order to strengthen the capacity buildings in the field of the environmental monitoring and reporting procedures and methodologies.

The environmental and social monitoring program will operate through the pre-construction, construction, and operation phases. It will consist of a number of activities, each with a specific purpose with key indicators and criteria for significance assessment.

Environmental and social monitoring is also an essential component of project implementation. It facilitates and ensures the follow-up of the implementation of the proposed mitigation measure, as they are required. It helps to anticipate possible environmental hazards and/or detect unpredicted impacts over time.

### Monitoring of Sub-contractors and Service Provider

Internal and External Monitoring will be carried out during the Project lifecycle.

Internal monitoring study will be planned and handled by Akinal. Primary aim of the internal monitoring is, monitoring and auditing the sub-contractors and service providers during the construction phase and self-audit during the operation phase in terms of the compliance of the project activities with the Project requirements. Internal monitoring will be carried out periodical. Schedule and periodical cycle of the internal monitoring will be decided by the Akinal in accordance with the project duration and requirements. After determination of any possible nonconformities, relevant corrective and preventive actions will be defined in accordance with the Corrective and Preventive Actions Procedure<sup>22</sup> of the Company. Monitoring reports will be submitted to the Company management and ESMS implementation performance will be assessed periodically.

External monitoring study will be conducted by Stantec. Primary aim of the external monitoring is, monitoring and auditing both the sub-contractors and Akinal in terms of the compliance of the construction and operation activities with the legislation and Project requirements provided in Section 9.0. External monitoring will be carried out semiannually during construction phase and annually during operation phase. External monitoring reports will be submitted to the Development Investment Bank of Turkey.

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<sup>22</sup> Doc No. 2-PR-102.01 Corrective and Preventive Actions Procedure



**Table 18-1:** Environmental and Social Monitoring Plan

Environmental and Social Monitoring Plan						
Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
<b>Construction Phase</b>						
Dust emission from excavation and unpaved roads	Unnecessary speeding will be prevented to reduce dust formation.  Water will be sprayed regularly during dry weather to prevent generation for dust.  For details, please see Annex-I.		Dust monitoring (PM <sub>10</sub> )	In case of any grievance		
Emissions from vehicles and construction equipment	Periodic maintenance will be done periodically by authorized institutions.  For details, please see Annex-I.		Exhaust emission reports	Maintenance: Automotive – every 2 years  Other vehicles – once a year		
Noise created from construction	Periodic maintenance of the construction equipment and		Noise monitoring	In case of any grievance		



Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
equipment and vehicles	<p>vehicles will be done periodically in authorized institutions and night works will be avoided.</p> <p>If equipment and machines with high noise levels are used, the noise level will be reduced by taking the most appropriate measures (isolation, silencer etc.).</p> <p>It will be prohibited to leave unused vehicles and equipment running.</p>					
Wastewater created from the construction works	<p>Domestic wastewater generated by the Project workers will be sent to the wastewater treatment plant of the OIZ.</p> <p>Contamination of storm water by chemicals, oil or any</p>		Wastewater analysis	Annually		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>other hazardous materials will be prevented. Wastes and other hazardous materials will be stored in closed areas where storm water cannot be contacted.</p> <p>For details, please see Annex-III.</p>					
Waste generation during construction works	<p>Wastes will be stored in the existing temporary waste storage area of the factory.</p> <p>Domestic wastes will be disposed in the landfill of the Gaziantep Municipality. The package wastes will be disposed via the licensed companies.</p> <p>Hazardous wastes and non-hazardous wastes</p>		Visual observation	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	will be disposed by the licensed companies.  For details, please see Annex-II.					
Climate Change and Sustainability	Quantity of natural sources used during the project works will be recorded and it will be aimed to decrease use of the natural sources every month in accordance with the resource efficiency target.		Records of natural sources and benefits	Monthly		
Soil and groundwater contamination	If fuels, oil and other chemicals cannot be stored in a central storage area or with a spill control reservoir, they will be stored in a manner to prevent risk to soil and groundwater spill. As a minimum, drip trays will be used; however, additional measures		Visual observation	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>will be taken depending on the nature of the substance or on the sensitivity of the receiving environment.</p> <p>Spill kits will be placed at the locations where hazardous materials are stored.</p>					
Risks arising from excavation and transportation of excavated materials	<ul style="list-style-type: none"> <li>- Appropriate vehicles will be used in the excavation or transportation of excavated materials</li> <li>- In order to eliminate risks such as spill during transportation, the cargo section will be covered with tarp</li> </ul>	As planned	Site observations, incident records	Continuous		
Risks arising from stocking excavation materials	<ul style="list-style-type: none"> <li>- The sub-soil excavation material will be used for levelling and filling of any necessary areas. -</li> </ul>	As planned	Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>In the vicinity of the storage areas built in the project site, all kinds of measures such as net, barriers, which will prevent overflows, will be taken.</p> <ul style="list-style-type: none"> <li>- To prevent landslides due to raining or structure of soil, storage and stockpiling excavation materials which are piled on top of each other will be avoided.</li> <li>- Storage and stockpiling of excavated materials will be on areas that will not pose a risk to other plants, roads etc.</li> </ul>					
Traffic accidents	- Drivers will ensured to have driving license and other required documentation,	As planned	Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<ul style="list-style-type: none"> <li>- Reversing will be avoided as much as possible inside and at the entrance of the plant.</li> <li>- Proper signage will be put in place.</li> <li>- A speed limit of 20 km/hr will be enforced inside the plant.</li> <li>- OIZ speed limit will be followed outside the plant.</li> </ul>					
Fire and explosion	<ul style="list-style-type: none"> <li>- Flammable materials and wastes will be stored away from source of ignition and hot works</li> <li>- Required amount and type of fire extinguishers will be provided</li> <li>- Pressurized gas cylinders will be stored in upright position and restrained securely in</li> </ul>	As planned	Site observations, incident records	Continuous		



Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	places out of direct sun light. Cylinders valve caps will be removed just before use and flammable and oxidizing gas cylinders will be stored separately.					
Risks associated to the management of worker's and community health and safety	<p>The Company is required to implement health and safety requirements for workers and communities according to the Turkish Law No. 6331 on Occupational Health and Safety and related regulations, and also relevant IFC policies and best practices.</p> <p>In any case, the Company is required to provide the following documents;</p> <ul style="list-style-type: none"> <li>Risk Assessment;</li> </ul>	As planned	Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<ul style="list-style-type: none"> <li>Health and Safety (H&amp;S) Plans ;</li> <li>Emergency Response Plans (ERPs),</li> </ul> <p>The above documents must be updated for the project and revised periodically.</p> <p>The H&amp;S Plan shall cover induction for all workers, work specific instructions, periodic training, supervision and also provision of first aid and medical response. The Company shall implement safe and healthy working conditions for all workers. Additionally, all health and safety documentation must be prepared by considering Covid-19</p>					

