



ERBAA WASTEWATER TREATMENT PLANT CAPACITY EXPANSION PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

(ESMP)

June 2025

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LIST OF ABBREVIATIONS

AoI	Area of Influence
C-ESMP	Contractor's Environmental and Social Management Plan
CIMER	Presidency's Communication Centre
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoC	Code of Conduct
E&S	Environmental and Social
EHS	Environment, Health, and Safety
EIA	Environmental Impact Assessment
EM	Erbaa Municipality
EPRP	Emergency Preparedness and Response Plan
ESHS	Environmental, Social, Health and Safety
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Monitoring Report
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standard
GBV	Gender Based Violence
GM	Grievance Mechanism
HAWS	Hand Arm Vibration Syndrome
HSE	Health, Safety, and Environment
IFC	International Finance Corporation
ILBANK	İller Bankası A.Ş.
ILO	International Labour Organization
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
LC	Least Concern
LMP	Labour Management Procedures
MoEUCC	Ministry of Environment, Urbanization and Climate Change
NCR	Non-Compliance Report
OHS	Occupational Health and Safety
OG	Official Gazette
OIZ	Organized Industrial Zone
PAP	Project Affected Person
PPE	Personal Protective Equipment

PID	Project Identification Document
PIU	Project Implementation Unit
PMU	Project Management Unit
PPE	Personal Protective Equipment
RCA	Root Cause Analysis
SDS	Safety Data Sheet
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
TAP	Portable Battery Manufacturers and Importers Association
TEFWER	Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction
TUBITAK	The Scientific and Technological Research Council of Türkiye
TURKAK	Turkish Accreditation Agency
TurkStat	Turkish Statistical Institute
VG	Vulnerable Group
WB	World Bank
WBG	World Bank Group
WHO	World Health Organization
WWTP	Wastewater Treatment Plant
YIMER	Foreigners Communication Centre

EXECUTIVE SUMMARY

Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction (TEFWER) Project (hereinafter the “Project”) has been developed by the participation of İller Bankası A.Ş. (İLBANK) and World Bank (WB) to support municipalities to undertake urgent repairs, structural strengthening, and if needed demolition/reconstruction, rehabilitation, or new construction of damaged municipal owned infrastructure and to put in place measures aimed at increasing disaster preparedness and climate adaptation.

In this regard, "Erbaa Existing Wastewater Treatment Plant Capacity Expansion Project" (hereinafter “the sub-project”) will be financed and implemented under TEFWER Component 1 - Green and Resilient Rehabilitation, Reconstruction and Construction of Municipal Infrastructure and Actions to Strengthen Municipal Resilience and following concerned subcomponent.

- Subcomponent 1.c - Restored and improved resilience of water and wastewater services.

The general objective of the sub-project is to increase the capacity of the existing Erbaa Wastewater Treatment Plant (WWTP) to fulfil the requirements of wastewater management. The specific objective of this sub-project is to increase the capacity of the existing Erbaa WWTP to serve the increasing population.

Erbaa district is a district of Tokat province in the Central Black Sea region and the distance to Tokat city centre is approximately 79 kilometres. The existing Erbaa WWTP, which is in the sub-project area, is located in Erek Neighbourhood, Çorak Location within the Erbaa Organized Industrial Zone (OIZ) (see Figure 2-1).

The Erbaa Municipality (hereinafter “EM”) is the owner of the Capacity Expansion for Wastewater Treatment Plant Project (the sub-project).

The EM completed the existing wastewater treatment plant investment in 2007 and commissioned it in 2008. The EM has the right to use the land where the WWTP is located, that is adjacent to its north-east, and this area is registered as WWTP expansion area. Therefore, no land acquisition is required within the scope of the sub-project. Title deed of the sub-project area and Zoning Plan of Erbaa OIZ are presented in Appendix-A. Indefinite handover decision of the land from Erbaa OIZ to EM dated 29.05.2006 is given in Appendix-G.

Therewith, the site walkover to the sub-project area was made by ENVESU Environment Energy Construction and Consultancy Inc. and 2U1K Engineering and Consultancy Inc. on May 29, 2024.

Subsequently, Environmental and Social (E&S) risks of the sub-project have been identified according to the WB Environmental and Social Standards (ESS) and İLBANK Environmental

and Social Management System (ESMS) and hence, Environmental Social Management Plan (ESMP) and Stakeholder Engagement Plan (SEP) has been prepared.

The sub-project's construction works are expected to commence in October 2025, last 22 months and be completed by the end of July 2027. The defects liability period of the sub-project is the first 12 months after construction. The target year of the sub-project operation is 2054. EM plans to employ a maximum of 40 workers for sub-project construction activities. The existing plant employs 8 people. During the operation phase of the sub-project, additional 6 people are planned to be employed so that a total of 14 people will be involved in the operation phase. Currently there is not any site work ongoing on the sub-project area.

The sub-project's construction will be carried out on existing WWTP area within the Erbaa OIZ. However, before starting construction activities, an opinion letter will be received from the Museum Directorate. When the official opinion letters obtained from the Museum Directorate, the opinion letter will be submitted to ILBANK. To manage activities in terms of cultural heritage, a Chance Find Procedure has been prepared (see Appendix-H). Also, most common OHS risk areas and corresponding general mitigation measures throughout the life of the sub-project are provided in Appendix-I

Existing Erbaa WWTP is a system designed with suspended activated sludge principle, operating with conventional (aeration + sedimentation) system, phosphorus removal with bio phosphorus tank and nitrogen treatment with denitrification process as nitrification. According to the sub-project's Project Identification Document (PID), the most feasible way has been designated to increase the capacity in the existing volumes for the sub-project process is to increase the existing capacity with the same capacity and the same process. Hence, as a sub-project, it is planned to construct a new 12,000 m³/day capacity with same process with the existing Erbaa WWTP as Phase-1 on the same parcel with the existing 12,000 m³/day capacity plant. Hence, the plant will reach a capacity of 24,000 m³/day.

The decision that national Environmental Impact Assessment (EIA) is not required for the existing plant was secured on 19 July 2005 after the application of the EM (see Appendix-C for the relevant official letter). Due to the capacity increase of the plant, the EIA process of the sub-project has been also initiated on 6 November 2024 in line with the Regulation on EIA published in the Official Gazette (OG) dated 29.07.2022 and numbered (No) 31907. In conclusion, Tokat Provincial Directorate of Environment, Urbanization and Climate Change has decided that the sub-project is out of scope for EIA (see Appendix-B).

There are no associated facilities such as roads, energy transmission lines, etc. of this sub-project, and no major impact is expected besides dust, noise, and traffic load increment during the construction phase. In addition to this, the odour impact during the operation phase will be reduced by good operating techniques. Also, there will be maintenance, and repair works in the plant throughout of the operation phase. The sub-project will not require any additional private land. Therefore, no land acquisition will be required.

As a part of the mitigation measures, management plans and procedures on different subjects should be developed by the contractor prior to the construction works. These management plans are based on the risks and mitigation measures specified in the ESMP. These plans will be prepared for construction and operation phases of the sub-project, at least one (1) month before the start of the relevant phase and will be submitted to ILBANK for approval. Employees will be trained on the relevant plans to be developed. A list of management plans and procedures for construction and operation phases of the sub-project are presented below.

- Contractors Environmental and Social Management Plan
- Effluent Management Plan,
- Odour Management Plan,
- Waste Management Plan,
- Sludge Management Plan,
- Spill Response Plan,
- Occupational Health and Safety (OHS) Management Plan,
- Emergency Preparedness and Response Plan (EPRP),
- Construction Site Traffic and Transport Management Plan,
- Labour Management Plan (based on the TEFWER's Labour Management Procedures (LMP)),
- Community Health and Safety Management Plan,
- Chance Finds Procedure.

The Stakeholder Consultation Meeting was held on 30 May 2025 at 15:00 at the Ahmet Yenihan Congress and Culture Centre Meeting Hall in Erbaa, Tokat, as part of the "Erbaa Existing Wastewater Treatment Plant Capacity Increase Project". A total of 16 people attended the meeting. Participants raised questions regarding the project's benefits to the public and its potential impacts during the operational phase. These questions were addressed by the project team and officials from Erbaa Municipality. The meeting lasted approximately one hour and concluded with an informative question-and-answer session. Detailed information regarding the Stakeholder Consultation Meeting is provided in Appendix-J.

1 INTRODUCTION

Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction (TEFWER) Project (hereinafter the “Project”) has been developed by the participation of İller Bankası A.Ş. (İLBANK) and World Bank (WB) to support municipalities to undertake urgent repairs, structural strengthening, and if needed demolition/reconstruction, rehabilitation, or new construction of damaged municipal owned infrastructure and to put in place measures aimed at increasing disaster preparedness and climate adaptation.

In this context, "Erbaa Existing Wastewater Treatment Plant Capacity Expansion Project" (hereinafter “the sub-project”) (hereinafter “the sub-project”) will be financed by the Project and will be implemented under TEFWER Component 1 - Green and Resilient Rehabilitation, Reconstruction and Construction of Municipal Infrastructure and Actions to Strengthen Municipal Resilience and following concerned subcomponents.

- Subcomponent 1.c - Restored and improved resilience of water and wastewater services.

The Erbaa Municipality (hereinafter “EM”) is the owner of the sub-project. Existing Erbaa WWTP adjacent to the sub-project area, is located within the borders of the Erbaa Organized Industrial Zone (OIZ) in Ereğ Neighbourhood, Çorak Mevkii, lot 1 of block 1367. Title deed of the sub-project area and Zoning Plan of Erbaa OIZ are presented in Appendix-A. Indefinite handover decision of the land from Erbaa OIZ to EM dated 29.05.2006 is given in Appendix-G.

Erbaa WWTP, which is one of the grant projects within the scope of the ‘Development Programme for the Level 2 Regions’ financed by the EU and the Republic of Türkiye, was commissioned in 2008. At present, the existing wastewater treatment plant capacity of Erbaa, which is developing rapidly, has reached its limit with 96%. The specific objective of sub-project is to increase the capacity of the existing Erbaa WWTP to serve the increasing population.

The WWTP is currently operated by the Erbaa Municipality to meet the discharge criteria of the Urban Wastewater Treatment Regulation. The WWTP is designed as a long aeration activated sludge system. Carbon removal is provided in the plant, but nitrogen and phosphorus are discharged at a quality close to the related limit values.

Within the framework of this objective, the prioritised infrastructure and management targets are categorised as follows

- To realise WWTP investments to meet the plant's capacity requirement until 2054,
- Strengthening and resilience of wastewater (WW) services,
- Strengthen the administrative organisation for a sustainable and manageable wastewater management.

The decision that national Environmental Impact Assessment (EIA) is not required for the existing plant with capacity of 12,000 m³/day was secured on 19 July 2005 (see Appendix-C for the relevant official letter). Due to the capacity increase of the plant, the EIA process of the sub-project, which has total capacity of 24,000 m³/day, has been also initiated on 6 November 2024 in line with the Regulation on EIA published in the Official Gazette (OG) dated 29.07.2022 and numbered (No) 31907. In conclusion, Tokat Provincial Directorate of Environment, Urbanization and Climate Change has decided that the sub-project is out of scope for EIA (see Appendix-B).

The sub-project's construction works are expected to commence in October 2025, last 22 months and be completed at the end of July 2027. The defects liability period of the sub-project is the first 12 months after construction.

In this regard, the site walkover to the sub-project area was made by ENVESU Environment Energy Construction and Consultancy Inc. and 2U1K Engineering and Consultancy Inc. on May 29, 2024.

Subsequently, Environmental and Social (E&S) risks of the sub-project have been identified according to the WB Environmental and Social Standard (ESS)s and İLBANK ESMS through the E&S Screening and Risk Categorization tool. Based on the assessments conducted during the risk screening, the E&S risk classification of the sub-project has been determined as "moderate" and hence, this Environmental Social Management Plan (ESMP) has been prepared.

2 SITE/LOCATION DESCRIPTION

Erbaa is a district of Tokat province in the Central Black Sea region of Türkiye. Erbaa administratively consists of the district municipality, three (3) town municipalities (Evyaba, Alacabal and Karşıyaka), 74 villages and 97 hamlets. Erbaa OIZ, where the existing plant and the sub-project area are located, started to operate within the borders of the district in 1997 as the 2nd OIZ within the borders of the province.

The sub-project area adjacent to Erbaa WWTP's north-east, is in Erek Neighbourhood, Çorak Mevkii, lot 1 of block 1367. The location of the plant and sub-project area are given in Figure 2-1.

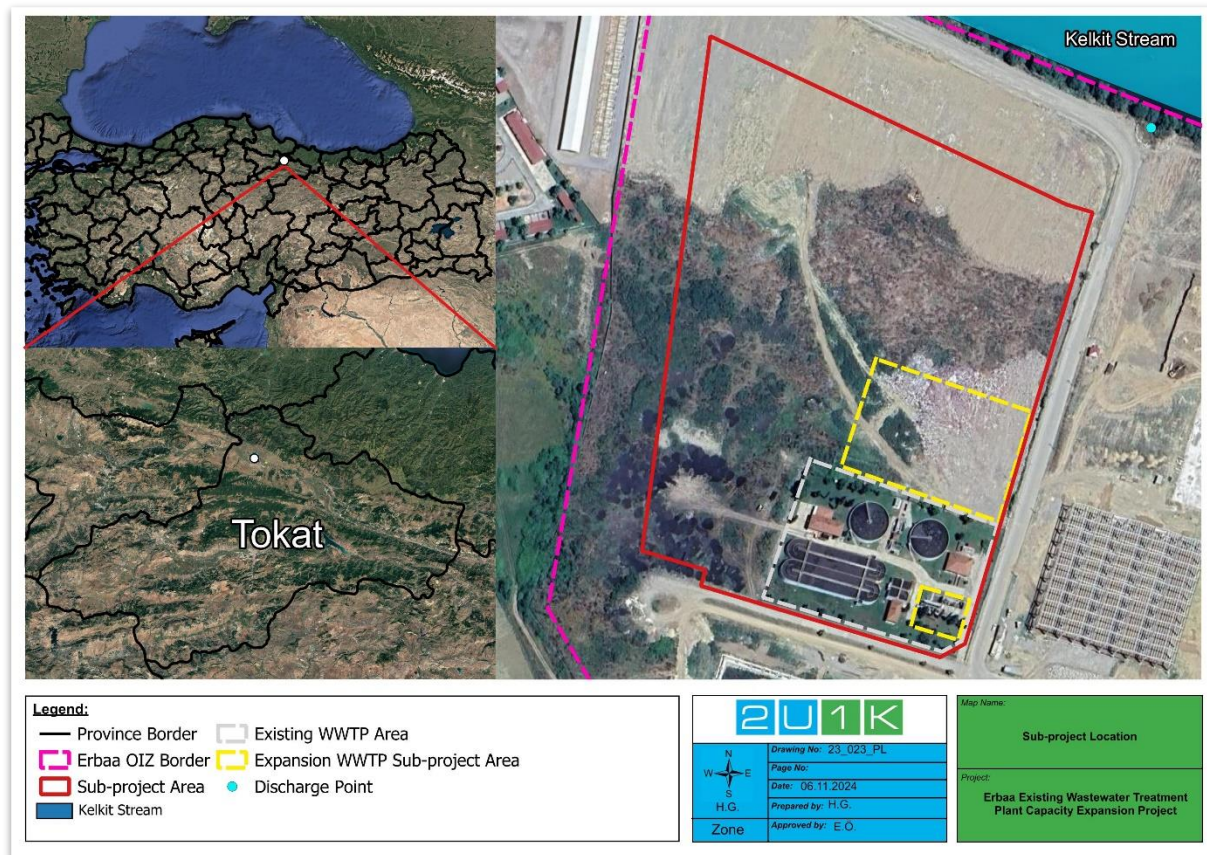


Figure 2-1. Location Map of the Sub-project Area

3 SUB-PROJECT DESCRIPTION AND ACTIVITIES

The existing WWTP with a capacity of 12,000 m³/day serves for population of 70,165, in Erbaa district of Tokat province. According to the sub-project specific Project Identification Document (PID) dated September 2024, the Erbaa WWTP is designed based on the population of 119,375 people (21,615/m³/day) projected for the year 2054. EM plans that it will be operated in the same conventional treatment plant characteristics including solar sludge drying unit (see 1 and Figure 3-2) as the existing WWTP with an additional capacity increase of 12,000m³/day with the commissioning of the sub-project. Hence, the total capacity of the WWTP will be 24,000m³/day. Also, the discharge point of the plant is the Kelkit stream within the Yesilirmak basin in the north-east of the sub-project area (see Figure 3-6).

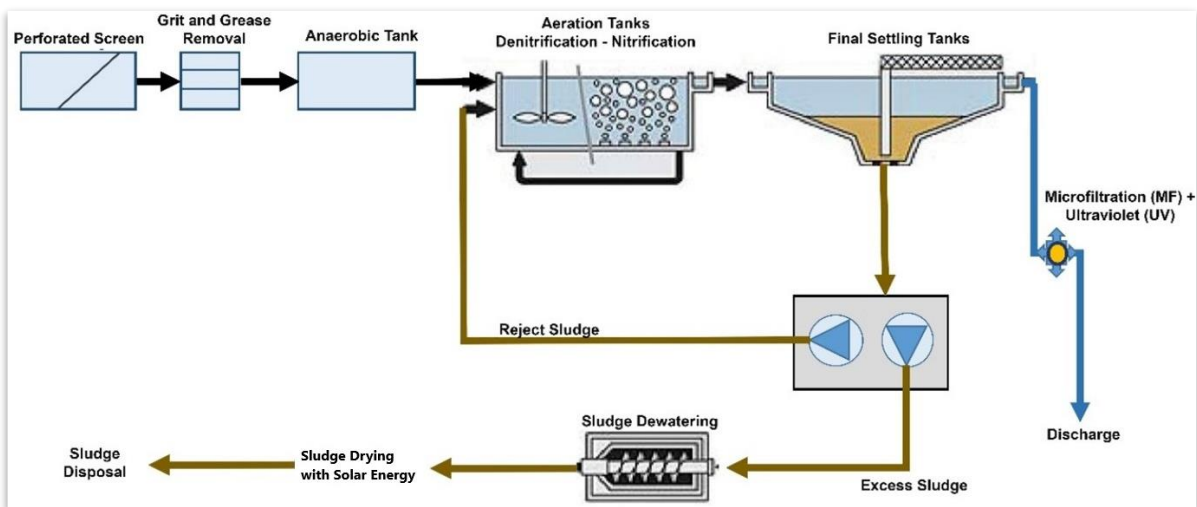


Figure 3-1. Conventional System Workflow Diagram

In this context, a new screen and aerated grit removal to be rebuilt next to the inlet structures of the existing WWTP and a new aeration will be constructed within the expansion area to the north of the existing treatment works, settling tanks, blower building and solar sludge drying unit. In this context, existing WWTP units and sub-project components are listed below.

Existing WWTP Units

- Mechanical Cleaning Coarse Screen
- Automatic Fine Screen
- Supply Tank
- Grit and Grease Removal Package Unit
- Anaerobic Tanks
- Aeration Tanks
- Settling Tank Distribution Tank
- Settling Tanks
- Sludge Return Tank
- Decanter
- Operation Building
- Blower Building
- Sludge Dewatering and Atelier Building
- Caretaker Building

Sub-project Components (Expansion WWTP Units)

- Inlet Chamber - Bypass channel
- Sampling and Discharge and Overflow Flow Meter
- Coarse and Fine Screens
- Inlet Pumping Station
- Grit and Grease Removal Tanks
- Grit and Grease Removal Tanks Blowers
- Anaerobic Bio phosphorus Tanks
- Distribution Chamber of Aeration Tanks
- Aeration Tanks
- Blower Unit
- Distribution Chamber of Final Settling Tanks
- Final Settling Tanks
- Excess and Return Sludge Pumping Stations
- Sludge Dewatering Unit
- Sludge Drying Unit
- Piping System

Sub-project's layout plan including existing Erbaa WWTP project components are given in [Figure 3-2](#).

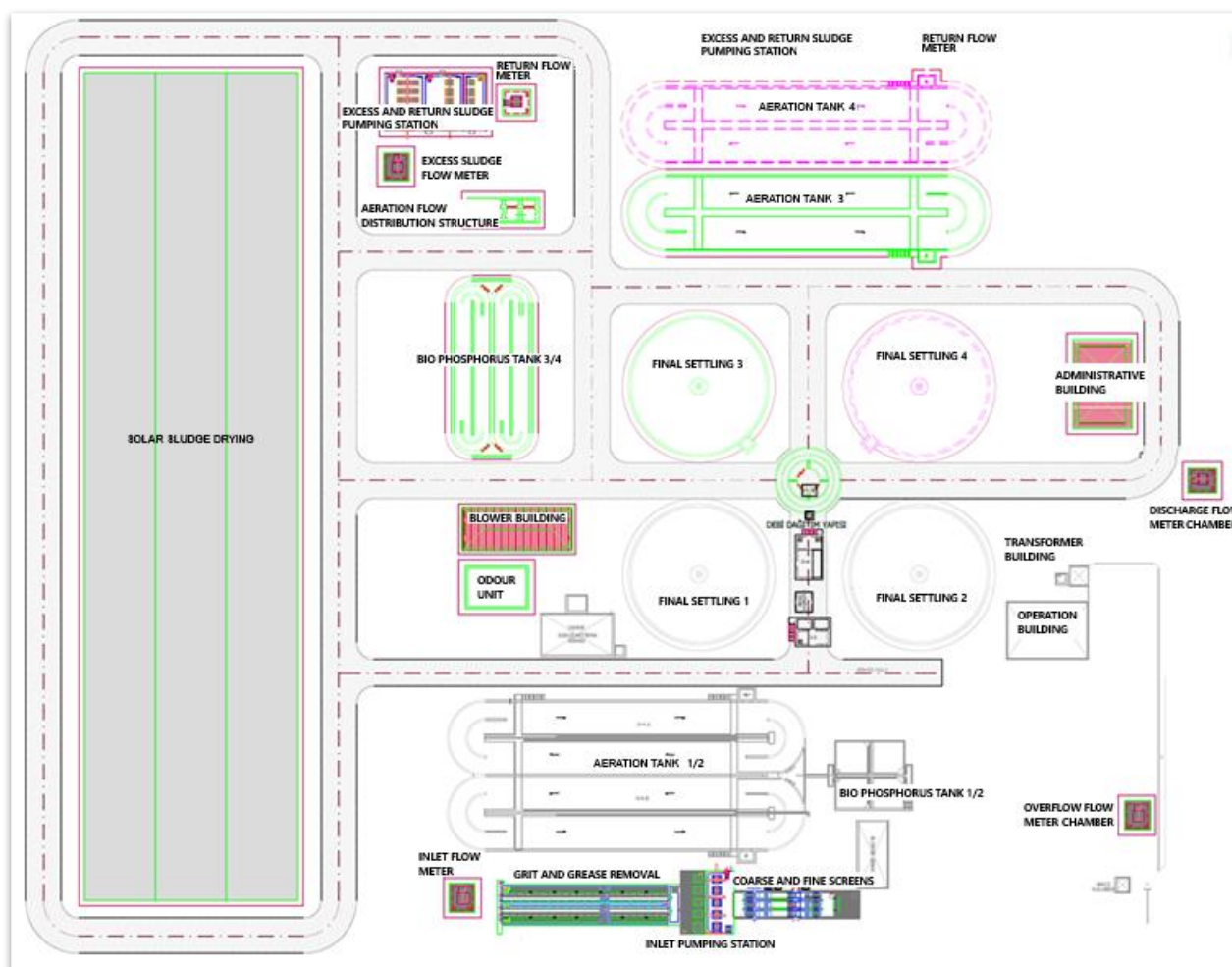


Figure 3-2. Sub-project's Layout Plan Including Existing Erbaa WWTP Project Components

In addition, more detailed design information for the sub-project can be found in the sub-project specific Project Identification Document (PID).

3.1 BASELINE DATA

E&S baseline data for the sub-project area is assessed under this section, while E&S risks/impact assessment of the sub-project is provided in Section 3.

Based on the environmental, social, and public/occupational health and safety risks/impacts that will potentially occur during the construction and operation phases of the sub-project, the Area of Influence (AoI) has been determined with radius of 2.5 km by taking the sub-project area at the centre, including the Erbaa OIZ area. There is a livestock market 200 m west of the sub-project area as a sensitive receptor. Erek and Tosunlar neighbourhoods are in the AoI of the sub-project. The location of the sub-project area and its AoI are presented in [Figure 3-3](#).

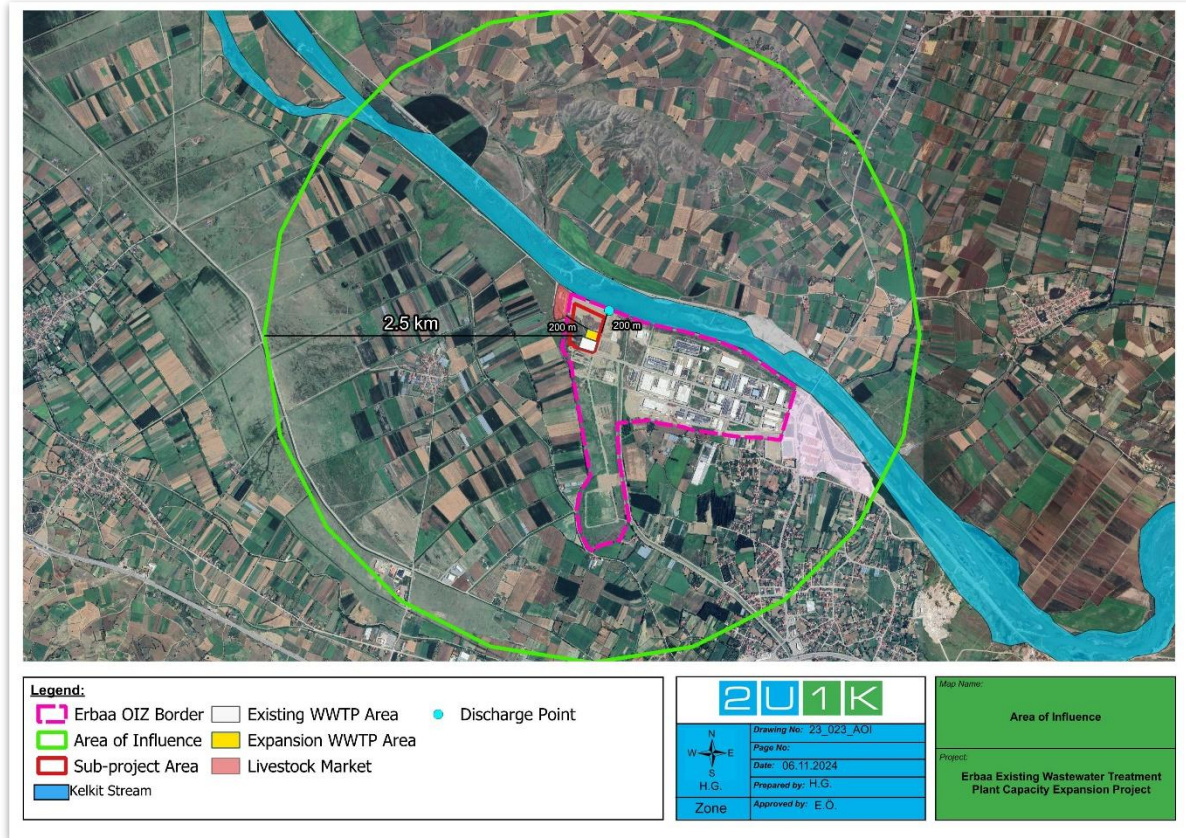


Figure 3-3. The Location of the Sub-project Area and Its AoI

3.1.1 Physical Environment

3.1.1.1 Topography

Erbaa district is a district of Tokat Province in the Central Black Sea region, where the Kelkit and Tozanlı streams merge and take the name of Yeşilırmak (Iris). The territory of the district has a surface area of 1,111 square kilometres, which includes a plain along the Kelkit stream, especially the Tozanlı stream, and the surrounding mountainous areas.

It is surrounded by Çarşamba district of Samsun and Akkuş district of Ordu province from the north, Taşova district of Amasya from the west, Niksar district of Tokat from the east, Tokat centre from the south and Turhal district from the southwest. In the north of the plain on which the district is located; Karınca mountain, which is considered within Canik Mountain, Sakarat and Boğalı mountains in the south, and the extensions of these mountains in the east and west.¹

The sub-project area is located in Yeşilırmak basin, crossed by the Kelkit stream to the north and the İmbat creek to the east. The topographic map of the sub-project area is in **Figure 3-6**Hata! Başvuru kaynağı bulunamadı..

¹ Source web site: www.erbaa.gov.tr

3.1.1.2 Geology

Gravel, sand, silt and clayey units and terraces (Qal) formed from these materials, Kelkit valley along the riverbeds. In addition, sand and gravel sediment thicknesses in riverbeds increases and merges with the alluvial material (Qk) at the edge of the Kelkit stream. Quaternary units can be distinguished as old and new alluvial deposits². In this direction, it is observed that the sub-project area is completely Quaternary (Q)/Alluvium (Qal) in composition. The geological map of the Tokat including sub-project area is presented in Figure 3-4.

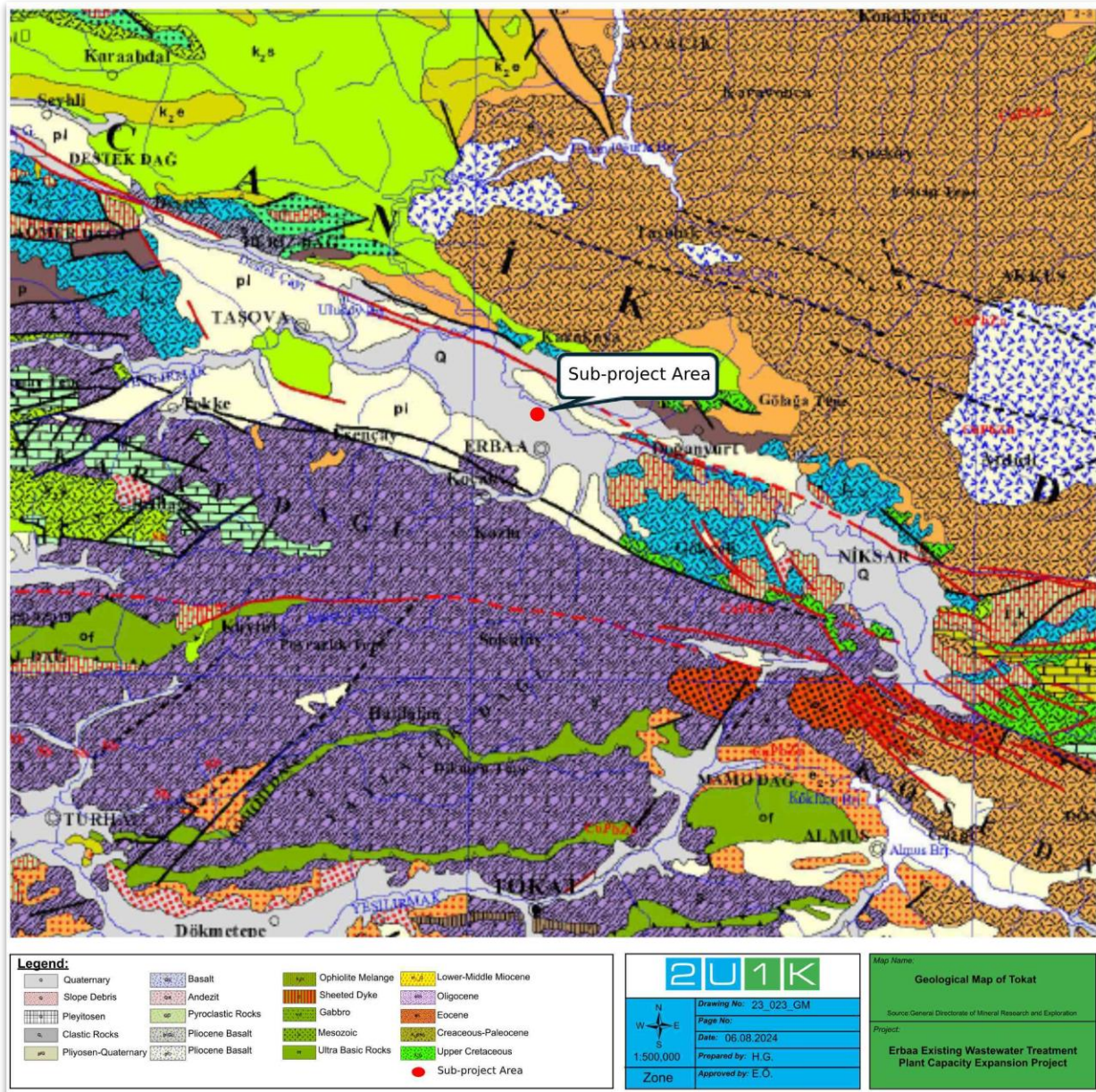


Figure 3-4. The Geological Map of Tokat³

² Canik and Kayabali, 2000

³ Source web site: www.mta.gov.tr

3.1.1.3 Tectonic and Seismicity

Tokat is located in the 1st degree earthquake zone. North Anatolian Fault Line passes through Reşadiye, Niksar and Erbaa districts of the province. Kelkit Stream Valley has formed along the North Anatolian fault line.

According to the Disaster and Emergency Management Presidency (AFAD) General Directorate's Türkiye Earthquake Hazard Map, active fault fractures near the North Anatolian fault line pass 800 m northeast of the sub-project area, and the sub-project area remains within the soil acceleration limits of 0.748 (see Figure 3-5). Hence, the sub-project area has high earthquake risk level in terms of AFAD PGA 475 scale.

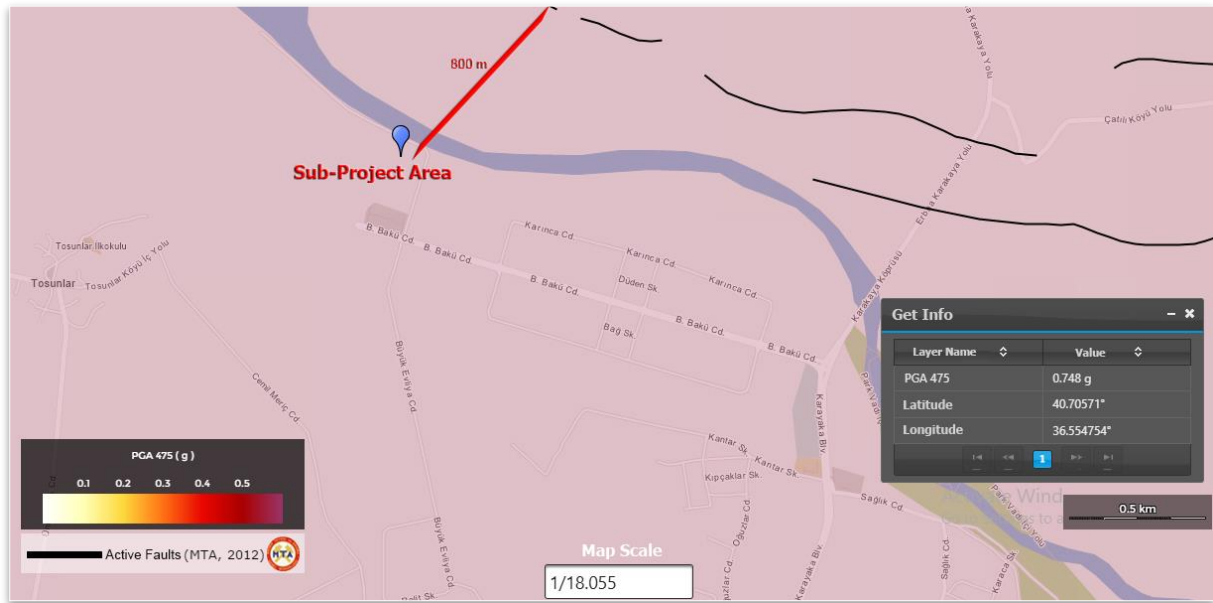


Figure 3-5. The Earthquake Hazard Map of the Sub-project Area⁴

3.1.1.4 Soil and Land Composition

No traces of debris or contamination were observed in the sub-project area and no potential soil contamination sourced from hazardous substances was encountered during the site visit. It was observed that the waste sludge was temporarily stored on the concrete ground.

3.1.1.5 Meteorology and Climatic Characteristics

Erbaa district is a settlement area located in the transition zone between the Black Sea Climate and the Central Anatolian Continental Climate. The climate characteristics of the area are influenced by the Continental Tropical air masses originating from Basra advancing from the southeast of Anatolia in summer and the Maritim Polar-Continental air masses entering our country through the Black Sea and the Balkans in winter. In addition to these, the fact that the district is located on a depression area has also been effective on the climate of the region.

⁴ Source web site: tdth.afad.gov.tr/TDTH (AFAD General Directorate's Türkiye Earthquake Hazard Map)

According to 31 years (1964-1995) observations, the average annual temperature of the research area is 14 °C, the highest temperature is measured in July-August and the lowest in January. The summers in the region are relatively hot and winters are milder than the immediate surroundings of the city. The average summer temperature of the city is 22.7 °C and the average winter temperature is 4.9 °C. The average annual rainfall in the region is 440.4 mm. Summers are relatively dry (68.2 mm.), winter is rainier in the region (125.1 mm). The most precipitation falls in spring season (32.6%) and the least precipitation falls in summer (15.5%).⁵

3.1.1.6 Air Quality and Odour

The air quality monitoring station under the supervision of the Ministry of Environment, Urbanization and Climate Change (MoEUCC) near the sub-project area is the Tokat - Erbaa in Erbaa district centre with coordinates Latitude 36,5616 and Longitude 40,6717.

Table 3-1 represents the mean monthly pollutant concentrations based on the national air quality monitoring system for the last 12 months at the monitoring station within the sub-project's Aol.

Table 3-1. Monthly Average Air Quality Concentrations in Erbaa, Tokat and Corresponding National and International Threshold Values⁶

Month	SO ₂		PM ₁₀		NO ₂	
	Measured Concentration (µg/m ³)	National and International limit value (µg/m ³)	Measured Concentration (µg/m ³)	National and International limit value (µg/m ³)	Measured Concentration (µg/m ³)	International limit value (µg/m ³)
October 2023	6.95	20	67.12	50	27.94	25
November 2023	8.35		53.12		36.08	
December 2023	8.74		86.79		67.97	
January 2024	11.16		57.35		31.08	
February 2024	11.98		63.06		37.09	
March 2024	9.25		49.54		36.68	
April 2024	7.13		49.63		25.20	
May 2024	9.35		23.28		14.44	
June 2024	9.38		28.75		16.46	
July 2024	7.92		22.24		15.02	
August 2024	6.05		21.86		16.99	
September 2024	5.74		30.48		25.06	

In this context, on the website of the MoEUCC, the current air quality index of Tokat Erbaa region is described as “medium” in terms of PM₁₀ parameter value (52 µg/m³) due to slightly above national and international limit value as 50 µg/m³.

⁵ Source web site: search.trdizin.gov.tr/en/yayin/detay/287378/erbaa-sehrinin-iklim-ozellikleri

⁶ Source web site: Website of the MoEUCC: www.havaizleme.gov.tr

Currently, the air quality of the sub-project area cannot be characterized as good, due to the PM₁₀ and NO₂ exceedances, which are considered to be the result of the contribution of domestic heating emissions in the region, especially in the fall and winter months.

As for the baseline on odour, no odour problem caused by the existing WWTP operational activities was observed during the site visit.

3.1.1.7 Noise

The sub-project area can be characterised as an area with low background noise levels due to its location at the western end of the Erbaa OIZ. During the site visit, no significant noise source other than the operation activities of the plant was encountered.

3.1.1.8 Wastewater

The Existing Erbaa WWTP monitors wastewater parameters with the Continuous Wastewater Monitoring Station (see Appendix-F for the photos of the station) in line with the environmental permit, which is valid until 28.08.2028, in accordance with local regulations. The relevant permit documents are in Appendix-C.

Existing WWTP effluent discharge limits are operated in line with the discharge limits of the Regulation on Urban Wastewater Treatment. The results of the analyses of the last four (4) samples taken and the relevant national regulation limit values for the corresponding parameter are given in Table 3-2. The related analysis reports of the laboratory accredited by the Turkish Accreditation Agency (TURKAK) are presented in Appendix-E.

Table 3-2. Last Four Analyses Results of Effluent for the Existing Erbaa WWTP

Parameter	Sample taken on				Discharge Limits of the national legislation (mg/l)
	13.06.2023	8.12.2023	30.12.2022	14.02.2022	
Chemical Oxygen Demand (COD)	32.48	18.89	<15	65	125
Biological Oxygen Demand (BOD) ₅	6.88	6.33	3.2	22.75	25
Total Suspended Solids (TSS)	13.45	4.1	<4	7.5	35
Total Nitrogen (TN)	-	-	4.37	9.02	15 (10000-100000 population equivalent)
Total Phosphorus (TP)	-	-	0.25	0.35	2 (10000-100000 population equivalent)
pH	7.98	7.66	-	-	6-9

There are no results for total nitrogen and phosphorus parameters in last two samples taken. Apart from that, all parameters of the samples taken are in compliance with the relevant national regulation limit values.

3.1.1.9 Waste

According to the results of the samples taken from the waste sludge formed as a result of wastewater treatment, the waste sludge is temporarily stored on the concrete ground and sent to the licensed company named Adocim Cement Concrete Industry and Trade Inc. (see Appendix-D for waste sludge acceptance protocol), 80 km by road from the sub-project area (see Appendix-F for the photos of the temporary storage area of the waste sludge and waste temporary storage areas of the plant). The area where hazardous and non-hazardous wastes are temporarily stored is impermeable. It was observed that there is absorbent material in case of leakage and spillage.