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>pandemic impacts, risks, precautions, and measures and must be implemented during all phases of the Project.</p> <p>Company is required to provide Personnel Protective Equipment (i.e. ear protection etc.) to all workers and visitors in areas where the indoor noise level exceeds the legal limits.</p>					
Infections due to Communicable diseases such as Covid-19	<ul style="list-style-type: none"> <li>- Covid-19 precaution plans and procedures will be implemented in the project work area and facilities, eating area, construction site, office areas and accommodation areas provided for employees</li> <li>- Communication and information tools</li> </ul>	As planned	Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	defined within the scope of Covid-19 measures in the SEP will be used in Project studies regarding Stakeholder Engagement.					
Hazards to the health and safety of employees and community	<ul style="list-style-type: none"> <li>- Health and Safety procedures will be developed and implemented according to laws, regulations and best practices,</li> <li>- Akinal will ensure that appropriate Health and Safety services and experts are provided.</li> <li>- All the measured defined in health and safety documentation regarding fire safety, working at heights, electrical safety, manual handling, hazardous material</li> </ul>	As planned	Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>etc. will be implemented on site.</p> <ul style="list-style-type: none"> <li>- A copy of risk assessment which is conducted by contractors and subcontractors will be requested.</li> <li>- Risk assessment documents will be updated during construction phase, if required (after accidents, near misses, installation of new equipment, change in method statements etc.)</li> <li>- Considering Covid-19 pandemic, risk assessment document will be updated to include risks and measures and will be implemented through construction phase</li> </ul>					

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
Potential construction impacts on agricultural lands used as livelihood and lands where livestock activities are maintained close to the project site.	<ul style="list-style-type: none"> <li>- Project impacts on land used as livelihood will be monitored within the framework of stakeholder engagement.</li> <li>- By meeting with stakeholders, grievance mechanism and stakeholder participation process will be informed.</li> <li>- Corrective measures and/or actions and compensations, if necessary, will be fulfilled, regarding the possible damage.</li> </ul>		Field observation report, Internal monitoring reports, Grievance redress mechanism records,			
Increasing the heavy vehicle traffic density during the excavation, equipment and material transportation process on the roads	<ul style="list-style-type: none"> <li>- On project dates when excavation, material and equipment transportation is intense due to construction works; Headmen of</li> </ul>	As planned	Field observation report, Internal monitoring reports, Grievance redress mechanism records, Project site vehicle reports	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
<p>outside the OIZ, which includes the access road of primary / secondary schools, also used by the neighborhoods of Karahüyük, Dülük and Atabek</p>	<p>settlements using high-traffic roads will be notified 1 week and 1 day in advance.</p> <ul style="list-style-type: none"> <li>- The roads used by the nearby neighborhoods and school bus routes will be used at a minimum or, where possible, not used at all.</li> <li>- At busy roads that intersect with residential areas and access roads to schools; Necessary precautions will be taken with flagman, signboards, pointers,</li> <li>- Heavy vehicle traffic that may increase the traffic density of the surrounding residential areas at school entrance / exit hours</li> </ul>					



Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	will be shifted to other hours of the day.					
In case of other ongoing project activities or possible road works within the OIZ; occurring impacts on traffic or transportation within the OIZ, caused from the heavy vehicles, construction activities and project vehicles.	<ul style="list-style-type: none"> <li>- A written notification will be made to the OIZ management 1 week and 1 day in advance for the dates when traffic intensity will occur,</li> <li>- Speed limits of project vehicles and heavy vehicles, and traffic density within the OIZ will be monitored,</li> <li>- Employees will be informed and activities will be monitored in order not to restrict the roads inside the OIZ during construction and transportation activities.</li> </ul>	As planned	Field observation report, Internal monitoring reports, Grievance redress mechanism records, Project site vehicle reports	Continuous		
Risk associated to the management of	The Company is required to comply with	As planned	Labour and working conditions	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
workers' fundamental principles and rights.	<p>the fundamental principles and standards embodied in the national labour, social security and occupational health and safety laws and the ILO conventions 29 and 105 (forced labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour).</p> <p>Human Resources Policy must include information relating to:</p> <ul style="list-style-type: none"> <li>• Maintaining a good worker management relationship;</li> <li>• Promoting the fair treatment, non-</li> </ul>		<p>plan/program prepared and implemented,</p> <p>Internal monitoring reports, Grievance redress mechanism records,</p>			

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>discrimination and equal opportunities for workers;</p> <ul style="list-style-type: none"> <li>Preventing use of child and forced labor.</li> </ul> <p>The implementation of the Policy will be checked during the monitoring phase.</p> <p>The company is required to establish an internal grievance mechanism (i.e. Personnel Request Forms, suggestion / complaints boxes etc.) for workers.</p>					
Prevention / resolution of loss of rights and disputes that may arise during the dismissal process	To provide detailed and clear information on dismissal process that will occur after the construction phase and on the rights of		Internal monitoring reports, Grievance redress mechanism records, Dismissal documents			