The relevant analysis reports prepared by the Scientific and Technological Research Council of Türkiye (TUBITAK) and the laboratory accredited by TURKAK, in 2016 and 2018 respectively, are also presented in Appendix-E. In addition, according to the industrial waste management plan of the facility prepared in accordance with local legislation, it is planned to send 3,900 tonnes of waste sludge for 2025.

On the other hand, according to the waste declaration made by the EM for 2023 on 23.01.2024, the plant responsible was declared hazardous waste as a 13 kg of hazardous parts removed from discarded equipment and 78 kg of laboratory chemicals consisting of or containing hazardous substances, including mixtures of laboratory chemicals (see Appendix-F for the photo of the laboratory of the plant).

3.1.1.10 Water Resources

Kelkit stream is 65 m north of the sub-project area as the discharge point of the sub-project. Imbat creek is 200 m east of the sub-project area. The nearest other major water resource, Yeşilırmak River, is 7.5 km northwest of the sub-project area. The two closest reservoirs to the sub-project area are Tepekışla dam to the southeast and Uluköy dam to the northwest. Their distances to the sub-project area are 13.3 km and 15.8 km respectively. The water resources near the sub-project area are given in [Figure 3-6](#).

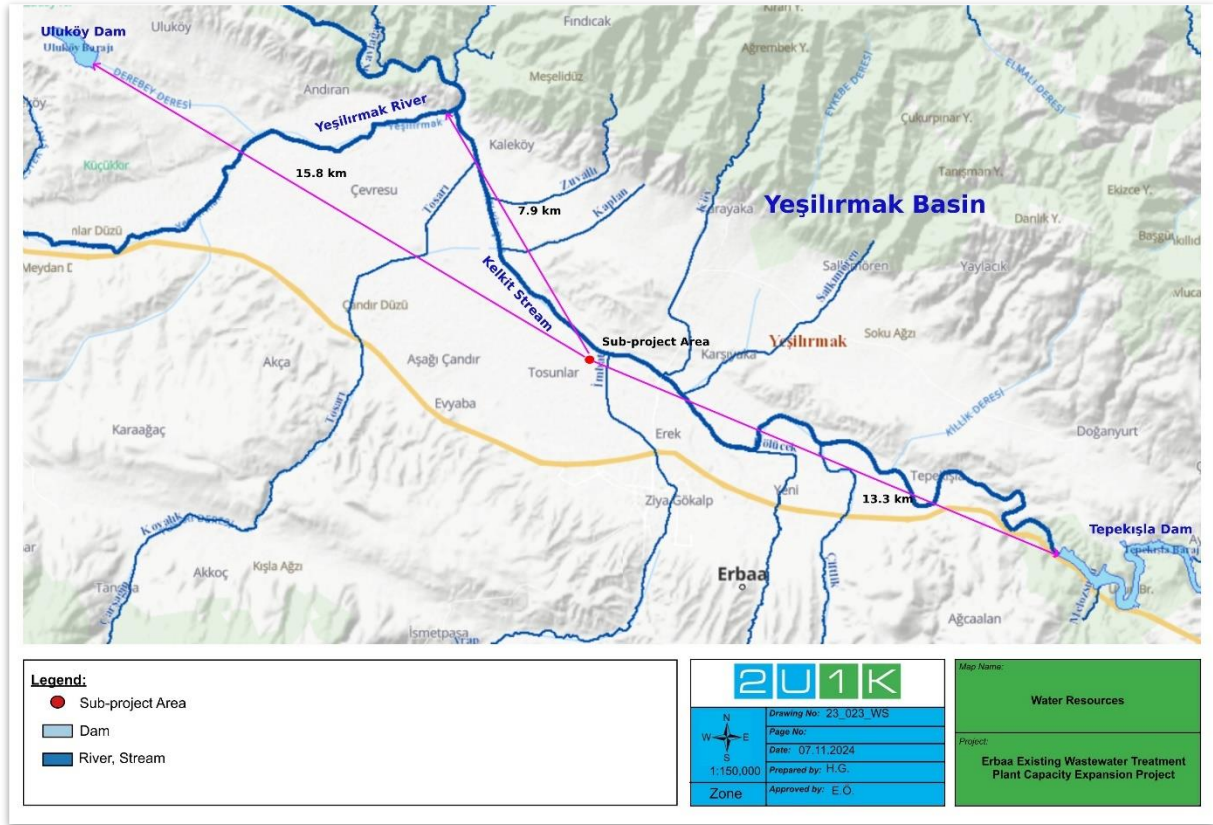


Figure 3-6. Water Resources Near to the Sub-project Area⁷

When the region where the sub-project area is located is evaluated in terms of sensitive water bodies according to national legislation, the sub-project Aol in Yeşilırmak basin is located 4.5 km away from the Nitrate Sensitive Area⁸ and Urban Sensitive Area⁹ border in the northwest direction (see Figure 3-7 and Figure 3-8).

⁷ Source web site: usbs.tarimorman.gov.tr (National Water Information System of the Ministry of Agriculture and Forestry)

⁸ Nitrate Sensitive Area: Drainage areas including agricultural and non-agricultural lands where nitrate is formed affecting natural freshwater lakes, other freshwater resources, estuaries and coastal waters that are determined to be eutrophic or may become eutrophic in the near future if necessary measures are not taken.

⁹ Urban Sensitive Area: Refers to the drainage area of a sensitive water body and the urban wastewater drainage areas located upstream of the sensitive water body that put pressure on the sensitive water body and cause water quality objectives not to be met.

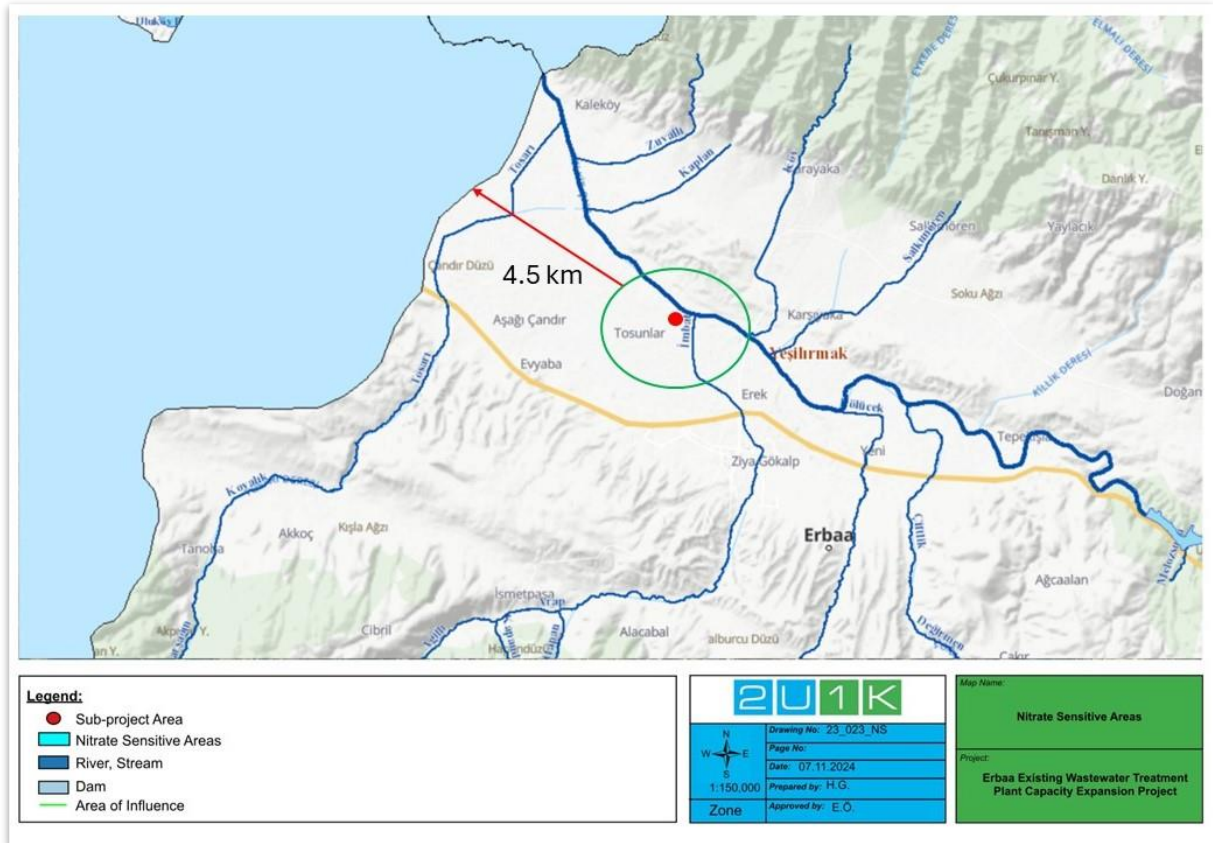


Figure 3-7. Distance of the Sub-project's AoI to Nitrate Sensitive Area¹⁰

¹⁰ Source web site: usbs.tarimorman.gov.tr (National Water Information System of the Ministry of Agriculture and Forestry)

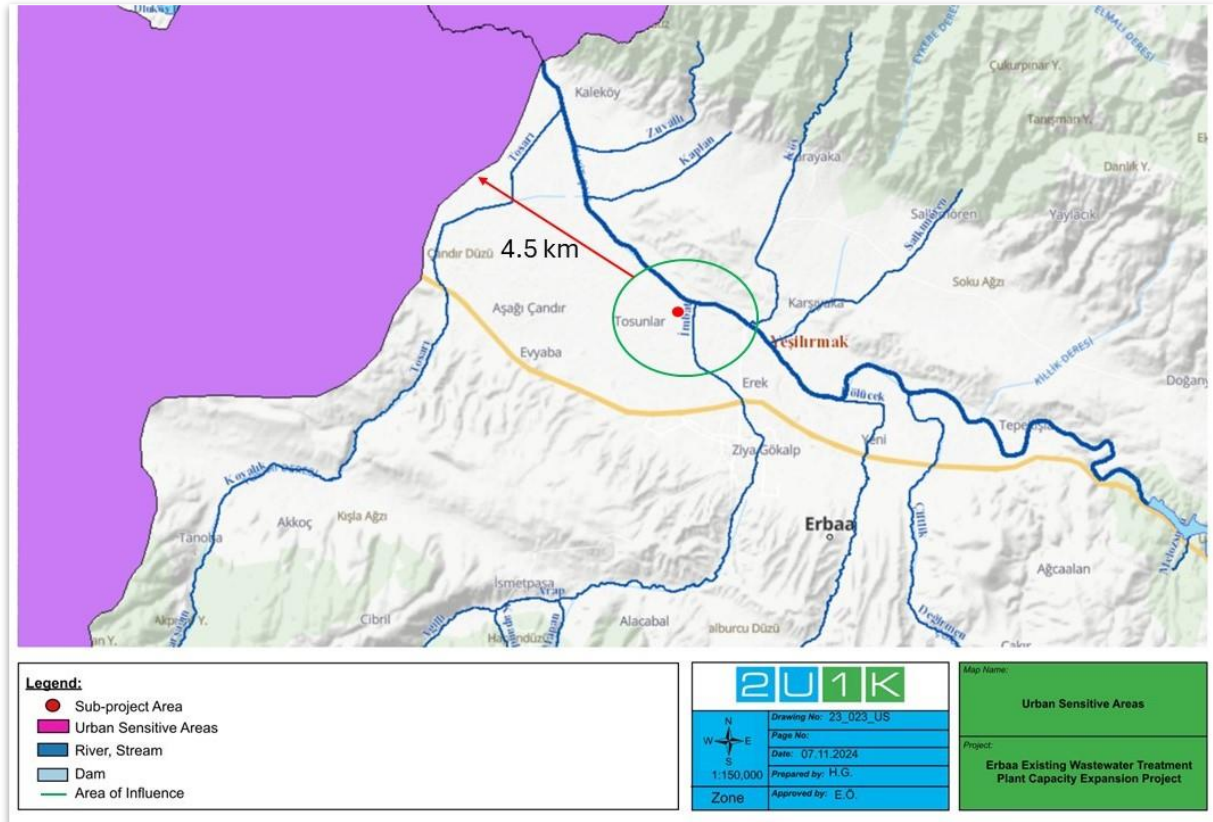


Figure 3-8. Distance of the Sub-project Aol to Urban Sensitive Area¹¹

3.1.1.11 Biodiversity

The sub-project area is under the influence of transitional climate between the Black Sea Climate and the Central Anatolian Continental Climate. Summers tend to be relatively dry, with higher temperatures and lower humidity levels, while winters are comparatively wetter, receiving more precipitation in the form of rain and occasionally snow.

According to the Corine 2018 Land Cover data, the sub-project area is classified under industrial or commercial units, with its previous habitat status being pastureland. The only natural habitat in the vicinity of the project area is the Kelkit stream, which is located adjacent to the sub-project area. The surroundings of the sub-project area are consisting of intensively modified habitats such as arable lands and sport and leisure facilities. The habitats within the sub-project area have experienced a significant degradation of their natural structure. The habitats in the sub-project area and its immediate surroundings are given in Figure 3-9.

¹¹ Source web site: usbs.tarimorman.gov.tr (National Water Information System of the Ministry of Agriculture and Forestry)

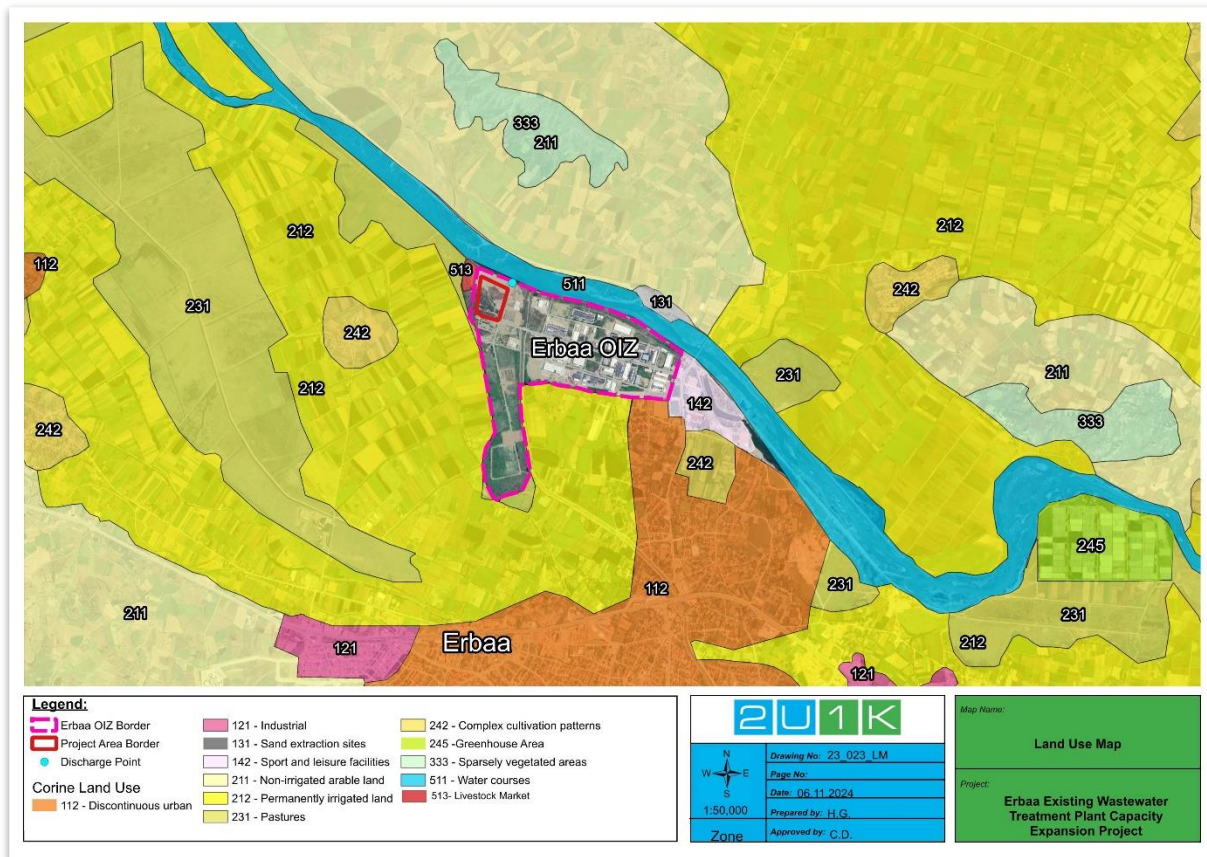


Figure 3-9. Corine Land Cover Data and the Sub-project Area

Due to the intense anthropogenic impact observed in the sub-project area, the distribution of flora and fauna is highly suppressed. The flora and fauna species that can be observed in the area comprise cosmopolitan species.

In evaluating the threat/protection status of species, Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats); and IUCN (International Union for Conservation of Nature) Red List Database were used.

Flora

The sub-project area is under intense anthropogenic influence. Natural habitat for natural plant species in the construction area is very limited.

There are a total of 64 plant species belonging to 25 families in the study area. According to the IUCN Red List, none of these species have been classified under a threat category.

Within the scope of the Bern Convention, none of the species are listed in App-I. Furthermore, there are no endemic species in the study area, and none of the plant species are listed in the CITES appendices.

The flora species found and likely to be found in and around the sub-project area are given in Table 3-3.

Table 3-3. Flora Species in the Sub-project Area

Species Name	Common Name	Endemism	Bern	IUCN	CITES
Equisetaceae					
<i>Equisetum palustre</i>	Horsetail	-	-	-	-
Ranunculaceae					
<i>Nigella orientalis</i>	Black Cumin	-	-	-	-
<i>Nigella arvensis</i>	Wild Black Cumin	-	-	-	-
<i>Consolida regalis</i>	Forking Larkspur	-	-	-	-
<i>Ranunculus neopolitanus</i>	Buttercup	-	-	-	-
<i>Ranunculus arvensis</i>	Corn Buttercup	-	-	-	-
<i>Adonis aestivalis</i>		-	-	-	-
<i>Adonis ericalcycina</i>	Pheasant's Eye	-	-	-	-
Papaveraceae					
<i>Papaver postii</i>	Poppy	-	-	-	-
Cruciferae (Brassicaceae)					
<i>Sinapis arvense</i>	Wild Mustard	-	-	-	-
<i>Calepina irregularis</i>	-	-	-	-	-
<i>Lepidium. ruderales</i>	Narrow-leaf Pepperwort	-	-	-	-
<i>Thlaspi arvense</i>	Field Pennycress	-	-	-	-
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	-	-	-	-
Resedaceae					
<i>Reseda. lutea.</i>	Wild Mignonette	-	-	-	-
Caryophyllaceae					
<i>Cerastium glomeratum</i>	Mouse-ear Chickweed	-	-	-	-
<i>Dianthus pallens</i>	-	-	-	-	-
<i>Silene supina</i>	Prostrate Catchfly	-	-	-	-
Chenopodiaceae.					
<i>Chenopodium vulvaria</i>	Stinking Goosefoot	-	-	-	-
Amaranthaceae					
<i>Amaranthus albus</i>	White Amaranth	-	-	-	-
Tamaricaceae					
<i>Tamarix parviflora</i>	Small-flowered Tamarisk	-	-	-	-
Guttiferae (Hypericaceae)					
<i>Hypericum triquetrifolium</i>	St. John's Wort	-	-	-	-
Malvaceae					
<i>Hibiscus trionum</i>	Flower-of-an-Hour	-	-	-	-
<i>Althaea hirsuta</i>	Rough Marshmallow	-	-	-	-
Geraniaceae					
<i>Geranium purpureum</i>	Purple Crane's-bill	-	-	-	-
<i>Erodium malacoides</i>	Mallow-leaved Stork's-bill	-	-	-	-
Leguminosae (Fabaceae)					
<i>Psoralea bituminosa</i>	Bitumen Clover	-	-	-	-
<i>Lathyrus aphaca</i>	Yellow Vetchling	-	-	-	-
<i>Trifolium angustifolium</i>	Narrow-leaf Clover	-	-	-	-
Rosaceae					
<i>Sanguisorba minor</i>	Salad Burnet	-	-	-	-

Species Name	Common Name	Endemism	Bern	IUCN	CITES
Umbelliferae (Apiaceae)					
<i>Falcaria vulgaris</i>	Sicklesprigs	-	-	-	-
<i>Tordylium syriacum</i>	Syrian Hartwort	-	-	-	-
Valerianaceae					
<i>Valeriana officinalis</i>	Valerian	-	-	-	-
Asteraceae					
<i>Conyza canadiensis</i>	Canadian Fleabane	-	-	-	-
<i>Conyza bonariensis</i>	Şifa otu	-	-	-	-
<i>Bellis perennis</i>	Daisy	-	-	-	-
<i>Tussilago farfara</i>	Coltsfoot	-	-	-	-
<i>Tanacetum parthenium</i>	Feverfew	-	-	-	-
<i>Artemisia tournefortiana</i>	Tournefort's Wormwood	-	-	-	-
<i>Cirsium canum</i>	Grey Thistle	-	-	-	-
<i>Picnomon acarna</i>	Acarna Thistle	-	-	-	-
<i>Centaurea iberica</i>	Iberian Knapweed	-	-	-	-
<i>Scorzonera parviflora</i>	Small-flowered Viper's-grass	-	-	-	-
<i>Picris hieracioides</i>	Hawkweed Oxtongue	-	-	-	-
<i>Taraxacum macrolepium</i>	Dandelion	-	-	-	-
Convolvulaceae					
<i>Convolvulus arvensis</i>	Field Bindweed	-	-	-	-
<i>Convolvulus scammonia</i>	Scammony Bindweed	-	-	-	-
Labiatae (Lamiaceae)					
<i>Teucrium chamaedrys</i>	Wall Germander	-	-	-	-
<i>Scutellaria orientalis</i>	Yellow Skullcap	-	-	-	-
<i>Salvia aethiopis</i>	Ethiopian Sage	-	-	-	-
Euphorbiaceae					
<i>Euphorbia rigida</i>	Gopher Spurge	-	-	-	-
Salicaceae					
<i>Salix alba</i>	White Willow	-	-	-	-
<i>Salix elaeagnos</i>	Olive Willow	-	-	-	-
<i>Populus tremula</i>	Aspen	-	-	-	-
Iridaceae					
<i>Gladiolus italicus</i>	Italian Gladiolus	-	-	-	-
Cyperaceae					
<i>Carex flacca</i>	Glaucous Sedge	-	-	-	-
Gramineae (Poaceae)					
<i>Brachypodium pinnatum</i>	Heath False Brome	-	-	-	-
<i>Bromus intermedius</i>	Intermediate Brome	-	-	-	-
<i>Poa compressa</i>	Flat-stem Bluegrass	-	-	-	-
<i>Poa nemoralis</i>	Wood Bluegrass	-	-	-	-
<i>Melica ciliata</i>	Hairy Melic	-	-	-	-
<i>Tragus racemosus</i>	Small Matgrass	-	-	-	-
<i>Setaria viridis</i>	Green Foxtail	-	-	-	-
<i>Bothriochloa ischaemum</i>	Yellow Bluestem	-	-	-	-

Fauna

Fauna species in the sub-project area have been heavily suppressed due to the agricultural areas, industrial structure, human presence, and the presence of domestic fauna species. Additionally, there is no habitat area for natural species. The species found and likely to be found in the sub-project area are species adapted to these conditions.

Amphibians

There are a total of 6 amphibian species belonging to four (4) families in the sub-project area, and all of them are in the LC category according to the IUCN Red List.

Within the scope of the Bern Convention, four (4) species are listed in the App-2 and one (1) species are listed in the App-3.

There are no endemic species in the sub-project area and none of the species are listed in CITES appendices.

The amphibian species found and likely to be found in and around the sub-project area are given in the Table 3-4.

Table 3-4. Amphibian Species in the Sub-project Area

Species Name	Common name	Endemism	BERN	IUCN	CITES
Salamandridae					
<i>Triturus karelinii</i>	Southern Crested Newt	-	App-II	LC	-
Buфонidae		-			-
<i>Bufo bufo</i>	Common Toad	-	App-III	LC	-
<i>Bufo viridis</i>	Green Toad	-	App-II	LC	-
Hylidae					
<i>Hyla arborea</i>	European Tree Frog	-	App-II	LC	-
Ranidae					
<i>Pelophylax ridibundus</i>	Marsh Frog	-	App-III	LC	-
<i>Rana dalmatina</i>	Agile Frog	-	App-II	LC	-

Reptiles

There are a total of 11 reptile species belonging to seven (7) families in the sub-project area. According to the IUCN Red List, *Testudo graeca* is classified as Vulnerable (VU), while all other species are listed as Least Concern (LC).

Within the scope of the Bern Convention, six (6) species are listed in the App-2 and five (5) species are listed in the App-3.

Testudo graeca is the only species in the sub-project area listed under CITES App-II.

None of the reptile species found in the sub-project area are endemic. The reptile species found and likely to be found in and around the sub-project area are given in the Table 3-5.

Table 3-5. Reptile Species in the Sub-project Area

Species Name	Common name	Endemism	BERN	IUCN	CITES
Testudinidae					
<i>Testudo graeca</i>	Common Tortoise	-	App-II	VU	App-II
Gekkonidae					
<i>Mediodactylus kotschyi</i>	Kotschy's Gecko	-	App-III	LC	-
<i>Hemidactylus turcicus</i>	Turkish Gecko	-	App-III	LC	-
Anguinidae					
<i>Anguis fragilis</i>	Slow Worm	-	App-III	LC	-
Lacertidae					
<i>Lacerta viridis</i>	Green Lizard	-	App-II	LC	-
Scincidae					
<i>Ablepharus kitaibeli</i>	Juniper Skink	-	App-II	LC	-
Typhlopidae					
<i>Xerotyphlops vermicularis</i>	Eurasian Blind Snake	-	App-III	LC	-
Colubridae					
<i>Zamenis situla</i>	European ratsnake	-	App-II	LC	-
<i>Natrix natrix</i>	Grass Snake	-	App-II	LC	-
<i>Natrix tessellata</i>	Dice Snake	-	App-II	LC	-
<i>Eirenis modestus</i>	Ring-Headed Dwarf Snake	-	App-III	LC	-

Birds

There are a total of 33 bird species from 17 families identified in the sub-project area. All of these species are classified as Least Concern (LC) according to the IUCN Red List.

Within the scope of the Bern Convention, 20 species are listed in the App-2 and eight (8) species are listed in the App-3. The remaining seven (7) species are not listed under the Bern Convention.

Buteo buteo, *Pernis apivorus*, *Ciconia ciconia*, *Falco tinnunculus*, and *Otus scops* are listed in CITES App-II, while *Carduelis carduelis*, *Linaria cannabina*, and *Sylvia atricapilla* are listed in CITES App-III. None of the bird species found in the sub-project area are endemic.

The bird species found and likely to be found in and around the sub-project area are given in the Table 3-6.

Table 3-6. Bird Species in the Sub-project Area

Species Name	Common name	Endemism	BERN	IUCN	CITES
Accipitridae					
<i>Buteo buteo</i>	Eurasian Buzzard	-	App-II	LC	App-II
<i>Pernis apivorus</i>	European Honey-buzzard	-	App-II	LC	App-II
Alaudidae					
<i>Galerida cristata</i>	Crested Lark	-	App-III	LC	-
Apodidae					
<i>Apus apus</i>	Common Swift	-	App-III	LC	-

Species Name	Common name	Endemism	BERN	IUCN	CITES
Ardeidae					
<i>Ardea alba</i>	Great White Egret	-	App-II	LC	-
<i>Egretta garzetta</i>	Little Egret	-	App-II	LC	-
Charadriidae					
<i>Charadrius leschenaultii</i>	Greater Sandplover	-	App-II	LC	-
Ciconiidae					
<i>Ciconia ciconia</i>	White Stork	-	App-II	LC	App-II
Cinclidae					
<i>Cinclus cinclus</i>	White-throated Dipper	-	App-II	LC	-
Columbidae					
<i>Columba livia</i>	Rock Dove	-	App-III	LC	-
<i>Columba palumbus</i>	Common Woodpigeon	-	App-III	LC	-
Corvidae					
<i>Corvus corax</i>	Common Raven	-	App-III	LC	-
<i>Corvus corone</i>	Carrion Crow	-	-	LC	-
<i>Corvus frugilegus</i>	Rook	-	-	LC	-
<i>Pica pica</i>	Magpie	-	-	LC	-
Falconidae					
<i>Falco tinnunculus</i>	Common Kestrel	-	App-II	LC	App-II
Fringillidae					
<i>Carduelis carduelis</i>	Goldfinch	-	App-II	LC	App-III
<i>Linaria cannabina</i>	Common Linnet	-	-	LC	App-III
Hirundinidae					
<i>Delichon urbicum</i>	Northern House Martin	-	App-II	LC	-
Meropidae					
<i>Merops apiaster</i>	European Bee-eater	-	App-II	LC	-
Motacillidae					
<i>Motacilla alba</i>	White Wagtail	-	App-II	LC	-
Passeridae					
<i>Passer domesticus</i>	Sparrow	-	-	LC	-
Scolopacidae					
<i>Actitis hypoleucos</i>	Common Sandpiper	-	App-II	LC	-
<i>Tringa totanus</i>	Common Redshank	-	App-III	LC	-
Strigidae					
<i>Otus scops</i>	Eurasian Scops-owl	-	App-II	LC	App-II
Sturnidae					
<i>Sturnus vulgaris</i>	Common Starling	-	-	LC	-
Sylviidae					
<i>Sylvia atricapilla</i>	Eurasian Blackcap	-	App-II	LC	App-III
<i>Curruca communis</i>	Common Whitethroat	-	App-II	LC	-
Turdidae					
<i>Luscinia megarhynchos</i>	Nightingale	-	App-II	LC	-
<i>Oenanthe oenanthe</i>	Northern Wheatear	-	App-II	LC	-
<i>Saxicola rubetra</i>	Whinchat	-	App-II	LC	-
<i>Turdus merula</i>	Blackbird	-	App-III	LC	-
Upupidae					

Species Name	Common name	Endemism	BERN	IUCN	CITES
<i>Upupa epops</i>	Hoopoe	-	App-II	LC	-

Mammals

There are 13 mammal species belonging to ten (10) families in the sub-project area. All of these species are classified as Least Concern (LC) according to the IUCN Red List.

Within the scope of the Bern Convention, five (5) species are listed in the App-2 and two (2) species are listed in the App-3. The remaining six (6) species are not listed under the Bern Convention.

There are no endemic species in the sub-project area and none of the species are listed in CITES appendices.

The mammal species found and likely to be found in and around the sub-project area are given in [Table 3-7](#).

Table 3-7. Mammal Species in the Sub-project Area

Species Name	Common name	Endemism	BERN	IUCN	CITES
Soricidae					
<i>Crociodura suaveolens</i>	Lesser White-toothed Shrew	-	App-III	LC	-
Gliridae					
<i>Nannospalax leucodon</i>	Lesser Blind Mole Rat	-	-	LC	-
Rhinolophidae					
<i>Rhinolophus ferrumequinum</i>	Greater Horseshoe Bat	-	App-II	LC	-
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	-	App-II	LC	-
Vespertilionidae					
<i>Myotis blythii</i>	Lesser Mouse-eared Myotis	-	App-II	LC	-
Molossidae					
<i>Tadarida teniotis</i>	European Free-tailed Bat	-	App-II	LC	-
Sciuridae					
<i>Sciurus anomalus</i>	Caucasian Squirrel	-	App-II	LC	-
Muridae					
<i>Apodemus flavicollis</i>	Yellow-necked Field Mouse	-	-	LC	-
<i>Rattus norvegicus</i>	Brown Rat	-	-	LC	-
<i>Rattus rattus</i>	House Rat	-	-	LC	-
Erinaceidae					
<i>Erinaceus concolor</i>	Southern, White-breasted Hedgehog	-	-	LC	-
Canidae					
<i>Vulpes vulpes</i>	Red Fox	-	-	LC	-
Suidae					
<i>Sus scrofa</i>	Wild Boar	-	App-III	LC	-

Nationally Protected and Internationally Recognized Areas

There are no protected areas in the sub-project area and its immediate vicinity. In addition, the Project area does not include Internationally Recognized Areas of high biodiversity value, such as World Heritage Natural Sites, Biosphere Reserves, Ramsar Wetlands of International Importance and Alliance for Zero Extinction Sites. Neither of these areas is located in the vicinity of the project site.

However, the project area is located within the Kelkit Valley Key Biodiversity Area (KBA) within the scope of internationally recognized areas ([Figure 3-10](#)).

The Kelkit Valley, covering 176,768 hectares, is an ecologically significant area formed by the Kelkit stream. It includes a variety of habitats such as oak, pine, and beech forests, agricultural lands, and Mediterranean maquis. The region contains two cedar communities, marking the northernmost distribution of cedar trees in the world. The valley is home to a mix of European-Siberian and Mediterranean biomes. It is an important breeding site for various bird species, and the Southern Crested Newt (*Triturus karelinii*) is a notable amphibian in the area. Despite its ecological characteristics, the area lacks formal protection status.

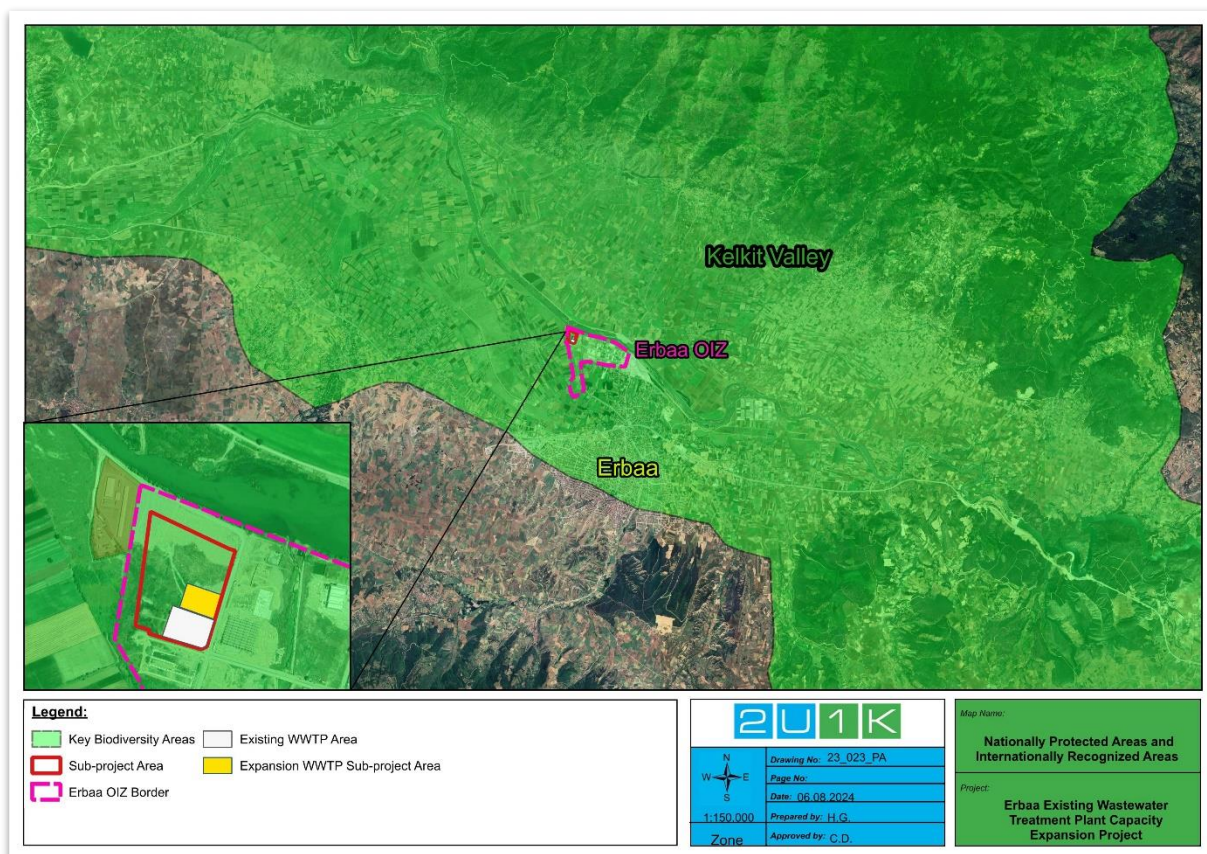


Figure 3-10. Nationally Protected and Internationally Recognized Areas

3.1.1.12 Other Natural Hazards

Landslides and Rockfall

Although rock fall is not frequent in Tokat, it increases in spring and winter seasons when the precipitation is the highest in the region.

Flooding

According to Disaster and Emergency Management Presidency (AFAD) Provincial Disaster Risk Reduction Plan for 2022, flooding disasters occurred in Erbaa on 17.07.1962, 24.09.1968 and 20.12.1993.

3.1.2 Socio-economic Environment

3.1.2.1 Demography and Population

Located in the Black Sea Region, Tokat is surrounded by Samsun to the north, Ordu to the northeast, Sivas to the south and southeast, Yozgat to the southwest and Amasya to the west.

According to 2023 TurkStat data, the total population of Tokat is 606,934, 305,700 of whom are female and 301,234 of whom are male. In Tokat, which has an area of 10,073 km², there are 60 people per square kilometer. The population density of Tokat is 60/km². According to the data of the same year, the population growth rate of Tokat is 1.76%.

In addition, Tokat has 12 districts, and the most populous district is the central district. The project for capacity increase of Existing Erbaa Wastewater Treatment Plant is located in Erbaa District of Tokat Province. The project for capacity increase of Existing Erbaa Wastewater Treatment Plant is located in Erbaa District of Tokat Province. According to 2023 TurkStat data, the population of Erbaa district is 100,323, of which 50,617 are female and 49,706 are male. It is the second most populous district of Tokat Province.

In Erbaa District Erek and Tosunlar neighbourhoods are located within the Aol of the sub-project. The population of Erek neighbourhood is 2,698, of which 1,347 are women and 1,351 are men. The population of Tosunlar neighbourhood is 228, of which 114 are female and 114 are male.

Gender-based 2023 population data of two (2) neighbourhoods in the sub-project area are presented in Table 3-8.

Table 3-8. Data on the Population in the Sub-project Area

District	Settlement	Female	Male	Total Population
Erbaa	Erek Neighbourhood	1,347	1,351	2,698
	Tosunlar Neighbourhood	114	114	228

Source: TurkStat, 2023

3.1.2.2 Land Acquisition

The area where the sub-project will be realized is located on 1367 block 1 parcel. EM is the owner of the sub-project. The land was given from Erbaa OIZ to EM indefinitely with the handover decision dated 29.05.2006 (see Appendix-G). Therefore, no land acquisition will take place.

3.1.2.3 Vulnerable and Disadvantaged Groups

Vulnerable groups are people who might be directly and differentially or disproportionately affected by a project because of their disadvantaged or vulnerable status. This disadvantaged or vulnerable status may stem from an individual's or group's race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status.

As a result of interviews with the mukhtars of Erek and Tosunlar neighbourhoods, the following vulnerable/disadvantaged groups that are likely to be affected by the sub-project have been identified:

- Households living on state assistance:

These are households that rely primarily on government-provided financial aid, food support, or other social welfare programs to meet their basic needs due to low income, unemployment, or other economic vulnerabilities.

- Homeless People:

Individuals who lack stable, permanent, and adequate housing, often living on the streets, in shelters, or in temporary accommodations, and who are particularly vulnerable to environmental, social, and economic challenges.

- Mentally or Physically Handicapped:

Individuals who have mental or physical disabilities that significantly limit their ability to perform daily activities, interact with their environment, or access services without additional support or accommodations.

- People who over the age of 70 and living alone:

Elderly individuals aged 70 or older who live independently without the regular presence or assistance of family members, caregivers, or other forms of support, making them potentially more vulnerable to health, mobility, or social isolation challenges.

- Female Household Head:

Women who are the primary or sole income earners and decision-makers in their households, often responsible for supporting dependents without a cohabiting partner or spouse, which may increase their economic and social vulnerability.

Table 3-9 shows the vulnerable/disadvantaged groups identified as a result of interviews with neighbourhood headmen and their numbers.

Table 3-9. Vulnerable Groups

Settlement	Households living on state assistance	Homeless People	Mentally and / or Physically Handicapped	People who over the age of 70 and living alone	Female Household Head
Erek Neighborhood	60	2	10	5	0
Tosunlar Neighborhood	0	0	4	1	2

3.1.2.4 Education

According to 2023/2024 academic year data, there are 647 schools/educational institutions in Tokat Province. There are 102.068 students in total in educational institutions in Tokat.

In Erbaa District, there are 100 schools, 755 classrooms and 18,844 students. Ereğ Neighborhood has a primary school and a kindergarten, but no high school. High school students go to Erbaa District with transportation. There is no school in Tosunlar Neighborhood. Students go to Erbaa District with transportation.

3.1.2.5 Health

There are a total of nine (9) hospitals in Tokat Province. The number of doctors per 1,000 people is 1.8 (Ministry of Health, 2022). There is one in Erbaa district. There is no health centre in Ereğ Neighbourhood. Residents of the neighbourhood go to the health centre in Fatih Sultan Mehmet Neighbourhood, which is 2 km away. There is also no health centre in Tosunlar Neighbourhood and residents go to the health centres in Erbaa District centre.