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>employees in accordance with the date specified in the labor law. To evaluate the demands and complaints of the workers according to GRM to prevent loss of rights.</p> <p>to make the necessary negotiations between the employees and the Firm..</p>					
<b>Operation Phase</b>						
Stack gas emissions	<p>Emission measurements will be conducted periodically</p> <p>Filters or other stack gas treatment methods will be used if concentrations above the limit values are measured.</p> <p>For details, please see Annex-I.</p>		Ambient air quality monitoring (SO <sub>2</sub> , NO <sub>2</sub> , CO)	In case of any grievance		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
Permitting	Article 11 of the Environmental Permit and License Regulation related to changes in the facility will be complied with and necessary applications related to revision of the Environmental Permit will be done.  For details, please see Annex-I.		Environmental permit	Continuous		
Noise created from operational activities	Periodic maintenance of the operational equipment and will be done periodically in authorized institutions.  If equipment and machines with high noise levels are used, the noise level will be reduced by taking the most appropriate		Noise monitoring	In case of any grievance		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>measures (isolation, silencer etc.).</p> <p>It will be prohibited to leave unused vehicles and equipment running.</p>					
Wastewater created from the operation phase	<p>Domestic and industrial wastewater generated by the Project workers will be sent to the wastewater treatment plant of the OIZ.</p> <p>Contamination of storm water by chemicals, oil or any other hazardous materials will be prevented. Wastes and other hazardous materials will be stored in closed areas where storm water cannot be contacted.</p> <p>The connection Permit of wastewater will be</p>		Wastewater analysis	Annually		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>renewed once expired and necessary analysis required by the OIZ will be made by the accredited laboratories.</p> <p>For details, please see Annex-III.</p>					
Waste generation during operation phase	<p>Wastes will be stored in the existing temporary waste storage area of the factory.</p> <p>Domestic wastes will be disposed in the landfill of the Gaziantep Municipality. The package wastes will be disposed via the licensed companies.</p> <p>Hazardous wastes and non-hazardous wastes will be disposed by the licensed companies.</p>		Visual observation	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	For details, please see Annex-II.					
Climate Change and Sustainability	Quantity of natural sources used during the project works will be recorded		Records of natural sources and benefits	Monthly		
Soil and groundwater contamination	If fuels, oil and other chemicals cannot be stored in a central storage area or with a spill control reservoir, they will be stored in a manner to any prevent risk to soil and groundwater spills. As a minimum, drip trays will be used; however, additional measures will be taken depending on the nature of the substance or on the sensitivity of the receiving environment.		Visual observation	Continuous		



Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	Spill kits will be placed at the locations where hazardous materials are stored.					
Risk associated to the management of worker's and community health and safety	<p>The Company is required to implement health and safety requirements for workers and communities according to the Turkish Law No. 6331 on Occupational Health and Safety and related regulations, and also relevant IFC policies and best practices.</p> <p>In any case, the Company is required to provide the following documents;</p> <ul style="list-style-type: none"> <li>• Risk Assessment Analysis;</li> <li>• Health and Safety Plans</li> </ul>		<p>Site observations, incident records</p> <p>Labour and working conditions plan/program prepared and implemented;</p> <p>Internal grievance mechanism.</p>	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>(HS);</p> <ul style="list-style-type: none"> <li>Emergency Response Plans (ERPs),</li> </ul> <p>The above documents must be updated for the project and revised periodically.</p> <p>The H&amp;S Plan shall cover induction for all workers, work specific instructions, periodic training, supervision and also provision of first aid and medical response. The Company shall implement safe and healthy working conditions for all workers. Additionally, all health and safety documentation must be prepared by considering Covid-19 pandemic impacts, risks, precautions, and</p>					

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>measures and must be implemented during all phases of the Project.</p> <p>Company is required to provide Personnel Protective Equipment (i.e. ear protection etc.) to all workers and visitors in areas where the indoor noise level exceeds the legal limits.</p>					
Taking necessary measures to ensure equal opportunity in the recruitment process	<p>To provide detailed and clear information on recruitment process for all candidates, especially to provide information for the vulnerable groups living close to the Project area.</p> <p>Conducting a transparent and procedural recruitment process.</p>		<p>Labour and working conditions plan/program prepared and implemented, recruitment evaluation reports, ToRs</p> <p>Internal grievance mechanism.</p>			

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	To provide equal opportunities to all candidates.					
Traffic accidents	<ul style="list-style-type: none"> <li>- Drivers will ensured to have driving license and other required documentation,</li> <li>- Reversing will be avoided as much as possible inside and at the entrance of the plant.</li> <li>- Proper signage will be put in place.</li> <li>- A speed limit of 20 km/hr will be enforced inside the plant.</li> <li>- OIZ speed limit will be followed outside the plant.</li> </ul>		Site observations, incident records	Continuous		
Fire and explosion	<ul style="list-style-type: none"> <li>- Flammable materials and wastes will be stored away from source of ignition and hot works</li> <li>-Required amount and</li> </ul>		Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>type of fire extinguishers will be provided</p> <ul style="list-style-type: none"> <li>- Pressurized gas cylinders will be stored in upright position and restrained securely in places out of direct sun light. Cylinders valve caps will be removed just before use and flammable and oxidizing gas cylinders will be stored separately.</li> </ul>					
Risks arising from raw material storage	<p>Prevent interaction with surrounding environment in storages areas, with the use of nets, barriers and walls</p> <ul style="list-style-type: none"> <li>- Storage area safety and stability will be ensured</li> <li>- Chemical will be stored in areas where spill prevention and</li> </ul>		Site observations, incident records	Continuous		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	containment measures are implemented. Spill kits will be provided.					
Risks arising from working with machines and equipment	<ul style="list-style-type: none"> <li>- Guards and barriers to prevent employees contact will be provided.</li> <li>- Unauthorized use of machines and equipment will be prohibited.</li> </ul>		Site observations, incident records	Continuous		
Risk arising from working with chemicals	<ul style="list-style-type: none"> <li>- Measures will be taken according to SDS and hazard control hierarchy.</li> <li>- Appropriate type and amount of PPE will be provided to employees.</li> </ul>		Site observations, incident records	Continuous		
Pandemic risk caused by Covid-19	<ul style="list-style-type: none"> <li>- Covid-19 precaution plans and procedures prepared in the project work area and facilities, dining hall, construction site, office</li> </ul>		Health control records, grievance redress mechanism records, internal and external monitoring reports	During Covid-19 risk		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>areas and accommodation provided for employees from outside the city will be implemented,</p> <ul style="list-style-type: none"> <li>- Communication and information tools defined within the scope of Covid-19 measures in the SEP will be used in Project studies regarding Stakeholder Engagement.</li> </ul>					
Increasing the heavy vehicle traffic density during the material transportation process on the roads outside the OIZ, which includes the access road of primary / secondary schools, also used by the	<ul style="list-style-type: none"> <li>- On project dates when, material and equipment transportation is intense; Headmen of settlements using high-traffic roads will be notified 1 week and 1 day in advance.</li> <li>- The roads used by the nearby</li> </ul>		Field observation report, Internal monitoring reports, Grievance redress mechanism records,	During operation, especially when transportation activities increased		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
neighborhoods of Karahüyük, Dülük and Atabek	<p>neighborhoods and school bus routes will be used at a minimum or, where possible, not used at all.</p> <ul style="list-style-type: none"> <li>- At busy roads that intersect with residential areas and access roads to schools; Necessary precautions will be taken with flagman, signboards, pointers,</li> <li>- Heavy vehicle traffic that may increase the traffic density of the surrounding residential areas at school entrance / exit hours will be shifted to other hours of the day.</li> </ul>					
In case of other ongoing project activities or possible road works within the OIZ; occurring	- A written notification will be made to the OIZ management 1 week and 1 day in advance for the dates when		Field observation report, Internal monitoring reports, Grievance redress mechanism records,	During operation, especially when transportation		



Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
impacts on traffic or transportation within the OIZ, caused from the heavy vehicles, and project vehicles.	<p>traffic intensity will occur,</p> <ul style="list-style-type: none"> <li>- Speed limits of project vehicles and heavy vehicles, and traffic density within the OIZ will be monitored,</li> <li>- Employees will be informed and activities will be monitored in order not to restrict the roads inside the OIZ during transportation activities.</li> </ul>			activities increased		
Risk associated to the management of workers' fundamental principles and rights.	The Company is required to comply with the fundamental principles and standards embodied in the national labour, social security and occupational health and safety laws and the ILO conventions 29 and 105 (forced		Internal monitoring reports, redress Grievance mechanism records,	During operation,		

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>labour), 87 (freedom of association), 98 (right to collective bargaining), 100 and 111 (discrimination), 138 (minimum age) 182 (worst forms of child labour).</p> <p>Human Resources Policy must include information relating to:</p> <ul style="list-style-type: none"> <li>• Maintaining a good worker management relationship;</li> <li>• Promoting the fair treatment, non-discrimination and equal opportunities for workers;</li> <li>• Preventing use of child and forced labor.</li> </ul> <p>The implementation of</p>					

Social & Environmental Impacts	Mitigation measures	Color coding	Measurement	Frequency of the Measurement	Describe status of completion, suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
	<p>the Policy will be checked during the monitoring phase.</p> <p>The company is required to establish an internal grievance mechanism (i.e. Personnel Request Forms, suggestion / complaints boxes etc.) for workers.</p> <p>The Company shall consider Covid-19 measures during all phases of the project. EBRD's Briefing Note regarding PR2 would be considered as a guidance.</p>					

Other Environmental and Social Requirements	Status and Records	Incomplete Task and Time
Stakeholder Consultation and Information Requirements	Grievance mechanism, stakeholder communication and visit records	

Grievance Mechanism	Grievance mechanism, stakeholder communication and visit records	
Gender equality	Grievance mechanism, stakeholder communication and visit records Female-male recruitment rates / numbers on a monthly basis Human resources records	
<i>Color Coding: The progress of implementing mitigation measures should be color-coded in column C: Green = On Schedule/ Ahead of Schedule/ Completed, Orange = Slightly Delayed, Red = Delayed</i>		<div>on schedule</div> <div>slightly delayed</div> <div>major delays /issues</div>

## Plan for Monitoring Effectiveness of ESMP

*(to be completed by Company)*

Mitigation measures	Indicators <i>proving effectiveness of avoidance or reducing impacts</i> <sup>v</sup>	Baseline	Monitoring methodology	Target (mid-term)	Target (end of project)

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## Annex-I: Air Quality Management Plan

### INTRODUCTION

The purpose of the Air Quality Management Plan (the Plan) is to define the scope and applicable interphases for the management of air emissions during the construction and operation activities of the **Wetlaid Production Line Investment Project planned by Akinal Synthetic** Textile Industry Trade Inc.; define project standards in terms of air emissions; define responsibilities, commitments, operating procedures and instructions for the implementation of this management plan; and to manage air emissions and monitor project performance in relation to air emissions.

The Plan will be implemented along with the other management plans prepared for construction and operation phases of the Project and listed below:

- Environmental and Social Management Plan (ESMP)
- Stakeholder Engagement Plan (SEP)
- Occupational Health and Safety Plan
- Emergency Action Plan
- Waste Management Plan
- Wastewater Management Plan

### OBJECTIVES

The objective of this Plan is to minimize potential air emission impacts on receptors resulting from the Project construction and operation activities.

### LEGAL AND OTHER REQUIREMENTS

This Management Plan is being prepared in accordance with the requirements of the Project ESAP, applicable national legislation, Environmental and Social Policies of the Development Investment Bank of Turkey, IFC Environmental and Social Performance Standards (specifically PS3) and Environmental and Social Framework of Asian Infrastructure Investment Bank (specifically ESS1).

Legislative requirements in Turkey related to air quality management is provided in following regulations:

- Regulation on Industrial Air Pollution Control
- Regulation on Assessment and Management of Air Quality
- Regulation on Monitoring of Greenhouse Gas Emissions
- Regulation on Exhaust Gas Emission Control and Petrol and Diesel Quality
- Regulation on Reducing the Sulphur Ratio in Some Fuel Types
- Regulation on Substances that Deplete the Ozone Layer
- Regulation on Environmental Permit and License

### Emission Limits

Mass flow rates of the pollutants and air emission concentrations to be obeyed during the Project works are provided from Regulation on Industrial Air Pollution Control which are given in the below tables.



**TABLE A: MASS FLOW RATES (ANNEX 2, TABLE 2.1 OF THE REGULATION)**

Emissions	Mass flow rates (kg / hour) for operating hours in normal operating conditions and weekly working days	
	Stack	Non-stack
Dust	10	1
Lead	0.5	0.05
Cadmium	0.01	0.001
Thallium	0.01	0.001
Chlorine	20	2
Hydrogen Chloride and Gas	20	2
Inorganic Chloride Compounds	2	0.2
Hydrogen fluoride and Gas	4	0.4
Inorganic Fluoride Compounds	500	50
Hydrogen Sulfide	60	6
Carbon Monoxide	40	4
Sulfur dioxide	30	3
Note: Values in the table are the hourly mass flow rates created from the entire facility (sum of the emissions from all stacks)		

**TABLE B: LIMIT VALUES OF STACK GAS EMISSIONS FOR THE FACILITIES WITH COMBUSTION THERMAL POWER BELOW 50 MW (ANNEX 5, TABLE 5.2 OF THE REGULATION)**

Fuels	SO <sub>2</sub> mg/Nm <sup>3</sup>	CO mg/Nm <sup>3</sup>	NO <sub>2</sub> mg/Nm <sup>3</sup>	Dust mg/Nm <sup>3</sup>
Natural Gas, LPG, Refinery gas	100	100	800	10
* Volumetric oxygen content in flue gases is taken as 3%.				

The IFC Air Emissions and Ambient Air Quality Guidelines refer to the limit values recommended by the World Health Organization (WHO) and presented in the table below.

**TABLE C: WHO AMBIENT AIR QUALITY LIMITS**

Pollutant	Average Period	Limit Value (mg/m <sup>3</sup> )
SO <sub>2</sub>	24-hour	20
	10 minutes	500
NO <sub>2</sub>	1-year	40
	24-hour	200



Pollutant	Average Period	Limit Value (mg/m <sup>3</sup> )
Particulate Matter PM <sub>10</sub>	1-year	20
	24-hour	50
Particulate Matter PM <sub>2.5</sub>	1-year	10
	24-hour	25
O <sub>3</sub>	8-hour daily maximum	100

### POSSIBLE AIR EMISSIONS

Dust formation from earthmoving activities/movement of the vehicles and other gas emissions from construction machinery will be the main sources of impacts on air quality during the construction phase of the project. These impacts on the air quality, mainly due to dust emissions caused by excavation works and exhaust emissions from the vehicles will be temporary during the construction phase.

Natural gas is used in the existing facility for production activities. Stack gas emissions from burning of natural gas (carbon dioxide, carbon monoxide, sulfur dioxide, nitrogen oxides, particulate matter etc.) will be the air emissions created from the production activities during operation phase.

### MANAGEMENT AND MONITORING

Table D below presents a summary of the potential environmental impacts related to air quality, together with mitigation and management measures to avoid or reduce these impacts.

**TABLE D: MANAGEMENT AND MONITORING**

Air Emission Source	Potential Impact	Mitigation/Management	Monitoring Frequency	Responsibility
<b>CONSTRUCTION PHASE</b>				
Dust emission from excavation and unpaved roads	Air pollution	<p>Unnecessary speeding will be prevented to reduce dust formation.</p> <p>Water will be sprayed regularly during dry weather to prevent generation for dust.</p> <p>Maximum height of fugitive material stockpiles will be less than 5 meters.</p> <p>Trucks transporting fugitive materials such as soil, sand etc. will be covered to prevent dispersion during transportation. On each journey, the sheeting material will be maintained in good order.</p>	Continuous	Akinal Environmental Officer



Air Emission Source	Potential Impact	Mitigation/Management	Monitoring Frequency	Responsibility
Emissions from vehicles and construction equipment	Air pollution	Periodic maintenance will be done periodically by authorized institutions.  Equipment will not be left running for long periods when not directly in use.	Automotive – every 2 years  Other vehicles – once a year	Akinal Environmental Officer
<b>OPERATION PHASE</b>				
Stack gas emissions	Air pollution	Emission measurements will be conducted periodically  Filters or other stack gas treatment methods will be used if concentrations above the limit values are measured.	Every 2 years	Akinal Environmental Officer
Permitting	Air pollution	Article 11 of the Environmental Permit and License Regulation related to changes in the facility will be complied with and necessary applications related to revision of the Environmental Permit will be done.	Continuous	Akinal Environmental Officer

In case of complaint about air pollution, air quality measurement must be done at the closest sensitive receiving point (Figure 8-2 in the ESMP). Daily site audits will be conducted by the Environmental Officer and nonconformities will be determined. Observed nonconformities will be recorded by the Environmental officer and relevant corrective/preventive actions will be defined and implemented.

## ROLES AND RESPONSIBILITIES

The roles and responsibilities in relation to the implementation of this Plan are presented in the following table.

**TABLE E: ROLES AND RESPONSIBILITIES**

ROLES	RESPONSIBILITIES
General Manager	<ul style="list-style-type: none"> <li>To approve this Plan and allocation of the resources required for implementation of this Plan;</li> <li>To employ required number of personnel and resources required for implementation;</li> <li>To take appropriate actions to address major nonconformities, based on audit and monitoring reports.</li> </ul>
Factory Manager	<ul style="list-style-type: none"> <li>To monitor implementation of the Plan and ensure that the activities carried out within the factory are carried out in accordance with the Plan;</li> <li>To inform the Environmental Officer about the identified deficiencies and improvement suggestions in order to monitor the performance of this Plan and ensure continuous improvement.</li> </ul>



Environmental Officer	<ul style="list-style-type: none"> <li>• To coordinate Project activities related to this Plan;</li> <li>• To inform the employees / sub-contractors about this Plan;</li> <li>• To check and approve the subcontractors' compliance with the Plan and supervise their implementation performance;</li> <li>• To identify the mistakes of the sub-contractors in the implementation of the Plan, communicate the sub-contractors about these mistakes and provide necessary technical support;</li> <li>• To monitor, audit and revise this Plan for improvement and better implementation;</li> <li>• Inform the General Manager and Factory Manager regarding the performance of the Plan.</li> </ul>
Human Resources Director	<ul style="list-style-type: none"> <li>• To communicate with all stakeholders within scope of the Plan;</li> <li>• To coordinate communication with local people in case of emergencies;</li> <li>• To implement grievance mechanism and communicate with Environmental Officer about internal/external complaints related to this Plan.</li> </ul>

### TRAINING, AWARENESS AND COMPETENCY

Akınal will provide adequate training to all project employees in accordance with the requirements of this Plan and ensure that sub-contractor employees receive similar trainings. Trainings will be held on a regular basis. Training will aim to inform about legislative requirements and competency with other relevant standards (i.e., IFC PSs, AIIBs ESSs). In addition, trainings will provide general knowledge about possible important impacts of the Project related to the Plan and mitigation measures.

### REPORTING AND NOTIFICATION

The effectiveness of this Plan, monitoring results, problems related to air emissions, internal and external grievances about air emissions, need of any investments and all other topics related to implementation of the Plan will be reported to General Manager. In addition, General Manager will be notified directly for solution of the urgent issues.



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## Annex-II: Waste Management Plan

### INTRODUCTION

The purpose of the Waste Management Plan (the Plan) is to define the scope and applicable interphases for waste management activities (generation, avoiding, reuse, reduction, minimization, collection, storage, disposal etc.) during the construction and operation activities of **the Wetlaid Production Line Investment Project planned by Akinal Synthetic Textile Industry Trade Inc.**; define project standards in terms of waste management, define responsibilities, commitments, operating procedures and instructions for the implementation of this management plan; and to manage air emissions and monitor project performance in relation to waste management.