3.1.2.6 Means of Livelihood and Employment

Tokat is a province located on the Central Anatolian border of the Black Sea Region. This location allows it to carry the economic and social characteristics of both the Black Sea and Central Anatolia. The main livelihoods of Tokat can be summarized as follows:

- Agriculture: Tobacco, grapes, viniculture, vegetables, fruits and pulses are cultivated in the fertile agricultural lands of Tokat.
- Livestock: Cattle, sheep and goat breeding, beekeeping and poultry breeding are practiced.
- Industry: There are food processing industry, tobacco processing plants and furniture and textile workshops in Tokat.
- Tourism: Tokat has tourism potential with its historical and natural riches. Balıca Cave, which is on the Tentative List of World Heritage by UNESCO, historical buildings dating back to the Ottoman Empire and thermal tourism attract tourists.

The economic structure of Erbaa District is mainly based on agriculture.

- Agriculture: Tobacco, vegetables, fruits and cereals are widely produced in Erbaa district.
- Livestock: Erbaa's rural areas are suitable for animal husbandry. In addition to ovine and bovine breeding, beekeeping is also practiced.
- Industry: Industrial activities in Erbaa are mostly small scale and based on agriculture. Industry in Erbaa is based on food processing facilities, furniture production and construction sector.

The main source of income for the residents of Ereğ neighbourhood is factory labour. In Tosunlar Neighbourhood, residents make a living from agriculture and animal husbandry.

3.1.2.7 Transportation and Traffic

Tokat have variety of transportation options and generally experiences moderate traffic conditions.

Air Travel: Tokat Airport, originally opened in 1995, underwent significant renovations and was reopened on March 25, 2022. Turkish Airlines operates regular flights between Tokat and Istanbul, facilitating air travel to and from the region.

Bus Services: The city is well-connected by intercity bus services. Companies like Tokat Yıldızı and Tokat Seyahat offer routes to major cities such as Ankara, Istanbul, Izmir, and Antalya. These services provide comfortable travel options with amenities like 2+1 seating arrangements and onboard entertainment.

Local Transportation: Within Tokat, public buses and minibuses (dolmuş) are commonly used for urban and suburban travel, providing residents and visitors with accessible transportation options.

Tokat's transportation infrastructure supports efficient travel within the city and to other regions, with manageable traffic levels contributing to a smooth commuting experience. During the construction phase of the subproject, some roads may be closed for a short period of time. In this case, alternative road options will be provided to the local community. Measures related to traffic impact that may be observed during the construction period will be specified in the traffic management plan prepared by the contractor.

3.1.2.8 Cultural Heritage

Tokat bears the traces of many civilizations such as Roman, Byzantine, Seljuk and Ottoman throughout its history. Tokat Castle, located within the provincial borders, is the symbol of the city with its history dating back to the Roman period. Gök Madrasa, one of the most beautiful examples of Seljuk architecture, was built in 1270 and attracts attention with its stone workmanship. In addition, Balıca Cave is on the UNESCO World Heritage Tentative List with its natural structure and unique stalactites. In addition, Yağlıbasan Madrasah, which dates back to the Danişment period, sheds light on the history of science and education as one of the first madrasas in Anatolia.

Erbaa, one of the important districts of Tokat, stands out with its rich history and natural beauties. Horoztepe Archaeological Site in the district is the most important representative of Erbaa's historical heritage. Remains and burial mounds from the Early Bronze Age shed light on the thousands of years of history of the region. The Erbaa Grand Mosque from the Ottoman period is also an important part of Erbaa's religious and architectural history.

Among the traditional handicrafts of Erbaa, carpet weaving and woodworking stand out. Especially the carpets woven with geometric and floral motifs reflect the aesthetic

understanding of the region. Woodworking manifests itself in both furniture and decorative products.

As a result of the interviews with neighbourhoods' mukhtars, it was stated that there is one old bathhouse in Erek Neighbourhood, which is protected by the municipality. The distance between Erbaa WWTP and the historical bath is 2.5 km. Apart from this, there are no buildings of historical or cultural importance in Tosunlar Neighbourhood.

3.2 ENVIRONMENTAL AND SOCIAL ASSESSMENT

The sub-project's construction works are expected to commence in October 2025, last 22 months and be completed at the end of July 2027. The defects liability period of the sub-project is the first 12 months after construction. The target year of the sub-project operation is 2054. A maximum of 40 workers will be employed for sub-project construction activities. The existing plant employs 8 people. During the operation phase of the sub-project, additional 6 people are planned to be employed so that a total of 14 people will be involved in the operation phase. Currently there is not any site work ongoing on the sub-project area.

Principally, the sub-project will have a main vital positive impact for the Erbaa district as it will solve the region's wastewater capacity problems and, reduce the wastewater load. The sub-project will have impact on its surroundings during construction phase physically due to noise generation, increased dust emission, management of excavated soil, and emissions from the construction machinery. In the operation phase, there may be odour impact during the operation phase of the sub-project. Based on the environmental, social, and public/occupational health and safety risks/impacts that will potentially occur during the construction and operation phases of the sub-project, the Area of Influence (AoI) has been determined with a perimeter of 2.5 km around the sub-project area, including the Erbaa OIZ area. There is a livestock market 200 m west of the sub-project area as a sensitive receptor. The location of the sub-project area and its AoI are presented in [Figure 3-3](#).

The following sections include the environmental, social, and public/occupational health and safety potential risks/impacts of the sub-project. E&S mitigation measures to be taken for sub-project due to these impacts are given in [Table 4-1](#) and [Table 4-2](#).

In this context, the Environment, Health, and Safety (EHS) and social impacts of the sub-project construction and operation phases are detailed below.

3.2.1 Air Quality and Odour

Construction phase

Sub-project's environmental impacts at AoI are limited to the footprint and these impacts are effective for limited time during construction phase. In case of complaints regarding air quality, air quality measurements will be made for impact area.

There will be temporary greenhouse gas emissions from truck and excavator that will be used for construction activities.

Operation phase

During the operation phase, maintenance and repair activities may create dust and odour pollutants from operational activities of the plant that can impact air quality.

The methods to reduce and effectively manage the negative environmental impacts for both phases of the sub-project that may occur are provided in [Table 4-1](#) and [Table 4-2](#).

3.2.2 Water Use

Construction phase

The contractor has not been contracted within the scope of construction works yet. The contractors to be involved in the construction phase will be selected by tender. During the construction phase, daily potable water demand of personnel will be met by carboys purchased from licensed companies according to the list of licensed companies announced by the Ministry of Health in compliance with the requirements of the Regulation on Water Intended for Human Consumption and Public Health Law.

The maximum number of the personnel planned to be employed during the construction phase of the sub-project is 40 people. The average daily water consumption per person is regarded as 100 L/day¹², and the estimated daily amount of water that will be required during the construction phase of the sub-project is calculated as 4 m³/day.

Operation phase

During the operation phase of the sub-project, the number of the 14 personnel will be working. So, the estimated daily amount of water that will be required during the operation phase of the sub-project is calculated as about 1.4 m³/day.

3.2.3 Wastewater

Construction phase

The wastewater to be generated during the construction phase will be domestic wastewater from the personnel. 40 personnel will be employed during the construction phase of the sub-project.

Daily discharged wastewater per person is regarded as 85 L/(person.day)¹³, and the estimated daily amount of wastewater to be discharged during the construction phase of the sub-project is calculated as 3.4 m³/day.

The existing sewerage system will be used to discharge the wastewater generated by the personnel.

Operation phase

¹² Technical Specification for Preparation of ILBANK Drinking Water Facilities Studies, Feasibility and Projects - Table 4.4

¹³ Technical Specification for Preparation of ILBANK Drinking Water Facilities Studies, Feasibility and Projects

Daily discharged wastewater per person is regarded as 85 L/(person.day)¹⁴, and the estimated daily amount of wastewater to be discharged during the operation phase of the sub-project is calculated as about 1.2 m³/day.

The sewerage system of the sub-project will be used to discharge the wastewater generated by the personnel.

WWTP effluent discharge limits will be operated in compliance with the discharge limits of the Regulation on Urban Wastewater Treatment. The related national regulation limit values for the corresponding parameter are given in Table 3-10.

Table 3-10. National Wastewater Limit Values of the Sub- Project

Parameter	Discharge Limits of the national legislation (mg/l)
Chemical Oxygen Demand (COD)	125
Biological Oxygen Demand (BOD) ₅	25
Total Suspended Solids (TSS)	35
Total Nitrogen (TN) ¹⁵	10
Total Phosphorus (TP) ¹⁶	1
pH	6-9

Discharge to Kelkit stream is planned from the same place with the existing discharge point (see Appendix-F for the photo of the discharge point). Except for the doubling of the effluent flow rate in the maximum case, the effective operation of the new plant will continue to ensure compliance with the national and international legislation in the water quality to be given to the receiving environment.

The methods in line with the WBG's General EHS Guidelines, WBG's EHS Guidelines for Water and Sanitation and local legislation to mitigate and effectively manage the adverse environmental and social impacts on wastewater that may occur during operation and maintenance of the sub-project are listed in the corresponding sections of Table 4-2.

3.2.4 Waste Management

Pollution prevention

Throughout the life of the sub-project, workers will be recruited from the region as much as possible.

¹⁴ Technical Specification for Preparation of ILBANK Drinking Water Facilities Studies, Feasibility and Projects

¹⁵ >100000 population equivalent

Throughout the life of the sub-project, priority will be given to working with local suppliers and procuring services from the local employees in the service industry, as much as possible (fuel supply, vehicle maintenance/food, beverage, and spare parts supply, etc.).

Resource efficiency and management actions will be taken; use of renewable energy and energy efficiency measures, reducing the carbon footprint, responsible supply chain management and green procurement.

Construction phase

Domestic Solid Waste

Domestic solid waste will be generated from the personnel who will work during the construction phase of the sub-project. The domestic solid waste generated will mostly consist of organic waste.

The amount of domestic solid waste from the personnel is calculated according to the data established by TurkStat (2022)¹⁶ that an average of daily 0.94 kg of domestic solid waste will be generated per capita in Tokat.

The domestic solid waste generated (calculated as 37.6 kg/day) will be stored in available trash containers and collected by the district municipality via garbage trucks. The waste collected will be delivered to licensed solid waste landfills.

Packaging Waste

The ratio of recyclable packaging waste is in metropolitan cities in Türkiye as follows. 48 kg/P-year paper and board, 14 kg/P-year plastic, 6 kg/P-year nylon, 8 kg/P-year metal, 8 kg/P-year glass, in total 84 kg/P-year¹⁷.

Packaging wastes made of plastic, metal, glass, paper and board, composite and similar materials (calculated as about 9.2 kg/day) should be collected separately from other wastes and given to Packaging Waste Collection, Segregation and Recovery Facilities licensed by the MoEUCC.

Excavation and Construction Waste

In accordance with the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes, excavated soil and construction waste producers are responsible for the transportation of the excavated soil and construction waste generated to the storage areas that have necessary permissions, using transportation vehicles with the necessary transportation permits.

¹⁶ TurkStat, Daily Amount of Municipal Waste Per Capita (Kg/Person-Day) Data (Tokat), 2022

¹⁷ Solid Waste Management and Recovery, Environmental Protection and Packaging Waste Recovery and Recycling Foundation (ÇEVKO) Publications

The excavation soil and construction wastes generated during the construction phase of the sub-project will be transferred to the permitted landfill belonging to the EM.

Hazardous Waste

During the construction phase of the sub-project, petroleum-based products, such as lubricants, hydraulic fluids, or fuels, may result in the potential for release into the environment during storage, transportation or use in equipment. Additionally, contaminated / oily fabrics, cloths and filters, contaminated packaging materials, toner cartridges, paint residues, fluorescent tubes, cleaning cloths and filters, hazardous insulating materials and pressurized tubes are other hazardous wastes that are likely to be generated.

Hazardous wastes that are likely to be generated during the construction phase will be collected separately in specific vessels / containers at the construction site and stored in a specific area that is established on the concrete floor and connected to the drainage channel to prevent it from reaching the ground or other bodies of water. A roof or overhead cover will be provided for the hazardous waste storage area to protect waste containers from rainwater exposure, thus preventing spills, leaks, and environmental pollution while safeguarding workers' safety. Additionally, prevailing wind directions will be considered when designing the storage area to prevent the dispersal of particulate matter, dust, or contaminants, thereby reducing health risks to workers and the environment. The waste generated should be temporarily stored at their source in line with the criteria set based on their types. The temporarily stored waste will be labelled with the phrase 'hazardous or non-hazardous waste' as well as the waste code, the amount of waste stored and the date of storage.

Waste will be delivered to licensed disposal / recycling facilities with separate waste codes. Hazardous waste will be transported by licensed vehicles within the scope of the "Communiqué on the Waste Transportation by Road".

Waste Batteries and Accumulators

Waste batteries will be collected separately in waste battery bins. The collected waste batteries will be delivered to the Portable Battery Manufacturers and Importers Association (TAP) (authorized waste battery collector) for disposal at the licensed facility.

These wastes will be handled in accordance with the procedures and principles of the Regulation on the Control of Waste Batteries and Accumulators. If not handled properly, these wastes can have an adverse impact on human health and the environment.

Medical Waste

During the construction phase, medical waste will be generated from first aid responses. According to the Regulation on Control of Medical Waste, medical wastes stored in specific containers and areas will be collected by licensed vehicles and delivered to licensed disposal companies.

It is expected that the medical waste produced during the construction phase will be generated in very small amounts due to first aid actions. While medical waste is expected to be generated in trace amounts, they can lead to significant effects such as contracting infectious diseases if not handled properly.

Operation phase

Wastes other than waste sludge will continue to be stored in the existing waste temporary storage area of the existing plant.

Primarily, the amount of waste sludge is expected to increase to 7,800 tonnes/year with the doubling of the wastewater treatment capacity of the plant, which is projected to be 3,900 tonnes for 2025. After stabilization, dewatering and solar drying, the excess dried waste sludge will be disposed of in compliance with the Annex-2 of the Regulation on Landfilling of Wastes and Regulation on Waste Management according to the analysis result. If the sludge is classified as hazardous, it will be sent to licensed disposal companies.

The amount of waste sludge sent approximately 10 tonnes per day is expected to increase to 20 tonnes at maximum capacity with the commissioning of the sub-project. Waste sludge management will be ensured through regular waste sludge deliveries. New photograph (dated 13.12.2024) of waste sludge storage area with the impermeable ground is given in the Appendix-F.

Maintenance and repair activities may generate waste materials that require proper disposal. Waste generated during maintenance and repair activities will be segregated into different categories based on their type and potential for reuse or recycling. Also, laboratory sources will continue to generate hazardous wastes. This can include categories such as hazardous waste, recyclables, and non-recyclables. Each category of waste should be disposed of in the appropriate manner, according to national regulations.

3.2.5 Noise

Construction phase

Noise will be generated from vehicles, machinery and equipment that will operate during the construction activities of the sub-project.

The list of vehicles, machinery and equipment planned to be used in the sub-project construction works is below.

- 1 truck
- 1 excavator
- 1 water truck

The equipment and machines used during the construction will be monitored and maintained at regular intervals. In case of complaints regarding noise, noise measurements will be made for impact area.

Operation phase

In addition to local and short-term repair and maintenance activities, the plant activities that can be considered as noise sources are expected during the operation phase of the sub-project.

3.2.6 Land Use and Soil Quality

Construction phase

Since the sub-project area is located within the boundaries of the area reserved for the existing treatment plant under the responsibility of Erbaa OIZ and will be restored after the construction phase, no change in land use is expected. Since there will be no fuel or similar hazardous chemical storage within the sub-project area, it is not anticipated to experience spill-like accidents. Measures to be taken to prevent soil contamination are given in [Table 4-1](#).

Operation phase

No change is foreseen for the sub-project land use in the operational phase allocated for the OIZ treatment plant.

No change in soil quality is expected during the operation phase of the sub-project since there will be no storage or soil related activity.

3.2.7 Landscape

Construction phase

Due to the construction work in the sub-project area within the OIZ area, there will be a temporary change in landscaping. A temporary disturbance due to construction is expected, but it will be of short duration.

Operation phase

As the sub-project will be installed adjacent to the existing plant, no adverse landscape impacts are expected during the operation phase of the sub-project.

3.2.8 Biodiversity and Protected Areas

Construction phase

Considering the location of the sub-project, the limited natural habitats in the sub-project area and its surroundings, along with the intense anthropogenic impact already present, the negative effects on the biological environment during the construction phase are expected to be minimal.

Operation phase

Since the sub-project is a wastewater treatment capacity expansion project, it is expected to yield positive results for the Kelkit stream, the only natural habitat in the region, during the operation phase.

3.2.9 Population / Demography

Construction and Operation phase

Since it is a wastewater treatment plant capacity increase project, it will not cause population increase in Erbaa District during the construction period. However, since local employment will be prioritized during the construction period of the sub-project, it is predicted that Ereğ and Tosunlar Neighbourhoods in the sub-project impact area will not experience any population increase or demographic change.

3.2.10 Land Acquisition

The land on which the sub-project will be realized was given from Erbaa OIZ to EM indefinitely with the handover decision (see Appendix-G). For this reason, no land acquisition is required within the scope of the subproject.

3.2.11 Vulnerable/Disadvantaged Groups/Individuals

Construction and Operation phase

The construction works to be carried out for the sub-project works will have a short-term and temporary effect.

The negative impacts that vulnerable/disadvantaged groups/individuals may be temporarily exposed to during the construction period of the sub-project and measures to mitigate these impacts are given below.

- Households living on state assistance:

Households reliant on state assistance may face difficulties in adapting to disruptions caused by the sub-project, as their limited resources could restrict their ability to cope with environmental or social changes in the area.

- **Homeless People:**

Homeless individuals may face heightened vulnerability to noise, dust, and disturbances caused by construction activities, as they lack stable shelter to mitigate these impacts.

- **Mentally or Physically Handicapped:**

People with mental or physical disabilities may encounter difficulties navigating construction zones or accessing essential services if sub-project activities disrupt mobility or infrastructure in the area.

- **People who over the age of 70 and living alone:**

Elderly individuals living alone may experience increased stress and challenges in coping with changes to their environment or disruptions to their routines caused by the sub-project.

- **Female Household Head:**

Female household heads may face additional burdens due to potential disruptions in accessing resources or services, particularly if they are primary caregivers or lack support networks to adapt to project-related changes.

3.2.12 Economy / Employment

Construction phase

It is anticipated that the sub-project will result in temporary employment. Priority will be given to contributing to the local economy through the use of local materials and local recruitment of labour during the construction and to paying attention to the procurement of various goods and services from local resources. It is estimated that 40 workers will be employed during different stages of the construction.

Negative impacts that local and regional businesses may face during the construction period (last 22 months) of the sub-project and the measures to be taken are given below:.

Mitigation Measures:

- Coordinate with local authorities to minimize disruptions and schedule construction activities during off-peak hours whenever possible.
- Maintain clear signage and alternative routes to ensure uninterrupted access to businesses throughout the construction period.
- Schedule noisy activities during non-business hours or weekends to mitigate disturbances to business operations.

Operation phase

During the operation period of the project, 8 employees will be recruited. These people will be recruited in addition to those already working at Erbaa WWTP.

3.2.13 Labour Conditions

The EM will be responsible for human resources for construction and operation phases. Türkiye is currently in the middle of a harmonization process with the European Union, and labour laws are being reviewed to ensure harmonization. The sub-project will comply with national labour, social security and occupational health and safety laws as well as the principles and standards of the International Labour Organization convention by meeting WB expectations according to WB Standards. Based on the national principles in the International Labour Organization convention, the EM will take the following measures:

- Not employing children under the age of 18 nor any forced labour,
- Eliminating forced labour and ensuring a Human Resources Policy compatible with the European Convention on Human Rights and the Turkish Constitution,
- Eliminating discrimination based on language, race, gender, political thought, philosophical belief and religion in business relations,
- Ensuring workers' access to the right of collective bargaining (Law No. 6356 on Trade Unions and Collective Bargaining Agreements, and Labour Law No. 4857),
- All employees will be issued written employment contract defining work, work hours, wages, rights and duties, etc. and,
- Ensuring access to the sub-project grievance mechanism that is functional effectively.

The Labour Law (4857) applies to all workplaces and employers, employees, employer representatives and worker representatives, regardless of the business activity.

3.2.13.1 Training

According to OHS Site Training Plan, the occupational health and safety training will be provided to the employees of contractor as part of each contract executed within the scope of the sub-project, which will at least include the subjects provided in the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees, and the Contractor's Environmental and Social Management Plan (C-ESMP) to be developed by the contractor, based on this ESMP, will contain the plans regarding the training to be provided to personnel.

Additionally, the contractor will provide training to its personnel, who will work during the performance of the work, on the environmental and social impacts that will be considered during the on-site work and are included in this ESMP document. The contractor will train its personnel in the fulfilment of all measures to prevent and/or minimize environmental and social impacts during the on-site construction, subject to inspection by the EM.

The contractor will ensure that the on-site personnel are primarily trained in the issues that include the risks, and protection measures specific to the worker's job and post before starting work.

In addition, training on risks that may arise from the circumstances, such as changes in post or job, replacement of work equipment or application of new technology and work instructions training, will be provided.

Training programs will be repeated periodically considering the changing and emerging risks provided in the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees. Information and training will be provided not only for personnel, but also for the measures to be taken for public health and safety.

The contractor is required to separately and measurably demonstrate the knowledge, skills, behaviours, and attitudes that the on-site personnel will have regarding occupational health and safety, environmental and social issues.

The Contractors are obliged to give code of conduct training, including Gender Based Violence (GBV) and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), to each worker so that the presence of workers who will work during the construction do not result in any disturbance/conflict within the local communities and their interaction with community members do not result in inappropriate behaviours/misconducts. The EM will ensure that the Contractors develop a Code of Conduct and that all workers are informed and receive training about it before starting to work. A Code of Conduct will be part of the employment contract to be signed by all workers at the job start-up phase. The training given in the Code of Conduct will be checked and reported by Environmental and Social Experts. Scaling and evaluation will be carried out at the end of the training provided. According to the results of the evaluation, training material will be updated by adding the learnings from near misses or incidents when happen.

3.2.14 Occupational Health and Safety

If the necessary measures are not taken during construction works, this may result in accidents that threaten the health and safety of workers. During the construction phase, workers may be exposed to various hazards, such as exposure to noise, dust, heat, hazardous chemicals, working at height, working in confined spaces, and working with electrical equipment, small cranes, and other machinery. Occupational accidents and injuries may occur

during these activities if potential risks at various stages of the sub-project are not managed properly. Potential accidents during the operation phases of the sub-project may also lead to health concerns associated with non-routine risks, such as exposure to hazardous materials or emergencies resulting from equipment failure or unforeseen events.

Risks include physical hazards like slips, trips, and falls; ergonomic hazards due to repetitive or strenuous activities; chemical hazards from exposure to toxic substances; and environmental hazards such as fires, electric shocks, and extreme weather conditions. Inadequate awareness of job responsibilities and risks, lack of training, and insufficient use of personal protective equipment (PPE) could exacerbate these risks.

Lastly, emergencies such as accidents, sabotage, fire, infectious diseases, earthquakes, flooding, storms, or chemical spills present significant risks to both workers and the surrounding environment during the construction and operation phases.

3.2.15 Community Health and Safety

Community health and safety issues are associated with risk factors that may arise from construction and operation phases of the sub-project. It is anticipated that the local people will be affected by the resulting dust and noise, especially during the construction phase.

To minimize the impact of the traffic activities that are expected to intensify during the construction phase, the working hours will be adjusted according to the peak hours of transportation.

Accidents and failures can be expected in the site of construction. The EM is responsible to prevent the adverse impacts of the construction phase over the community. Yet, pits and dangerous materials, which will be present at the construction site will be managed by safety standards. Necessary warning signs and with physical barriers with no gaps in between will be provided by the EM to protect the community health and provide safety.

3.2.16 Traffic and Transportation

Since there is no activity such as transportation of heavy items or construction crew that will create heavy traffic in the sub-project area where the sub-project will be carried out both during the construction and operation periods, no additional impact requiring special mitigation measures (such as new access road arrangements or arrangements at critical locations) are anticipated.

The times when the traffic density is low will be preferred for excavation trucks, and the necessary warning signs will be placed for the special link road. The personnel operating vehicles and heavy equipment will be dedicatedly assigned, and they will be provided with traffic and road safety training. The maintenance of the construction machinery and equipment will be carried out regularly and regulatory speed limitations will be followed for construction vehicles, and this should be included in the construction site traffic and transport management plan to be prepared by the contractor.

Prior to construction activities, the Contractor will install all signs, barriers and control devices needed to ensure the safe use of the road by traffic and pedestrians, as required by the traffic and transport management plan to be prepared.

3.2.17 Cultural Heritage

Construction phase

Since the project is a wastewater treatment plant capacity increase project and will be realized on the land currently belonging to the Erbaa OIZ, it is foreseen that no cultural heritage elements will be encountered in the region.

However, in the project area directional excavation will be carried out. Particularly for the area where underground horizontal drilling will take place, prior to commencing construction activities, an opinion letter will be obtained from the Museum Directorate. When the official opinion letters obtained from the Museum Directorate, the opinion letter will be forwarded to ILBANK. To manage activities in terms of cultural heritage, a chance find procedure has been prepared (see Appendix-H). The contract with the contractor participating in the construction work will include clauses related to the application of the chance find procedure. As an appendix to the contract, the chance find procedure will be shared with the contractor, and it will be ensured that the relevant personnel are knowledgeable and trained in this regard. In the event of any archaeological remains or artifacts being discovered during construction, all activities will be halted, recorded as specified in the chance find procedure, and reported to the Museum Directorate in accordance with Article 4 of Law No. 2863.

Operation phase

During the operational phase of this sub-project, it is essential to acknowledge that maintenance and repair activities will be limited to routine tasks, ensuring the continued functionality of the existing infrastructure without posing any adverse effects on cultural heritage.

Nevertheless, it is imperative to remain vigilant and consider the potential for unexpected circumstances or emergency situations that might necessitate excavation activities beyond the current routes or deeper excavation. In such instances, there exists a possibility of encountering cultural heritage finds. The sub-project's operational team will be well-prepared to address these contingencies, adhering to protocols for the chance discovery of cultural heritage artifacts, ensuring their preservation, documentation, and the required reporting to the relevant authorities.

All personnel involved will receive training on the chance find procedure underscoring the sub-project's commitment to minimizing any potential negative impact on cultural heritage during the operational phase. The respect and safeguarding of cultural heritage sites are paramount for the sub-project's sustainability and will remain a fundamental consideration across all sub-project stages.

3.3 STAKEHOLDER ENGAGEMENT

A stakeholder is defined as any person, organisation or group that may be affected by the sub-project or has an interest in the sub-project and its impacts. Stakeholder participation is considered a critical element in the sub-project. It can significantly influence the sub-project's success and sustainability. Engaging stakeholders allows for a more effective sub-project design and implementation by considering the needs and concerns of local communities. Moreover, stakeholder participation helps ensure the sub-project is more readily accepted by the community, enhancing its long-term success. It is essential to exert special effort in identifying disadvantaged and vulnerable stakeholders who may be disproportionately or differently affected by the sub-project or may face difficulties in participating in development processes.

The identification of stakeholders is an ongoing process that requires regular review and updates. Different issues are likely to concern different stakeholders. Therefore, stakeholders are grouped according to their connection to the sub-project. Understanding a stakeholder group's connections to the sub-project helps identify key objectives of engagement. A Stakeholder Engagement Plan (SEP) has been prepared for this sub-project in order to identify project stakeholders and create participation methods for the future of the sub-project. Stakeholders (including vulnerable individuals/groups) are defined in the table below to identify which stakeholders will be directly or indirectly - positively or negatively - affected ("affected parties") or have an interest in the sub-project ("other interested parties"). Detailed information on stakeholder identification is provided in the SEP prepared for this sub-project.

The grievance mechanism to be established for the sub-project will guide the EM in managing the stakeholder participation process. Grievances may be an indication of increased concern from stakeholders. Stakeholder engagement activities will be recorded through the consultation form included in the SEP, and consultations will be initiated before the sub-project's construction period.

Specific personnel will be assigned by the EM, the sub-project owner, to implement and manage the Stakeholder Engagement Plan (SEP) and Grievance Mechanism (GM). The expert to be assigned may be personnel who meets the appropriate qualifications within the existing organizational structure of EM or may require new employment. The final responsibility for the implementation of the SEP belongs to EM.

Following the completion and approval of the ESMP prepared under the sub-project, a Stakeholder Consultation Meeting was held on 30 May 2025 at 15:00. The location, date, and time of the meeting were announced in newspapers 10 days prior to the meeting. Additionally, the mukhtars of the neighbourhoods within the project's area of influence, media organisations, and professional chambers were informed about the meeting via text messages and emails. Detailed information regarding the Stakeholder Consultation Meeting is provided in Appendix-J.

3.3.1 Grievance Mechanism

The purpose of the Grievance Mechanism (GM) is foremost to give access to a problem-solving procedure to Project affected people including affected communities and sub-project workers. Grievances can be an indication of growing stakeholder concerns and can escalate if not identified and resolved. Identifying and responding to grievances supports the development of positive relationships between sub-project worker's, local communities, and other stakeholders.

In the sub-project level Grievance Mechanism, Public Grievance Mechanism and Worker Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, if refugee/immigrants who do not speak Turkish have grievances about the sub-project or the impacts of the sub-project, translation support will be provided.

The structured GM will ensure that grievances associated with the sub-project are addressed through a transparent and impartial process. From the early stages of the sub-project lifecycle, the grievance procedure will be disclosed to the public through individual or group meetings, printed materials, notice boards.

The grievances will be acknowledged by the GM official assigned by the EM and timeframe for the provision of response or for further consideration will mainly depend on the complexity of the issue raised, however, ideally, it is expected to not exceed 14 days after receiving the grievance.

The GM official who will manage the Grievance Mechanism will be knowledgeable about the guidelines prepared by the World Bank to prevent sexual exploitation, abuse and harassment cases for the sub-projects financed under construction works. Grievances of gender-based violence, exploitation and harassment can result in a culture of silence due to negative reactions from the community. For the avoidance of this, it is highly important that the stakeholders raise the grievances involving these issues about the sub-project anonymously. In addition, the authorities handling the grievances should address such issues within confidence and by an unbiased approach¹⁸. These grievances will be handled centrally at EM, not only at the Contractor level and EM will report to ILBANK. EM will manage such grievances in line with SEP report ILBANK GM. In case a sensitive complaint is received by the Contractor or EM, they will be responsible for conveying the issue directly to the ILBANK GM focal point¹⁹. However, Contractor and EM should still be trained and informed about the principles applicable to Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) and Gender Based Violence (GBV) cases. Details of the Grievance Mechanism can also be found in SEP.

¹⁸<https://thedocs.worldbank.org/en/doc/7416815825801947270290022020/original/ESFGoodPracticeNoteonGBVinMajorCivilW orksv2.pdf>

¹⁹https://www.ilbank.gov.tr/storage/uploads/pagefiles/ilbank_uluslararası_projeler_sikayet_mekanizmasi_proseduru_1646748134.pdf

3.3.1.1 Public Grievance Mechanism

As the sub-project is within the municipality, it is anticipated that the existing grievance mechanism system (Hilal Table) can be maintained as the primary grievance mechanism for this sub-project. Specifically, all complaints related to the sub-project will be directed to the sub-project GM official for receiving and monitoring complaints.

Hilal Masa Contact Information

- Adress: Cumhuriyet Mah. İstiklal Cad. No: 85 Erbaa / Tokat
- Email: erbaa@erbaa.bel.tr
- Telephone: 0850 633 00 60
- Contact form on the website of Erbaa Municipality: <https://erbaa.bel.tr/Site/iletisim>

In addition, a communication channel will be established to allow direct access to the sub-project GM official, and this communication channel will be announced to stakeholders through the website, announcements, brochures, etc. Complaints received by the contractor, CİMER, YİMER, ILBANK, WB etc. will also be redirected to the communication channel. All stakeholders involved in the sub-project will be common beneficiaries of the GM.

During construction and operational activities, the grievance mechanism described above will continue to be driven by views of stakeholders, making this procedure accessible to all affected stakeholders. The personnel to be appointed by the EM will record the grievances and requests coming from different channels in a single established system and will provide solutions.

The GM official will record all grievances that are:

- Communicated to the sub-project officials personally,
- Communicated by phone/e-mail,
- Conveyed by stakeholders who want to communicate based on the sub-project documentation,
- From the personnel during the construction phase,
- From the operating personnel, and
- Communicated to contractors.

For this method to be successful, the GM official to be assigned will constantly be in contact with other municipality experts, contractors, and personnel who will be involved in the operational phase. Additionally, the GM officer to be appointed will be introduced to the stakeholders through the website, brochures, and announcements.

If stakeholders fail to reach a satisfactory solution through the channels provided above or have requests for a higher-level explanation, they will be able to reach ILBANK's communication channels, the Presidency's Communication Centre (CİMER), the Foreigners Communication Centre (YİMER) and the relevant legal institutions.

The officer assigned by EM for the Public Grievance Mechanism will receive suggestions and complaints with the Sample Grievance Form. Following the actions taken and the solution provided regarding the reported grievance will be recorded together with the Grievance Closure Form. The Contractor should review the sub-project specific SEP (and its relevant annexes for grievance forms) prepared for this sub-project to access more detailed information on the Public Grievance Mechanism and their role regarding the GM. Thus, all activities carried out under the grievance mechanism will be recorded and care will be taken to establish a transparent relationship between the public and the sub-project owner.

3.3.1.2 Worker Grievance Mechanism

Worker Grievance Mechanism is defined as complaints from sub-project employees (including both direct and indirect employees). This mechanism is structured with an intention of it being an effective approach for early identification, assessment, and resolution of grievances throughout the sub-project's lifespan. The Grievance Mechanism should guarantee that any employee raising a complaint will not be subject to any reprisal.

The scope of the Worker Grievance Mechanism can be summarized as but not limited to; any worker with a concern of pertaining to onsite work such as occupational health and safety, terms of employment, wages, issues with the local community or among co-workers, hygiene issues in the common areas, insufficient amount of food and / or concerns regarding the security of the workers.

The GM will be informed to all sub-project workers through written and verbal communications. Each worker should be informed about the GM at the time they are hired, and details about how it operates should be easily available, in employee handbooks for example.

Confidentiality is very important to some employees; therefore, workers can submit their complaints anonymously, there are no restrictions in this regard. If an anonymous complaint is received, the corrective action taken against the complaint or the response to the complaint will be announced by posting it in appropriate areas in the containers that workers will use.

The Contractor will assign a responsible person to record the grievances received at the construction site verbally or through grievance forms that will be placed in the containers. The responsible staff of Contractor will record all grievances that received at the construction site and convey to the sub-project GM officer for further action and resolution.

It is important to note that sub-project employees will retain their right to access the public grievance mechanism for non-employment-related matters.

Complaints should be investigated as soon as possible to prioritize resolution. Regardless of the general response and resolution timeframes, some complaints may require immediate intervention, for example in cases involving workers' livelihoods.

The officer appointed by EM for the Worker Grievance Mechanism will receive suggestions and complaints with the Sample Grievance Form. Following the actions taken and the solution provided regarding the reported grievance will be recorded together with the Grievance Closure Form. The SEP prepared for the sub-project contains more detailed information on the Worker Grievance Mechanism and its appendices include Sample Grievance Form and Grievance Closure Form. Thus, all activities carried out under the grievance mechanism will be recorded and care will be taken to establish a transparent relationship between the worker and the sub-project owner.

4 ESMP MATRIX: RISK AND IMPACTS, MITIGATION, MONITORING

4.1 RISK AND IMPACTS, MITIGATION

Table 4-1. ESMP Construction Phase Matrix Table of the Sub-project

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
1	Labour and Working Conditions				
1.1	Inadequate workers health and safety conditions	Workers at the Sub-project Area	<ul style="list-style-type: none"> ▪The Project implementation unit (PIU) to be formed by the EM and the contractor's project team will include staff(s) (at least one environmental and social expert and "A" Class OHS expert) who will take part in full-time and effectively control the implementation of the sub-project. Also, The EM will make sure that the measures provided below are taken by the contractor and enforce necessary actions/sanctions in case lack of these measures on site. In this regard, most common OHS risk areas and corresponding general mitigation measures throughout the life of the sub-project are provided in Appendix-I. ▪Including sub-project engineers, management team and workers shall be informed about job descriptions, responsibilities, and risks according to be prepared "Project OHS Management Plan". The workers will be provided working conditions in accordance with the Labour Law and the LMP of TEFWER Project (such as wages, working hours, payment for overtime hours, period of rest, social security benefits). The workers will be provided with the necessary personal protective equipment and information on works and occupational safety through regular trainings. Before the construction works starts, a Risk Assessment Report shall be prepared for all works to be carried out and necessary measures shall be taken to avoid related risks. Emergency Preparedness and Response Plans (EPRP)s shall be prepared for possible accidents and emergency situations (i.e., fires, earthquakes, floods, etc.) events and emergency teams shall be established and drills and training shall be carried out in line with the emergency scenarios. ▪OHS Management Plan will be prepared to outline all the actions and procedures for ensuring OHS for all workers by the contractor during the construction period and by the EM during the operation period. ▪To control the cases (fire, earthquake, etc.), which may occur during the construction activities under the sub-project, and which require urgent action, an EPRP and an OHS Management Plan will be prepared by the contractor and shared with all employees. The contractor will prepare a training program regarding the plans. ▪The EM will ensure a safe working environment for the workers and will require all employees and contractors to adhere to local and international health and safety legislation and guidelines. Workers will be provided with all necessary Personal Protective Equipment (PPE) (hard hats, safety harnesses, protective coveralls, glasses, gloves, armour-clad shoes, etc.). 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪OHS Management Plan ▪Site OHS Risk Assessment Plan ▪Emergency Preparedness and Response Plans (EPRP)s ▪Labour Management Plan (based on the TEFWER's Labour Management Procedures (LMP))

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> Smoking areas will be allocated on the construction site. Appropriate hand, face washing and shower facilities will be provided. Technical and OHS training, including the code of conduct indicating the possible risks regarding the work site and the work to be carried will be given to workers by the contractor with a training plan including toolbox talks. These will include regular training to workers on COVID-19 and other epidemics symptoms and other pandemics, how to be protected and what to do when symptoms appear. Training will also be given in risks that may arise due to changes in the workplace or job, change of work equipment, application of new technology. Information and training activities will be carried out not only for the employees, but also about the measures to be taken for public health and safety. All employees will receive written contracts with job description, wages, working hours, rights and duties, Code of Conduct (CoC) etc. Workers will be required to comply with all national OHS regulations and WB Environmental and Social Standards will be made. Contractor will prepare their site-specific Labour Management Plan on the basis of the LMP of TEFWER prior to commencement of any civil works in the sub-project area. All activities will be implemented in line with both the Law on Occupational Health and Safety and its relevant regulations, and the WBG EHS Guidelines. The contractor will assign full-time personnel with relevant certification and experience in charge of OHS and she/he shall monitor the site implementations. Emergency teams will be formed, and drills and training programs will be carried out in line with emergency scenarios. Employees will have a good command of EPRP, and the grievance will be reported to the authorized teams and resolved, if they require urgent action. Appropriate signposting of the sites will be provided and then workers will be informed of key rules and regulations to follow. First aid kit will be kept available at the construction site, taking into account that first aid response may be required before the casualty is referred to the nearest healthcare provider. First aiders will be provided according to the national regulation. Both trainings, incidents (fatalities, lost time incidents, any significant events including spills, fire, outbreak of pandemic or communicable diseases, social unrest, etc.) and near misses will be recorded. The EM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including Root Cause Analysis (RCA), precautions and compensation measures taken within 15days. ILBANK will forward the incident report to the WB immediately upon receipt from the EM. The areas to be excavated will not be accessible except by authorized personnel. Loading and unloading activities will be carried out together with the persons who will supervise the personnel who will carry out the activity. 		