The Plan will be implemented along with the other management plans prepared for construction and operation phases of the Project and listed below:

- Environmental and Social Management Plan (ESMP)
- Stakeholder Engagement Plan (SEP)
- Occupational Health and Safety Plan
- Emergency Action Plan
- Air Quality Management Plan
- Wastewater Management Plan

### OBJECTIVES

The objective of this Plan is to define mitigation and control measures for minimization and management of the solid, hazardous and non-hazardous wastes that will be created from the Project construction and operation activities.

### LEGAL AND OTHER REQUIREMENTS

This Management Plan is being prepared in accordance with the requirements of the Project ESAP, applicable national legislation, Environmental and Social Policies of the Development Investment Bank of Turkey, IFC Environmental and Social Performance Standards (specifically PS3) and Environmental and Social Framework of Asian Infrastructure Investment Bank (specifically ESS1).

Legislative requirements in Turkey related to waste management is provided in following regulations and notices:

- Regulation on Waste Management
- Regulation on Control of Excavation Soil and Construction Debris
- Regulation on Control of Waste Batteries and Accumulators
- Regulation on Control of Vegetative Oils
- Regulation on Control of Medical Wastes
- Regulation on Control of End of Life Tires
- Regulation on Control of PCB and PCTs
- Regulation on Restriction of Some Hazardous Materials in Electrical and Electronic Devices
- Regulation on Control of Waste Oil
- Regulation on Control of End of Life Vehicles
- Regulation on Waste Incineration



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- Regulation on Landfills (Regular Storage of Wastes)
  - Regulation on Control of Packaging Wastes
  - Regulation on Control of Waste Electrical and Electronic Goods
  - Zero Waste Regulation
  - Notice on Recycling of Certain Non-Hazardous Wastes

### TYPES OF WASTE TO BE GENERATED

Waste generation is expected as a result of construction and operation activities. It consists of domestic wastes, package wastes, construction wastes, including excavated materials, hazardous wastes and non-hazardous wastes.

During the construction phase of the Project, the vegetative topsoil will be removed and stored in a separate designated area and will then be used for landscape rehabilitation activities after completion of the hard fill. The sub-soil excavation material will be used for levelling and filling of any necessary areas. Therefore, any excavation waste will not be created during the construction phase.

Domestic solid waste including packaging waste (glass, paper, cartoon, plastic etc.) will be produced by workers during construction and operation on-site. Regarding the domestic solid waste, the amounts can be estimated as 35.10 kg/day and 58,50 kg/day considering daily waste generation value of 1,17 kg/capita-day and 30 and 50 workers for the construction and operation phases, respectively.

Hazardous wastes like concrete additives, contaminated soils, preservative, adhesives, paint, varnish, solvents, fluorescent light tubes, lead-acid batteries etc. and non-hazardous wastes like metal, scrap, iron, hard plastic etc. will also be created during construction activities of the Project.

Other wastes to be generated during operation phase of the Project are listed below with the waste codes:

- 130110: Mineral based non-chlorinated hydraulic oils;
- 150110: Packages containing residues of hazardous substances or contaminated with hazardous substances;
- 150202: Absorbents, filter materials (oil filters if not specified otherwise), cleaning cloths, protective clothing contaminated with hazardous substances;
- 180103: Wastes subject to special processing of collection and disposal in order to prevent infection;
- 070213: Waste plastic;
- 040221: Unprocessed textile fiber;
- 040222: Processed textile fiber;
- 200140: Metals;
- 160601: Lead batteries and accumulators;
- 200121: Fluorescent light tubes and other mercury containing wastes.

### MANAGEMENT AND MONITORING

Table A below presents a summary of the potential environmental impacts related to waste management, together with mitigation and management measures to avoid or reduce these impacts.



**TABLE A: MANAGEMENT AND MONITORING**

Waste Type	Potential Impact	Mitigation/Management	Monitoring Frequency	Responsibility
<b>CONSTRUCTION PHASE</b>				
Domestic wastes	Contamination	Domestic wastes will be collected separately from other wastes, stored temporarily at site and disposed in the landfill of the Gaziantep Municipality.	Continuous	Akinal Environmental Officer
Packaging wastes (glass, paper, cartoon, plastic etc.)	Contamination	Packaging wastes will be collected separately from domestic wastes, stored temporarily at site and other wastes and disposed via the MoEU licensed companies.	Continuous	Akinal Environmental Officer
Hazardous wastes (concrete additives, contaminated soils, preservative, adhesives, paint, varnish, solvents, fluorescent light tubes, lead-acid batteries etc.)	Contamination	Hazardous wastes will be collected separately from domestic wastes and other wastes, stored in the permitted temporary waste storage area and disposed via the MoEU licensed companies.	Continuous	Akinal Environmental Officer
Non-hazardous wastes (metal, scrap, iron, hard plastic etc.)	Contamination	Non-hazardous wastes will be collected separately from domestic wastes and other wastes, stored in the permitted temporary waste storage area and disposed via the MoEU licensed companies.	Continuous	Akinal Environmental Officer
<b>OPERATION PHASE</b>				
Domestic wastes	Contamination	Domestic wastes will be collected separately from other wastes, stored temporarily at site and disposed in the landfill of the Gaziantep Municipality.	Continuous	Akinal Environmental Officer



Waste Type	Potential Impact	Mitigation/Management	Monitoring Frequency	Responsibility
Packaging wastes (glass, paper, cartoon, plastic etc.)	Contamination	Packaging wastes will be collected separately from domestic wastes, stored temporarily at site and other wastes and disposed via the MoEU licensed companies.	Continuous	Akinal Environmental Officer
Hazardous wastes (non-chlorinated hydraulic oils, contaminated packages, absorbents, filter materials, medical wastes, lead batteries and accumulators, fluorescent light tubes etc.)	Contamination	Hazardous wastes will be collected separately from domestic wastes and other wastes, stored in the permitted temporary waste storage area and disposed via the MoEU licensed companies.	Continuous Industrial Waste Management Plan – once per 3 years Annual waste declaration	Akinal Environmental Officer
Non-hazardous wastes (unprocessed textile fiber; processed textile fiber, metals etc.)	Contamination	Non-hazardous wastes will be collected separately from domestic wastes and other wastes, stored in the permitted temporary waste storage area and disposed via the MoEU licensed companies.	Continuous Industrial Waste Management Plan – once per 3 years Annual waste declaration	Akinal Environmental Officer

Within the scope of the project, a waste management hierarchy will be implemented. Waste generation will be tried to be avoided and waste disposal will be the last option in accordance with the hierarchical order listed below:

1. Prevention (first option)
2. Decrease
3. Reuse
4. Recovery
5. Disposal (last option)

The existing factory has a temporary waste storage area which was approved by the PDoEU. Wastes which will be generated in scope of the Project will be stored in the existing temporary waste storage area.