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> Unauthorized access to the construction site will be restricted. The construction areas will be surrounded, and necessary security measures will be taken, no one will be allowed to enter except for the staff. If a trench needed to be left open for night, the sufficient illumination of the area shall be ensured by the Contractor and necessary signs shall be placed, and the area shall be enclosed with physical barriers without any gaps between. Installation of concrete moulds, concreting, installation of water tank etc. may require working at height, working in confined space etc. Therefore, workplace relevant procedures such as Confined Space Entry Procedure, Working at Height Procedure, etc. will be prepared in accordance with applicable national requirements and internationally accepted standards. Adequate and appropriate training in confined space hazard control, atmospheric testing, use of required PPE as well as the serviceability and integrity of PPE shall be verified before workers are required to enter a permitting confined space. In addition, adequate and appropriate rescue and/or rescue plans and equipment shall be in place before the worker enters the confined space. In the event of an accident, coordination will be established with the emergency response teams to ensure that the most accurate first aid is given. The EPRP will be revised in accordance with the operation period and necessary training will be given to workplace physician approved employees can enter to confined space. Only physician approved employees can work at height holding the height work permit will work at height, and safeguarding measures (guardrails, fall arrest) will be in place. The WBG General EHS Guidelines and WBG's EHS Guidelines for Water and Sanitation will apply. All equipment used during the construction phase will be kept in good working condition. Equipment that meets international standards in terms of performance and safety will be used. The contractor will assign a full-time staff responsible for OHS with relevant certification and experience and monitor field practices. Jet grouting involves some risks and hazards that can compromise the safety of the workers and the public. To prevent or mitigate safety issues associated with jet grouting are high-pressure injection that can cause injuries or damage to equipment; electric shock from the power supply or lightning; fire or explosion from the grout or gas; and collapse or instability of the improved soil elements or adjacent structures, it is important to follow the relevant standards and national regulations, use PPE, conduct regular inspections and maintenance, and have EPRPs and relevant procedures. 		
1.2	Inadequate workers health and safety conditions related to COVID-19 and other pandemics	Workers at the Sub-project Area	<ul style="list-style-type: none"> Guidance, directives and recommendations of Ministry of Health, Ministry Labour, and Social Services, World Health Organization (WHO) and the WB shall be followed, and all relevant necessary measures shall be taken, both for occupational health and safety of employees and for workplaces, in case of an outbreak of any other pandemic/communicable disease including COVID-19. The contractor will ensure a safe working environment for the workers in line with international best practice and Turkish Legislation including the health and safety measures related to COVID-19 provided by the Ministry of Health and Ministry of Labour, and Social Services. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> OHS Management Plan Site OHS Risk Assessment Plan Emergency Preparedness and Response Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> Before the construction works start, a Risk Assessment study will be implemented for all works to be carried out. EPRP will be prepared and put into practice. Both the Risk assessment and EPRP will take into consideration the COVID-19 risks and other communicable disease risks, as relevant. Sub-project and site-specific OHS Management Plan based on construction site OHS risk assessment and that will also cover measures to address COVID-19 and/or any other pandemic/communicable disease risk, which will be in line with the WBG EHS Guidelines (both general and sector specific) will be developed before the commencement of works and implemented on site. OHS trainings and toolbox talks will be provided to the employees including the CoC indicating the possible risks regarding the work site and works to be carried out. These will include regular training to workers on COVID-19 symptoms, how to be protected and what to do when symptoms appear. 		
1.3	Child labour, forced labour and unregistered employment contribution to economy	Local Parties, Workers, and Settlements within the Aol	<ul style="list-style-type: none"> Priority will be given to the local labour where possible and practical. Efforts will be exercised to allocate employment opportunities to the local parties and the settlements within the Aol. The work permits of the employees will be controlled within the scope of the sub-project, prohibiting child labour, forced labour, and child labour under the age of 18. A Contractor's Labour Management Plan, based on the TEFWER Labour Management Procedures (LMP), will be prepared by contractor prior to commencement of any civil works in the sub-project area. This plan will manage the contractor's work process and ensure that written contracts are issued to all workers. Discrimination in the workplace will be eliminated. Necessary measures will be taken by contractor to make sure that workers coming from outside the city will be given a training program on dialogue and communication with local communities, and that there are no social or cultural issues between host communities and external workers. It is the EM's responsibility to ensure that the contractor complies with the determined criteria. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Labour Management Plan (based on the TEFWER's LMP) SEP
1.4	Improper working conditions, Child labour forced labour and unregistered employment. (GBV/SEA/SH)	Workers at the Sub-project Area	<ul style="list-style-type: none"> Workers will be provided access to the Grievance Mechanism and will be informed about this mechanism. In the Worker Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation support will be provided in case non-Turkish speaking Refugee/Migrant workers have grievances about the sub-project or its impacts. Information on GBV/SEA/SH service providers should be shared during public consultations. The sub-project GM should be designed to receive GBV/SEA/SH grievances anonymously and ensure they are addressed in a confidential and sensitive manner. Relevant sub-project staff should be trained in order to refer GBV survivors to existing identified service providers and ensure that they are provided services promptly. The CoC for workers will include the prohibition of GBV/SEA/SH. All workers will be given training on avoidance of discrimination and CoC. The trainings given to the employees will be explanatory about the concepts of SEA/SH and GBV. At the same time, through the trainings, it will be ensured that workers learn the Grievance Mechanism of the sub-project (explained in detail in the sub-project's SEP document) and the steps to be followed in exercising their legal rights. Access to the Grievance Mechanism will be easy and effective. The 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Labour Management Plan (based on the TEFWER's LMP) SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<p>grievance mechanism officer designated for the sub-project will be announced to all employees during the trainings to be given before starting work. There will be brochures and posters containing the grievance mechanism and the contact information of the authorized person in places such as the cafeteria, canteen and service areas used by the employees.</p> <ul style="list-style-type: none"> Minimum legal labour standards will be met (child/forced labour, anti-discrimination, working hours, minimum wages) in accordance with International Labour Organization (ILO) regulations. Compliance with the Labour Management Procedures (LMP) of the sub-project and the Contractor's Labour Management Plan, prepared by contractor, and which is subject to approval, will be ensured by the EM and Supervision Consultant. Workers will be provided hygienic and adequate facilities. Workers will be allowed to have access to primary healthcare on site, enabling the provision of prescriptions. Discrimination based on language, race, gender, political thought, philosophical belief, and religion will be avoided in business relations. Workers will be issued a written contract stipulating working hours, wages, rights, and duties etc., and the CoC. 		
2	Resource Efficiency and Pollution Prevention				
2.1	Failure to set sustainable and resource efficiency goals ²⁰	Local Parties and Settlements within the Aol	<ul style="list-style-type: none"> Resource efficiency and management actions will be taken; use of renewable energy and energy efficiency measures, reducing the carbon footprint, responsible supply chain management and green procurement. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> C-ESMP Environmental and Social Monitoring Report (ESMR)
2.2	Air pollution from construction works (Dust emissions, Exhaust gases from equipment and vehicles)	Air quality, residents, flora and fauna species and habitats within the Sub-project's Aol and Workers at the Sub-project Area	<ul style="list-style-type: none"> Dust from outdoor sources will be minimized by employing control measures such as covering the piles and increasing the moisture content. Dust suppression techniques such as the application of water or non-toxic chemicals will be used to minimize dust from vehicle movements. Close or cover trucks for the transport of materials. Spraying water on the ground where dust is generated, disposing of excess material, and cleaning the location upon the finalization of works. Protective covers or curtains for zone where the largest amounts of dust are generated. Truck loading and unloading operations will be carried out with due care, and materials will be prevented from scattering around. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Construction Site Traffic and Transport Management Plan SEP

²⁰ As mentioned in the United Nations Development Cooperation Strategy Türkiye 2016-2020 Government of The Republic of Türkiye and The United Nations System in Türkiye, Sustainable, Inclusive Growth and Development Goals.

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> Modern equipment and vehicles that can meet the applicable emission standards will be selected for construction works. All vehicles will have exhaust emission permits, and all vehicles will be regularly maintained. Exhaust systems and emission levels of machinery and vehicles will be checked by the contractor. Sub-project Grievance Mechanism will be implemented. In case of any complaints, air quality measurement will be carried out at the nearest sensitive receptors by an authorized environmental laboratory, and the results will be recorded. Speed limits will be set for construction equipment, and actions will be taken to ensure that such limits are complied with. During transportation, excavated materials will be covered with nylon canvas or materials with grain size larger than 10 mm. Any damage caused by inadequate dust suppression measures (i.e. pollution of the surrounding area, transport to a residential area by wind, dust deposits by the wind, etc.) will be compensated by the contractor. Compliance with the air emission limit values stipulated in national legislation and WBG General EHS Guidelines will be ensured. Restricting works during daytime if necessary (e.g. 7AM to 5 PM). 		
2.3	Noise from construction works (Increase in noise and vibration levels)	Residents, flora and fauna species and habitats within the Sub-project's AoI and Workers at the Sub-project Area	<ul style="list-style-type: none"> Residents living near the sub-project area will be informed during the construction phase. Construction works will be planned in consultation with local communities, and operations with the highest noise generation potential will be scheduled during the time of the day that will cause minimum disturbance. Noise control devices, such as temporary noise barriers and deflectors, will be used for operations causing impact as well as exhaust silencers for combustion engines. Use of roads close to the settlements in transportation activities for the sub-project will be avoided or minimized. Equipment and vehicles used externally will be regularly maintained. "Low noise" equipment will be used as much as possible during the construction phase. Where construction equipment is provided with impermeable acoustic covers or enclosures, covers will be kept closed while equipment is in operation. When equipment is not working, they will be turned off or reduced to the minimum level. Vibration levels will be monitored in case of complaints, and measures will be taken to reduce vibration if standards are exceeded. Noise measurement will be carried out at the nearest noise sensitive receptors by an authorized environmental laboratory, in case of any complaints. Compliance with the noise limit values stipulated in national legislation and WBG General EHS Guidelines will be ensured. Restricting works during daytime if necessary (e.g. 7AM to 5 PM). Establish schedules and/or other forms of specific limitations for works. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Construction Site Traffic and Transport Management Plan SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
2.4	Waste management failure, pollution from hazardous waste	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> ▪ All non-waste and excavated material generated in the course of construction will be deposited in the landfill and in a manner that is not harmful to the environment. Stone, soil, and other materials that may be reused shall be utilized during the realization of the sub-project. Materials that cannot be used and hazardous waste will be removed in compliance with entity level regulations. ▪ Waste Management Plan will be developed and implemented by the Contractor. ▪ If asbestos containing material are identified, the relevant authorities will be notified, and approval obtained before starting any work. The approval will specify the type of work that can be carried out and the requirements for safe removal and disposal. ▪ During asbestos removal, measures will be taken to prevent the release of asbestos fibres into the air. This can include wetting down the materials with water to prevent dust, using negative air pressure systems, and using airtight containers to transport the waste. ▪ Workers involved in asbestos removal will be provided with appropriate PPE, including respirators, gloves, and protective clothing. ▪ Asbestos-containing waste will be disposed of at designated facilities that are authorized to handle hazardous waste. The waste will be securely packaged, labelled, and transported to the facility in accordance with the regulations. ▪ The work area will be monitored for asbestos fibres during and after removal to ensure that the work is being carried out safely. Records of the work will be kept, including the type and quantity of asbestos containing materials removed, the methods used, and the disposal sites. 	<ul style="list-style-type: none"> ▪ EM ▪ Contractor ▪ Supervision Consultant 	<ul style="list-style-type: none"> ▪ Waste Management Plan
2.5	Waste management failure, pollution from domestic waste	Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> ▪ Any domestic waste generated will be sorted at source (plastic, glass, paper, etc.), and reusable waste will be recycled. ▪ Unrecyclable waste will be collected in closed sanitary trash bins and will be disposed of by the solid waste collection system of Erbaa Municipality. 	<ul style="list-style-type: none"> ▪ EM ▪ Contractor ▪ Supervision Consultant 	<ul style="list-style-type: none"> ▪ Waste Management Plan
2.6	Waste management failure, pollution from waste oils	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> ▪ If different categories of oils are generated from the works at the construction site, these oils will be stored separately. ▪ Containers where waste oils are stored will be kept closed and protected from rainwater. ▪ Waste oils will only be transported by licensed transportation companies and will only be delivered to licensed recycling or disposal facilities. 	<ul style="list-style-type: none"> ▪ EM ▪ Contractor ▪ Supervision Consultant 	<ul style="list-style-type: none"> ▪ Waste Management Plan ▪ Spill Response Plan
2.7	Waste management failure, pollution from	Soil quality, Kelkit Stream	<ul style="list-style-type: none"> ▪ Waste batteries will be collected separately from other wastes, delivered to authorized organizations and recycled. 	<ul style="list-style-type: none"> ▪ EM ▪ Contractor 	<ul style="list-style-type: none"> ▪ Waste Management Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
	waste batteries and accumulators	as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities within the Municipal borders through authorized transportation companies. 	<ul style="list-style-type: none"> Supervision Consultant 	
2.8	Waste management failure, pollution from demolition waste, loss of topsoil	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> Consideration will be given to recycling of excavation soil and construction wastes and especially to their reuse as infrastructure material. For a robust recycling and disposal system, waste will be sorted at source. Removal of the excavated material, which will not be used for backfilling, from the site will be performed at regular intervals without waiting. These materials will be transferred to permitted excavation waste storage area by licensed transportation companies. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Waste Management Plan Construction Site Traffic and Transport Management Plan
2.9	Wastes of construction works (Transportation management of waste (both hazardous and non-hazardous) to the appropriate landfills/disposal sites)	Residents, soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> Waste management plan will be prepared, and the employees will be trained on the plan. During the construction period, any waste will be collected separately at source and stored in the temporary waste storage area. All types of waste shall be transferred to a licensed disposal facility via licensed waste transportation companies following the relevant legislation. Wastes generated shall only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes shall be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context shall be recorded and records shall be kept. Impermeability will be provided on the floors of the temporary storage area and a suitable drainage system which is closed and does not reach surface water will be installed. Spill kits will be available at the temporary storage area and necessary precautions will be taken against possible fires such as provision of appropriate firefighting equipment. Topsoil will be separated from general trash and organic, liquid, and chemical wastes on site, and stored in appropriate containers. Construction waste will be regularly collected by licensed collectors at the permitted excavation waste storage site of the Municipality. Waste disposal records will be kept regularly. To keep these records, a waste registry information form will be prepared, which will contain information on the waste code, amount, and transfer and disposal method as presented in the Annex 4 of the Regulation on Waste Management. Where appropriate, waste can be reused or recycled. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Waste Management Plan Construction Site Traffic and Transport Management Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> Temporary storage of medical waste will be performed in accordance with Article 14 of the Regulation on Control of Medical Waste. In addition, medical waste will be transported to processing facilities in accordance with Article 15 of the concerned regulation. 		
2.10	Soil contamination from construction works (Spill outs of fuel, lubricant, antifreeze etc. may result in contamination)	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> Safe delivery/storage/handling procedures in accordance with Safety Data Sheets (SDSs) will be established. Spilled material will be immediately contain and clean-up. Provisions of the Regulation on the Control of Soil Pollution and Sites Contaminated by Point Sources will be complied with within the scope of the sub-project. Periodic inception of vehicles, machinery and equipment used during the construction works. Storage of fuel and lubricant as specified in their SDSs, and isolation and cleaning of the site in case of spillage or leakage. Wastes and wastewater to be generated during the construction phase of the sub-project will be stored and disposed of in a controlled manner in accordance with the relevant regulations and in line with the management practices described in this report. Measures such as regular equipment maintenance, providing workers with appropriate training, and ensuring that all equipment and materials are properly stored and handled will be implemented. A spill response plan will be developed before construction begins to ensure that a timely and effective response can be carried out in the event of a spill or accident. The plan should include procedures for containing and cleaning up spills, as well as identifying the responsible parties and the reporting requirements. Employees will be trained on the plan prior to the construction phase. Removing contaminated soil, using remediation techniques to break down pollutants, and replacing affected soil with clean soil. After a spill or accident, monitoring of the soil quality will be conducted to ensure that remediation efforts are effective. Additionally, all spills and accidents will be reported to the regulatory agencies. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Spill Response Plan Waste Management Plan
2.11	Topsoil loss, Deposit of excavated soil, erosion, landslides, or sedimentation may occur	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> The provisions of the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes will be complied during the land preparation and construction phase of the sub-project. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Waste Management Plan
2.12	Pollution from hazardous materials	Soil quality, Kelkit Stream as water resource, lora and fauna species and habitats	<ul style="list-style-type: none"> Safe delivery/storage/handling procedures in accordance with SDSs will be established. Any spilled material will be immediately contain and clean-up. If hazardous wastes are stored in the sub-project area, those wastes will be stored in containers that are strong, leak-proof, safe and in accordance with internationally recognized standards. The containers will bear "hazardous waste" label, with the amount, content, properties, storage conditions and storage date of the stored material indicated on the containers. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Spill Response Plan C-ESMP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
		within the Sub-project's Aol	<ul style="list-style-type: none"> Containers containing hazardous materials will be placed in sealed vessels to prevent spills and leaks. Hazardous wastes will be transported by licensed waste transportation companies and will be disposed of at licensed facilities. Toxic paints, solvents or lead-based paints will not be used. Hazardous waste management will be fulfilled in consultation with Tokat/Erbaa Municipalities in accordance with the Regulation on Waste Management. Hazardous chemicals and wastes likely to be generated at the construction site will be stored not to pose a threat to community health. Construction activities may pose the potential for accidental release/leakages of petroleum-based products, such as lubricants, hydraulic fluids, or fuels during their storage, transfer, or use in equipment. All chemical storage containers, including diesel fuel, and hazardous liquid waste drums/containers will be placed in secondary containment so as to minimize the risk of soil, surface water and groundwater contamination during construction. The disposal of hazardous chemicals and wastes that may be generated at the construction site will be carried out at licensed facilities under the supervision of authorized companies and experts. 		
2.13	Wastewater management failure, pollution from wastewater (Water Quality and Domestic wastewater generation)	Kelkit Stream as a discharge point, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> Effluent Management Plan will be developed and monitored by the EM for the existing Erbaa WWTP. Bypass of the treatment system of the existing Erbaa WWTP will be avoided, if not possible, will be minimized. The number of employees at peak time during the construction phase of the sub-project is expected to be 40. Thus, the limited amount of domestic wastewater generated at site will be integrated into the existing sewerage system of the Erbaa WWTP, which is adjacent to the sub-project area. Surface runoff or wastewater generation due to dust suppression activities will be prevented. The units of the sub-project that are in touch with water, wastewater and chemicals will be constructed with using concrete with appropriate cement ratio and durability in order to provide basement impermeability. Thus, no leakages to soil and groundwater will occur during the construction phase of the sub-project. Construction activities may pose the potential for accidental release/leakages of petroleum-based products, such as lubricants, hydraulic fluids, or fuels during their storage, transfer, or use in equipment. All chemical storage containers, including diesel fuel, and hazardous liquid waste drums/containers should be placed in secondary containment so as to minimize the risk of soil, surface water and groundwater contamination during construction phase. The water to be used for dust suppression will be followed in m³. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Effluent Management Plan
3	Community Health, Safety, and Security				

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
3.1	Community health and safety risks	Local communities	<ul style="list-style-type: none"> ▪The construction area should be barriered to prevent trespassing. Necessary signage and lighting equipment shall be established. Traffic safety shall be established through appropriate management measures. Community should be informed about transfer of large machinery and equipment. If necessary, emergency drills should be implemented with the participation of the emergency authorities in the area. ▪Design and the construction work of the sub-project should be in line with the WBG guidelines including the life and fire safety provisions. ▪The sub-project area will be fenced to avoid physical hazards to the communities associated with the sub-project and construction activities will be announced to the affected local people, businesses, and governmental bodies at least two (2) days in advance. ▪Contractors will take necessary health and safety measures, such as using appropriate warning signs and signboards, arranging time schedule of noisy works (mostly after 9:00 AM before 6 PM), making the regular maintenance of the machinery, replacement or repair of part which cause noise and performing watering in dry seasons, under the management of the EM during site preparation and construction activities so that the public is informed of the construction plan and locations in a timely manner and the construction sites are determined. ▪Care will be taken to ensure that warning signs are visible at night and in bad weather conditions. ▪The adequate number of appropriate firefighting equipment will be always kept available at construction sites. ▪Detailed information on the use of the Grievance Mechanism and contact information on the grievance mechanism officer will be made available to the public. (Via the sub-project website, information brochures left at the Mukhtars offices, posters, and hand brochures in places such as schools, health centres, hospitals, mosques, which are the common areas used by the community intensively). ▪In the sub-project level Grievance Mechanism and Public Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation support will be provided in case non-Turkish speaking Refugee/Migrant workers have grievances about the sub-project or its impacts. ▪Community Health and Safety Management Plan will be prepared by the contractor during the construction period and by the EM during the operation period. It will be shared with the relevant audience. 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪Community Health and Safety Management Plan ▪Construction Site Traffic and Transport Management Plan ▪SEP ▪EPRP
3.2	Interruptions in Transport and Transport Safety (Direct and indirect threats posed by construction activities against traffic and pedestrians)	Local communities	<ul style="list-style-type: none"> ▪Construction Site Traffic and Transport Management Plan to be prepared by the Contractor will be implemented and the workers will be trained about the Plan. ▪Actions will be taken to ensure that any vehicles operating during the construction period obey the set speed limit (30 km/hr). ▪Traffic and warning signs will be placed around and near the sub-project area. Positioning clear warning and information signs around the construction zone. Imposing time constraints (e.g. 7AM to 5PM) for works. Considering disabled, women, children and people with special needs while locating and marking alternative roads (roundabouts). 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪Construction Site Traffic and Transport Management Plan ▪Community Health and Safety Management Plan ▪EPRP ▪SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> Local people will be informed about potential hazards and risks through brochures and posters left in common areas frequently used by local people such as headman's offices, hospital, health centre, mosque, coffee house and marketplace. The activities affecting the local traffic will be planned considering the rush hours of the traffic as much as possible. All drivers involved in the sub-project will be informed about road safety, speed limits, and traffic rules to be followed during the construction sub-project, and requirements to be observed. The weight of all vehicles will not exceed the legal limits according to Highway Traffic Regulation. In case of hazardous chemical or waste storage on site, the transfer of these wastes will be performed out by licensed carriers not to pose a threat to community health. The routes developed in agreement with the competent authorities will be used for special cargos. The designated routes will be programmed to prevent traffic congestion on the roads and will be published in advance to prevent possible disturbance. The arrangements in traffic will be discussed with the Municipality and planned jointly. 		
4	Biodiversity Conservation and Sustainable Management of Living Natural Resources				
4.1	Biodiversity conservation	Fauna species encountered and habitats within the Sub-project Area	<ul style="list-style-type: none"> Species encountered during the construction phase should not be killed or collected, and eggs and nests should not be deliberately damaged. Workers working in construction should be made aware. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> C-ESMP
4.2	Damage to vegetation may onset in the course of construction	Flora species and habitats within the Sub-project Area	<ul style="list-style-type: none"> Minimizing the areas requiring the removal of vegetation, and upon finalization of works, replace/restore removed vegetation. Special measures if needed to avoid damage to species. 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> C-ESMP
5	Cultural Heritage				
5.1	Loss of cultural heritage	Any artifacts	<ul style="list-style-type: none"> Any artifacts found during the construction works will be indicated and recorded as "chance finds". A "Chance Find Procedure" has been prepared for the steps to be followed and will be implemented in case of the chance find (see Appendix-H). Workers/employees will be trained in cultural heritage issues. In case of a chance find, all activities will be stopped, the site will be secured, and the Cultural Assets Conservation Board or Museum Directorate will be informed about the chance finds and site will be secured by the Contractor. The approval of the relevant Conservation Board, who is 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Chance Find Procedure

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			responsible for the area where the construction site is located, will be required to continue any activity on site. No demolition/construction work will be carried out when awaiting the said approval. ▪Any correspondence on this subject will be updated in accordance with all decisions taken, and all documents will be submitted to ILBANK .		
6	Stakeholder Engagement and Information Disclosure				
6.1	Potential community complaints	Sub-project's Stakeholders	<ul style="list-style-type: none"> ▪The Contractor will provide training to the site personnel on environmental and social issues. It is the EM's responsibility to ensure that the contractor complies with the determined criteria. ▪The operations to be carried out during construction works will be performed not to restrict / hinder the social and economic life of local people. ▪To avoid any impact on the safety and daily life of communities, safety and information signs will be placed on site before the work. ▪ 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪SEP
6.2	Stakeholders' negative opinions about the sub-project due to insufficient information	Sub-project's Stakeholders	<ul style="list-style-type: none"> ▪Before the start of construction works, the local people and all relevant stakeholders will be informed of the works to be performed and the measures to be taken. ▪The information on the start and finish dates of construction and working periods and the permits obtained from the provincial/district municipality will be shown by the operations owner in a signboard that is easily visible to all personnel at the construction site. 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪SEP ▪C-ESMP
6.5	Communication problems as a result of lack of open communication with stakeholders	Sub-project's Stakeholders	<ul style="list-style-type: none"> ▪An adequate timing will be planned for interaction / communication with communities and for engagement. ▪Consultation on risks and adverse impacts of the sub-project and create opportunities to receive affected communities view on sub-project. ▪Establishment of grievance mechanism to collect and provide timely resolution of affected communities concerns and grievances regarding of the sub-project's environmental and social performance. ▪Transparent public disclosure to inform each phase of the sub-project through website, notice boards, telecommunication tools and public meetings. ▪Establishing well designed and structured public questionnaire to receive feedback from affected communities. ▪Regular consultations will be carried out with the authorities and communities regarding the sub-project management. ▪Comprehensive information on the stakeholder engagement is provided in SEP of the sub-project and the SEP will be updated and implemented throughout the sub-project. 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪SEP
6.6	Grievance issues	Sub-project's Stakeholders	<ul style="list-style-type: none"> ▪An efficient Grievance Mechanism will be initiated to allow potentially affected individuals to voice their concerns on the sub-project. ▪In the sub-project level Grievance Mechanism, Public Grievance Mechanism and Labor Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. In addition, translation 	<ul style="list-style-type: none"> ▪EM ▪Contractor 	▪SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			support will be provided in case non-Turkish speaking Refugees/Migrants have grievances about the sub-project or its impacts.	▪Supervision Consultant	
6.7	Missing documentation	Sub-project's Stakeholders	<ul style="list-style-type: none"> ▪All activities, information meetings, opinions/suggestions, grievances, etc. provided during the construction period will be documented continuously. ▪The contractor will develop (C-ESMP), prepare monthly and quarterly ESMRs and submit them to the EM through the Supervision Consultant. The Supervision Consultant will review the quarterly ESMRs and C-ESMP of the contractor and will include its own assessments and observations on ESHS aspects and prepare quarterly ESMRs and submit them to the EM. The EM's PIU will examine the monthly and quarterly ESMR of the contractor/s and the Supervision Consultants and will be responsible for the timely delivery of the Monthly (if requested by ILBANK) and Quarterly ESMRs to ILBANK. The ILBANK's PMU will review the monthly/quarterly reports delivered by the EM during the construction phase. ILBANK will inform the WB by providing regular semi-annual monitoring reports on the ESHS performance of the sub-project. The WB will review regular semi-annual monitoring reports on the ESHS performance of the sub-project and instruct ILBANK if any non-conformity or non-compliance identified. 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪C-ESMP ▪SEP

Table 4-2. ESMP Operation Phase Matrix Table of the Sub-project

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
1	Labour and Working Conditions				
1.1	Inadequate workers health and safety conditions	Workers at the Sub-project Area	<ul style="list-style-type: none"> ▪ OHS Management Plan and Emergency Preparedness and Response Plan (EPRP) will be developed and implemented by the EM. ▪ The workers shall be informed about job descriptions, responsibilities, and risks and mitigation measures about OHS. The workers will be provided working conditions in accordance with the Labour Law (No: 4857 Date: 10.06.2003) (such as wages, working hours, payment for overtime hours, period of rest, social security benefits). The workers will be provided with the necessary personal protective equipment and information on works and occupational safety through regular trainings. Before the operation, a Risk Assessment Report shall be prepared for all works to be carried out and necessary measures shall be taken to avoid related risks. EPRPs shall be prepared for a possible accident and emergency, and emergency teams shall be established, and drills and training shall be carried out in line with the emergency scenarios. The workers shall be made aware of accessible GM. ▪ The operating procedures prepared for the components of the system are applied as specified in the Annex-3 of the Regulation on Wastewater Collection and Disposal Systems. ▪ Emergency plans specified in the Annex-3 of the Regulation on Wastewater Collection and Disposal Systems are prepared for emergency situations that may occur in any part of the system. ▪ Before starting work, employees will be knowledgeable about job descriptions, responsibilities, relationships with the local people, and risks that may threaten occupational health and safety. ▪ Workers will be provided with appropriate induction, health and safety training and information. ▪ All equipment used during the operation phase will be kept in good working condition. ▪ EPRP will be prepared for a potential accident and emergency. Emergency teams will be formed, and drills and training programs will be carried out in line with emergency scenarios. ▪ Employees will have a good command of EPRP, and the grievance will be reported to the authorized teams and resolved, if they require urgent action. ▪ In case of any potential accident involving injury during the operation phase, the equipment for the first aid will be kept available at the rehabilitation centre, taking into account that first aid response may be required before the casualty is referred to the nearest healthcare provider. ▪ The EM formally agrees that all work will be carried out in a safe and disciplined manner and is designed to minimize risks on neighbouring residents and environment. ▪ All activities will be implemented in line with both the Law on Occupational Health and Safety (No:6331 Date:30.06.2012) and its relevant regulations, and the WBG's EHS Guidelines. 	EM	<ul style="list-style-type: none"> ▪ OHS Management Plan ▪ Emergency Preparedness and Response Plans ▪ Risk Assessment Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> ▪The EM will ensure a safe working environment for the workers and supply appropriate personal protective equipment (PPE). ▪Guidance, directives, and recommendations of Ministry of Health, Ministry of Labour and Social Security, WHO and the WB shall be followed, and all relevant necessary measures shall be taken, both for occupational health and safety of employees and for workplaces, in case of an outbreak of any other pandemic/communicable disease including COVID-19 and other pandemics. ▪All regulations regarding OHS will be effective for the personnel. ▪OHS trainings and toolbox talks will be provided to the employees including the code of conduct. These will include regular trainings to workers on COVID-19 and other pandemics symptoms, how to be protected and what to do when symptoms appear. ▪Both trainings and incidents (fatalities, lost time incidents, near misses, outbreak of pandemic or communicable diseases, social unrest, etc.) will be recorded. ▪The EM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 days. ILBANK will forward the incident report to the WB immediately upon receipt from the EM. ▪Regular site tours will be realized, safe situations and behaviours will be observed and reported, unsafe behaviours and situations will be corrected by ensuring site discipline. 		
1.2	Improper working conditions Child Labour, forced labour and unregistered employment	Workers at the Sub-project Area	<ul style="list-style-type: none"> ▪Workers will be familiar with the Grievance Mechanism officer and will be enabled to have access to and be aware of the Grievance Mechanism. ▪Minimum legal labour standards will be met (child/forced labour, anti-discrimination, working hours, minimum wages) as per ILO regulations. ▪At the same time, WB and the national legislation will be complied with in terms of the working conditions. ▪Workers will be issued a written contract stipulating working hours, wages, rights, and duties etc., and the CoC. 	▪EM	<ul style="list-style-type: none"> ▪Labour Management Plan (based on the TEFWER's LMP) ▪SEP
2	Resource Efficiency and Pollution Prevention				
2.1	Waste and chemical risks	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol and	<ul style="list-style-type: none"> ▪Wastes generated should only be temporarily stored on site in the temporary storage area that is maintained/equipped with appropriate precautions according to the type of wastes, when needed, and wastes should be transported to licensed disposal facilities with licensed transport vehicles appropriate to the type of waste. Information related to the operations in this context should be recorded and records should be kept. ▪Waste will be characterized based on their composition, source, types, generation rates or local legal requirements in case of maintenance of the sub-project. ▪In addition to the adoption of waste prevention strategies, putting recycling plans into practice will considerably reduce the total amount of waste. 	▪EM	<ul style="list-style-type: none"> ▪Waste Management Plan ▪Spill Response Plan

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
		Workers at the Sub-project Area	<ul style="list-style-type: none"> ▪ If waste materials are still generated after appropriate waste prevention, reduction, reuse, and recycling measures are put into action, all necessary measures will be taken to avoid potential effects of waste material treatment and disposal on human health and the environment. ▪ Establish safe delivery/storage/handling procedures in accordance with SDSs. Immediately contain and clean-up any spilled material. 		
2.2	Wastewater management failure during the operation and maintenance	Kelkit Stream as a discharge point, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> ▪ The number of employees within the sub-project's operation phase is expected to be 14. Treated wastewater/effluent of the sub-project and Erbaa district will be discharged into the Kelkit stream as receiving environment in line with the Regulation on Urban Wastewater Treatment, WBG's General EHS Guidelines and WBG's EHS Guidelines for Water and Sanitation. ▪ Recommended measures to prevent, minimize, and control industrial discharges to the sewerage system of the Erbaa OIZ include: <ul style="list-style-type: none"> ○ EM will continuously improve its source control program within the OIZ area. ○ Treatment or pre-treatment to neutralize or remove toxic chemicals should ideally take place at the industrial facility itself within the OIZ, prior to discharge of the effluent to the sewerage of the OIZ with help of the implementation of an EM's source control program for industrial and commercial users to ensure that any wastewater discharged to the sewer system can be effectively treated. Examples of problematic discharges include flammable, reactive, explosive, corrosive, or radioactive substances; noxious or malodorous materials; medical or infectious wastes; solid or viscous materials that could cause obstruction to the flow or operation of the treatment plants; toxic substances; non-biodegradable oils; and pollutants that could result in the emission of hazardous gases. ○ EM will continue to monitor with the regular inspection of industrial user facilities and collect samples of wastewater discharges to the sewerage system to ensure compliance with the source control program. ○ EM will continue to conduct surveillance monitoring at sewer maintenance and of the influent to the wastewater treatment facilities. ○ EM will continue to investigate upstream sources of pollutants causing treatment plant upsets or interference. ▪ Recommended measures to prevent, minimize, and control leaks and overflows include: <ul style="list-style-type: none"> ○ Equip pumping stations with a backup power supply, such as a diesel generator, to ensure uninterrupted operation during power outages, and conduct regular maintenance to minimize service interruptions. Consider redundant pump capacity in critical areas. ○ Conduct repairs prioritized based on the nature and severity of the problem. Immediate clearing of blockage or repair is warranted where an overflow is currently occurring or 	▪ EM	<ul style="list-style-type: none"> ▪ Effluent Management Plan ▪ SEP ▪ EPRP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<p>for urgent problems that may cause an imminent overflow (e.g. pump station failures, sewer line ruptures, or sewer line blockages);</p> <ul style="list-style-type: none"> ○ Review previous sewer maintenance records to help identify “hot spots” or areas with frequent maintenance problems and locations of potential system failure, and conduct preventative maintenance, rehabilitation, or replacement of lines as needed. ○ When a spill, leak, and/or overflow occurs, keep sewage from entering the storm drain system by covering or blocking storm drain inlets or by containing and diverting the sewage away from open channels and other storm drain facilities (using sandbags, inflatable dams, etc.). Remove the sewage using vacuum equipment or use other measures to divert it back to the sanitary sewer system. ○ Establish routine maintenance program, including: <ul style="list-style-type: none"> ▪ Development of an inventory of system components, with information including age, construction materials, drainage areas served, elevations, etc. ▪ Regular cleaning of grit chambers and sewer lines to remove grease, grit, and other debris that may lead to sewer backups. Cleaning should be conducted more frequently for problem areas. Cleaning activities may require removal of tree roots and other identified obstructions. ▪ Inspection of the condition of sanitary sewer structures and identifying areas that need repair or maintenance. Items to note may include cracked/deteriorating pipes; leaking joints or seals at manhole; frequent line blockages; lines that generally flow at or near capacity; and suspected infiltration or exfiltration. ▪ Monitoring of sewer flow to identify potential inflows and outflows. <p>▪ Effluent Management Plan will be developed, and implemented, by the EM that includes measures and procedures for operational activities.</p> <ul style="list-style-type: none"> ○ Broken pipes and other repairs to be undertaken without delay, ○ Pumps and pumping stations to be adequately maintained, ○ All storage tanks and drums will be placed on concrete areas with proper secondary containments. When necessary; spill kits, absorbent pads or materials and adsorbent sands will be provided near the chemical storage areas at all times. ○ System overflows will be prevented as much as possible by using level meters, ○ Bypass of the treatment system will be avoided, if not possible, will be minimized, ○ Effluent water quality of the sub-project will comply with the limit values stipulated in National Legislation and WBG's General EHS Guidelines and WBG's EHS Guidelines for Water and Sanitation, the more comprehensive and strict ones will be considered. <p>▪ Wastes generated during maintenance works are disposed of without causing any additional pollution as determined by the relevant local legislation.</p>		

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
2.3	Soil/Water resources contamination/degradation due to failure to manage waste sludge	Soil quality, Kelkit Stream as water resource, flora and fauna species and habitats within the Sub-project's Aol	<ul style="list-style-type: none"> ▪ After stabilization, dewatering and solar drying, the excess dried waste sludge will be disposed of in compliance with the Annex-2 of the Regulation on Landfilling of Wastes and the Regulation on Waste Management according to the analysis result. If the sludge is classified as hazardous, it will be sent to licensed disposal companies. ▪ Sludge Management Plan will be developed, and implemented, by the EM to ensure waste sludge disposal in line with the national legislation. 	▪ EM	<ul style="list-style-type: none"> ▪ ESMR ▪ Sludge Management Plan ▪ SEP ▪ EPRP
2.4	Odour nuisance	Residents, flora and fauna species and habitats within the Sub-project's Aol and Workers at the Sub-project Area	<ul style="list-style-type: none"> ▪ An Odour Management Plan will be prepared and implemented by the EM that offers strategies to ensure the following especially at the WWTP area: The first level measures: <ul style="list-style-type: none"> ○ Prevention of wastewater influents which exceed treatment plant capacity. ○ Reduction of solid waste and activated sludge amounts. ○ Increasing disposal frequency of screenings. ○ Proper and timely disposal of sludge to prevent flies and odour. ○ Increasing aeration rate in biological treatment process. ○ Addition of chlorinated water to sludge thickeners if activated sludge is in open area. ○ Addition of lime to activated sludge. ○ Keeping water level under control in order to prevent turbulence as a result of instant decrease of water. ▪ If odour nuisance prevails after the proper implementation of first level measures, the second level measures shall be taken. These are: <ul style="list-style-type: none"> ○ Addition of oxidizing material (such as hydrogen peroxide, sodium hypochlorite) (oxidizing materials, prevent generation of especially hydrogen sulphide). Addition of sodium hydroxide can also be considered. Sodium hydroxide will dissolve hydrogen sulphur gas in water. ○ Preventing anaerobic bacteria with control of pH levels or disinfection. ○ Oxidizing odorous compound by the help of chemicals. ○ Planting trees in the WWTP area and the buffer zone around the treatment plant for the prevention of odour distribution. ○ If nuisance still prevails after implementation of first and second measures, the final measure shall be determined as: <ul style="list-style-type: none"> ○ Enclosing of preliminary treatment units, aeration tanks and bio-P tanks ▪ Apart from that, following mitigation measures will be implemented throughout the Project. <ul style="list-style-type: none"> ○ Establishment of an operating grievance redress mechanism to manage odour related grievances. 	▪ EM	<ul style="list-style-type: none"> ▪ Odour Management Plan ▪ SEP ▪ EPRP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> ○ Maintaining pipelines and ensuring effective management and operation of the sewerage system including effective maintenance of all elements of the sewerage system and rapid response to emergencies. ○ Regular maintenance and cleaning works shall be conducted on the machinery and equipment in order to prevent occurrence of odour. ○ Regular and sufficient ventilation at the pumping stations will be provided. <p>▪Trees will be planted around the pumping station areas</p>		
3	Community Health, Safety, and Security				
3.1	Community health and safety risks	Local communities	<ul style="list-style-type: none"> ▪The operations should be engaged without posing risk to the community safety. The facility should be fenced to prevent trespassing. If necessary, emergency drills should be implemented with the participation of the emergency authorities in the area. ▪The grievance mechanism officer will be introduced to the local people and updated information about the grievance mechanism will continue to be provided. In case of an update in the documents, the updated information will be announced to the local people through the relevant headman's office. 	▪EM	<ul style="list-style-type: none"> ▪Community Health and Safety Management Plan ▪Traffic and Transport Management Plan ▪SEP ▪EPRP
4	Biodiversity Conservation and Sustainable Management of Living Natural Resources				
4.1	Biodiversity conservation	Flora and fauna species within the Sub-project Area	▪No impact expected for the operation phase.	-	-
5	Stakeholder Engagement and Information Disclosure				
5.1	Stakeholders' negative opinions about the sub-project due to insufficient information	Sub-project's Stakeholders	▪In case of any technical emergencies, the local people and all relevant stakeholders will be informed of the works to be performed and the measures to be taken.	▪EM	▪SEP
5.2	Grievance issues	Sub-project's Stakeholders	▪An efficient Grievance Mechanism will be initiated to allow potentially affected community members and the employees to voice their concerns on the sub-project and have their grievances adequately addressed in a timely manner.	▪EM	▪SEP

Ref.	Impact Description	Sensitive Receptor(s)	Management/ Mitigation Measure	Responsibility for Implementation of Mitigation Measure	Relevant Management Plan or Procedure
			<ul style="list-style-type: none"> ▪In the sub-project level Grievance Mechanism, Public Grievance Mechanism and Labor Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. 		
5.3	Community complaints	Sub-project's Stakeholders	<ul style="list-style-type: none"> ▪Interaction / communication will be established with communities, and adequate timing will be planned for engagement activities. Additionally, regular consultations will be carried out with the authorities and communities regarding the sub-project management. ▪Consultation on risks and adverse impacts of the sub-project and create opportunities to receive affected communities view on sub-project. ▪Establishment of grievance mechanism to collect and provide timely resolution of affected communities concerns and grievances regarding of the sub-project's environmental and social performance. ▪In the sub-project level Grievance Mechanism and Public Grievance Mechanism, grievances will be submitted in Turkish through Turkish forms. ▪Transparent public disclosure to inform each phase of the sub-project through website, notice boards, telecommunication tools and public meetings. ▪Establishing well designed and structured public questionnaire to receive feedback from affected communities. 	▪EM	▪SEP

4.2 MONITORING

Key Performance Indicators (KPIs) of this procedure will be monitored, verified, and evaluated within the scope of the sub-project monitoring stage. The KPIs for both construction and operation phases of the sub-project are presented in [Table 4-3](#).

The monitoring, review and audit program detailed in Table 4-4 will be implemented during construction and operation to monitor the implementation of the environmental and social commitments of the sub-project's ESMP requirements. The EM will be responsible for ensuring that the contractor comply with applicable national/international regulations and WB's requirements during the construction phase of the sub-project.