A 3-year Industrial Waste Management Plan (2019-2021) was prepared according to the Regulation on Waste Management and approved by the PDoEU for the existing factory. The Industrial Waste Management Plan will be revised and submitted to the PDoEU for the next 3 years in accordance with the Regulation on Waste Management.



Waste type, code, amount, source, facility to be sent, transportation information and disposal process will be recorded through MoEU's Mobile Waste Tracking System (MoTAT). Annual notifications about hazardous / non-hazardous wastes and waste oils will be made using MoEU online system. All records will be kept for at least 5 years to be reviewed by the Ministry in case of any audit.

Within the scope of the Zero Waste Regulation, OIZ Directorate will be contacted and cooperated with during the transition period of the regulation for establishment of a zero waste management system. Compliance with the provisions of the regulation will be achieved after the transition period.

## ROLES AND RESPONSIBILITIES

The roles and responsibilities in relation to the implementation of this Plan are presented in the following table.

**TABLE B: ROLES AND RESPONSIBILITIES**

ROLES	RESPONSIBILITIES
General Manager	<ul style="list-style-type: none"> <li>To approve this Plan and allocation of the resources required for implementation of this Plan;</li> <li>To employ required number of personnel and resources required for implementation;</li> <li>To take appropriate actions to address major nonconformities, based on audit and monitoring reports.</li> </ul>
Factory Manager	<ul style="list-style-type: none"> <li>To monitor implementation of the Plan and ensure that the activities carried out within the factory are carried out in accordance with the Plan;</li> <li>To inform the Environmental Officer about the identified deficiencies and improvement suggestions in order to monitor the performance of this Plan and ensure continuous improvement.</li> </ul>
Environmental Officer	<ul style="list-style-type: none"> <li>To coordinate Project activities related to this Plan;</li> <li>To inform the employees / sub-contractors about this Plan;</li> <li>To check and approve the subcontractors' compliance with the Plan and supervise their implementation performance;</li> <li>To identify the mistakes of the sub-contractors in the implementation of the Plan, communicate the sub-contractors about these mistakes and provide necessary technical support;</li> <li>To monitor, audit and revise this Plan for improvement and better implementation;</li> <li>Inform the General Manager and Factory Manager regarding the performance of the Plan.</li> </ul>
Human Resources Director	<ul style="list-style-type: none"> <li>To communicate with all stakeholders within scope of the Plan;</li> <li>To coordinate communication with local people in case of emergencies;</li> <li>To implement grievance mechanism and communicate with Environmental Officer about internal/external complaints related to this Plan.</li> </ul>

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### **TRAINING, AWARENESS AND COMPETENCY**

Akinal will provide adequate training to all project employees in accordance with the requirements of this Plan and ensure that sub-contractor employees receive similar trainings. Trainings will be held on a regular basis. Training will aim to inform about legislative requirements and competency with other relevant standards (i.e., IFC PSs, AIIB ESSs). In addition, trainings will provide general knowledge about possible important impacts of the Project related to the Plan and mitigation measures.

### **REPORTING AND NOTIFICATION**

The effectiveness of this Plan, monitoring results, problems related to waste management, internal and external grievances about waste management, need of any investments and all other topics related to implementation of the Plan will be reported to General Manager. In addition, General Manager will be notified directly for solution of the urgent issues.





## Annex-III: Wastewater Management Plan

### INTRODUCTION

The purpose of Wastewater Management Plan (the Plan) is to define the scope and applicable interphases for wastewater management activities for the period between use of water and wastewater discharge during the construction and operation activities of the Wetlaid Production Line Investment Project planned by Akinal Synthetic Textile Industry Trade Inc.; define project standards in terms of wastewater management, define responsibilities, commitments, operating procedures and instructions for the implementation of this management plan; and to manage air emissions and monitor project performance in relation to wastewater management.

The Plan will be implemented along with the other management plans prepared for construction and operation phases of the Project and listed below:

- Environmental and Social Management Plan (ESMP)
- Stakeholder Engagement Plan (SEP)
- Occupational Health and Safety Plan
- Emergency Action Plan
- Air Quality Management Plan
- Waste Management Plan

### OBJECTIVES

The objective of this Plan is to define mitigation and control measures for minimization and management of wastewater that will be created from the Project construction and operation activities.

### LEGAL AND OTHER REQUIREMENTS

This Management Plan is being prepared in accordance with the requirements of the Project ESAP, applicable national legislation, Environmental and Social Policies of the Development Investment Bank of Turkey, IFC Environmental and Social Performance Standards (specifically PS3) and Environmental and Social Framework of Asian Infrastructure Investment Bank (specifically ESS1).

Legislative requirements in Turkey related to air quality management is provided in following regulations and notices:

- Regulation on Water Pollution Control
- Regulation on Control of Pollution Caused by Dangerous Substances in Water and its Environment
- Regulation on Prevention of Groundwater from Contamination and Degradation
- Regulation on Protection of Wetlands
- Regulation on Management of Surface Water Quality
- Regulation on Septic Tanks Constructed in Places where Sewage System Construction is not Possible

Wastewater Channel Discharge Criteria of Gaziantep OIZ will be obeyed during discharge of the wastewater to the OIZ wastewater network (Table A).