Table 4-3. Key Performance Indicators for Both Construction and Operation Phases of the Sub-project

Monitoring Focus	KPI
Documentation	
Following ESMP Project specific plans will be developed and be in place.	Full compliance with Sub-project's ESMP
Air Quality	
Air Quality incidents	Minimization and continued improvement in the number of the reported air quality related incidents.
Non-Compliance with air quality standards	Zero grievances per year
Community grievances	Minimization and continued improvement in the number of air quality related community grievances
Violation on speed limit	Minimization and continued improvement in the number of reported violations on speed limit
Noise	
Noise and Vibration incidents	Minimize and continued improvement in number of reported noise and vibration related incidents
Non-Compliance with Project standards	Zero Non-Compliance Reports (NCRs) per year
Number of noise-related community grievances	Zero grievances per year
Community grievances	Minimization and continued improvement in the number of noise related community grievances
Water / Wastewater	
Spill incident	Minimization and continued improvement in the number of the reported water quality related incidents.
Non-Compliance with Sub-project standards	Zero NCRs per year
Wastewater discharge quality analyses	Zero NCRs per year Meeting set national and international wastewater discharge quality standards
Water quality analyses	Meeting set national and international water quality standards for surface and groundwater impacted and/or near the sub-project
Flood incidents	No infrastructure damage and damage to loads/humans
Waste	
Waste Generation	Minimization of total waste generated Decrease in the ratio of hazardous waste generated to total waste (by contamination + by generation)
Waste Disposal	Increase in the ratio of recovered/reused/recycled waste to total waste generated
Soil Quality	
Spill incident	Minimization and continued improvement in the number of the reported soil quality related incidents
Non-Compliance with Sub-project standards	Zero NCRs per year
Soil quality accidents	Zero accident per year
Number of soil-related community grievances	Zero grievances per year
Traffic	
Number of non-compliances against the mitigation controls identified in Traffic and Transport Management Plan	Decreasing number/ continuous improvement in number of reported non-compliances

Monitoring Focus	KPI
Number of drivers found to be exceeding speed limits or driving unsafely	Zero exceedance per year
Number of road traffic accidents involving: Accidental injuries and deaths, Spillages (such as cargo or fuel), Wildlife-vehicle collisions.	Zero accidents per year
Number of traffic-related grievances	Zero grievances per year
Health, Safety and Environment	
% of scheduled Health, Safety, and Environment (HSE) Inspection	>90
% of attendance at HSE meetings	>90
% of closing of NCRs	100
Reporting safe observations	100%
Reporting unsafe observations	100%
Reporting near misses	100%
Reporting number of incidents	100%
Reporting number of accidents	100%
Reporting day-loss	100%
% of Toolbox attending	>90
% of Risk Assessment compliance	>90
% of Legal Requirements compliance	100%
Results of scheduled audits	>85
HSE training carried out to training matrix > 90% of all training to matrix	>90
% of attendance at scheduled trainings	>90
Engagement in HSE program by individual managers and supervisors	>90
Engagement in HSE program by contractor's	>90
Labour and Working Conditions	
Number of worker grievances closed out within the target timeframe	100% compliance with labour laws and regulations Zero unresolved health and safety incidents within the target timeframe 100% availability of required PPE 90% or higher worker satisfaction rate
Community Health and Safety	
Number of communicable and non-communicable diseases and injuries.	Negative Trend/No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum
Number of community health safety & security grievances from local communities as recorded in the grievance management system.	Decreasing number/ continuous improvement in number of grievances
Number of reported community health & safety incidents	Zero incidents per year
Number of reported air quality or noise incidents	Zero incidents per year
Direct and indirect threats posed by construction activities against traffic and pedestrians	Zero number of drivers found to be exceeding speed limits or driving unsafely, Zero accidental injuries and deaths, Zero traffic-related grievances.
Access to the Construction Site - Security Fence/ Protection Tape	Zero Number of unauthorized accesses to the sub-project area
Trainings	
Training records	Trainings on ESMP and SEP documents. Providing all trainings (including GM, GBV, SEA/SH) to all employees. 100% of scheduled training sessions conducted 80% or higher participant satisfaction rate Zero participants without completion certificates if applicable
Disclosure	
Grievance Records, Disclosure meeting participant records, ESMP, SEP, and GM will be disclosed at Project web site in two languages (English and Turkish).	All grievances closed-out within the target timeframe ESMP, Project specific SEP and GM will be prepared and disclosed at the sub-project web site
Vulnerable Groups	
Incidents, Grievances, Toolbox talks and trainings, Information/ disclosure	All grievances closed-out within the target timeframe Sufficient information provided to the VGs.
Grievance Mechanism	
Grievance Records, GM disclosure	All grievances closed-out within the target timeframe GM disclosure to the PAPs, stakeholders GM disclosure at Sub-project web site
Cultural Heritage	
Existence of a Chance Find	Zero Grievance Records

Table 4-4. Environmental and Social Monitoring Table of the Sub-project

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
1.1	Construction	Grievance Mechanism	<ul style="list-style-type: none"> ▪Grievance records ▪Number/Percentage of closed grievances within the targeted timeframe 	▪Aol	<ul style="list-style-type: none"> ▪On-site inspections ▪Minutes of meetings ▪Grievance mechanism records 	Monthly	<ul style="list-style-type: none"> ▪Relevant national legislation ▪WBG General EHS Guidelines Project's E&S instruments 	<ul style="list-style-type: none"> ▪Number of grievances ▪Number/Percentage of closed grievances within the targeted timeframe 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪ Included in Sub-project Budget
1.2	Construction	Labour Conditions	<ul style="list-style-type: none"> ▪Grievance records ▪Percentage of closed grievances within the target timeframe ▪Site conditions 	▪Sub-project area	<ul style="list-style-type: none"> ▪Internal and external audits ▪Grievance records ▪Accident records ▪Training records ▪Sample contracts ▪Human Resource Policy ▪Number of the local employees ▪Legal work permit 	Monthly	<ul style="list-style-type: none"> ▪Labour Law (No. 4857) ▪Law on Trade Unions and Collective Bargaining Agreements ▪ILO International Regulations 	<ul style="list-style-type: none"> ▪100% compliance with labour laws and regulations ▪Zero unresolved health and safety incidents within the target timeframe ▪100% availability of required PPE ▪90% or higher worker satisfaction rate 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪ Included in Sub-project Budget
1.3	Construction	Occupational Health and Safety	<ul style="list-style-type: none"> ▪Safe conditions on the construction site ▪Risk analysis and procedures ▪Disease ▪Incident and accident reports 	<ul style="list-style-type: none"> ▪Sub-project area ▪Settlements near the sub-project area 	<ul style="list-style-type: none"> ▪On-site inspections ▪Interviews with employees ▪Grievance records 	Monthly	<ul style="list-style-type: none"> ▪Occupational Health and Safety Law ▪Regulation on Health and Safety Measures in 	<ul style="list-style-type: none"> ▪Health and Safety KPIs detailed in Table 4-3. 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			<ul style="list-style-type: none"> ▪Grievance records ▪Percentage of closed grievances within the target timeframe ▪Toolbox talks and trainings ▪HSE Inspection ▪Legal Requirements ▪EPRP ▪Drill reports ▪OHS practices in the field (Use of PPE, etc.) 		<ul style="list-style-type: none"> ▪Training and toolbox records ▪Contract examples ▪Internal and external audits ▪Incident/Accident and near miss records ▪Drill records ▪Availability of an adequate OHS organizational structure 		<ul style="list-style-type: none"> Working with Asbestos ▪Regulation on Health and Safety Requirements for the Use of Work Equipment 			
1.4	Construction	Community Health & Safety	<ul style="list-style-type: none"> ▪Safety conditions at the site ▪Fencing of construction site ▪Warning signs and flashlights ▪Grievance records ▪Percentage of closed grievances within the target timeframe ▪Incident and accident reports ▪Construction Site Traffic and Transport Management Plan 	<ul style="list-style-type: none"> ▪Sub-project area ▪Residential areas around sub-project area 	<ul style="list-style-type: none"> ▪Records of comments/suggestions/grievances ▪Site Audits ▪Training records ▪Review of Construction Site Traffic and Transport management plan 	Monthly	<ul style="list-style-type: none"> ▪Public Health Law ▪Regulation on Health and Safety Signs 	<ul style="list-style-type: none"> ▪Negative Trend/No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum ▪Decreasing number/continuous improvement in number of grievances ▪Zero incidents per year ▪Zero number of drivers found to be exceeding speed limits or driving unsafely ▪Zero accidental injuries and deaths 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
								<ul style="list-style-type: none"> ▪Zero traffic-related grievances ▪Zero Number of unauthorized accesses to the sub-project area 		
1.5	Construction	Documentation	<ul style="list-style-type: none"> ▪Availability of ESMP Project specific plans and reports 	<ul style="list-style-type: none"> ▪Sub-project area 	<ul style="list-style-type: none"> ▪On-site inspection ▪Record control 	During the construction period, the contractor will develop C-ESMP (based on this ESMP), monthly and quarterly report the ESMRs and to the EM, the EM to ILBANK quarterly together with the Grievance Register. Moreover, ILBANK will compile these ESMRs and report them to WB biannually together with the sub-project Progress Report.	<ul style="list-style-type: none"> ▪WB ESS1 	<ul style="list-style-type: none"> ▪Full compliance with Sub-project's ESMP 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪Included in Sub-project Budget
1.7	Construction	Sustainable Development and Resource Efficiency during the construction period	<ul style="list-style-type: none"> ▪Wastewater loss records in the plant 	<ul style="list-style-type: none"> ▪Settlements near the sub-project area 	<ul style="list-style-type: none"> ▪View/suggestion/grievance records ▪Wastewater loss records ▪On-site inspection 	Monthly	<ul style="list-style-type: none"> ▪Regulation on Control of Water Pollution ▪WB ESS3 	<ul style="list-style-type: none"> ▪Sustainable/minimum wastewater loss records 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	<ul style="list-style-type: none"> ▪Included in Sub-project Budget
1.8	Construction	Air Quality	<ul style="list-style-type: none"> ▪Number of air quality-related grievance records 	<ul style="list-style-type: none"> ▪Sub-project area 	<ul style="list-style-type: none"> ▪On-site inspections 	In case of grievance Monthly	<ul style="list-style-type: none"> ▪Regulation on Air Quality 	<ul style="list-style-type: none"> ▪Minimization and continued improvement in the 	<ul style="list-style-type: none"> ▪EM ▪Contractor 	<ul style="list-style-type: none"> ▪Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			<ul style="list-style-type: none"> Percentage of closed grievances within the target timeframe Air Quality incidents Records of non-compliance with air quality standards Visually, on the basis of irritation of the respiratory system 	<ul style="list-style-type: none"> Settlements, schools, hospitals, and place of worship near the sub-project area 	<ul style="list-style-type: none"> PM_{2.5} and PM₁₀ Measurements to be performed by an authorized environmental laboratory in case of grievance 		<ul style="list-style-type: none"> Assessment and Management WB ESS3 	<ul style="list-style-type: none"> number of the reported air quality related incidents Zero NCRs per year Zero grievances per year Minimization and continued improvement in the number of air quality related community grievances 	<ul style="list-style-type: none"> Supervision Consultant 	
1.9	Construction	Noise	<ul style="list-style-type: none"> Number of noise-related grievance records Percentage of closed grievances within the target timeframe Noise and vibration incidents Records of non-compliance with noise standards 	<ul style="list-style-type: none"> Sub-project area Settlements, schools, hospitals, and place of worship near the sub-project area 	<ul style="list-style-type: none"> Monitoring conducted at the nearest sensitive receptors using noise measuring devices On-site inspections Measurements to be performed by an authorized environmental laboratory in case of grievance 	<ul style="list-style-type: none"> In case of grievance Monthly 	<ul style="list-style-type: none"> Regulation on the Control of Environmental Noise 	<ul style="list-style-type: none"> Minimize and continued improvement in number of reported noise and vibration related incidents Zero NCRs per year Zero grievances per year Minimization and continued improvement in the number of noise related community grievances 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Included in Sub-project Budget
1.10	Construction	Soil Quality	<ul style="list-style-type: none"> Soil quality/Spill incident and accidents Records of non-compliance with soil quality standards Incident and accident Reports 	<ul style="list-style-type: none"> Sub-project area 	<ul style="list-style-type: none"> On-site inspection 	<ul style="list-style-type: none"> Daily 	<ul style="list-style-type: none"> Regulation on Control of Soil Pollution and Point Source Contaminated Lands Regulation on Waste Management 	<ul style="list-style-type: none"> Minimization and continued improvement in the number of the reported soil quality related incidents Zero NCRs per year Zero accident per year 	<ul style="list-style-type: none"> EM Contractor Supervision Consultant 	<ul style="list-style-type: none"> Included in Sub-project Budget

Erbaa Existing Wastewater Treatment Plant Capacity Expansion Project

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
								▪Zero grievances per year		
1.11	Construction	Waste Management	<ul style="list-style-type: none"> ▪Temporary waste storage area conditions ▪Total amount of waste generated ▪Recovery / reuse / recycle ratio 	▪Sub-project area	<ul style="list-style-type: none"> ▪Waste records ▪On-site inspection regarding proper collection and temporary storage of wastes 	Daily	<ul style="list-style-type: none"> ▪Regulation on Waste Management ▪Regulation on Health and Safety Measures in Working with Asbestos 	<ul style="list-style-type: none"> ▪Minimization of total waste generated 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget
1.12	Construction	Domestic Waste	<ul style="list-style-type: none"> ▪Total amount of domestic waste generated ▪Ratio of recovered/reused/ recycled domestic waste to total waste generated ▪Domestic waste storage conditions ▪On-site inspection 	▪Sub-project area	<ul style="list-style-type: none"> ▪Waste records ▪On-site inspection 	Daily	<ul style="list-style-type: none"> ▪Regulation on Control of Packaging Waste ▪Regulation on Waste Management 	<ul style="list-style-type: none"> ▪Minimization of total waste generated ▪Increase in the ratio of recovered/ reused/ recycled to landfilled 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget
1.13	Construction	Waste Oils	<ul style="list-style-type: none"> ▪Total amount of waste oil generated ▪Ratio of recovered/reused/ recycled waste oil to total waste generated ▪Waste oil storage conditions ▪On-site inspection 	▪Sub-project area	<ul style="list-style-type: none"> ▪Visual observations ▪Waste records 	Weekly	▪Regulation on the Management of Waste Oils	<ul style="list-style-type: none"> ▪Minimization of total waste generated ▪Increase in the ratio of recovered/ reused/ recycled waste to total waste generated 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget
1.14	Construction	Waste Batteries and Accumulators	<ul style="list-style-type: none"> ▪Total amount of waste batteries/accumulator s generated ▪Recovery /reuse/ recycle ratio 	▪Sub-project area	▪Waste records	Monthly	▪Regulation on the Control of Waste Batteries and Accumulators	<ul style="list-style-type: none"> ▪Minimization of total waste generated ▪Increase in the ratio of recovered/ reused/ recycled waste to total waste generated 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
1.15	Construction	Excavation Soil, Construction and Debris/ Demolition Wastes	<ul style="list-style-type: none"> ▪Total amount of excavation and demolition waste generated ▪Excavation and demolition waste transfer records ▪Soil stripping, excavation, and backfilling activities ▪Waste storage conditions ▪Transfer records ▪Soil stripping, excavation and backfilling activities 	▪Sub-project area	▪On-site inspection	Daily	▪Regulation on the Control of Excavation Soil, Construction and Demolition Wastes	<ul style="list-style-type: none"> ▪Minimization of total waste generated ▪Increase in the ratio of recovered/ reused/ recycled waste to total waste generated 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget
1.16	Construction	Hazardous Waste Management	<ul style="list-style-type: none"> ▪Total amount of hazardous waste generated ▪Hazardous waste storage conditions ▪On-site inspection 	▪Sub-project area	<ul style="list-style-type: none"> ▪Waste records ▪On-site inspection 	Daily	▪Regulation on Waste Management	<ul style="list-style-type: none"> ▪Decrease in the ratio of hazardous waste generated to total hazardous waste (by contamination + by generation) 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget
1.17	Construction	Cultural Heritage	<ul style="list-style-type: none"> ▪Existence of a Chance Find 	<ul style="list-style-type: none"> ▪Sub-project area ▪Settlements near the sub-project area 	<ul style="list-style-type: none"> ▪On-site inspection ▪Existence of a Chance Find Procedure 	Monthly	<ul style="list-style-type: none"> ▪Law on the Conservation of Cultural and Natural Properties ▪ WB ESS8 	<ul style="list-style-type: none"> ▪Zero Grievance Records 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant 	▪Included in Sub-project Budget
1.18	Construction	Vulnerable Groups	<ul style="list-style-type: none"> ▪Communication and information dissemination 	▪Sub-project area	<ul style="list-style-type: none"> ▪Surveys and interviews with affected populations ▪Review of healthcare and social service access records 	Monthly	▪TEFWER ESMF	<ul style="list-style-type: none"> ▪All grievances closed-out within the target timeframe ▪Sufficient information provided to the VGs 	<ul style="list-style-type: none"> ▪EM ▪Contractor ▪Supervision Consultant ▪Local Health and Social Services Departments 	▪Included in Sub-project Budget

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Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
					<ul style="list-style-type: none"> ▪ On-site inspections ▪ Coordination with local service providers ▪ Tracking of communication efforts and outreach effectiveness 					
1.19	Construction	Trainings	<ul style="list-style-type: none"> ▪ Training Records ▪ Number of participants attending the training sessions ▪ Percentage of participants successfully completing the training ▪ Feedback from participants 	<ul style="list-style-type: none"> ▪ Sub-project area ▪ Training venues ▪ 	<ul style="list-style-type: none"> ▪ Review of training attendance sheets ▪ Evaluation forms completed by participants ▪ On-site observation of training sessions ▪ Interviews with trainers and participants 	Monthly	TEFWER ESMF	<ul style="list-style-type: none"> ▪ Trainings on ESMP and SEP documents. ▪ Providing all trainings (including GM, GBV, SEA/SH) to all employees. ▪ 100% of scheduled training sessions conducted ▪ 80% or higher participant satisfaction rate ▪ Zero participants without completion certificates if applicable 	<ul style="list-style-type: none"> ▪ EM ▪ Contractor ▪ Supervision Consultant ▪ Training Providers 	<ul style="list-style-type: none"> ▪ Included in Sub-project Budget
1.20	Construction	Direct and indirect threats posed by construction activities against traffic and pedestrians	<ul style="list-style-type: none"> ▪ Grievance records ▪ Information gathered through Public Consultation ▪ Information on available pedestrian ways ▪ Number of non-compliances against the mitigation controls identified in 	<ul style="list-style-type: none"> ▪ Sub-project area 	<ul style="list-style-type: none"> ▪ On-site inspection 	Daily	<ul style="list-style-type: none"> ▪ Occupational Health and Safety Law 	<ul style="list-style-type: none"> ▪ Zero number of drivers found to be exceeding speed limits or driving unsafely ▪ Zero accidental injuries and deaths, ▪ Zero traffic-related grievances 	<ul style="list-style-type: none"> ▪ EM ▪ Contractor ▪ Supervision Consultant 	<ul style="list-style-type: none"> ▪ Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
			Traffic and Transport Management Plan ▪Existence of EPRP ▪Driver training records ▪Number of road traffic accidents involving ▪Existence and number of warning signs properly installed at designated location ▪Training records for drivers ▪Installation of warning signs							
1.21	Construction	Access to the Construction Site - Security Fence/ Protection Tape	▪Grievance records	▪Settlements near the sub-project area	▪On-site inspection	Daily	▪Occupational Health and Safety Law	▪Zero Number of unauthorized accesses to the sub-project area	▪EM ▪Contractor ▪Supervision Consultant	▪Included in Sub-project Budget
2.1	Operation	Disclosure	▪Grievance records ▪Percentage of closed grievances within the target timeframe	▪Settlements near the sub-project area	▪On-site inspections ▪Minutes of meetings ▪Grievance mechanism records	Daily	▪Regulation on the Control of Environmental Noise ▪Regulation on Air Quality Assessment and Management ▪ WBG General EHS Guidelines	▪All grievances closed-out within the target timeframe	▪EM	▪Included in Sub-project Budget
2.2	Operation	Labour Conditions	▪Grievance records ▪Percentage of closed grievances within the target timeframe	▪Sub-project route and maintenance areas	▪Internal and external audits ▪Grievance records	Monthly	▪Labour Law (No. 4857) ▪Law on Trade Unions and Collective	▪All grievances closed-out within the target timeframe	▪EM	▪Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
					<ul style="list-style-type: none"> ▪ Accident records ▪ Training records ▪ Sample contracts ▪ Human Resource Policy ▪ Number of the local employees ▪ Legal work permit 		Bargaining Agreements ▪ ILO International Regulations			
2.3	Operation	Occupational Health and Safety	<ul style="list-style-type: none"> ▪ Disease ▪ Incident and accident reports ▪ Grievance records ▪ Percentage of closed grievances within the target timeframe ▪ Trainings ▪ HSE Inspection ▪ Legal Requirements ▪ Compliance with EPRP of drills/year ▪ OHS practices in the field (Use of PPE, etc.) ▪ Daily Site OHS Reports 	<ul style="list-style-type: none"> ▪ Sub-project area ▪ Settlements near the sub-project area 	<ul style="list-style-type: none"> ▪ On-site inspections ▪ Interviews with employees ▪ Complaint records ▪ Training records ▪ Contract examples ▪ Internal and external audits ▪ EPRPs ▪ Incident/ Accident records ▪ Availability of an adequate OHS organizational structure 	Monthly	▪ Occupational Health and Safety Law ▪ Regulation on Health and Safety Requirements for the Use of Work Equipment	▪ Health and Safety KPIs detailed in Table 4-3.	▪ EM	▪ Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
2.4	Operation	Community Health & Safety	<ul style="list-style-type: none"> ▪Grievances records ▪Percentage of closed grievances within the target timeframe ▪Incident and accident reports 	<ul style="list-style-type: none"> ▪Sub-project area ▪Residential areas around sub-project area 	<ul style="list-style-type: none"> ▪Records of comments/ suggestions/ grievances ▪Site Audits ▪Training records 	Monthly	<ul style="list-style-type: none"> ▪Public Health Law ▪Regulation on Health and Safety Signs 	<ul style="list-style-type: none"> ▪No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum. ▪Decreasing number/ continuous improvement in number of complaints ▪Zero incidents per year 	▪EM	▪Included in Sub-project Budget
2.5	Operation	Grievance Mechanism	<ul style="list-style-type: none"> ▪Grievance Records ▪Percentage of closed grievances within the target timeframe ▪GM of the sub-project 	<ul style="list-style-type: none"> ▪Sub-project area ▪Settlements near the sub-project area 	<ul style="list-style-type: none"> ▪View/ suggestion/ grievance records ▪Grievance database ▪On-site inspection ▪Existence / accessibility of grievance boxes 	Monthly	<ul style="list-style-type: none"> ▪TEFWER ESMF ▪TEFWER Sub-project, SEP Sub-project, GM 	<ul style="list-style-type: none"> ▪All grievances closed out within the target timeframe 	▪EM	▪Included in Sub-project Budget
2.6	Operation	Waste Management	<ul style="list-style-type: none"> ▪Total amount of waste generated ▪Recovery / reuse / recycle ratio 	<ul style="list-style-type: none"> ▪Sub-project area 	<ul style="list-style-type: none"> ▪Waste records ▪On-site inspection regarding proper collection and temporary storage of wastes 	In case of grievance Daily	<ul style="list-style-type: none"> ▪Regulation on Waste Management ▪Regulation on Control of Packaging Waste ▪Regulation on the Management of Waste Oils ▪Regulation on the Control of Waste Batteries and Accumulators 	<ul style="list-style-type: none"> ▪Minimization of total waste generated ▪Decrease in the ratio of hazardous waste generated to total waste (by contamination + by generation) 	▪EM	▪Included in Sub-project Budget

Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
							▪Regulation on Control of Medical Waste			
2.7	Operation	Wastewater Management	<ul style="list-style-type: none"> ▪Effluent discharge quality analysis parameters and corresponding national regulation limit values (mg/l) <ul style="list-style-type: none"> ○ COD : <125 ○ BOD₅ : <25 ○ TSS : <35 ○ TN : <10 ○ TP : <1 ○ pH : 6-9 	▪Discharge point and Kelkit stream	▪Sampling Analysis results	Continuous Wastewater Monitoring Station Sampling Analysis results 24 samples/year in line with the local legislation	<ul style="list-style-type: none"> ▪Regulation on Urban Wastewater Treatment ▪WBG's General EHS Guidelines ▪ WBG's EHS Guidelines for Water and Sanitation 	<ul style="list-style-type: none"> ▪Minimization and continued improvement in the number of the reported water quality related incidents. ▪Compliance with the national regulation limit values for corresponding parameters ▪Zero NCRs per year ▪Zero grievances per year ▪No infrastructure damage and damage to loads/humans 	▪EM	▪Included in Sub-project Budget
2.8	Operation	Odour	▪Odour concentration (Odour Unit/m ³)	<ul style="list-style-type: none"> ▪Sub-project area ▪Discharged point Kelkit stream 	▪Sampling Analysis results	During the lifetime of the sub-project. In case of grievance	<ul style="list-style-type: none"> ▪WBG's General EHS Guidelines ▪ WBG's EHS Guidelines for Water and Sanitation 	<ul style="list-style-type: none"> ▪Minimization and continued improvement in the number of the reported odour related incidents ▪Zero NCRs per year ▪Zero grievances per year ▪Odour Management Plan 	▪EM	▪Included in Sub-project Budget
2.9	Operation	Dried Sludge Waste	<ul style="list-style-type: none"> ▪Waste amount ▪Disposal parameters with analysis 	▪Sub-project area	<ul style="list-style-type: none"> ▪Waste records ▪On-site inspection ▪Sampling Analysis results 	During the lifetime of the sub-project. In case of grievance Before disposal	▪Regulation on Landfilling of Wastes	<ul style="list-style-type: none"> ▪Minimization of total waste generated. ▪Sludge Management Plan 	▪EM	▪Included in Sub-project Budget

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Ref.	pPhase	Subject	Parameter to be Monitored	Monitoring Location	Monitoring Method	Monitoring Frequency	Reference	KPI	Responsibility for Monitoring	Cost (If not included in the Sub-project Budget)
2.10	Operation	Sustainable Development and Resource Efficiency during the operation period	<ul style="list-style-type: none"> Wastewater loss records in plant 	<ul style="list-style-type: none"> Sub-project area 	<ul style="list-style-type: none"> On-site inspection 	Daily	<ul style="list-style-type: none"> Regulation on Control of Water Pollution WB ESS3 WB ESS4 	<ul style="list-style-type: none"> Sustainable/minimum wastewater loss records 	<ul style="list-style-type: none"> EM 	<ul style="list-style-type: none"> Included in Sub-project Budget

5 CAPACITY DEVELOPMENT AND TRAINING

5.1 INSTITUTIONAL ARRANGEMENTS

The main actors in the implementation of this ESMP for the sub-project are the WB, ILBANK's Project Management Unit (PMU) and the EM. The roles and responsibilities of these institutions are presented in Table 5-1. Also, the graphic organigram for the ESMP implementation of the sub-project is in [Figure 5-1](#).

Table 5-1. Roles and Responsibilities

Financial Roles	EM	ILBANK	Contractor	Supervisor Consultant
	Sub-Borrower	Financial Intermediary		
Number of Staff	<ul style="list-style-type: none"> Assign one of each expert/focal point listed; Social Expert, Environmental Expert, and OHS expert. 	<ul style="list-style-type: none"> One environmental specialist, one social specialist and one OHS specialist will be assigned from the present staff of PMU. Individual freelance consultants can also be employed to strength the PMU. 	<ul style="list-style-type: none"> The construction works under the contract packages included in the scope of the ESMP will be carried out by contractors. 	<p>The sub-project owner will appoint a Supervisory Consultant having a range of specialties to inspect the contractor's activities on a daily basis. Apart from the guidance to the given to the sub-project Owner about WB ESSs and also the stakeholder consultation and announcement requirements and the sub-project documents in compliance with WB requirements, the Supervisory Consultant will appoint the personnel given below:</p>
Sub-project Roles	<ul style="list-style-type: none"> Preparation and implementation of ESMP and SEP including management of sub-project level Grievance Mechanisms, Monitor environmental and social performance of the contractors' works on site, in line with the site-specific environmental and social requirements, Review E&S performance reports of contractor's (monthly) and supervision consultant's (quarterly), summarize on E&S compliance issues and report to ILBANK on quarterly basis on E&S compliance and monitoring. 	<ul style="list-style-type: none"> Responsible for reviewing and approving site-specific E&S documents for the sub-project; and for monitoring the implementation of ESMF, ESMP and Grievance process. Reporting to WB on biannual basis on E&S compliance and monitoring. 		
Sub-project Roles	<ul style="list-style-type: none"> The EM's PIU will examine the C-ESMP of the contractor/s, monthly and quarterly ESMRs and will be 	<ul style="list-style-type: none"> The ILBANK's PMU will review the monthly/quarterly reports delivered by the EM during the construction phase. ILBANK 	<ul style="list-style-type: none"> The construction contractor will develop C-ESMP, which are based 	<ul style="list-style-type: none"> The Supervision Consultant will review the monthly/quarterly ESMRs and C-ESMP of the

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Financial Roles	EM	ILBANK	Contractor	Supervisor Consultant
	Sub-Borrower	Financial Intermediary		
	<p>responsible for the timely delivery of the Monthly (if requested by ILBANK) and Quarterly ESMRs to ILBANK.</p> <ul style="list-style-type: none"> ▪ Tendering all the sub-project works and consulting services. ▪ EM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 days. 	<p>will inform the WB by providing regular semi-annual monitoring reports on the Environmental, Social, Health and Safety (ESHS) performance of the sub-project.</p> <ul style="list-style-type: none"> ▪ Supervise and monitor the whole process to ensure the proper application of the WB's ESSs and safeguard policies, TEFWER's ESMF, SEP and Labour Management Plan along with this ESMP. ▪ ILBANK will forward the environmental or social incident reports to the WB immediately upon receipt from the EM. 	<p>on this ESMP, report monthly and quarterly ESMRs and submit to the EM through the Supervision Consultant. The contractor will also prepare Labour Management Plan on the basis of TEFWER LMP, which is part of the C-ESMP.</p> <ul style="list-style-type: none"> ▪ Contractors must adhere to ESMP guidelines, considering them during bid preparation. The ESMP outlines potential negative project impacts and mitigation measures, along with responsible stakeholders. ▪ Contractors will train project personnel on ESMP measures during construction, focusing on environmental, occupational, and community health and safety, and social issues awareness. ▪ Environmental, Social, and Occupational Health and Safety (OHS) Experts, included in the sub-project Organizational Chart, will coordinate ESMP 	<p>contractor/s and will include its own assessments and observations on ESHS aspects and prepare quarterly ESMRs and submit them to the EM.</p> <ul style="list-style-type: none"> ▪ The Supervisory Contract Manager will ensure contractor compliance with ESMP requirements through continuous monitoring, audits, and inspections. They'll identify and address any non-compliance issues. ▪ The Environmental Expert will oversee ESMP implementation, reporting regularly to the sub-project owner. They should have relevant education (ideally a master's degree) and proficiency in English and Turkish. ▪ The OHS Expert will supervise health and safety measures, holding international safety certifications. Relevant education is preferred. ▪ The Social/Human Resources Expert will oversee community health, safety measures, and Social Engagement Plan implementation, reporting regularly. They should have relevant education and language proficiency.

Financial Roles	EM	ILBANK	Contractor	Supervisor Consultant
	Sub-Borrower	Financial Intermediary		
			measures during construction. They'll ensure actions align with ESMP and implement monitoring plans.	

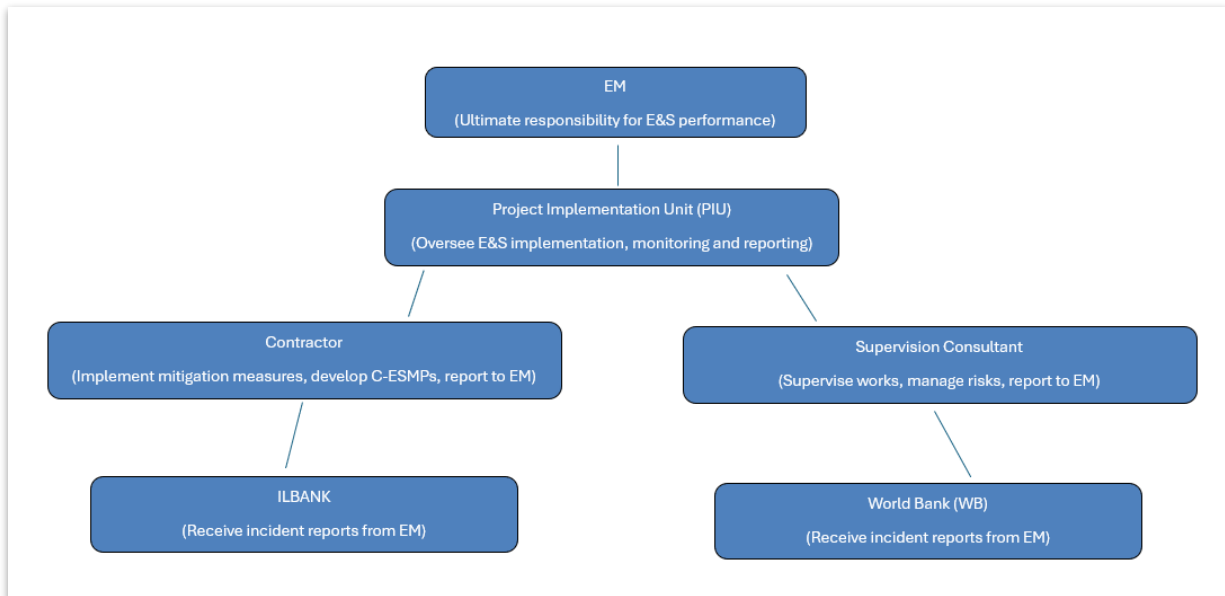


Figure 5-1. ESMP Implementation

EM

The EM will hold ultimate responsibility for the environmental and social performance of the sub-project, including the performance of its contractors. A Project Implementation Unit (PIU) will be established to carry out operational and administrative tasks to oversee the implementation of the E&S instruments and monitoring progress. The EM will be responsible for the preparation and implementation of ESMP and SEP including management of sub-project level Grievance Mechanisms; for the monitoring environmental and social performance of the contractors' works on site, in line with the site-specific environmental and social requirements; for the reporting to ILBANK on quarterly basis on E&S compliance and monitoring as stated in Table 5-1.

The EM will be responsible for the incident and accident reporting and informing the necessary institutions (WB, ILBANK etc.), as per the provisions explained below:

- The WB and ILBANK will be promptly notified of any incident or accident related to the sub-project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers including but not limited to; incidents and accidents encountered during construction works, environmental spills, etc.
- Sufficient detail will be provided regarding the incident or accident, findings of the RCA, indicating immediate measures or corrective actions taken or that are planned to be taken to address it, compensation paid, and any information provided by any contractor and supervision consultant, as appropriate. It will be ensured that the incident report is in line with the WB's Environment and Social Incidence Response Toolkit. Subsequently, as per

the Bank's request, a report on the incident or accident and propose any measures to prevent its recurrence will be prepared.

- The EM will report details of any significant environmental or social incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 days. ILBANK will forward the incident report to the WB immediately upon receipt from the EM.

Contractor

The contractor will carry out the construction activities of the sub-project in line with the approved design documents and will be the responsible body to implement and apply the mitigation measures given in ESMP during construction phase. The construction contractor will develop Contractor's Environmental and Social Management Plan (C-ESMP), which is based on this ESMP, and report monthly and quarterly ESMRs, detailed in [Table 5-2](#). The contractor should adhere to assigned duties and responsibilities as specified in the ESMP to ensure compliance with related national regulations, TEFWER ESMF and WB's ESSs. The contractor will employ a full time OHS "A" Class specialist and a full time environmental and social expert who will instruct and consult the workers on GM and implementation of ESMP (including grievance mechanism and the applicable stakeholder engagement activities detailed in sub-project SEP). Furthermore, a competent environmental and social expert of contractor will monitor implementation of measures given in the mitigation plan and report to the EM on a monthly basis. The prompt notification of accident and incidents within the scope of construction works in line with the above-described provisions is the responsibility of the contractor. The contractor will keep an incident register at construction site throughout the construction and defects liability period.

During the construction phase, the contractor firm will train its workers on environmental and social aspects (including OHS) as per WB's ESSs and national regulations in order to raise environmental and social awareness. During the defects liability period, the contractor will be responsible for any repairs of the newly constructed facilities, in accordance with legal regulations as of provisional acceptance. Within the liability period, the contractor will implement measures given in the Environmental and Social Mitigation Plan for operation.

Supervision Consultant

Supervision consultant contracted by the EM will include at least one Environmental Expert, one Social Expert and one A Class Occupational Health and Safety Expert. The number of experts will be increased if necessary. Supervision Consultant will provide supervision of construction and/or rehabilitation works and installation of equipment. The experts will identify and manage environmental, social and OHS related risks and initiate corrective actions where necessary. The experts will also monitor and evaluate the performance of services provided by the contractor. In addition, a regular quarterly report regarding to environmental, social and OHS issues of the sub-project during construction phase will be provided by Supervision Consultant to the EM.

5.2 REPORTING

Reporting processes that should be put into action during the implementation phase of the sub-project and the requirements of such processes are presented in [Table 5-2](#).

Table 5-2. Reporting Requirements of Relevant Entities

Responsible Party	Reporting Process Requirements
Construction Contractor	<ul style="list-style-type: none"> The construction contractor will develop C-ESMPs, which are based on this ESMP, and report monthly and quarterly ESMRs and submit to the EM through the Supervision Consultant.
EM's PIU	<ul style="list-style-type: none"> The PIU will examine the monthly and quarterly ESMRs and C-ESMPs of the contractor/s and the Supervision Consultants and will be responsible for the timely delivery of the Monthly (if requested by ILBANK) and Quarterly ESMRs to ILBANK.
Supervision Consultant	<ul style="list-style-type: none"> The Supervision Consultant will review the monthly and quarterly ESMRs and C-ESMPs of the contractor/s and will include its own assessments and observations on ESHS aspects and prepare quarterly ESMRs and submit to the EM. The Supervision Consultant has the responsibility to prepare non-conformity forms in the event of any non-conformity observed during the site inspections and within the reports.
ILBANK's PMU	<ul style="list-style-type: none"> The PMU will review the monthly/quarterly reports delivered by the EM during the construction phase. ILBANK will inform the WB by providing regular semi-annual monitoring reports on the ESHS performance of the sub-project.
WB	<ul style="list-style-type: none"> The WB will review regular semi-annual monitoring reports on the ESHS performance of the sub-project and instruct ILBANK if any non-conformity or non-compliance identified.

For reporting on OHS, E&S incidents, the EM will report details of any significant incidents (e.g. fatalities, lost time incidents, environmental spills etc.) within 24 hours and submit an incident report, including RCA, precautions and compensation measures taken within 15 days. ILBANK will forward the incident report to the WB immediately upon receipt from the EM.

5.3 TRAINING PROGRAMME

The capacity strengthening of the participating sub-project will be carried out by ILBANK PMU in close collaboration with the WB. In this regard, ILBANK will organize training workshops to familiarize municipalities and their potential consultants with the World Bank's ESSs and E&S policies. The concerned training programme is presented in [Table 5-3](#).

Table 5-3. Training Programme Including the Sub-project

Item No	Heading of the Training	Target Group	Timing and Duration
1	Environmental and Social Framework: <ul style="list-style-type: none"> Implementation of ESMP, Labour Management Plan, SEP, and GM 	PIUs of the municipalities	<ul style="list-style-type: none"> Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation.
2	Environment and Occupational Health Safety: <ul style="list-style-type: none"> Workplace risk management Prevention of accidents at work sites Mandatory legal training, Work instructions Trainings (i.e. Working at Height, Confined 	PIUs of the municipalities	<ul style="list-style-type: none"> Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation.

Item No	Heading of the Training	Target Group	Timing and Duration
	<p>Space Entry, Material Handling) for the target groups</p> <ul style="list-style-type: none"> ▪ Use of Personal Protection Equipment's (PPEs) ▪ Health and safety standards ▪ Hazardous waste and leakage/spillage management ▪ Solid and liquid waste management ▪ Preparedness and response to emergency situation ▪ Awareness on communicable diseases (i.e. COVID-19, HIV/AIDS etc.) 		
3	<p>Labour and Working Conditions:</p> <ul style="list-style-type: none"> ▪ Implementation of the Labour Management Plan ▪ Terms and conditions of employment according to national working laws and regulations ▪ Contractor and sub-contractor codes of conduct ▪ Worker's organizations ▪ Child labour and forced labour issues ▪ Workers' Grievance Mechanism 	PIUs of the municipalities	<ul style="list-style-type: none"> ▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation.
4	<p>Grievance Mechanism:</p> <ul style="list-style-type: none"> ▪ Implementation of GM ▪ Registration and processing procedure ▪ Grievance procedure ▪ Documenting and processing grievances 	PIUs of the municipalities	<ul style="list-style-type: none"> ▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation.

6 IMPLEMENTATION SCHEDULE AND COST ESTIMATES

The sub-project's construction works are expected to last 22 months and be completed at the end of July 2027. The target year of the sub-project operation is 2054.

In this context, the cost estimates for the implementation of the ESMP including the trainings and meeting of the sub-project is provided below.