**TABLE A: WASTEWATER CHANNEL DISCHARGE CRITERIA OF GAZIANTEP**

Pollutant	Unit	Limit Value
Chemical Oxygen Demand (COD)	mg/L	2,200
Suspended Solid	mg/L	498
Oil and Grease	mg/L	100
Total Phosphorus	mg/L	8
Total Chromium	mg/L	4
Chromium (Cr <sup>+6</sup> )	mg/L	1.5
Lead (Pb)	mg/L	4
Total Cyanide	mg/L	1.5
Cadmium (Cd)	mg/L	0.3
Iron (Fe)	mg/L	30
Fluoride (F)	mg/L	40
Copper (Cu)	mg/L	8
Zink (cu)	mg/L	15
Mercury (Hg)	mg/L	-
Sulphate (SO <sub>4</sub> )	mg/L	3,500
Total Kjeldalh nitrogen	mg/L	30
Fish Bioassay (ZSF)	-	25
pH	-	6-9
Color	Pt-Co	260

### WATER USE AND TYPES OF WASTEWATER TO BE GENERATED

Water will be used for potable water demand of workers, dust suppression and cleaning purposes during the construction phase. Water usage will be required during the operation phase for potable water demand of workers, cleaning purposes and production.

Drinking water demand will be purchased with water suppliers and the potable water will be purchased from the OIZ Directorate water network during construction and operation periods. Water to be used for production activities will be purchased from the OIZ Directorate, similar to the existing factory.

Considering the daily domestic water requirement is 150 litres per capita, for 30 employees during the construction phase and 50 employees during the operation phase, the domestic water requirement (and, consequently, discharge) are respectively estimated to be 4,5 m<sup>3</sup>/day and 7,5 m<sup>3</sup>/day. Amount of



water which will be used for dust suppression and cleaning will be negligible since the construction will be done in a small area with limited time and during rainy/snowy winter season.

Approximately 120 m<sup>3</sup>/day water will be used for production activities together with the existing factory. Similar to the construction, water demand for cleaning purposes will be negligible. **Water is recycled in the wetlaid process. Amount of wastewater which is not treated and reused in the process will be approximately 72 m<sup>3</sup>/day for all factory.**

## MANAGEMENT AND MONITORING

Table B below presents a summary of the potential environmental impacts related to wastewater management, together with mitigation and management measures to avoid or reduce these impacts.

**TABLE B: MANAGEMENT AND MONITORING**

Wastewater Type	Potential Impact	Mitigation/Management	Monitoring Frequency	Responsibility
<b>CONSTRUCTION AND OPERATION PHASE</b>				
Domestic wastewater	Contamination	Domestic wastewater generated by project workers will be sent to the wastewater treatment plant of the OIZ.	Continuous	Akinal Environmental Officer
Storm water	Contamination	<p>The OIZ has storm water collection system with screeners and oil trappers. Since the Project is planned within the borders of the existing factory, this storm water collection system will be used and any additional action is not required for management of storm water during both construction and operation phases.</p> <p>Runoff will be directed via the existing system and discharged to the OIZ storm water collection system.</p> <p>Contamination of storm water by chemicals, oil or any other hazardous materials will be prevented. Wastes and other hazardous materials will be stored in closed areas where storm water cannot be contacted.</p>	Continuous	Akinal Environmental Officer
Domestic and industrial wastewater	Contamination	Wastewater analysis and measurements including analysis of pollutant concentrations will be conducted annually for the existing factory according to Akinal	Annual  Wastewater Connection Permit –	Akinal Environmental Officer

Wastewater Type	Potential Impact	Mitigation/Management	Monitoring Frequency	Responsibility
		<p>representatives. The analysis and measurements must be continued during construction and operation phases in according to the OIZ monitoring requirements.</p> <p>The connection Permit of wastewater will be renewed once expired and necessary analysis required by the OIZ will be made by the accredited laboratories.</p>	once per 3 years	
<b>OPERATION PHASE</b>				
Industrial wastewater	Contamination	Industrial wastewater generated from the production process will be sent to the wastewater treatment plant of the OIZ.	Continuous	Akinal Environmental Officer

The existing factory has a Wastewater Connection Permit, therefore any additional permit is not required for the Project.

Unnecessary consumption of the water to be used during the Project works will be avoided. In this context, water use amounts will be recorded monthly to determine possible excess uses (See ESMP Section 10.4), necessary measures will be taken for minimization of water use and wastewater generation.

Analysis of domestic water to be used during the Project activities must be done regularly.

### ROLES AND RESPONSIBILITIES

The roles and responsibilities in relation to the implementation of this Plan are presented in the following table.

**TABLE C: ROLES AND RESPONSIBILITIES**

ROLES	RESPONSIBILITIES
General Manager	<ul style="list-style-type: none"> <li>To approve this Plan and allocation of the resources required for implementation of this Plan;</li> <li>To employ required number of personnel and resources required for implementation;</li> <li>To take appropriate actions to address major nonconformities, based on audit and monitoring reports.</li> </ul>

Factory Manager	<ul style="list-style-type: none"> <li>• To monitor implementation of the Plan and ensure that the activities carried out within the factory are carried out in accordance with the Plan;</li> <li>• To inform the Environmental Officer about the identified deficiencies and improvement suggestions in order to monitor the performance of this Plan and ensure continuous improvement.</li> </ul>
Environmental Officer	<ul style="list-style-type: none"> <li>• To coordinate Project activities related to this Plan;</li> <li>• To inform the employees / sub-contractors about this Plan;</li> <li>• To check and approve the subcontractors' compliance with the Plan and supervise their implementation performance;</li> <li>• To identify the mistakes of the sub-contractors in the implementation of the Plan, communicate the sub-contractors about these mistakes and provide necessary technical support;</li> <li>• To monitor, audit and revise this Plan for improvement and better implementation;</li> <li>• Inform the General Manager and Factory Manager regarding the performance of the Plan.</li> </ul>
Human Resources Director	<ul style="list-style-type: none"> <li>• To communicate with all stakeholders within scope of the Plan;</li> <li>• To coordinate communication with local people in case of emergencies;</li> <li>• To implement grievance mechanism and communicate with Environmental Officer about internal/external complaints related to this Plan.</li> </ul>

### TRAINING, AWARENESS AND COMPETENCY

Akinal will provide adequate training to all project employees in accordance with the requirements of this Plan and ensure that sub-contractor employees receive similar trainings. Trainings will be held on a regular basis. Training will aim to inform about legislative requirements and competency with other relevant standards (i.e., IFC PSs, AIIB ESSs). In addition, trainings will provide general knowledge about possible important impacts of the Project related to the Plan and mitigation measures.

### REPORTING AND NOTIFICATION

The effectiveness of this Plan, monitoring results, problems related to wastewater management, internal and external grievances about wastewater management, need of any investments and all other topics related to implementation of the Plan will be reported to General Manager. In addition, General Manager will be notified directly for solution of the urgent issues.

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