Table 6-1. The Cost Estimates for the Implementation of the Sub-project's ESMP

Item No	Heading of the Training / Meeting / Implementation	Target Group	Timing and Duration	Cost**
1	Employment of E&S & OHS Experts Under PIU	EM	▪ After signature of sub-loan agreement	144,000 Euro*
	Employment of E&S, OHS Experts Under Contractor(s), and Supervisor Consultant	PIU of the EM	▪ Prior to construction	108,000 Euro*
2	Preparation and Implementation of E&S Sub-Management Plans	Contractor	▪ Prior to construction	8,000 Euro*
		PIU of the EM	▪ Prior to operation	80,000 Euro*
3	Waste Management, Spill Response and Pollution Prevention Activities	Contractor	▪ Throughout the construction	8,000 Euro*
		PIU of the EM	▪ Throughout the operation	80,000 Euro*
4	Environmental and Social Framework Training: <ul style="list-style-type: none"> ▪ Implementation of ESMP, Labour Management Plan, SEP, and GM 	PIU of the EM	<ul style="list-style-type: none"> ▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation. 	3,500 Euro*
5	Environmental and Occupational Health Safety Training: <ul style="list-style-type: none"> ▪ Workplace risk management Prevention of accidents at work sites ▪ Mandatory legal training, Work instructions Trainings (i.e. Working at Height, Confined Space Entry, Material Handling) for the target groups ▪ Use of Personal Protection Equipment's (PPEs) ▪ Health and safety standards ▪ Hazardous waste management ▪ Solid and liquid waste management ▪ Preparedness and response to emergency situation ▪ Awareness on communicable diseases (i.e. COVID-19, HIV/AIDS etc.) 	PIU of the EM	<ul style="list-style-type: none"> ▪ Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. ▪ Refresher trainings at least once a year or as needed, during sub-project implementation. 	1,800 Euro*

Item No	Heading of the Training / Meeting / Implementation	Target Group	Timing and Duration	Cost**
6	Labour and Working Conditions Training: <ul style="list-style-type: none"> Implementation of the Labour Management Plan Terms and conditions of employment according to national working laws and regulations Contractor and sub-contractor codes of conduct Worker's organizations Child labour and forced labour issues. Workers' Grievance Mechanism 	PIU of the EM	<ul style="list-style-type: none"> Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation. 	800 Euro*
7	Grievance Mechanism Training: <ul style="list-style-type: none"> Implementation of GM Registration and processing procedure Grievance procedure Documenting and processing grievances 	PIU of the EM	<ul style="list-style-type: none"> Initial training no later than 60 days after formation of the PMU/PIU and before start of sub-project activities. Refresher trainings at least once a year or as needed, during sub-project implementation. 	600 Euro*
8	Stakeholder Consultation Meeting: <ul style="list-style-type: none"> Presentation by the counsellors about the sub-project, Stakeholders' questions about the sub-project and sub-project impacts are answered. Stakeholders' opinions on the sub-project and its impacts are recorded. Stakeholders are informed about the addresses to which they can send their inquiries, suggestions and complaints about the sub-project. 	Affected groups and other relevant/affected stakeholders	After the draft ESMP report is completed. (Stakeholder meetings or any information sharing activities to be notified ten (10) days in advance by EM through brochures, website announcements and newspaper advertisements (at least one national and one local newspaper))	2,000 Euro*
Total:				436,700 Euro

*Including transportation and accommodation costs.

**Costs are indicative and for orientation purposes only - at time of preparation of this ESMP.

APPENDICES

- Appendix A - The Title Deed of the Sub-project Area and Zonin Plan of Erbaa OIZ
- Appendix B - EIA Out of Scope Decision for the Sub-project
- Appendix C - Official Letters, Permit and Licences for the Existing Erbaa WWTP
- Appendix D - Waste Sludge Acceptance Protocol
- Appendix E - Analysis Reports
- Appendix F - Photos of the Sub-project Area
- Appendix G - The Handover Decision of the Sub-project Area
- Appendix H - Chance Find Procedure of the Sub-project
- Appendix I - Common OHS Risks Areas and General Mitigation Measures

APPENDIX-A

The Title Deed of the Sub-project Area and Zoning Plan of Erbaa OIZ

BU BELGE TOPLAM 4 SAYFADAN OLUŞMAKTADIR BİLGİ AMAÇLIDIR.

Tarih: 6-12-2022-10:07



Tapu Kaydı (Hepsi)

TAPU KAYIT BİLGİSİ

Zemin Tipi:	AnaTasinmaz	Ada/Parsel:	1367/1
Taşınmaz Kimlik No:	125158091	AT Yüzölçüm(m2):	65754.47
İl/İlçe:	TOKAT/ERBAA	Bağımsız Bölüm Nitelik:	
Kurum Adı:	Erbaa	Bağımsız Bölüm Brüt Yüzölçümü:	
Mahalle/Köy Adı:	EREK Mah.	Bağımsız Bölüm Net Yüzölçümü:	
Mevkii:	ÇORAK	Blok/Kat/Giriş/BBNo:	
Cilt/Sayfa No:	54/5316	Arsa Pay/Payda:	
Kayıt Durum:	Aktif	Ana Taşınmaz Nitelik:	ARSA

TAŞINMAZA AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

Ş/B/İ	Açıklama	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
Beyan	ARITMA TESİSİ ALANI(Şablon: Diğer)		Erbaa - 14-10-2021 08:57 - 15339	-
Beyan	Diğer (Konusu: TAŞINMAZIN İCRA YOLUYLA SATIŞI DAHİL ÜÇÜNCÜ KİŞİLERE DEVRİNDE OSB DEN UYGUNLUK GÖRÜŞÜ ALINMASI ZORUNLUDUR) Tarih: 08/11/2017 Sayı: 154(Şablon: Diğer)	(SN:7232506) ERBAA ORGANİZE SANAYİ BÖL GESİ VKN:3370100982	Erbaa - 09-11-2017 09:53 - 9135	-

MÜLKİYET BİLGİLERİ

(Hisse) Sistem No	Malik	El Birliği No	Hisse Pay/ Payda	Metrekare	Toplam Metrekare	Edinme Sebebi-Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
706391695	(SN:7232506) ERBAA ORGANİZE SANAYİ BÖL GESİ VKN:3370100982	-	1708123/6 575447	17081.23	65754.47	İmar (TSM) 09-11-2022 20627	-
706391696	(SN:7232506) ERBAA ORGANİZE SANAYİ BÖL GESİ VKN:3370100982	-	4867324/6 575447	48673.24	65754.47	İmar (TSM) 09-11-2022 20627	-

MÜLKİYETE AİT ŞERH BEYAN İRTİFAK BİLGİLERİ

Ş/B/i	Açıklama	Kısıtlı Malik (Hisse) Ad Soyad	Malik/Lehtar	Tesis Kurum Tarih-Yevmiye	Terkin Sebebi-Tarih-Yevmiye
İrtifak	M: İŞ BU TAŞINMAZIN 17000 M2 LİK KISMI ÜZERİNDE ARITMA TESİSİ KURULMAK ÜZERE BEDELSİZ VE SÜRESİZ ERBAA BELEDİYESİ LEHİNE İNTİFA HAKKI VARDIR	ERBAA ORGANİZE SANAYİ BÖL GESİ VKN	(SN:2860967) ERBAA BELEDİYESİ VKN:3370045673	Erbaa - 30-05-2006 00:00 - 2033	
İrtifak	M İŞ BU TAŞINMAZIN 48000 METREKERE KISMI ÜZERİNDE ARITMA KURULMAK ÜZERE BEDELSİZ VE SÜRESİZ ERBAA BELEDİYESİ LEHİNE İNTİFA HAKKI KURULMUŞTUR	ERBAA ORGANİZE SANAYİ BÖL GESİ VKN	(SN:2860967) ERBAA BELEDİYESİ VKN:3370045673	Erbaa - 30-05-2006 00:00 - 2096	

MÜLKİYETE AİT REHİN BİLGİLERİ

İpotek						
Alacaklı	Müşterek Mi?	Borç	Faiz	Derece Sıra	Süre	Tesis Tarih - Yev
(SN:31) TÜRKİYE HALK BANKASI A.Ş. VKN:4560004685	Hayır	196773.00 ETL	%25	1/0	FBK	Erbaa - 28-10-1998 00:00 - 1775
İpoteğin Konulduğu Hisse Bilgisi						
Taşınmaz	Hisse Pay/ Payda	Borçlu Malik	Malik Borç	Tescil Tarih - Yev	Terkin Sebebi Tarih Yev	
Erbaa - EREK Mah. - (Aktif) - 1367 Ada - 1 Parsel	1708123/6 575447	(SN:7232506) ERBAA ORGANİZE SANAYİ BÖL GESİ VKN:3370100982	196773.00 ETL	Erbaa - 28-10-1998 00:00 - 1775	-	

İpotek						
Alacaklı	Müşterek Mi?	Borç	Faiz	Derece Sıra	Süre	Tesis Tarih - Yev
(SN:31) TÜRKİYE HALK BANKASI A.Ş. VKN:4560004685	Hayır	5217515.00 ETL	%36	1/0	FBK	Erbaa - 02-07-2009 00:00 - 4814
İpoteğin Konulduğu Hisse Bilgisi						
Taşınmaz	Hisse Pay/ Payda	Borçlu Malik	Malik Borç	Tescil Tarih - Yev	Terkin Sebebi Tarih Yev	
Erbaa - EREK Mah. - (Aktif) - 1367 Ada - 1 Parsel	4867324/6 575447	(SN:7232506) ERBAA ORGANİZE SANAYİ BÖL GESİ VKN:3370100982	5217515.00 ETL	Erbaa - 02-07-2009 00:00 - 4814	-	

Bu belgeyi akıllı telefonunuzdan karekod tarama programları ile aşağıdaki barkodu taratarak;
veya Web Tapu anasayfasından (<https://webtapu.tkgm.gov.tr> adresinden) x3UggTbX0S4 kodunu Online İşlemler alanına yazarak doğrulayabilirsiniz.



APPENDIX-B
EIA Out of Scope Decision for the Sub-project



T.C.
TOKAT VALİLİĞİ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü

Sayı : E-50227149-220.99-11658048
Konu : Erbaa İkinci Etap AAT ÇED Görüşü Hk.

ERBAA BELEDİYE BAŞKANLIĞINA
(Su ve Kanalizasyon Müdürlüğü)

İlgi : a) 06.11.2024 tarihli ve 44871 sayılı yazımız.
b) 06.12.2024 tarihli ve E-50227149-220.99-11167472 sayılı yazımız.
c) 20.12.2024 tarihli ve 46310 sayılı yazımız.
ç) 03.01.2025 tarihli ve E-50227149-220.03-11405501 sayılı yazımız.

İlgi (a) ve (c) yazılarınız ile; Tokat ili, Erbaa ilçesi, Kelkit OSB Mahallesi, Beylik Bükü Caddesi No:52A (1367 ada/1 parsel) adresinde, mevcut atıksu arıtma tesisinin bulunduğu 65.681,83 m² alanın 10.000 m² lik yüzölçümlü alanında, mevcut 11.640 m³/gün kapasiteli tesisle aynı parselde yeni 12.000 m³/gün kapasiteli *Konvansiyonel Sistem Evsel Biyolojik Atıksu Arıtma Tesis*i faaliyetinin gerçekleştirileceği belirtilerek bahse konu faaliyetin, 29/07/2022 tarihli ve 31907 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren ÇED Yönetmeliği kapsamında değerlendirilmesi hususu talep edilmektedir.

İlgi (b) yazımız ile Belediye Başkanlığınıza ait mevcut Atıksu Arıtma Tesisinin Mülga Çevre ve Orman Bakanlığı tarafından 19.07.2005 tarihinde verilmiş Çevresel Etki Değerlendirmesi Gerekli Değildir kararının geçerliliğinin devam ettiği, söz konusu yeni proje ile ilgili olarak açıklayıcı bilgi ve belgeler ile İl Müdürlüğümüze başvuru yapılması, ilgi (ç) yazımız ile de ÇED Yönetmeliği kapsamında değerlendirme yapılabilmesi için 209088 Geçici Referans Numarası ve R4PUNTNC Erişim Kodu ile, ilgili bilgi ve belgelerin Çevrimiçi ÇED Süreci Yönetimi Sistemine (e-ÇED) girilmesine müteakip değerlendirme yapılacağı hususu tarafınıza bildirilmiştir.

İlgi (a) ve (c) yazılarınız ile e-ÇED sistemi 209088 Referans numaralı başvurunuz incelendiğinde; ilk etap kapasitesi 11.640 m³/gün lük askıda aktif çamur prensibi ile tasarlanmış Belediye Başkanlığınıza ait mevcut Atıksu Arıtma Tesisinin 19.07.2005 tarihli Çevresel Etki Değerlendirmesi Gerekli Değildir kararının bulunduğu, proje onayının 16.05.2016 tarihinde Bakanlığımız tarafından yapıldığı, mevcut tesisin kurulu olduğu alanda ikinci etap için proses ve/veya sistem değişikliğine gidilmeden 12.000 m³/gün kapasiteli, ilave iki adet havalandırma ve iki adet çöktürme tankı yapılmasının planlandığı, kapasite artışı ile toplam kapasitenin 23.640 m³/gün olacağı hususları anlaşılmaktadır.

Bilindiği üzere Atıksu Arıtma Tesisleri, 29/07/2022 tarihli ve 31907 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren ÇED Yönetmeliği Ek-1 Listesi "15- Kapasitesi 50.000 m3/gün ve üzeri olan atık su arıtma tesisleri" ile Ek-2 Listesi "51- Kapasitesi 30.000 m3/gün ve üzeri olan atık su arıtma tesisleri," hükümlerine göre değerlendirilmektedir.

Aynı Yönetmeliğin "Kapasite artışları" başlığı altındaki madde 20- (1) "ÇED Olumlu" veya "ÇED Gerekli Değildir" kararı bulunan ve eşik değeri olan projelerde yapılacak kapasite artışı ve/veya alan

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: 456E86AE-F5ED-4CE0-BA1D-C31DA2E1A951 Doğrulama Adresi: <https://www.turkiye.gov.tr>
Altyüzeyler Mahallesi Fidanlık Caddesi No:34 Merkez / TOKAT Bilgi için: Hilal DURAN
Tel: 0356 214 31 39 Faks: 0356 214 11 05 e-posta: tokat@csb.gov.tr Çevre Mühendisi
KEP Adresi : tokatcevreseshircilik@hs01.kep.tr



genişletilmesinin planlanması durumunda, her bir kapasite artışı miktarının mevcut proje kapasitesi ile toplanması ve bu toplamın; .. b) Ek-2'deki listede yer alan eşik değeri ve üzerinde kalması durumunda, 16 ncı madde kapsamında başvuru yapılması gerekmektedir." hükmü yer almaktadır.

İl Müdürlüğümüzce yapılan değerlendirme neticesinde, söz konusu **"Konvansiyonel Sistem Evsel Biyolojik Atıksu Arıtma Tesisi kapasitesinin 11.640 m³/gün'den toplam 23.640 m³/gün'e artışı"** projesinin, ÇED Yönetmeliği Ek-2 listesinde 51. maddede yer alan eşik değerin (30.000 m³/gün) altında kalması nedeniyle, aynı Yönetmeliğin 20. maddesinin 1. bendinin (b) fıkrası doğrultusunda, 29/07/2022 tarihli ve 31907 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren ÇED Yönetmeliği kapsamı dışında kaldığı mütalaa edilmektedir.

Ayrıca, mevcut tesisinizin 28.08.2028 tarihine kadar geçerli 226722348.0.1 numaralı İl Müdürlüğümüzce verilmiş Atıksu Deşarı Konulu Çevre İzin Belgesi bulunmakta olup, Konvansiyonel Sistem Evsel Biyolojik Atıksu Arıtma Tesisi Kapasitesi Artışı Projesinin işletmeye alınmadan önce, güncel halinin 10.09.2014 tarih ve 29115 sayılı Resmi Gazetede yayımlanarak 01.11.2014 tarihinde yürürlüğe giren Çevre İzin ve Lisans Yönetmeliği "Madde 11- Çevre izin veya çevre izin ve lisans belgesinin geçerliliği ve yenilenmesi " başlığında değerlendirilmesi için İl Müdürlüğümüze müracaat edilmesi ve İl Müdürlüğümüzün yazılı görüşü alınmadan faaliyete geçilmemesi gerekmektedir. Aksi bir durumda 2872 sayılı Çevre Kanununun ilgili maddeleri uyarınca işletmenize idari yaptırım uygulanabileceği, planlanan yatırım ile ilgili olarak, 2872 sayılı Çevre Kanununa ve bu Kanuna istinaden çıkarılan Yönetmeliklerin ilgili hükümlerine uyulması, diğer mer'i mevzuat çerçevesinde öngörülen gerekli izinlerin alınması, faaliyetinizle ilgili olarak bir değişiklik yapılmasının planlanması halinde İl Müdürlüğümüze başvuru yapılması, ekolojik dengenin bozulmamasına, çevrenin korunmasına ve geliştirilmesine yönelik tedbirlere riayet edilmesi gerekmektedir.

Gereğini ve bilgilerinize arz ederim.

Selim BOYRAZ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürü

APPENDIX-C

Official Letters, Permit and Licences for the Existing Erbaa WWTP

"EIA Not Required" Official Letter and Document for the Existing Erbaa WWTP



T.C.
ÇEVRE ve ORMAN BAKANLIĞI
Çevresel Etki Değerlendirmesi ve Planlama Genel Müdürlüğü

SAYI : B.18.0.ÇED.0.13.00.02/ 4170
KONU : Atıksu Arıtma Tesisi

19 TEMMUZ 2000

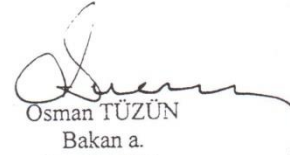
ERBAA BELEDİYE BAŞKANLIĞINA
Erbaa / TOKAT

Tokat İli, Erbaa İlçesi, Erek Mahallesi, 440 ada, 1 ve 69 nolu parseller üzerinde Erbaa Belediye Başkanlığı tarafından yapılması planlanan Atıksu Arıtma Tesisi projesine ait Bakanlığımıza sunulan Proje Tanıtım Dosyası incelenmiş ve değerlendirilmiştir.

16.12.2003 tarih ve 25318 sayılı Resmi Gazetede yayımlanarak yürürlüğe giren ÇED Yönetmeliği'nin 17. maddesi gereğince; "Atıksu Arıtma Tesisi" projesine Bakanlığımızca "Çevresel Etki Değerlendirmesi Gerekli Değildir Kararı" verilmiştir.

Söz konusu faaliyete ilişkin Proje Tanıtım Dosyası ve eklerinde belirtilen hususlar ile 2872 sayılı Çevre Kanunu ve bu Kanuna istinaden yürürlüğe giren ilgili yönetmeliklere uyulması, mer'i mevzuat uyarınca ilgili kurum/kuruluşlardan gerekli izinlerin alınması ve ÇED Yönetmeliğinin 18. maddesi gereğince alınan izin ve ruhsatlar ile yatırımın başlangıç, işletme ve işletme sonrası dönemlerine ilişkin raporların ilgili Valiliğe iletilmesi gerekmektedir.

Bilgilerinizi ve gereğini rica ederim.


Osman TÜZÜN
Bakan a.
Genel Müdür

EKLER:

- EK I : Proje Tanıtım Dosyası
EK II : CD
EK III: ÇED Gerekli Değildir Belgesi.

DAĞITIM LİSTESİ:

- Tokat Valiliği
(İl Çevre ve Orman Müdürlüğü) (Ek I)
- ÇED ve Plan İzleme Kontrol Dairesi Başkanlığı (EK II)
- Erbaa Belediye Başkanlığı (Ek III)
- Vadi Müh. İnş. San. ve Tic. Ltd. Şti.(Ek konulmadı)

T.C.
Çevre ve Orman
Bakanlığı



T.C.
ÇEVRE ve ORMAN BAKANLIĞI
ÇEVRESEL ETKİ DEĞERLENDİRMESİ VE PLANLAMA
GENEL MÜDÜRLÜĞÜ

Karar Tarihi:/....../2005

Karar No :

ÇED GEREKLİ DEĞİLDİR BELGESİ

16.12.2003 tarih ve 25318 sayılı Resmi Gazete'de yayımlanarak yürürlüğe giren Çevresel Etki Değerlendirmesi Yönetmeliği'nin 17. maddesi gereğince; "Atıksu Arıtma Tesisi" projesi hakkında "Çevresel Etki Değerlendirmesi Gerekli Değildir" kararı verilmiştir.


Osman TÜZÜN
Bakan a.
Genel Müdür



Proje Sahibi : Erbaa Belediye Başkanlığı
Projenin Yeri : Tokat İli, Erbaa İlçesi, Erek Mahallesi.

Environmental Permit and Official Cover Letter for the Existing Erbaa WWTP



T.C.
TOKAT VALİLİĞİ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü



Sayı : 42292087-150/E.1044
Konu : Çevre İzin Belgesi

28.08.2023

ERBAA BELEDİYEBAŞKANLIĞI
Kelkit Mahallesi, Beylik Bükü Caddesi, Erbaa OSB Bölgesi Erbaa / TOKAT

İlgi : a) 23.03.2023 tarihli ve 595289 no'lu başvurunuz.
b) 26.04.2023 tarihli ve 42292087-150/E.1044 no'lu yazımız.
c) 15.08.2023 tarihli ve 610542 no'lu başvurunuz.

10/09/2014 tarihli ve 29115 sayılı Resmi Gazete'de yayımlanan Çevre İzin ve Lisans Yönetmeliği kapsamında gerçekleştirilen ilgi (a)' da kayıtlı Geçici Faaliyet Belgesi başvurusu uygun bulunmuş ve bu Yönetmeliğin 8 nci maddesi gereğince ilgi (b) yazımız ile Geçici Faaliyet Belgesi verilmiştir.

Bu Yönetmeliğin 9 ncu maddesi gereğince ilgi (c)' de kayıtlı Çevre İzin Belgesi başvurusu yapılmıştır. Söz konusu başvuru Yönetmeliğin 9 ncu maddesi ve ilgili diğer yönetmelikler kapsamında incelenmiş ve Kelkit Mahallesi, Beylik Bükü Caddesi, Erbaa OSB Bölgesi Erbaa / TOKAT adresinde bulunan işletmeniz için 28.08.2028 tarihine kadar geçerli olmak üzere ÇEVRE İZİN ve LİSANS BELGESİ verilmesi uygun bulunmuştur.

ÇEVRE İZİN ve LİSANS BELGESİ süresi içinde ekte yer alan çalışma şartlarına uygun faaliyet gösterilmesi, aksi durumda ise söz konusu belgenin iptal edileceği ve 2872 sayılı Çevre Kanunu'nun ilgili maddeleri uyarınca idari yaptırım uygulanacağı hususunda;

Bilgilerinizi ve gereğini rica ederim.

e-imzalıdır
Ali YILMAZ
İl Müdürü

EKLER:

- 1) Atık ve DR Kodları
- 2) Çevre İzin Koşulları

5070 sayılı Elektronik İmza Kanunu gereği bu belge elektronik imza ile imzalanmıştır.



T.C.
TOKAT VALİLİĞİ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü
TESİSE KABUL EDİLECEK ATIKLAR VE KODLARI



5070 sayılı Elektronik İmza Kanunu gereği bu belge elektronik imza ile imzalanmıştır.



T.C.
TOKAT VALİLİĞİ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü



TESİS İZİN KOŞULLARI

Atıksu Deşarjı

- 31/12/2004 tarih ve 25687 sayılı Resmi Gazete'de yayımlanan Su Kirliliği Kontrolü Yönetmeliği (SKKY) "İzleme" başlıklı 54 üncü maddesi gereğince işletmeciler tarafından yapılan ölçüm ve analizlerin sonuçları raporların asılları ile birlikte dijital ortamda da en az beş yıl süreyle saklanmak zorundadır.
- SKKY'nin "Haber Verme Yükümlülüğü" başlıklı 52 nci maddesi gereğince arıtma tesisi olmayanlar, arızalananlar, çalıştığı halde standartları sağlayamayanlar, faaliyetinde kapasite artırımına gidenler, faaliyetlerini geçici veya sürekli olarak durduranlar ilgili idareye derhal haber vermekle yükümlüdürler.
- Deşarj standartlarının sağlanması amacıyla, atıksuların yağmur suları, soğutma suları, az kirli yıkama suları ve buna benzer az kirli sularla seyreltilmesi yasaktır.
- İşletmeye ait Atıksu Arıtma Tesinde arıtma çamuru oluşması durumunda ilgili yönetmelikler kapsamında yapılacak olan analiz sonucuna göre belirlenecek uygun bertaraf yöntemiyle bertaraf edilmesi gerekmektedir.
- Kapasitesi 5.000 (m3/gün) den büyük olan tesislerde SAİS Tebliği uygulanır.
- ** -Eğer ilk yıl boyunca üç ardışık numune analiz sonuçlarının deşarj standartlarına uyulduğu gösterilebilirse , izleyen yıllarda ilgili sektör tablosunda yer alan pH, KOI, BOI, Yağ-Gres, AKM parametreleri dışındaki diğer parametrelere Çevre ve Şehircilik İl Müdürlüğünü yazıyla bilgilendirmek kaydıyla yılda bir kez bakılması yeterlidir. Eğer parametrelerden biri deşarj standartlarına uymazsa takip eden yıl içerisinde tabloya göre numune alınmalıdır.
- SKKY'deki hüküm ve esaslara uyulması gerekmektedir.
- Kentsel Atıksu Arıtımı Yönetmeliği'ndeki hüküm ve esaslara uyulması gerekmektedir.
- Atık su debisi 500 m3/gün üzerinde olan işletmelerin atıksu arıtma tesisi çıkış noktasında veya kanalizasyon sistemine atıksu bağlantısının yapıldığı yerde numune alma bacası, otomatik numune alma ve debi ölçme cihazı bulundurulması zorunludur.
- Kurulu kapasitesi 5.000 m3/gün ve üzerinde olan ve endüstriyel atıksu bağlı olan kentsel atıksu arıtma tesisleri tarafından SKKY 38. Madde 6. Fıkrası kapsamında gerekli değerlendirilmenin yapılması gerekmektedir.

5070 sayılı Elektronik İmza Kanunu gereği bu belge elektronik imza ile imzalanmıştır.



T.C.
TOKAT VALİLİĞİ
Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü

ÇEVRE İZİN BELGESİ

Belge No : 226722348.0.1
Başlangıç Tarihi : 28.08.2023
Bitiş Tarihi : 28.08.2028
Tesis Adı : ERBAA BELEDİYEBAŞKANLIĞI
Tesis Adresi : Kelkit Mahallesi, Beylik Bükü Caddesi, Erbaa OSB Bölgesi Erbaa / TOKAT
İşletme Vergi No : 3370045673
Çevre İzin ve Lisans Konusu : Atıksu Deşarjı

Yukarıda adı ve açık adresi belirtilen tesise Çevre İzin ve Lisans Yönetmeliği kapsamında ÇEVRE İZİN BELGESİ verilmiş olup 28.08.2023 tarihli ve 42292087-150/E.1044 sayılı yazı ile birlikte geçerlidir. Ayrı kullanılmaz.

 e-imzalıdır
Ali YILMAZ
İl Müdürü

5070 sayılı Elektronik İmza Kanunu gereği bu belge elektronik imza ile imzalanmıştır.

APPENDIX-D
Waste Sludge Acceptance Protocol

ADOÇİM

PROTOKOL

Kurum	Erbaa Belediyesi Su ve Kanalizasyon Müdürlüğü
Adres	Erbaa/TOKAT
Tel	0 356 715 10 19
Konu	Atık Bertarafı Hk.
Tarih	25.07.2024
İlgili	Sn. Mustafa BOLAT – Çevre Mühendisi
Protokol No	AT- 22/0068-2024

Sn. İlgili;

İşletmenizden kaynaklanan yaklaşık 10 ton/gün civarında olan 190805 atık kodlu Atıksu Artımından kaynaklanan çamur içerikli atıklarınızı; 223338494.0.1 No'lu Atık Yakma ve Birlikte Yakma Lisansımız ile fabrikamızda Alternatif Yakıt olarak (R01 kodu ile) bertaraf edilebiliriz;

Bertaraf Bedeli; 1.000 TL/TON+KDV' dir. (Not: Atık miktarı 1 tonun altında olması durumunda sevkiyatı yapılan her parti için yine 1.000 TL+KDV fiyat uygulanacaktır.)

Not 1: Atıkların nakliyesi tarafınıza ait olacaktır. Atık bertaraf Bedeli olarak verilecek fiyat ADOÇİM fabrikası teslim fiyatıdır.

Not 2: Atığın içeriğinde teneke, demir parçaları, cam içerikli atıklar boya kimyasalları, radyasyon içerikli ve tıbbi atık vb atıklar, istenmemektedir. Atık ağırlığının %5'inden fazla istenmeyen içerikte atık çıkması durumunda atıklar komple geri iade edilecektir.

Not 3: Arıtma çamurlarının rutubet değeri min %80'e kadar düşürülecektir. Rutubet değeri %80'nin üzerinde olan arıtma çamurları R01 kodu ile tesise kabul edilmeyecektir.

Not 4: İş bu protokol 25.07.2024 tarihi ile 30.06.2025 tarihleri arasında geçerlidir.

YÜKÜMLÜKLERİNİZ ve YÜKÜMLÜLÜKLERİMİZ

Atıklar aşağıdaki "Atık Kabul Talimatı"na uygun olarak tesisimize kabul edilir.

ATIK KABUL TALİMATI

- İlk başvuruda telefonla gelen talepler kabul edilmez, firmalardan yazılı başvuru yapılması istenir.
- Yazılı başvuru ekinde mutlaka atığın kodu, atığın Tehlikeli Atıkların Kontrolü Yönetmeliğine göre; atık yağın ise Atık Yağların Kontrolü Yönetmeliğine göre yapılmış analizi olmalıdır.
- Atık üreticisi atığını yollamadan önce, fabrikadan randevu alır.
- Atık analizleri Atık Kabul Birimi tarafından muhafaza edilir.
- Analizlere uygun atığın gönderilmesinden atık üreticisi sorumludur.
- Başvuru yazıları makam onayından geçerek Çevre Birimi ve Üretim Müdürlüğüne iletilir.
- Atık alımları atık depo ünitesinin kapasitesini geçmeyecek şekilde yapılır.
- Atıklar 08:00-16:00 saatleri arasında kabul edilir.
- Cumartesi ve Pazar günleri atık kabul edilmez.
- Atık Alım Şartları aşağıdaki gibidir.
 - Gelen Atığın Miktarı ADOÇİM Çimento Beton San ve Tic. A.Ş. kantar raporlarına göre belirlenir.
 - Atıklar depolama alanına gönderilmeden önce radyasyon ölçümü yapılır ve herhangi bir radyoaktif maddeye rastlandığında atık koşulsuz araçtan indirilmeden geri iade edilir.
 - Tehlikeli/tehlikesiz atıklar ile ilgili EÇBS -MOTAT sistemine giriş yapılmayan atıklar tesise kabul edilmez.

ÖDEME

ADOÇİM kantar fişi esas alınarak atık geldiğinde atık bertaraf bedeli faturalandırılacak ve fatura tarihi itibarıyla ilgili ay kapanmadan ödemesi yapılacaktır.

NAKLİYE

Nakliye tarafınıza ait olup, Çevre Mevzuatlarına uygun olarak taşınması sağlanmalıdır. Atığın taşınması ve nakliyesinden atık üreticisi sorumludur. Atığın teslimi fabrika içi yerde teslim olarak yapılacaktır.

ATIK ÜRETİCİSİ
ERBAA BELEDİYESİ
ERBAA BELEDİYE BAŞKANI

ADOÇİM Çimento Beton Sanayi ve Ticaret A.Ş.
ADOÇİM Çimento Beton Sanayi ve Ticaret A.Ş. Artova Şubesi
Alparslan Mah. Keşliközü Mevki 60670 Artova / TOKAT
e-mail: info@adocim.com

ATIK BERTARAF FİRMASI

ADOÇİM ÇIMENTO
BETON SAN VE TİC. A.Ş.
Alparslan Mah. Keşliközü Mevki 60670
Tel: 0356 611 25 00 Artova/TOKAT
Fax: 0356 611 22 32
Boğaziçi Kurumlar Y.D. No: 008 066 4308
<http://www.adocim.com>
Tel: 0 356 611 25 00 pbx
Fax: 0 356 611 27 27

APPENDIX-E
Analysis Reports

Wastewater Analysis Reports

Yeterlik Belge No
Y-55/250/2019



AB-0012-T

SAM.AS.23.0613003

08-23

ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

İstasyon Mh. Yunus Emre Sk. No: 10 D: 1 55060 İlkadım/Samsun - İlkadım/Türkiye

Tel: +90 362 230 31 26 (Pbx) Faks: +90 362 230 31 28

www.artekcevre.com.tr

ANALİZ RAPORU

Rapor No / Tarihi	SAM.AS.23.0613003 / 07/08/2023	Rapor Onay Tarihi	2023.08.07 11:54:03+03'00'
Müşterinin Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ		
Müşterinin Adresi	Erbaa/Tokat/Türkiye		
Numune No	SAM.AS.23.0613003	Numunenin Alındığı Yer	SAİS KABİNİ ÇIKIŞI
Müşteri Numune No		Numunenin Alınma Tarihi - Saati	13/06/2023 11:07:00 13/06/2023 11:07:00
Numune Türü	ATIK SU	Numuneye Uygulanan İşlemler	Soğuk Zincir - Kimyasal Koruma
Numuneyi Alan	ARTEK SAMSUN	Numunenin Kabul Tarihi-Saati	13/06/2023 - 16:04:32
Numunenin Alınma Şekli	Anlık	Analiz Başlangıç / Bitiş Tarihi	14/06/2023 14/06/2023
Numunenin Getirilişi	Yerinden Alınma	Sayfa Sayısı	2
Numune Miktarı / Ambalajı	1000 ml Plastik Kap		
Metot Numarası	Metot Adı - Tarih		
SM 5220 B	Standard Methods - Chemical Oxygen Demand (COD) - Open Reflux Method-(2011)		
SM 2510 B	Standard Methods - Conductivity - Laboratory Method-(2011)		
SM 4500-O G	Standard Methods - Oxygen (Dissolved) - Membrane Electrode Method-(2016)		
SM 4500-H+ B	Standard Methods - pH Value - Electrometric Method-(2011)		
SM 2540 D	Standard Methods - Solids - Total Suspended Solids Dried at 103-105 °C-(2015)		
SM 2550 B	Standard Methods - Temperature - Laboratory and Field Methods-(2010)		
TS ISO 5667-10	Su Kalitesi- Numune Alma- Bölüm 10 Atık Sulardan Numune Alma Kılavuzu-(2021)		

<p>Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırılığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporlarda yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır. E-imzalı raporların geçerliliği sadece dijital doküman üzerinden sağlanmaktadır. Raporun basımı halinde geçerliliği doğrulanmamaktadır.</p>	<p>1 / 2 Sayfa</p>
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FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 6 REV.TAR.:
26.05.2023



Yeterlik Belge No
Y-55/250/2019



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU

AB-0012-T
SAM.AS.23.0613003
08-23

Firma Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ				
Rapor No / Tarihi	SAM.AS.23.0613003 / 07/08/2023				
Analiz Parametreleri	Analiz Metodu	Birim	Analiz Sonucu	Firma Analizör Değeri	Kentsel Atıksu Arıtımı Yönetmeliği/Tablo 1 Konsantrasyon (mg/L)
Askıda Katı Madde-AKM (Toplam) (*)	SM 2540 D	mg/L	13,45	12,59	35 mg/L N (10000 E.N.'den fazla) / 60 mg/L N (2000-10000E.N.)
Çözünmüş Oksijen - Oksijen Doygunluğu Tayini (*y)	SM 4500-O G	mg/L	6,88	6,76	-
	SM 4500-O G	%	84,5	-	-
pH (*y)	SM 4500-H+ B	-	7,98	7,36	-
İletkenlik (*y)	SM 2510 B	µS/cm	1149	1211,9	-
Sıcaklık (*y)	SM 2550 B	°C	23,2	22,34	-
Kimyasal Oksijen İhtiyacı (KOİ) (*)	SM 5220 B	mg/L	32,48	31,47	≤125
(*) İşaretili parametreler Bakanlık ve Türkak kapsamında raporlanmıştır.					
(*y) İşaretili parametre firmamız yetkili numune alma personeli tarafından yerinde ölçülmüştür.					
Açıklamalar : Bu rapor 1(bir) nüsha halinde hazırlanıp, müşteriye gönderilmiştir. Bu rapor laboratuvarımız tarafından elektronik ortamda arşivlenmektedir.					

Sorumlu İmzalar :

Sezin GÖKSEL
Şube Laboratuvar Müdür Yardımcısı
Elektronik olarak imzalanmıştır.

Murat ÖZTÜRK
Şube Laboratuvar Müdürü
Elektronik olarak imzalanmıştır.

Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporda yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır. E-imzalı raporların geçerliliği sadece dijital doküman üzerinden sağlanmaktadır. Raporun basımı halinde geçerliliği doğrulanamamaktadır.

Sayfa { 2 / 2

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 6 REV.TAR.:
26.05.2023

Erbaa Wastewater Treatment Plant Capacity Expansion Project
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN



Yeterlik Belge No
Y-55/250/2019



AB-0012-T
SAM.AS.23.1208005
01-24

ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

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ANALİZ RAPORU

Rapor No / Tarihi	SAM.AS.23.1208005 / 17/01/2024	Rapor Onay Tarihi	2024.01.17 19:32:19 +03'00'
Müşterinin Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ		
Müşterinin Adresi	Erbaa/Tokat/Türkiye		
Numune No	SAM.AS.23.1208005	Numunenin Alındığı Yer	SAİS KABİN ÇIKIŞI
Müşteri Numune No		Numunenin Alınma Tarihi - Saati	08/12/2023 11:53:00 08/12/2023 13:53:00
Numune Türü	ATIK SU	Numuneye Uygulanan İşlemler	Kimyasal Koruma- Soğuk Zincir
Numuneyi Alan	ARTEK SAMSUN	Numunenin Kabul Tarihi-Saati	08/12/2023 - 17:43:00
Numunenin Alınma Şekli	2 Saatlik	Analiz Başlangıç / Bitiş Tarihi	11/12/2023 11/12/2023
Numunenin Getirilişi	Yerinden Alınma	Sayfa Sayısı	2
Numune Miktarı / Ambalajı	2000 ml Plastik Kap/Şişe		
Metot Numarası	Metot Adı - Tarih		
SM 5220 B	Standard Methods - Chemical Oxygen Demand (COD) - Open Reflux Method-(2011)		
SM 2510 B	Standard Methods - Conductivity - Laboratory Method-(2011)		
SM 4500-O G	Standard Methods - Oxygen (Dissolved) - Membrane Electrode Method-(2016)		
SM 4500-H+ B	Standard Methods - pH Value - Electrometric Method-(2011)		
SM 2540 D	Standard Methods - Solids - Total Suspended Solids Dried at 103-105 °C-(2015)		
SM 2550 B	Standard Methods - Temperature - Laboratory and Field Methods-(2010)		
TS ISO 5667-10	Su Kalitesi- Numune Alma- Bölüm 10 Atık Sulardan Numune Alma Kilavuzu-(2021)		

<p>Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' ın [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporunda yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır. E-imzalı raporların geçerliliği sadece dijital doküman üzerinden sağlanmaktadır. Raporun basımı halinde geçerliliği doğrulanamamaktadır.</p>	1 / 2 Sayfa
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FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 6 REV.TAR.:
26.05.2023



Yeterlik Belge No
Y-55/250/2019



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU

AB-0012-T
SAM.AS.23.1208005
01-24

Firma Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ			
Rapor No / Tarihi	SAM.AS.23.1208005 / 17/01/2024			
Analiz Parametreleri	Analiz Metodu	Birim	Analiz Sonucu	Firma Analizör Değeri
Askıda Katı Madde-AKM (Toplam) (*)	SM 2540 D	mg/L	4,1	3,54
Çözünmüş Oksijen - Oksijen Doygunluğu Tayini (*)	SM 4500-O G	mg/L	6,33	6,63
	SM 4500-O G	%	69,2	-
pH (*)	SM 4500-H+ B	-	7,66	7,51
İletkenlik (*)	SM 2510 B	µS/cm	1402	1389
Sıcaklık (*)	SM 2550 B	°C	18,4	19,5
Kimyasal Oksijen İhtiyacı (KOİ) (*)	SM 5220 B	mg/L	18,89	19,26
(*) İşaretili parametreler Bakanlık ve Türkak kapsamında raporlanmıştır.				
(*) İşaretili parametre firmamız yetkili numune alma personeli tarafından yerinde ölçülmüştür.				
Açıklamalar : Bu rapor 1(bir) nüsha halinde hazırlanıp, müşteriye gönderilmiştir. Bu rapor laboratuvarımız tarafından elektronik ortamda arşivlenmektedir.				

Sorumlu İmzalar :

Sezin GÖKSEL
Şube Laboratuvar Müdür Yardımcısı

Murat ÖZTÜRK
Şube Laboratuvar Müdürü

Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporda yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır. E-imzalı raporların geçerliliği sadece dijital doküman üzerinden sağlanmaktadır. Raporun basımı halinde geçerliliği doğrulanamamaktadır.

Sayfa { 2 / 2

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 6 REV.TAR.:
26.05.2023



Yeterlik Belge No
Y-55/250/2019



AB-0012-T

SAM.AS.22.0131001

04-22

ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

İstasyon Mh. Yunus Emre Sk. No: 10 D: 1 55060 İlkadım/Samsun - İlkadım/Türkiye

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ANALİZ RAPORU

Rapor No / Tarihi	SAM.AS.22.0131001 / 16/04/2022		
Müşterinin Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ		
Müşterinin Adresi	Erbaa/Tokat/Türkiye		
Numune No	SAM.AS.22.0131001	Numunenin Alındığı Yer	ARITMA ÇIKIŞI
Müşteri Numune No		Numunenin Alınma Tarihi - Saati	30/12/2022 09:40:00 31/12/2022 09:40:00
Numune Türü	ATIK SU	Numuneye Uygulanan İşlemler	Soğuk Zincir - Kimyasal Koruma
Numuneyi Alan	ARTEK SAMSUN	Numunenin Kabul Tarihi-Saati	31/01/2022 - 16:37:04
Numunenin Alınma Şekli	24 Saatlik	Analiz Başlangıç / Bitiş Tarihi	31/01/2022 06/02/2022
Numunenin Getirilişi	Yerinden Alınma	Sayfa Sayısı	2
Numune Miktarı / Ambalajı	3000 ml Plastik Kap		
Metot Numarası	Metot Adı - Tarih		
İşbirliği/Taşeron Laboratuvar Metodu	İşbirliği/Taşeron Laboratuvar Metodu		
SM 5210 B	Standard Methods - Biochemical Oxygen Demand (BOD) - 5 day-(2016)		
SM 5220 B	Standard Methods - Chemical Oxygen Demand (COD) - Open Reflux Method-(2011)		
SM 2540 D	Standard Methods - Solids - Total Suspended Solids Dried at 103-105 °C-(2015)		
TS ISO 5667-10	Su Kalitesi- Numune Alma- Bölüm 10 Atık Sulardan Numune Alma Kılavuzu-(2021)		

Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporada yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır.	(1 / 2) Sayfa
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FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 4
REV.TAR.: 14.12.2020



Yeterlik Belge No
Y-55/250/2019



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU

AB-0012-T
SAM.AS.22.0131001
04-22

Firma Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ				
Rapor No / Tarihi	SAM.AS.22.0131001 / 16/04/2022				
Analiz Parametreleri	Analiz Metodu	Birim	Analiz Sonucu	Kentsel Atıksu Arıtımı Yönetmeliği/Tablo 1 Konsantrasyon (mg/L)	Kentsel Atıksu Arıtımı Yönetmeliği/Tablo 2 Konsantrasyon (mg/L)
Askıda Katı Madde-AKM (Toplam) (*)	SM 2540 D	mg/L	<4	35 mg/L N (10000 E.N.'den fazla) / 60 mg/L N (2000-10000E.N.)	-
Biyokimyasal Oksijen İhtiyacı (BOİ) Tayini (*)	SM 5210 B	mg/L	3,2	≤25	-
Kimyasal Oksijen İhtiyacı (KOİ) (*)	SM 5220 B	mg/L	<15	≤125	-
Toplam Azot Tayini (a)	İşbirliği/Taşeron Laboratuvar Metodu	mg/L	4,37	-	15 mg/l N (10000-100000 E.N.) 10 mg/l N (100 000 E.N.'den fazla)
Toplam Fosfor Tayini (a)	İşbirliği/Taşeron Laboratuvar Metodu	mg/L	0,25	-	2 mg/l P (10000-100000 E.N.) 1 mg/l P (100 000 E.N.'den fazla)
(*) İşaretili parametreler Bakanlık ve Türkak kapsamında raporlanmıştır. (a) İşaretili parametreler işbirliği laboratuvarı tarafından analiz edilmiştir.					
Açıklamalar : Bu rapor 1(bir) nüsha halinde hazırlanıp, müşteriye gönderilmiştir. Bu rapor laboratuvarımız tarafından elektronik ortamda arşivlenmektedir.					

Sorumlu İmzalar :

İrem Demir
Laboratuvar Birim Yöneticisi
Elektronik olarak imzalanmıştır.

Murat ÖZTÜRK
Şube Laboratuvar Müdürü
Elektronik olarak imzalanmıştır.

Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporda yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede; numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır.

Sayfa (2 / 2)

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 4
REV.TAR.: 14.12.2020



Yeterlik Belge No
Y-55/250/2019



AB-0012-T

SAM.AS.22.0215002

04-22

ARTEK MÜHENDİSLİK
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ANALİZ RAPORU

Rapor No / Tarihi	SAM.AS.22.0215002 / 16/04/2022		
Müşterinin Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ		
Müşterinin Adresi	Erbaa/Tokat/Türkiye		
Numune No	SAM.AS.22.0215002	Numunenin Alındığı Yer	ARITMA ÇIKIŞI
Müşteri Numune No		Numunenin Alınma Tarihi - Saati	14/02/2022 11:35:00 15/02/2022 11:35:00
Numune Türü	ATIK SU	Numuneye Uygulanan İşlemler	Soğuk Zincir - Kimyasal Koruma
Numuneyi Alan	ARTEK SAMSUN	Numunenin Kabul Tarihi-Saati	15/02/2022 - 17:05:00
Numunenin Alınma Şekli	24 Saatlik	Analiz Başlangıç / Bitiş Tarihi	16/02/2022 21/02/2022
Numunenin Getirilişi	Yerinden Alınma	Sayfa Sayısı	2
Numune Miktarı / Ambalajı	3000 ml Plastik Kap		
Metot Numarası	Metot Adı - Tarih		
İşbirliği/Taşeron Laboratuvar Metodu	İşbirliği/Taşeron Laboratuvar Metodu		
SM 5210 B	Standard Methods - Biochemical Oxygen Demand (BOD) - 5 day-(2016)		
SM 5220 B	Standard Methods - Chemical Oxygen Demand (COD) - Open Reflux Method-(2011)		
SM 2540 D	Standard Methods - Solids - Total Suspended Solids Dried at 103-105 °C-(2015)		
TS ISO 5667-10	Su Kalitesi- Numune Alma- Bölüm 10 Atık Sulardan Numune Alma Kılavuzu-(2021)		

Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporada yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır.	(1 / 2) Sayfa
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FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 4
REV.TAR.: 14.12.2020



Yeterlik Belge No
Y-55/250/2019



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU

AB-0012-T
SAM.AS.22.0215002
04-22

Firma Adı	T.C. ERBAA BELEDİYE BAŞKANLIĞI SU VE KANALİZASYON MÜDÜRLÜĞÜ				
Rapor No / Tarihi	SAM.AS.22.0215002 / 16/04/2022				
Analiz Parametreleri	Analiz Metodu	Birim	Analiz Sonucu	Kentsel Atıksu Arıtımı Yönetmeliği/Tablo 1 Konsantrasyon (mg/L)	Kentsel Atıksu Arıtımı Yönetmeliği/Tablo 2 Konsantrasyon (mg/L)
Askıda Katı Madde-AKM (Toplam) (*)	SM 2540 D	mg/L	7,5	35 mg/L N (10000 E.N.'den fazla) / 60 mg/L N (2000-10000E.N.)	-
Biyokimyasal Oksijen İhtiyacı (BOİ) Tayini (*)	SM 5210 B	mg/L	22,75	≤25	-
Kimyasal Oksijen İhtiyacı (KOİ) (*)	SM 5220 B	mg/L	65	≤125	-
Toplam Azot Tayini (a)	İşbirliği/Taşeron Laboratuvar Metodu	mg/L	9,02	-	15 mg/l N (10000-100000 E.N.) 10 mg/l N (100 000 E.N.'den fazla)
Toplam Fosfor Tayini (a)	İşbirliği/Taşeron Laboratuvar Metodu	mg/L	0,35	-	2 mg/l P (10000-100000 E.N.) 1 mg/l P (100 000 E.N.'den fazla)
(*) İşaretili parametreler Bakanlık ve Türkak kapsamında raporlanmıştır. (a) İşaretili parametreler işbirliği laboratuvarı tarafından analiz edilmiştir.					
Açıklamalar : Bu rapor 1(bir) nüsha halinde hazırlanıp, müşteriye gönderilmiştir. Bu rapor laboratuvarımız tarafından elektronik ortamda arşivlenmektedir.					

Sorumlu İmzalar :

İrem Demir
Laboratuvar Birim Yöneticisi
Elektronik olarak imzalanmıştır.

Murat ÖZTÜRK
Şube Laboratuvar Müdürü
Elektronik olarak imzalanmıştır.

Deney laboratuvarı olarak faaliyet gösteren ARTEK, TÜRKAK' tan [AB-0012-T] ile [TS EN ISO/IEC 17025] standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan sayfalarda verilmiştir. İmzasız raporlar geçersizdir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Raporda yer alan sonuçlar sadece incelenen numuneye aittir. Firmamız tarafından alınan numunelerde; numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numunede; numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi alana aittir. Müşteri tarafından sağlanan bilgilerin hukuki sorumluluğu müşteriye aittir, firmamız bu bilgilerden kaynaklanacak sonuçlardan feragat eder. Elektronik imzalı raporlar 5070 sayılı Elektronik İmza Kanunu' na göre elektronik imza ile imzalanmıştır.

Sayfa (2 / 2)

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 4
REV.TAR.: 14.12.2020

Waste Sludge Analysis Reports

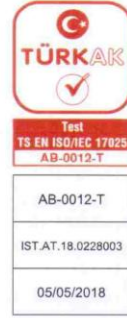
Yeterlik Belge No
Y-34/073/2015



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU

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Rapor No / Tarihi	IST.AT.18.0228003 / 05/05/2018		
Müşterinin Adı	REMONDIS SU VE ATIKSU TEKNOLOJİLERİ SAN. VE TİC. A.Ş.		
Müşterinin Adresi	Kelkit Mah. Karayaka Belediyesi Yolu Üzeri Erbaa - TOKAT Erbaa/Tokat/Türkiye		
Numune No	IST.AT.18.0228003	Numunenin Alındığı Yer	Anıtma Çamur
Numune/Durum	ATIK/Çamur	Numunenin Alınma Tarihi - Saati	27/02/2018 14:00:00 27/02/2018 14:00:00
Numuneyi Alan	ARTEK	Numuneye Uygulanan İşlemler	Soğuk Zincir
Numunenin Alınma Şekli	Anlık	Numunenin Kabul Tarihi-Saati	28/02/2018 - 08:00:00
Numunenin Getirilişi	Kargo	Analiz Başlangıç/Bitiş Tarihi	28/02/2018 14/03/2018
Numune Miktarı / Ambalajı	3000 gr Plastik Kap		

Metot Numarası	Metot Adı - Tarih
SM 4500-SO4-2 E	Standard Methods - Sulfate - Turbidimetric Method-(2011)
SM 5310 B	Standard Methods - Total Organic Carbon (TOC) - High Temperature Combustion Method-(2014)
TS 6227 ISO 6439	Su Kalitesi- Fenol İndeksi Tayini-Damıtma sonrası 4-aminoantipirin kullanılarak uygulanan spektrometrik metotlar-(2005)
EPA 200.7	Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma Atomic Emission Spectrometry-(1994)
SM 2540 C	Standard Methods - Solids - Total Dissolved Solids Dried at 180 °C-(2015)
TS 9546 EN 12880	Çamurların karakterizasyonu - Kuru kalıntı ve su muhtevası tayini-(2002)
TS 12089 EN 13137	Atıkların özellikleri-Atık, çamur ve sedimentlerde toplam organik karbon (TOK) tayini-(2003)
TS 12090	Kati atıklardan numune alma kuralları-(1996)
TS EN 12457-4	Atıkların nitelendirilmesi - Katıdan özütleme analizi-Granül kati atıkların ve çamurların kati özütlemesi için uygunluk deneyi - Bölüm 4: Sivi kati oranı 10 l/kg olan ve parçacık boyutu 10 mm'den küçük (ölçüsü azaltılmış veya azaltılmamış) malzemeler için tek aşamalı parti deneyi-(2004)
TS EN 12879	Çamurların özellikleri-Kuru kütlenin kizdırma kaybinin tayini-(2003)
TS EN 14039	Atıkların nitelendirilmesi-C10-C40 aralığındaki hidrokarbon muhtevasının gaz kromatografisi ile tayini-(2004)
TS ISO 10390	Toprak Kalitesi-pH Tayini- (2013)
EPA 8082A	PCBs by GC-(2007)
SM 3112 B	Standard Methods - Metals by Cold-Vapor Atomic Absorption Spectrometry-(2011)

İmzasız ve kaşesiz raporlar geçersizdir. Raporla yer alan sonuçlar sadece incelenen numuneye aittir. Bu rapor laboratuvarımızın yazılı bir onay olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numune, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi, örnekleme alanına aittir.

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 3
REV.TAR.: 03.03.2014



Yeterlik Belge No
Y-34/073/2015



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
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Test
TS EN ISO/IEC 17025
AB-0012-T

AB-0012-T

IST.AT.18.0228003

05/05/2018

ANALİZ RAPORU

Firma Adı	REMONDIS SU VE ATIKSU TEKNOLOJİLERİ SAN. VE TİC. A.Ş.
Rapor No / Tarihi	IST.AT.18.0228003 / 05/05/2018
Metot Numarası	Metot Adı - Tarih
SM 4110 B	Standard Methods - Determination of Anions by Ion Chromatography - with Chemical Suppression of Eluent Conductivity-(2011)
SM 4500-Cl- B	Standard Methods - Chloride - Argentometric Method-(2011)
EPA 5021A, EPA 8015	Volatile Organic Compounds In Various Sample Matrices- (2014), (BTEX) Nonhalogenated Organics Using GC-FID-(2003)

ARTEK MÜHENDİSLİK
ÇEVRE ÖLÇÜM VE DANIŞMANLIK HİZ. TİC. A.Ş.

İmzasız ve kaşesiz raporlar geçersizdir. Raporlarda yer alan sonuçlar sadece incelenen numuneye aittir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmelidir. Analiz yapılan numunede, numunenin alınıgından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi, örneklemeyi alana aittir.

Sayfa (2 / 4)

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 3
REV.TAR.: 03.03.2014



Yeterlik Belge No
Y-34/073/2015



Test
TS EN ISO/IEC 17025
AR-0012-T

AB-0012-T

IST.AT.18.0228003

05/05/2018

ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU

Firma Adı	REMONDIS SU VE ATIKSU TEKNOLOJİLERİ SAN. VE TİC. A.Ş.					
Rapor No / Tarihi	IST.AT.18.0228003 / 05/05/2018					
Analiz Parametreleri	Analiz Metodu	Birim	Analiz Sonucu	Atıkların Düzenli Depolanmasına Dair Yönetmelik- I. sınıf (Tehlikeli)	Atıkların Düzenli Depolanmasına Dair Yönetmelik- II. sınıf (Tehlikesiz)	Atıkların Düzenli Depolanmasına Dair Yönetmelik- III. sınıf (İnert)
Çözünmüş Organik Karbon (DOC) Tayini (*)	SM 5310 B	mg/L	2166,5	80<-≤100	50<-≤80	≤50
Fenol indeksi (*)	TS 6227 ISO 6439	mg/L	<0,029	-	-	≤0,1
Florür Tayini (*)	SM 4110 B	mg/L	5,46	15<-≤50	1<-≤15	≤1
Klorür Tayini (*)	SM 4500-Cl- B	mg/L	80,6	1500<-≤2500	80<-≤1500	≤80
Nem Tayini (*)	TS 9546 EN 12880	%	39,6	-	-	-
pH Tayini (*)	TS ISO 10390		7,09	-	≥6	-
Sülfat Tayini (*)	SM 4500-SO4-2 E	mg/L	3,4	2000≤-<5000	600≤-<2000	100≤-<600
Toplam Çözünen Katı Tayini (*)	SM 2540 C	mg/L	3900	6000≤-<10000	400≤-<6000	≤400
Toplam Organik Karbon (TOC) Tayini (*)	TS 12089 EN 13137	%	8,33	5<-≤6	3<-≤5	≤3
LOI Tayini (*)	TS EN 12879	%	77,2	≤10	-	-
BTEX Tayini (*)	EPA 5021A, EPA 8015	mg/Kg	<0,06	-	-	≤6
Mineral Yağ Tayini (*)	TS EN 14039	mg/Kg	875,46	-	-	≤500
PCB Tayini (*)	EPA 8082A	mg/Kg	0,011	-	-	≤1
Antimon Tayini (*)	EPA 200.7	mg/L	<0,005	0,07<-≤0,5	0,006<-≤0,07	≤0,006
Arsenik Tayini (*)	EPA 200.7	mg/L	<0,02	0,2<-≤2,5	0,05<-≤0,2	≤0,05
Bakır Tayini (*)	EPA 200.7	mg/L	0,02	5<-≤10	0,2<-≤5	≤0,2
Baryum Tayini (*)	EPA 200.7	mg/L	0,15	10<-≤30	2<-≤10	≤2
Civa Tayini (*)	SM 3112 B	mg/L	<0,0001	0,02<-≤0,2	0,001<-≤0,02	≤0,001
Çinko Tayini (*)	EPA 200.7	mg/L	1,3	5<-≤20	0,4<-≤5	≤0,4
Kadmiyum Tayini (*)	EPA 200.7	mg/L	<0,001	0,1<-≤0,5	0,004<-≤0,1	≤0,004
Kurşun Tayini (*)	EPA 200.7	mg/L	<0,01	1<-≤5	0,05<-≤1	≤0,05
Molibden Tayini (*)	EPA 200.7	mg/L	<0,0075	1<-≤3	0,05<-≤1	≤0,05
Nikel Tayini (*)	EPA 200.7	mg/L	0,15	1<-≤4	0,04<-≤1	≤0,04
Selenyum Tayini (*)	EPA 200.7	mg/L	0,04	0,05<-≤0,7	0,01<-≤0,05	≤0,01
T. Krom Tayini (*)	EPA 200.7	mg/L	0,03	1<-≤7	0,05<-≤1	≤0,05

* İşaretili parametreler Bakanlık ve Türkak kapsamında raporlanmıştır.

ARTEK MÜHENDİSLİK
ÇEVRE ÖLÇÜM VE DANIŞMANLIK HİZ. TİC. A.Ş.

İmzasız ve kaşesiz raporlar geçersizdir. Raporda yer alan sonuçlar sadece incelenen numuneye aittir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmiştir. Analiz yapılan numune, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi, örneklemeyi alana aittir.

Sayfa (3 / 4)

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 3
REV.TAR.: 03.03.2014

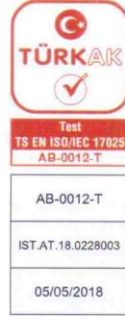


Yeterlik Belge No
Y-34/073/2015



ARTEK MÜHENDİSLİK
Çevre Ölçüm ve Danışmanlık Hiz. Tic. A.Ş.
ÇEVRE LABORATUVARI

ANALİZ RAPORU



Firma Adı	REMONDIS SU VE ATIKSU TEKNOLOJİLERİ SAN. VE TİC. A.Ş.
Rapor No / Tarihi	IST.AT.18.0228003 / 05/05/2018

Bu rapor 1(bir) nüsha halinde hazırlanıp, müşteriye gönderilmiştir. Bu rapor laboratuvarımız tarafından elektronik ortamda
Açıklamalar : arşivlenmektedir.

Sorumlu İmzalar:

Özlem GÜLER
Laboratuvar Birim Yöneticisi

Melahat AYDIN
Laboratuvar Müdürü
ARTEK MÜHENDİSLİK
ÇEVRE ÖLÇÜM VE DAN. HİZ. TİC. A.Ş.

İmzasız ve kaşesiz raporlar geçersizdir. Raporda yer alan sonuçlar sadece incelenen numuneye aittir. Bu rapor laboratuvarımızın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu raporun hiçbir bölümü tek başına veya ayrı ayrı kullanılamaz. Numune alma ve taşıma işlemleri Numune Alma Prosedürüne, Numune Alma Talimatına ve numune alma planına uygun olarak gerçekleştirilmelidir. Analiz yapılan numunede, numunenin alınışından laboratuvarımıza teslimine kadar olan prosedürlerin ve bakılması istenen grup ve parametrelerin belirlenmesinde teknik ve hukuki sorumluluk numuneyi, örneklemeyi alana aittir.

Sayfa (4 / 4)

FORM NO:FR.510.01-01
YAYIN TARİHİ:14.02.2013

REV.NO: 3
REV.TAR.: 03.03.2014



TÜRKİYE BİLİMSEL VE TEKNOLOJİK ARAŞTIRMA KURUMU
MARMARA ARAŞTIRMA MERKEZİ
ÇEVRE VE TEMİZ ÜRETİM ENSTİTÜSÜ

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http://mam.tubitak.gov.tr



AB-0390-T
4083
06 - 16

ANALİZ RAPORU
(Endüstriyel Teknik Destek Hizmeti)

Rapor no : : 45924173 -125.05- 1127/ 4083
Rapor tarihi : : 20-06-2016
Talep eden : : Erbaa Belediyesi
Adres : : OSB Erbaa Atıksu Arıtma Tesisi Erbaa / TOKAT
Konusu : : Erbaa OSB AAT Dekantör Çıkışı Çamuru Örneğinin "Atıkların Düzenli Depolanmasına Ait Yönetmelik" Ek-2 Atıkların Düzenli Depolanabilmesi için Kabul Kriterleri ve İlave Parametreleri Doğrultusunda Analizi

Bu raporda yer alan sonuçlar, sadece incelenen numunelere aittir.

Onaylayan

Doç. Dr. Özgen ERCAN
Çevre ve Temiz Üretim Enstitüsü
Endüstriyel Hizmet Sorumlusu

Bu rapor ve sonuçları talepte bulunan kuruluş ve müşterilerince ticaret ve reklam amaçları ile kullanılamaz. Rapor tamamen veya kısmen çoğaltılamaz/yayınlanamaz.
Raporda (*) işaretli analizler akredite edilmiştir. İmzasız analiz raporları geçersizdir.
Türk Akreditasyon Kurumu (TÜRKAK) deney raporlarının tanınması konusunda Avrupa Akreditasyon Birliği (EA) ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile Karşılıklı Tanınma Anlaşması'nı imzalamıştır.
Deney ve/veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde)ve deney metodları bu raporun tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

Bu rapor 4 sayfa olup, 2 asıl (1 asıl müşteriye, 1 asıl Enstitü arşivine) olarak hazırlanmıştır.

Sayfa 1/4


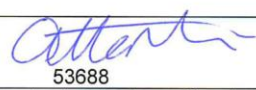


Y-41/005/2016

Erbaa Wastewater Treatment Plant Capacity Expansion Project
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN



AB-0390-T
4083
06 - 16

Rapor no	: 45924173 -125.05- 1127 / 4083
Talep eden	: Erbaa Belediyesi
Talep edenin adresi	: OSB Erbaa Atıksu Arıtma Tesisi Erbaa / TOKAT
Örnek	: Erbaa OSB AAT Dekantör Çıkışı Çamuru
Örnek sayısı	: 1
Örneğin getiriliş şekli	: Kargo ile.
Kabul anındaki durumu	: Cam kap
Son kullanım tarihi	:
Enstitü örnek kayıt no	: 168/555/1
Kabul tarihi ve saati	: 24/05/2016
Analiz tarihi	: 24/05/2016 – 20/06/2016
Şahit numune bilgileri	: () Müşteriye iade (x) Şahit numune mevcut () Şahit numune alınmamıştır
<p>Erbaa Belediyesi OSB AAT Dekantör Çıkışı Çamuru örneği analizi konulu talep yazısı TÜBİTAK Marmara Araştırma Merkezine gelmiş ve 3225 evrak numarası ile kayıt altına alınmıştır.</p> <p>Analiz talep yazısı ekinde, Artek Mühendislik teknik elemanı tarafından, 18/05/2016 tarihinde, saat 17:00' de, OSB AAT dekantör çıkışından alındığı, mühürlendiği (Mühür no: 6276) belirtilen, örnek alma tutanağı ile birlikte bir (1) adet arıtma çamuru örneği mühürlü olarak TÜBİTAK MAM Çevre ve Temiz Üretim Enstitüsü' ne gelmiştir.</p> <p>Talep yazısında OSB AAT Dekantör Çıkışı Çamuru örneğinin "Atıkların Düzenli Depolanmasına Dair Yönetmelik" Ek-2 Atıkların Düzenli Depolanabilmesi için Kabul Kriterleri kirlilik ve ilave parametreler doğrultusunda analiz edilmesi ve depolanma sınıfının belirlenmesi talep edilmiştir.</p> <p>OSB AAT Dekantör Çıkışı Çamuru örneği eluatı TS EN 12457 – 4 standardına uygun olarak analize hazırlanmıştır.</p> <p>Hazırlanan, OSB AAT Dekantör Çıkışı Çamuru örneği eluatı ve orijinal OSB AAT Dekantör Çıkışı Çamuru örneğinin analizi neticesinde elde edilen değerler, ADDDY / Ek - 2' de verilen limit değerleri mukayese edilmiş Tablo 1' de, analiz yöntemleri ise Tablo 2' de verilmiştir.</p>	
Açıklamalar:	
Sorumlu İmzalar:	 51381  53688
<p>Bu rapor ve sonuçları talepte bulunan kuruluş ve müşterilerince ticaret ve reklam amaçları ile kullanılamaz. Rapor tamamen veya kısmen çoğaltılamaz/yayınlanamaz.</p> <p>Raporda (*) işaretli analizler akredite edilmiştir.</p> <p>İmzasız analiz raporları geçersizdir.</p>	
Bu rapor 4 sayfa olup, 2 asıl (1 asıl müşteriye, 1 asıl Enstitü arşivine) olarak hazırlanmıştır.	
Sayfa 2/4	

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4083

06 - 16

Rapor no: 45924173 -125.05- 1127/ 4083

Tablo 1: Erbaa Belediyesi OSB AAT Dekantör Çıkışı Çamuru Örneği Analiz Sonuçları ve ADDDY/ Ek-2 Limit Değeri

Parametre / Örnek	Erbaa OSB AAT Dekantör Çıkış Çamuru	ADDY/ Ek-2		
		A) İnert atıkların Depolanabilme Kriterleri III. Sınıf Depolama Tesisleri için Sınır Değerler	B) Tehlikesiz atıkların Depolanabilme Kriterleri II. Sınıf Depolama Tesisleri için Sınır Değerler	C) Tehlikeli atıkların Depolanabilme Kriterleri I.Sınıf Depolama Tesisleri için Sınır Değerler
Eluate Analiz Parametreleri				
(*)Arsenik (As mg/l)	0,0008	0,05	0,2	2,5
(*)Baryum (Ba mg/l)	0,033	2	10	30
(*)Kadmiyum (Cd mg/l)	0,0001	0,004	0,1	0,5
(*)Krom (Cr mg/l)	0,008	0,05	1	7
(*)Bakır (Cu mg/l)	0,037	0,2	5	10
(*)Cıva (Hg mg/l)	< 0,00013	0,001	0,02	0,2
(*)Molibden (Mo mg/l)	< 0,005	0,05	1	3
(*)Nikel (Ni mg/l)	0,023	0,04	1	4
(*)Kurşun (Pb mg/l)	0,004	0,05	1	5
(*)Antimon (Sb mg/l)	0,0008	0,006	0,07	0,5
(*)Selenyum (Se mg/l)	0,0013	0,01	0,05	0,7
(*)Çinko (Zn mg/l)	0,138	0,4	5	20
(*)Klorür (Cl ⁻ mg/l)	34,5	80	1500	2500
(*)Florür (F ⁻ mg/l)	< 0,2	1	15	50
(*)Sülfat (SO ₄ ⁼ mg/l)	2,03	100	2000	5000
(*)Çözünmüş Organik Karbon (ÇOK mg/l)	330	50	80	100
(*)Toplam Çözünen Katı Madde (TÇKM mg/l)	2484	400	6000	10000
(*)Fenoller (C ₆ H ₅ OH mg/l)	0,59	0,1		
Orijinal Atık Analiz Parametreleri				
(*)Toplam Organik Karbon (TOK mg/kg)	65,63	250000	% 25	
(*)BTEx (mg/kg)	< 0,5	6		
(*)PCBs (mg/kg)	< 0,1	1		
(*)Mineral Yağ (mg/kg)	977	500		
(*)Yanma Kaybı (%)	67,38			100000 (%10)
(*) Kuru madde Miktarı (%)	22,63	30	---	---
(*) Nem (%)	77,37	70		

Açıklamalar:

Sorumlu İmzalar:

51384

53688

Bu rapor ve sonuçları talepte bulunan kuruluş ve müşterilerince ticaret ve reklam amaçları ile kullanılamaz. Rapor tamamen veya kısmen çoğaltılamaz/yayınlanamaz.
Raporda (*) işaretli analizler akredite edilmiştir.
İmzasız analiz raporları geçersizdir.

Bu rapor 4 sayfa olup, 2 asıl (1 asıl müşteriye, 1 asıl Enstitü arşivine) olarak hazırlanmıştır.

Sayfa 3/4



AB-0390-T

06 - 16

Rapor no: 45924173 -125.05- 1127/ 4083

Tablo 2: ADDDY/ Ek-2 Analiz Parametreleri ve Analiz Yöntemleri

Parametre	Analiz Yöntemleri
Eluate Analiz Parametreleri	
(*)Arsenik (As mg/l), (*)Baryum (Ba mg/l), (*)Kadmiyum (Cd mg/l), (*)Krom (Cr mg/l), (*)Bakır (Cu mg/l), (*)Molibden (Mo mg/l), (*)Nikel (Ni mg/l), (*)Kurşun (Pb mg/l), (*)Antimon (Sb mg/l), (*)Selenyum (Se mg/l),(*)Çinko (Zn mg/l)	EPA 6020 A (ICP – MS)
(*)Cıva (Hg mg/l)	TS EN ISO 12846
(*)Klorür (Cl ⁻ mg/l), (*)Sülfat (SO ₄ ²⁻ mg/l)	SM- 4110 B İyon Kromatografi
(*)Florür (F ⁻ mg/l)	4500 – F- C İyon Seçici Elektrot
(*)Çözünmüş Organik Karbon (ÇOK mg/l)	SM- 5310 B Yük. Sic. yakma
(*)Toplam Çözünen Katılar (TÇM mg/l)	SM- 2540 C Gravimetrik
(*)Fenoller (C ₆ H ₅ OH mg/l)	SM- 5530 D Fotometrik
Orijinal Atık Analiz Parametreleri	
(*)Toplam Organik Karbon (TOK mg/ kg)	TS 12089 EN 13137
(*)BTEX (benzen, toluen,etilbenzen ve xlenes) (mg/kg)	EPA 8015 C
(*)PCBs (mg/kg)	ISO 10382
(*)Mineral Yağ	EN 14039:2004 GC
(*)Yanma Kaybı (%)	DS/EN 12879
(*) Kuru Madde Miktarı (%)	TS 9546 EN 12280

SM: Standard Methods For the Examination of Water and Wastewater, 22 th Edition (2012)

Analiz Sonuçlarının Değerlendirilmesi

Erbaa Belediyesi OSB AAT Dekantör Çıkışı Çamuru örneğinin analizi neticesinde, eluatta fenol, orijinal örnekte Mineral Yağ, Nem ve Yanma Kaybı parametreleri değerlerinin ADDDY/ Ek-2; A, B, C' de verilen Depolama Tesisleri sınır değerlerine uygun olmadığı belirlenmiştir.

Yönetmelik Geçici Madde 4: (1) Atık Yönetimi Genel Genel Esaslarına İlişkin Yönetmeliğin ek-IV' ünde tehlikesiz atık olarak sınıflandırılan arıtma çamurlarının, ek-2' de verilen diğer tüm parametreleri sağlaması, ağırlıkça en az %30 kuru madde ihtiva etmesi ve kötü kokunun giderilmesi kaydıyla II. Sınıf düzenli depolama alanında ayrı bir lota depolanmasında 1/1/2020 tarihine kadar Çözünmüş Organik Karbon (ÇOK) limit değerine uygunluk aranmaz.

Açıklamalar:

Sorumlu İmzalar:

53681

53688

Bu rapor ve sonuçları talepte bulunan kuruluş ve müşterilerince ticaret ve reklam amaçları ile kullanılamaz. Rapor tamamen veya kısmen çoğaltılamaz/yayınlanamaz.

Raporda (*) işaretli analizler akredite edilmiştir.

İmzasız analiz raporları geçersizdir.

Bu rapor 4 sayfa olup, 2 asıl (1 asıl müşteriye, 1 asıl Enstitü arşivine) olarak hazırlanmıştır.

Sayfa 4/4

APPENDIX-F
Photos of the Sub-project Area



Erbaa OIZ Entrance Gate



Waste Bins in Erbaa WWTP Administrative Building



Laboratory in Erbaa WWTP Administrative Building



Continuous Wastewater Monitoring Station in Erbaa WWTP Area



Inside the Continuous Wastewater Monitoring Station in Erbaa WWTP Area



Hazardous Waste Temporary Storage Area in Erbaa WWTP Area



Waste Sludge Temporary Storage Area in the Sub-project Area



Erbaa WWTP of Anaerobic and Aeration Tanks



Discharge line of the Erbaa WWTP



Discharge Point of the Existing Plant to Kelkit Stream (Also to be for the Sub-project)



Sub-project Area and Kelkit Stream Remote View



Waste Sludge Temporary Storage Area in the Sub-project Area on 13.12.2024

APPENDIX-G

The Handover Decision of the Sub-project Area

KARAR 97

Karar Sıra No. 79	Karara esas olan evrakın			Mevzuun mahiyeti ve h�lasesi
	Tarih	No.	Nereden g�nderildiđi	

Erbaa OSB'deki Arıtma Tesisi Yerinin
Bedelsiz Devri

Toplantı tarihi 29.05.2006 g n 

Başkanın adı ve soyadı : Sayın Valim Erdoğan G RB   

Azaların adı ve soyadı : Sabri BAŞK  , Ahmet YENİHAN, Halil BAŞAK

O. Uğur AKIN, Erkan YAZICI, Tugay KAYA, Bekir DUMAN, Adnan DOĞAN
Mustafa K    , Mehmet ŞAHİN, Kemal BAYRAKTAR

KARARIN METNİ

M  teşebbis Heyetimiz Sayın Valim, Erdoğan G RB   ' n başkan -
lığında ařađıdaki hususları g r  mek  zere toplanmıřtır

1- Erbaa Belediyesi ile Erbaa Organize Sanayi B lgesi Y netim
Kurulu Başkan Vekili arasında 27.06.2005 tarihinde yapılan protokol n
yapım ve iřletme bařlıđı altındaki 1. maddesinde ikenimiz eski Erek yeni
Kelkit Mahallesi'nde Erbaa Organize Sanayi B lgesi Y netim Kurulu
uhdesinde bulunan Organize Sanayi B lgesinde 31 L 11a - 32 L 111c
imar paftasında 440 ada 1-69 parseldeki 65.000 m²'lik alanda Erbaa
Belediye Bařkanlıđı Atıksu Arıtma Tesisi kurmayı ve iřletmeyi taahh t eden
Buna karřılık Organize Sanayi B lgesi Y netim Kurulu Bařkanlıđı
OSB. İmar Planlarında arıtma tesisi olarak g sterilen yerin kullanım hakkını
bedelsiz olarak Erbaa Belediyesine devreden Bununla birlikte Erbaa Organize
Sanayi B lgesinde bulunan Sanayi Kuruluřları bu tesisten istifade eden.

End striyel atık  reten sanayi kuruluřları ise kendi ihtiyaclarını
yaptıktan sonra bu tesisten yararlanabilir řeklinde d zenlenen protokol proje
dok man eklenerek AB Merkezi Finans İhale Birimine g nderilmiř ve
hibe almayı hak kazanmıřtır Ancak MFİB Arıtma Tesisi kurulacak alanın
tapusunun devrini son s zleřme tarihi olan 31 Mayıs 2006 tarihine kadar

DEFTERİ

98

Karar Sıra No.	Karara esas olan evrakın			Mevzuun mahiyeti ve hılasası
	Tarih	No.	Nereden gönderildiği	
Toplantı tarihi...../...../19 günü				
Başkanın adı ve soyadı				
Azaların adı ve soyadı				
KARARIN METNİ				
<p>İstap etmektedir.</p> <p>Süre cırlığının obbyı 440 ada 1 nolu parselden 48.000/586169.m² lik hissenin 440 ada 69 nolu parselden 17.000/59183. m² lik toplamda 65.000 m² lik alanın hisseli satışı yapılarak Erbaa Belediye Başkanlığı adına bedeksiz devir yapılması.</p> <p>Sözleşme imzalandıktan sonra 440 ada 1 nolu parsel ile 440 ada 69 nolu parsellerin tevhid ve parselasyon işlemleri yapılarak arıtma tesisi kurularak 65.000 m² lik alanın mülstabil tapu haline dönüştürülerek Erbaa Belediyesine bedeksiz devredilmesine;</p> <p>Müttesebbis Heyetimizce karar verilmiştir.</p>				
	İye	İye	İye	İye
Endoğan GÜRBÜZ	Sabri BAŞKÖY	Ahmet YENİHAN	O. Uğur AKIN	
Palat Valisi	Erbaa Kaymakamı	Belediye Başkanı	İl İlçe İlçe Müdürü	
Başkan V.	İye	İye	İye	
Halil BAŞAK	Erkan YAZICI	Turgay BAŞA	Bekir DUMAN	
İl İlçe İlçe	Kaymakamlık Yazı İşl. Müdürü	İlçe İlçe İlçe	İl Genel Mec. Üyesi	
İye	İye	İye	İye	
Mehmet ŞAHİN	Mustafa KILU	Adnan DOĞAN	Kemal BAYRAK	
İl Genel Mec. Üyesi	İl Genel Mec. Üyesi	İl Genel Mec. Üyesi	Belediye Vekili	

APPENDIX-H

Chance Find Procedure of the Sub-project



ERBAA EXISTING WASTEWATER TREATMENT PLANT CAPACITY EXPANSION PROJECT

CHANCE FIND PROCEDURE

November 2024

INTRODUCTION

This document presents the Chance Find Procedure for "Erbaa Existing Wastewater Treatment Plant Capacity Expansion Project" (hereinafter referred to as 'sub-project') and is prepared by 2U1K Engineering and Consultancy Inc. for "Erbaa Municipality (EM)" (hereinafter referred to as 'Borrower / sub-project owner').

This document is intended to avoid potential impacts of the sub-project on any cultural heritage during land preparation works, including excavation. This Procedure is a part of the general package as an annex to the Environmental and Social Management Plan (ESMP) developed for the sub-project.

SCOPE

Types of Cultural Heritage Covered by This Procedure

Tangible Cultural Heritage

Tangible (physical) cultural heritage refers to movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.

ROLES AND RESPONSIBILITIES

Roles	Responsibilities
Contractors	<ul style="list-style-type: none"> • Compliance with the Chance Find Procedure provided in contractor agreements, • Provide appropriate training and information to the worksite personnel who work in the sub-projects and who may disturb the cultural heritage so that they understand their responsibilities for cultural heritage.
Project Owner	<ul style="list-style-type: none"> • Ensure compliance of the sub-project with the Project Standards and other requirements given in this procedure, • General responsibility for the scope and implementation of the procedure, • Development, monitoring and revision of this procedure, • Fulfilment of cultural heritage evaluation processes, • Ensure that the operations do not disturb cultural properties and sites without the approval of the relevant authority, • Investigation, reporting and monitoring of unauthorized damages to the worksite as well as of procedure violations, • Management of amendments to laws or policies, • Coordination with the organizations involved in the implementation and other stakeholders.
All Workers	<ul style="list-style-type: none"> • Learn about the Chance Find Procedure through induction training and any other training provided.

PROJECT STANDARDS

- Law on the Conservation of Cultural and Natural Properties (LCCNP) (No: 2863),

- Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention).

CHANCE FIND PROCEDURE

Initial Approach Adopted by the Contractor

- Action 1: Immediately stop all construction works in the vicinity of the chance find, in case of discovery of archaeological finds,
- Action 2: Immediately notify the project manager and/or environmental department,
- Action 3: Take photographs or make technical drawings,
- Action 4: Record the location of the location by keeping all remains in their position (without moving them);
- Action 5: Prevent damage to or loss of movable objects by encircling the area,
- Action 6: Contact an archaeologist from a local university for guidance,
- Action 7: Prepare the Chance Find Form (Annex 1).

Approach Adopted by the Archaeologist

Based on the description of the find, the archaeologist will make recommendations on actions to be taken by phone/e-mail or visit. The sub-project team will take into account the following possible strategies, if the archaeologist(s) confirm(s) the presence of archaeological finds/remains/sites:

Strategy 1: Avoidance by partial or full sub-project redesign or relocation

In case of any archaeological find or discovery, the sub-project owner will provide the relevant information to authorities. This responsibility will apply even if the sub-project is redesigned or relocated. In any case, the relevant governmental body will be informed of the archaeological find or discovery.

Strategy 2: Implementation of worksite protection measures

This option includes the implementation of site protection measures such as fencing or blockage. As per LCCNP No. 2863, any archaeological find is the property of the Republic of Türkiye, and governmental bodies will decide on the geographical scope and implementation of site protection measures.

Strategy 3: Rescue or emergency excavation

If the sub-project owner fails to relocate or redesign the sub-project, this may require rescue or emergency excavation works. If notification is stipulated by LCCNP, an application will be lodged to governmental bodies. If an official application is lodged, the relevant Regional Board will be allowed to make a decision.

After the permit is obtained, archaeological excavations will be performed with the attendance of scientific consultants from the archaeological departments of universities. Following the

completion of archaeological excavations, the results will be submitted to relevant governmental bodies for the final decision to be taken for the progress of the sub-project.

Procedure for the Discovery of Potential Human Remains

Identification of human remains is very clear in terms of graves or burial sites. If a grave or burial site is found, the procedures to be followed are not different from the procedure applicable to archaeological finds as per Article 6 of LCCNP. Modern burials or forensic human remains will not be addressed within the scope of LCCNP.

KEY PERFORMANCE INDICATORS

The key performance indicators to be used during the implementation of this Procedure are set out below.

Table 1.1. Key Performance Indicators (KPIs)

No	KPIs	Target	Monitoring Measure
1	Non-conformities reported during the year with respect to key management controls identified in this procedure	Minimization of reported non-conformities, aiming at zero	Database Reporting Inspection Reports
2	Number of complaints lodged by local communities during the year regarding cultural heritages	Investigation of complaints about cultural heritage (disrespect, destruction, removal, sale of artefacts) and fulfilment of relevant actions. Provision of prompt response to complaints from local communities regarding the misbehaviour of personnel regarding cultural properties.	Database Grievance Mechanism Records Reporting

REPORTING

Contractor will comply with reporting requirements including chance finds defined in site-specific ESMP (contractor will develop monthly and quarterly monitoring reports and submit to EM through supervision consultant; EM will examine submit the reports to ILBANK quarterly (and monthly if requested by ILBANK); ILBANK will inform the World Bank by providing regular semi-annual monitoring reports.

ANNEX – 1 Sample Chance Find Form

Place:	Chance Find No:	Date:
Location Data: Coordination: Elevation: Brief Area Description:		
Chance Type:	<input type="checkbox"/> Archaeological Items <input type="checkbox"/> Metal Finds <input type="checkbox"/> Terracotta Finds <input type="checkbox"/> Pottery Shards <input type="checkbox"/> Glass Finds	<input type="checkbox"/> Sculpture etc. <input type="checkbox"/> Human / Animal Bone <input type="checkbox"/> Unidentified
Temporary Measures		
Photograph		
Discoverer's Name-Last Name:		
Signature:		

APPENDIX-I

Common OHS Risks Areas and General Mitigation Measures

Risk Area	General Mitigation Measure
<p><u>WORKING AT HEIGHTS</u></p> <p>Working from heights is the most common cause of fatal injuries to workers.</p>	<ul style="list-style-type: none"> ▪ All employees who have received a certificate from the workplace physician that they can work at height need suitable training in working on different pieces of equipment, and such work must be planned appropriately. Safety approaches and precautions should be adopted, such as: Where practical, avoid the need to work at height. ▪ Put collective measures and implement a "Working at Height Permit System where working at height can't be avoided to prevent falls. Such as the use of equipment to provide an extra level of safety to reduce the risk of a fall – according to "Occupational Health and Safety Regulation in Construction Works", a scaffold with a double guard-rail and kick plate edge protection is needed. Minimize the consequences of a fall by providing a safety net. ▪ Wear the necessary Personal Protective Equipment (PPE) such as a safety harness.
<p><u>MOVING OBJECTS</u></p> <p>A construction site is an ever-changing environment, with many objects moving around, often on uneven terrain. Delivery vehicles, heavy plant machinery and overhead lifting equipment pose a hazard to site workers and operators.</p>	<ul style="list-style-type: none"> ▪ Sites should always be planned to manage plant and pedestrian interface where physical barriers and suitable segregation is in place. ▪ To reduce risks, workers should: <ul style="list-style-type: none"> ▪ Never stand behind large operating plant machinery (sweeping area) and blind point, never stand under suspended loads. ▪ If they do not have lights or sound warnings, they should not be allowed to work in the sub-project area. Periodic checks of the construction machines should be up to date. ▪ Always ensure you have a banksman to guide plant vehicles when reversing or manoeuvring on a public road. ▪ Always wear PPE such as a hard hat and high visibility jacket to ensure he/she is seen.
<p><u>SLIPS, TRIPS, AND FALLS</u></p> <p>Slips, trips, and falls can happen in almost any environment, and, in construction, there are more common incidents of these kinds of injuries than in other industries. The HSE reports that around a quarter of injuries reported are due to Slips, Trips and Falls. As construction sites often have uneven terrain and the typography is forever changing, it is unsurprising that slips, trips, and falls are a common hazard.</p> <p>HSE reports that several thousand construction workers are injured every year following a slip or trip. Most of these could be avoided by effectively managing working areas and access routes, such as excavations and footpaths.</p>	<p>Managers and Site supervisor on construction sites must effectively manage the site so that workers can move around it safely. Risks should always be reported and sorted to reduce the chances of injury. To reduce harm due to Slips, Trips and Falls;</p> <ul style="list-style-type: none"> ▪ Keep work and storage areas tidy and designate specific areas for waste collection. ▪ Where surfaces are slippery with mud, they should be treated with gravel. ▪ Where surfaces are slippery with ice, they should be treated with grit. ▪ All slippery areas should be signposted and slip resistant footwear should be worn
<p><u>NOISE</u></p> <p>Working around loud, excessive, and repetitive noise can cause long term hearing problems, such as deafness. Noise can also be a dangerous</p>	<p>A comprehensive noise risk assessment should be carried out where the risk assessment has highlighted a noise hazard with the works to be undertaken.</p>

Risk Area	General Mitigation Measure
distraction and may distract the worker from the task at hand, which can cause accidents.	
<p><u>HAND ARM VIBRATION SYNDROME</u></p> <p>HAVS (Hand Arm Vibration Syndrome) is a debilitating and painful disease of the blood vessels, nerves, and joints. It is typically caused by the continued use of hand-held power tools, including vibratory power tools and ground working equipment.</p> <p>Some of the workers at risk of developing HAVS, resulting in the inability to do fine work, and cold temperatures can trigger painful attacks on the fingers. Once the damage is done, it is permanent.</p>	<p>HAVS is preventable if construction works are correctly planned to minimize exposure to vibration during work and workers are monitored and given appropriate protection when using vibrating tools and equipment.</p> <p>Workers exposed to vibration should be planned to work by changing at certain intervals.</p>
<p><u>MATERIAL HANDLING – MANUAL AND BY EQUIPMENT</u></p> <p>Materials and equipment are constantly being lifted and moved around construction sites, whether manually or by equipment. Either way, handling carries a degree of risk.</p>	<ul style="list-style-type: none"> ▪ For manual handling, training must be provided to ensure employees can lift and carry materials safely. ▪ For lifting equipment handling, there are lots of risks, especially when operating lifting equipment on uneven ground. If an employee is required to use lifting equipment, they must be trained to operate the equipment safely, and a regular test should be taken to check their ability to use the equipment. Always check your plant is fit for use and that it's certificated and inspected before use.
<p><u>EXCAVATIONS</u></p> <p>Incidents commonly occur within excavations on construction sites, such as an unsupported excavation collapsing with workers inside.</p>	<p>Common safety measures that need to be put in place according to "Occupational Health and Safety Regulation in Construction Works" to prevent excavations from collapse and to reduce the risk of operatives falling into excavations:</p> <ul style="list-style-type: none"> ▪ Never work in an unsupported excavation. ▪ Shoring or terracing application will also be used. ▪ Ensure an excavation is supported and fully secure. ▪ Regularly inspect the excavation both before and during the work shift. ▪ Always check that the edge protection of an excavation is 100% intact before you enter it. ▪ Always maintain a safe distance from the edge of all deep excavations.
<p><u>ELECTRICITY</u></p> <p>Most of the accidents arise from contact with overhead or underground power cables and electrical equipment/machinery.</p>	<p>In civil engineering, strikes to services are common. The strikes happen when excavation is undertaken without adequately checking the ground for existing services. Consequently, incidents can easily be avoided by using technology such as CAT and Genny scanning equipment to scan an area and foresee potential services and prevent service strikes.</p>
<p><u>AIRBORNE FIBRES AND MATERIALS</u></p> <p>Construction dust is often an invisible, fine, and toxic mixture of hazardous materials and fibres. This can damage the lungs and lead to chronic obstructive pulmonary disease, asthma, silicosis, and other such diseases.</p>	<p>All employers have to ensure suitably chosen protective equipment is used.</p>
<p><u>SITE SECURITY</u></p>	<p>Always make sure that boundary safety fencing is 100% secure and there are no openings for the public to access.</p>

Risk Area	General Mitigation Measure
Having inadequate security around a construction site may danger the public and lead to an unnecessary incident	
<p><u>FIRE PROTECTION RISK</u></p> <p>Despite the presence of firefighting equipment, safe storage of chemicals, personnel training, controlled ignition, regular cleaning, and inspection measures, the risk of fire can increase if proper protection is not ensured.</p>	<ul style="list-style-type: none"> ▪ According to related regulation fire-fighting equipment will be available on site (including but not limited to, rubber beaters when working in grass/bush areas, at least one fire extinguisher of the appropriate type when welding or other 'hot' activities are undertaken); ▪ Surplus chemicals/flammable materials needed in the sub-project area will not be stacked and these chemicals will be stored in safe warehouses. Uncontrolled storage of chemicals increases the danger of fire and sabotage. ▪ All employees will be trained about the fire risks and how to deal with any fires in case occurs. Fires won't be lit for any reason. ▪ Debris will be cleaned regularly. ▪ Work areas and buildings will be inspected regularly to detect and eliminate potential fire sources. ▪ Smoking will be allowed only in designated smoking areas. Cigarette butts will not be thrown to the ground.

APPENDIX-J
Minutes of Meeting

TURKIYE EARTHQUAKE, FLOODS AND WILDFIRES EMERGENCY RECONSTRUCTION (TEFWER) PROJECT

ERBAA EXISTING WASTEWATER TREATMENT PLANT CAPACITY EXPANSION PROJECT

MINUTES OF STAKEHOLDER CONSULTATION MEETING

Due Date : 2 June 2025

Meeting Date : 30 May 2025

*Meeting Location : Ahmet Yenihan Congress and Culture
Centre Meeting Hall*

STAKEHOLDER CONSULTATION MEETING

“Erbaa Existing Wastewater Treatment Plant Capacity Expansion Project” (hereinafter referred to as the ‘sub-project’) and TEFWER Project Component 1 – Green and Resilient Rehabilitation, Reconstruction and Actions to Strengthen Urban Resilience and related sub-components will be financed.

Within the scope of the sub-project, an Environmental and Social Management Plan (ESMP) and a Stakeholder Engagement Plan (SEP) have been prepared. In addition to these studies, following the completion of the ESMP, a Stakeholder Consultation Meeting was held on 30 May 2025 at Ahmet Yenihan Congress and Culture Centre Meeting Hall at 15:00.

Summary

Information about the sub-project was presented by the consultant company during the Stakeholder Consultation Meeting. The details are as follows:

The Municipality announced the meeting to the neighbourhoods within the impact area of the sub-project, citizens, relevant NGOs and local media. Sixteen (16) people attended the meeting.

The meeting was opened by ENVESU's Environmental Engineer Project Manager. A presentation was made about the Environmental and Social Management Plan (ESMP) of the sub-project. Within the scope of the ESMP, the subject of the sub-project, its stakeholders, and the environmental and social risks of the sub-project were evaluated. During the meeting, the parties involved in the sub-project and its legal framework were also shared. In addition, the purpose of the Stakeholder Consultation Meeting and the contact information that stakeholders can reach in case of a possible complaint were also provided to the participants.

Then the question and answer session started. Questions were answered by the sub-project manager and Erbaa Municipality officials.

Question & Answer Session

This subsection presents the participants' views, requests and questions, and the relevant responses received during the Stakeholder Consultation Meeting. Details are as follows:

Question 1: What benefits will investments in the sub-project provide to citizens?

Answer 1: The capacity of the existing wastewater treatment plant will be insufficient to meet the expected population growth in the future. There is also a need for other existing and new facilities within the OIZ. The growth of the OIZ will also provide new employment opportunities for citizens. Considering that Erbaa also experiences flood issues, this indicates the need for a wastewater treatment plant capacity increase project. Water is also

used from the Kelkit Stream, which is the discharge point, meaning that the sub-project will meet the needs of both the public and the facilities in the OIZ.

Question 2: What will be the impacts of the sub-project during the operational phase?

Answer 2: Odour and sludge formation are expected. These issues have been evaluated during the preparation of the reports. The plan is to incinerate the sludge generated by the capacity increase of the existing wastewater treatment plant and dispose of it to the licensed cement plants. This will also prevent odour issues. The upgrading of the facility will prevent these issues.

Conclusion

During the Stakeholder Consultation Meeting, which lasted approximately one hour, ENVESU and Erbaa Municipality officials provided information about the sub-project and held a question-and-answer session. The public was provided with the necessary information about the Erbaa Wastewater Treatment Plant Capacity Expansion Project, and questions were answered.

Participant List

2U1K
Mühendislik ve
Danışmanlık A.Ş.

TOPLANTI KATILIMCI LİSTESİ

Tarih : 30/05/2025

Yer : Ahmet Tanrıhan Kongre ve Kültür Merkezi Kongre Salonu / Tokat Erbaa

Katılımcılar:

Adı ve Soyadı	Şirket/Birim	Unvan	Telefon/Faks No	E-Posta	İmza
		Halk			
		Halk			
		Halk			
		Genel Müdür			
		Y. İnşaat Müh.			
		Genel Müdür			

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Sayfa No : 1/1
Page No

Revizyon Tarihi : 05.03.2020
Revision Date

Revizyon Bilgisi / Revision Log
Revizyon Numarası : 05
Revision Number

2U1K Mühendislik ve Danışmanlık A.Ş.
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Mustafa Kemal Mahallesi Dumlupınar Bulvarı
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06800 Çankaya / ANKARA
T: (312) 287-2507
F: (312) 287-2508
A: (312) 287-2509

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²¹ In accordance with the Personal Data Protection Law, the meeting participant list is not published and is stored in the Project Implementation Unit's archives solely for project management purposes. It will be kept for the duration of the project and will not be shared with third parties.



TOPLANTI KATILIMCI LİSTESİ

Tarih	: 30/05/2025
Yer	: Ahmet Yenerhan Kongre ve Kültür Merkezi Kongre Salonu / Tokat Erbaa

Katılımcılar:

Adı ve Soyadı	Şirket/Birim	Unvan	Telefon/Faks No	E-Posta	İmza
[İmza]		Halk	[Telefon]		[İmza]
[İmza]		Halk	[Telefon]		[İmza]
[İmza]		Armut	[Telefon]		[İmza]
[İmza]		Perişan Mimar	[Telefon]		[İmza]
[İmza]		Halk	[Telefon]		[İmza]
[İmza]		Halk	[Telefon]		[İmza]
[İmza]		Memur	[Telefon]		[İmza]
[İmza]		Memur	[Telefon]		[İmza]

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Sayfa No
Page No

: 1/1

Revizyon Tarihi
Revision Date

: 05.03.2020

Revizyon Bilgisi / Revision Log

Revizyon Numarası
Revision Number

: 05

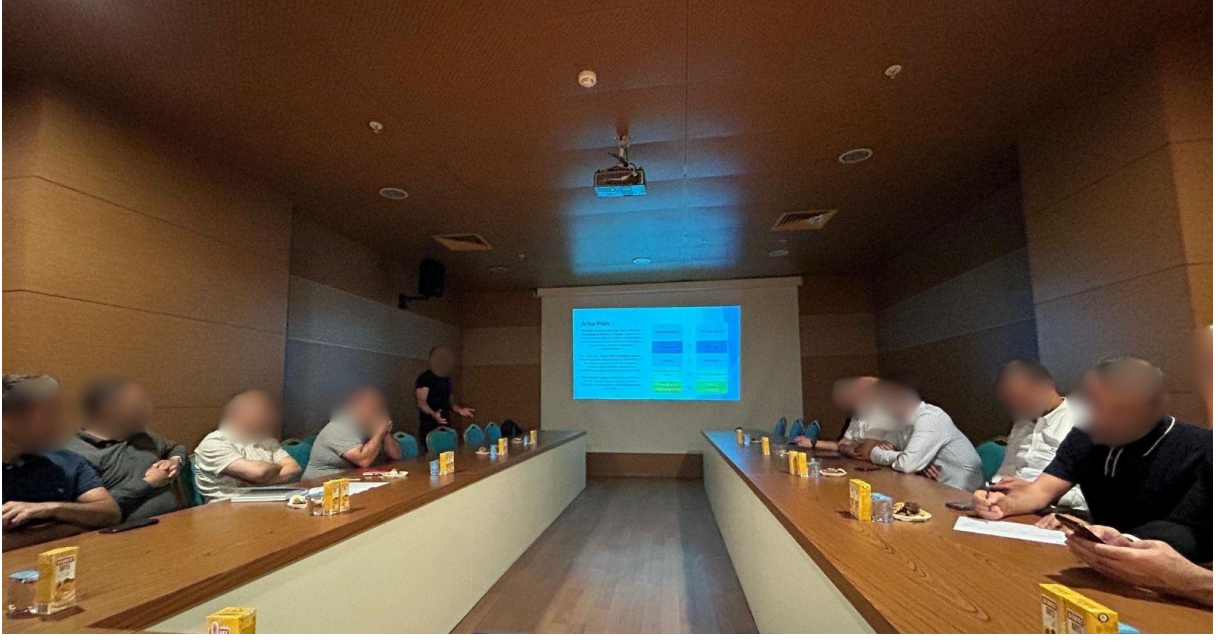
2U1K Mühendislik ve Danışmanlık A.Ş.
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ANNEXES

Annex-1: Photos from the Stakeholder Consultation Meeting









Annex-2: Newspaper Announcements

National Newspaper

BİR GÜN HALKIN GAZETESİ

18 MAYIS 2025 PAZAR YIL 22 SAYI 7701 www.birgun.net / 20 TL

MÜZELER GÜNÜ'NDE
Bazı müzelerle giriş ücretsiz
Bugün 18 Mayıs Müzeler Günü. İstanbul'da Yenikapı Sarayı, Miniaturk gibi bazı müzeler saat 14.00'a kadar ücretsiz ziyaret edilebilecek. 19'da

JANDARMAYLA GELDİLER
Hatay'da zeytin ağacı kıymı
Hatay'ın Baklıdere mahallesinde, TOKİ'nin kamulaştırdığı araziye şirket görevlileri dün jandarmayla birlikte zeytin ağaçlarını sökmeğe başladı. İlayda KAYA/3'te

42 MİLYON KİŞİ BİREYSEL KREDİ ALDI, BORÇLAR ÖDENEMİYOR

Denge bozuldu çark dönmüyor

Ekonomide geline son nokta: Ülkede her iki kişiden biri martta bireysel kredi kullandı. Ortalama borç ilk kez 100 bin lirayı aştı

YÜKSEK FAİZE RAĞMEN
Borcu borca ödemeye çözümünde sona gelindi. BDDK'nın Mart ayı verilerine göre 42 milyon aşkın kişinin bir veya birden fazla bireysel kredi borcu bulunuyor. Krediye Mevduat Hesabı kullanımı da bir yılda 220 milyar liradan 518 milyar liraya kadar ulaştı.

CEVİREMEZ HALDELER
Prof. Köçükkale yaşanan durumu yorumladı: Hane halkının gelir gider dengesi bozuldu. Yüksek faize rağmen KMH ve kredi kartı mevcut borçları kapatmak için kullanılıyor. Bireyler artık borcunu borca kapatsamıyor. Hava GÜMÜŞKAYA/4'te

İYİMSERLİK GERİLEDİ
Ekonomide umut kalmadı
İstanbul Ekonomi Araştırma'nın Mayıs ayı raporu ekonomiyi dış umudun azaldığını ortaya koydu. Katılımların yüzde 77'i gidişatın "çok kötü" "kötü" olduğu yorumunu yaptı. Geleceğe karamsar yaklaşımların oranı da mart ayından bu yana 4 puan artarken katılımların yüzde 53'ü ekonominin daha kötü olacağı görüşünde.

Pazar
gazetesi
BirGün Pazar'da bu hafta AKP'nin tarikat ve cemaat eliyle gerileştirip neoliberal politikalarla piyasacılaştırdığı eğitim sistemi ele alınıyor

Piyasacı ve tarikatçı eğitim
12 Eylül'den beri her yeni neslin tarikatlar ile patronların eline bırakılması ve toplumsal değerlerin yitirilmesi adına en kritik adımlar eğitimde atıldı. Buna rağmen üniversiteler ve işlerde gençler Saray'ın tam karşısında duruyor. Hatiraltılar 10-11'de

Jose Pepe Mujica'ya veda
Pepe, dünyaya bilgelikle ve genelde kışık duran o çekik gözlerle bakardı, ancak gerçekten yaşadığında güleni açardı.

Halkın parası sele kapıldı
İktidar, halkın parasını savurmaya devam ediyor. Kayseri'de 1,5 yıl önce açılan altgeçit ilk güçlü yağmurla su altında kaldı. Firmalar ise tanıdık

▲Milyonlarca lira harcandı
Kayseri'de sağanak yağışta su altında kalan altgeçidin kolun ve Uzka İnşaat ortaklığıyla yapıldığı öğrenildi. Alt geçit için 376 milyon TL harcandı.

▲İlk yağmurla köktü
CHP Kayseri Milletvekili Asım Genç tepki gösterdi: "Yalnızca vatandaşlar değil, kamu kaynakları da su altında kaldı." Mustafa BİLDİRCİN/6'da

Terra Santa baskını!
Kültür üssü haline gelen Terra Santa Manastırı'nın apar topar boşaltılması halkın tepkisine yol açtı
Beyoğlu'nda halkın nefes alabileceği çok az merkeze biri olan Terra Santa, Vakıflar Müdürlüğü tarafından mahkemeye kararı beklenmeden boşaltıldı. Beyoğlu Belediye Başkanı Güney, "Yeni yerler bulunuz. Beyoğlu binalardan büyüktür" dedi. 2'de

2 bin yıl hapis istemi
Bolu Kartalkaya Kartal Oteli'nde 78 kişinin ölümüyle sonuçlanan yangında iddianame tamamlandı. 13 şüpheliye 1998'er yıla, 19 şüpheliye de 22 yıl 6'şar aya kadar hapis cezası istendi. İçişleri Bakanlığı ve Çalışma Bakanlığı soruşturma talebine yanıt vermedi. 3'te

Mimar, mühendis de işsiz
TMMOB üyeleri mesleklerinin işsiz hale getirilmesine karşı Ankara'da yürüdü. Yönetim Kurulu Üyesi Küçükaras "Mühendislik, mimarlık ve şehir planlığı, diplomatik işsizliğin sembolü haline geliyor" dedi. 5'te

abone.birgun.net'e
gitmek için kare kodu okutabilirsiniz.

YİNE MÜSİLAJ
Yeni değil 20 yıllık
Marmara Denizi'ndeki müsilaaj tehlikesine karşı Tarih Denizi Araştırmaları Vakfı (TODAV) yöneticileri İstanbul Boğazı'nda inceleme yaptı. TODAV Başkanı Prof. Öztürk, "20 yıldır devam eden müsilaaj sorunu sadece belediyelerin değil tüm yöneticilerin sorumluluğundadır" dedi. Ebru CELİK/3'te

Çanakkale'nin madene vereceği suyu yok
İlayda SORKU/2'de

YİNE ALDATTILINIZ
O heybe boş çıktı
Cumhurbaşkanı adayı İsmailoğlu, Erdoğan'ın "Türban büyüğü heybe" ifadesine gönderme bulundu: "Ne heybeden bir turp çıktı ne de dhananın kuyruğu koptu. Gücünüzü gidiyor biliyorum ama ne yazık ki yine aldattınız." 6'da

16 GÜNDEM

18 MAYIS 2025/ PAZAR
SAYFA TASARIMI: ÖZGÜR ÇELİKÖRÜK

BİR GÜN

Özgür ve demokratik günlere uyanacağız



BEKİR ASLAN
(Basel)

Tutuklu öğrenci

“

Bundan yıllar yıllar önce en büyük iki korkumdan birisi hapse düşmekti. Simdiye 30 günü aşkındır tutuklu olmama rağmen halen moralim yüksek, umutluyum ve huzurluyum. Bir gün özgür, demokratik bir Türkiye'ye uyanma isteği içindeyim. Yaşadığım şu günleri yeri gelecek çocuklarımıza ve torunlarımıza gururla anlatacağım

19 Mart'tan sonraki süreçten sonra 18 günde 5 farklı suçlamayla 3 hane gözaltına alınıp devam eden suz gözetim sonunda tutuklanarak kendimi önce Metris Cezaevi'nde daha sonrasında Silivri 2 No'lu



BİR GÜN

Cezaevinde buldum. Bu süreçte tutuklanan 300'den fazla dostumun içinde "terör" sebebiyle tutuklanan tek kişi oldum. Tutuklanma sebebi; Grup Yorum'un parkısını X üzerinden retweetlemek ve CHP'nin Sisi mitinde gormüş olduğum "DEV-Genz" pankartının fotoğrafını çekerek bunu X'te paylaşmamı.

"DEV-Genz", Büyük Z Kuşağı anlamına geliyor ve böyle bir oluşum hiçbir zaman olmadı fakat bana "Bu örgüte ne zaman katıldığını", "örgütü içi konumum" ve "liberari" sordular. Bu mizahi pankartı DHPK-C'ye bağlayarak "DHPK-C

düşüğünü düşünüp durursan kısa sürede burası seni cürütelebilir. Spot, kitap okuma haricinde bu sebeplerden dolayı dışarıdaki arkadaşlarımdan dışı kitapları da istemedim. Herhangi yanlış bir şey yapmadığım ve bana yöneltilen suçlamaların galibin olduğunun bilincinde olduğum için Silivri'de günlerimi haki bir huzurla geçiriyordum. Ne ben ne de tutuklanan diğer arkadaşlarım bu ülkenin کوتülüğü ni istiyor. Aksine bizler hukukun adli idare, demokratik bir Türkiye olduğunu, imamsız veya diğer siyasetçilerin yargılanmasına da karşı değiliz fakat bilunuz ki bu yargılamalar, tutuklamalar siyasi bir amaçla yapılmıştır. X'de takipçi sayım birazcık fazla olduğu için boylesine muhim bir konuda haklarımdan birini savunmak istemedim. Boylesine bir kitleye hitap etmem gücüm, sansim varken tepkisi kalmak, susmak bana yakışmaz diye düşündüm. Ne diğer tutuklu arkadaşlarım ne de benim demokratik, hukukun idare, bir Türkiye'yi savunmaktan çıkarı var. Hicbirisi ne zaman tahliye olacağını bilmeyor çünkü tutuklandığım siyasetçilerin hukuki olmadığını iddia ediyorlar.

Cezaevinde 19 Mart'tan sonra tutuklanan diğer arkadaşlarla aynı koğuştaki bulunmamam hem avantajlar hem de dezavantajları var. Arkadaşlarım, 24-25 kişi ortak suçlamayla tutuklandığı için kafa yapıları ve sohbet konuları günle-ri'nin daha hızlı geçirmeye müsait.

Aynı zamanda "terör" den yargılandığı için 2 No'lu da benim kaldığım gibi koğuştaki kalmaktan ziyade 5 No'lu'da birlikte kalabiliyorlar. Birbirlerine daha güzel biçimde moral oluyordular diye düşünüyorum çünkü yan yanalar. Umarım yanılmıyordum ve günlerini düşündüğüm gibi güle yzyaya geçirilebiliyorlardı.

Hafızda 45 dakikalık spor yapma hakkına sahibim. Ya açık spor sahasında yanı halisahada ya da kapalı spor salonunda futbol, voleybol, basketbol oynayabiliyoruz.

Yanlarında kaldığım insanlar, mahkûmlar koğuştaki ilk geldiğim andan itibaren bana yardımcı olmaya çalıştı. Kıyafetlerimi dışarıdaki arkadaşlarımın cezaevine verdikten 10-12 gün sonra kıyafetlerim bana teslim edildi çünkü burası sürekli tekrar ettiğim gibi uyuşturucu hapishanesi olduğu için teslim edilen kıyafetlerin içerisinde uyuşturucu madde var mı yok mu diye narkotik köpeklerine kontrol ettiriliyor. E bin ovarda kışın mahkûm olduğu bu cezaevinde yalnızca 1 narkotik köpeği bulunuyormuş sanırım. Bu yüzden tutuklandığımda üstümden bulunan kıyafetlerim dışında başka kıyafetlerim yoktu.

Kantinden bir şey almak da 5 gün sürdü. Tüm bu süreçte koğuştaki 3 kişi de bana kıyafet verdi.

Ekstra bir ihtiyaçım varsa bunları gidermeye çalıştım. İste ak kişiyi hapis yatmak, kitap okuyup sessiz sessiz vakit geçirmek için güzel olsa da bu tecrübten ziyade çoğu insanın 24-25 kişilik kafa yapısını uyuşturucu kişilerle kalmayı seçeceğini düşünüyorum.

Gözaltına alındığım vakit cebimde olan ve karakolda cepe atmak zorunda kaldığım 2 şeye hâlâ daha üzüldüyüm. Birisi Kadıköy'de 8 Nisan'da bir dayanışma konsi-deri bir teyzemin bana hediye olarak verdiği çakmak, diğeri ise gözaltından hemen 5 dakika önce bir arkadaşımın montuma uymulu olduğu için hediye ettiği kırmızı siğara.

Bundan yıllar yıllar önce en büyük 2 korkumdan birisi hapse düşmekti. Simdiye 30 günü aşkındır tutuklu olmama rağmen halen moralim yüksek, umutluyum ve huzurluyum. Bir gün özgür, demokratik bir Türkiye'ye uyanma isteği içindeyim. Yaşadığım şu günleri yeri gelecek çocuklarımıza ve torunlarımıza gururla anlatacağım.

Ayrıca değli, adalet istiyoruz. İmamoglu'nun yeri Sarachane, öğrencilerin yeri üniversiteler, Türkiye'nin yeri demokrasi olmalıdır. Sevgi ve umutla.

Marmara 2 Numaralı 7.Tipi Kapalı Ceza İnfaz Kurumu F3-A1 Koğuştaki Tamamı birgün.net'te.

Şengör'ün hapsi istendi

Bilim insanı Prof. Dr. Celal Şengör hakkında, "Türk Milletini, Türkiye Cumhuriyeti Devletini, devletin kurum ve organlarını aşağılama" suçundan 2 yıla kadar hapis cezası istemisiyle iddianame hazırlandı. So-

ruşturmanın Şengör'ün gördüğü videoda, "Türkinler zekasına yönelik sözleri" nedeniyle baslatıldığı belirtildi. Şengör savunmasında, bu sözleri bilimsel belgelere dayanarak söylediğini ifade etti. AA



ERBAA ÜNİVERSİTESİ

'Cezaevinde hayatını sürdürüyor'

İnsan Hakları Derneği (İHD) İstanbul Şubesi Hapishaneler Komisyonu, "F Oturmas" eylemlerinin 686'ncı haftasında Beyoğlu'nda bulunan dernek binası önünde açılıma yaptı. Edirne F Tipi Cezaevi'nde tutulan ağır hasta tutuklu Taylan Balatac'nın sağlık durumu dikkat çekilen eylemde, serbest bırakılması istendi. Balatac'nın 26 yıldır cezaevinde olduğunu vurgulanan eylemde şöyle denildi: "Taylan'ın dünyama dair defalarca basınına yapıldı ve dilekçeler verildi. Hapishane koşullarında hayatını yalnız idame ettiremeyecek durumda. Tedavisinin ve bakımının dışarıda yapılması için serbest bırakılması gerekiyor" denildi. **Haber Merkezi**

7 üniversiteye kayyum rektör atandı

AKP'li Cumhurbaşkanı Erdoğan'ın imzasıyla 7 üniversiteye kayyum rektör atanması yapıldı. Resmî Gazete'de dün yayımlanan kararla birlikte yapılan atamalar duyuruldu. Karara göre, Atama Üniversitesi Rektörlüğüne Prof. Dr. Turan Sağer, Bartın Üniversitesi Rektörlüğüne Prof. Dr. Ahmet Akkaya, Bayburt Üniversitesi Rektörlüğüne Prof. Dr. Muhtu Türkmen, Çankırı Karatekin Üniversitesi Rektörlüğüne Prof. Dr. Mevlüt Karatay, İğdır Üniversitesi Rektörlüğüne Prof. Dr. Ekrem Gürel, İstanbul Arel Üniversitesi Rektörlüğüne Prof. Dr. Ersin Göse ve İstanbul Aydın Üniversitesi Rektörlüğüne ise Prof. Dr. İbrahim Hakkı Aydın atandı. Öte yandan yine yayımlanan karara göre Yükseköğretim Kurulu Üyeliliğine, Prof. Dr. R. Güretilmiş Kazancıoğlu, Türk-Japon Bilim ve Teknoloji Üniversitesi Konseyi Üyeliliğine İbrahim Senel atandı. **Haber Merkezi**

SABANCI ÜNİVERSİTESİ SAP S4 HANA-KALİTE GÜVENCE (QA) DANIŞMANLIK HİZMETİ ALIMI AÇIK İHALE İLANI

SAP S4 HANA-KALİTE GÜVENCE(QA) DANIŞMANLIK HİZMETİ ALIMI Açık İhalesine ilişkin ayrıntılı bilgiler aşağıda yer almaktadır:
İhale Adı ve Numarası : Sap S4 Hana-Kalite Güvence(QA) Danışmanlık Hizmeti Alımı (2025-1227551)
Usulü, niteliği ve miktarı : Açık ihale, hizmet alım ihalesi, niteliği ve miktarı teknik şartnamede belirtilmiştir.
İstekillerden talep edilen belgeler : <https://www.sabanciuniv.edu.tr/ihale-duyuruları> adresinde belirtilmektedir.
İhalelerin yapılacağı yer : Sabancı Üniversitesi, Orta Mahalle Üniversite Caddesi No: 27 Tuzla- İstanbul
İhale dosyası teslim yeri : Sabancı Üniversitesi, Orta Mahalle Üniversite Caddesi No: 27 Tuzla- İstanbul
İhale dosyası son teslim tarihi ve saati : 29.05.2025 Saat: 10:00
İhale Tarihi ve saati : 29.05.2025 Saat: 11:00
İhale doküman bedeli : #3.000.00# (ÜçBinTürkLirası) TL'dir. Sabancı Üniversitesi Akbank Şubesi nezdinde bulunan TR86 0004 6007 1388 8000 1208 58 nolu hesabına İhale No: 2025-1227551 İhale Dokümanı Bedeli açıklaması ile yatırılabilir. Bankadan alınan ödeme makbuzu ihale zarfının içinde bulunmalıdır.

Resmî İhtilar www.ih.gov.tr/de BASIN: 2228021

TOPLANTI İLANI ERBAA İLÇESİ ATIKSU ARITMA TESİSİ KAPASİTE ARTIŞI PROJESİ

Paydaş Katılımı ve Halkın Bilgilendirilmesi Toplantısı Finansman Dünya Bankası tarafından sağlanacak ve İLBANK AŞ tarafından yürütülen "Türkiye Deprem, Sel ve Yangın Acil İmar Projesi" (TEPWER) kapsamında "ERBAA İlçesi Atıksu Arıtma Tesisi Kapasite Artışı Projesi" gerçekleştirilmektedir. Aşağıda belirtilen tarih ve saatte proje ile ilgili olarak paydaşları ve halkı bilgilendirmek, görüş ve önerilerini almak için "Paydaş Katılımı ve Halkın Bilgilendirilmesi Toplantısı" yapılacaktır.

Halkımıza saygı ile duyurulur.

İlgili belgelere aşağıdaki adresten ulaşabilirsiniz:
<https://erbaa.bel.tr/Site/Duyuru/atiksu-aritma-tesis-kapasite-artisi-projesi>

Toplantı Yeri : Ahmet Yenihan Kongre ve Kültür Merkezi Toplantı Salonu
Toplantı Yerinin Adresi : Cumhuriyet Mahallesi İstiklal Caddesi No:83

Toplantı Tarihi : 30.05.2025 Cuma
Toplantı Saati : 15:00 – 17:00

Proje Sahibi : ERBAA BELEDİYESİ
Tel : +90 542 220 17 33 Mustafa Bolat (Çevre Mühendisi)
Mail : 1.mustafabolat@gmail.com

Müşavir Firma : ENVESU Çevre Enerji İnş. ve Müh. A.Ş.
Tel : +90 312 284 94 14 - Mail: info@envesu.com

Resmî İhtilar www.ih.gov.tr/de BASIN: 2228093

2025 YILI İLAÇ ALIMI İŞİ KADIKÖY BELEDİYESİ SAĞLIK İŞLERİ MÜDÜRLÜĞÜ

2025 YILI İLAÇ ALIMI İŞİ mal alımı 4734 sayılı Kamu İhale Kanununun 19 uncu maddesine göre açık ihale usulü ile ihale edilecek olup, teklifler sadece elektronik ortamda EKAP üzerinden alınacaktır. İhaleye ilişkin ayrıntılı bilgiler aşağıda yer almaktadır.

İKN : 2025/734591

1-İdarenin

a) Adı : KADIKÖY BELEDİYESİ SAĞLIK İŞLERİ MÜDÜRLÜĞÜ

b) Adresi : HASANPAŞA KURBAGALIDERE CAD. 24 34722 HASANPAŞA KADIKÖY/İSTANBUL

c) Telefon ve faks numarası : 2165425000/1125 - 2164146712

d) İhale dokümanının görülebileceği ve e-imza kullanılarak indirilebileceği internet sayfası : <https://ekap.kik.gov.tr/EKAP/>

e) İhale konusu malın alımı

a) Adı : 2025 YILI İLAÇ ALIMI İŞİ

b) Niteliği, türü ve miktarı : 2025 YILI İLAÇ ALIMI İŞİ İHALESİ -64 İŞ KALEMİ

Ayrıntılı bilgiye EKAP'ta yer alan ihale dokümanı içinde bulunan idari şartnameden ulaşılabılır.

c) Yapılacağı/teslim edileceği yer : DR RANA BEŞE SAĞLIK POLİKLİNİĞİ

d) İhtilazın/teslim tarihi : Sözleşmenin imzalanmasını takip eden gündür.

e) İşe başlama tarihi : Sözleşmenin imzalanmasını takip eden gündür.

3-İhalelerin

a) İhale (son teklif verme) tarih ve saati : 27.05.2025 - 15:00

b) İhale komisyonunun toplantı yeri (e-tekliiflerin açılacağı adres) : FAHRETTİN KERİM GÖK (CADESİ) KADIKÖY BAŞKANLIĞI BİNASI 4 KAT A BLOK İHALE KOMİSYONU BAŞKANLIĞI HASANPAŞA KADIKÖY/İSTANBUL

4. İhaleye katılabilme şartları ve istenilen belgeler ile yeterlik değerlendirmesinde uygulanacak kriterler:

4.1. İstekillerin ihaleye katılabilmesi için aşağıda sayılan belgeler ve yeterlik kriterleri ile fiyat dışı unsurlara ilişkin bilgileri e-tekliifleri kapsamında beyan etmeleri gerekmektedir.

4.1.1.3. İhale konusu malın satış faaliyetinin yerine getirilebilmesi için ilgili mevzuat gereğince alınması zorunlu izin, ruhsat veya faaliyet belgesi veya belgelerine ilişkin bilgileri: Ecza Deposu İzin/Ruhsat belgesi

4.1.2. Teklif vermeye yetkili olduğunu gösteren bilgiler;

4.1.2.1. Tüzel kişilerde; istekillerin yönetimindeki görevliler ile ilgisine göre, ortaklar ve ortaklık oranlarına (halka arz edilen hisseler hariç)öyellerine/kurucularına ilişkin bilgiler istence EKAP'tan alınır.

4.1.3. Şekli ve içeriği İdari Şartnamede belirlenen teklif mektubudur.

4.1.4. Şekli ve içeriği İdari Şartnamede belirlenen geçici teminat bilgileri.

4.1.5 İhale konusu alımın tamamı veya bir kısmı alt yüklenicilere yaptırılamaz.

4.2. Ekonomik ve mali yeterliğe ilişkin belgeler ve bu belgelerin taşıması gereken kriterler:

İdare tarafından ekonomik ve mali yeterliğe ilişkin kriter belirtilmemiştir.

4.3. Mesleki ve teknik yeterliğe ilişkin belgeler ve bu belgelerin taşıması gereken kriterler:

İdare tarafından mesleki ve teknik yeterliğe ilişkin kriter belirtilmemiştir.

5. Ekonomik açıdan en avantajlı teklif sadece fiyat esasına göre belirlenecektir.

6. İhaleye sadece yerli istekiller katılabilecek olup yerli mali teklif eden yerli istekilleri ihalenin tamamında % 15 (yüzde on beş) oranında fiyat avantajı uygulanacaktır.

7. İhale dokümanı EKAP üzerinden bedelsiz olarak görülebilir. Ancak, ihaleye teklif verecek olanların, e-imza kullanarak EKAP üzerinden ihale dokümanını indirmeleri zorunludur.

8. Teklifler, EKAP üzerinden elektronik ortamda hazırlandıktan sonra, e-imza ile imzalanarak, teklifte ilişkin e-anahatlar ile birlikte ihale tarihi ve saatine kadar EKAP üzerinden gönderilecektir.

9. İstekiller tekliflerini, her bir iş kaleminin miktarı ile bu iş kalemleri için teklif edilen birim fiyatların çarpımı sonucu bulunan toplam bedel üzerinden teklif birim fiyat şeklinde verebilecektir. İhale sonucunda, üzerine ihale yapılan istekli ile birim fiyat sözleşme imzalanacaktır.

10. Bu ihalede, kısmi teklif verilebilir.

11. İstekiller teklif ettikleri bedelin %3'ünden az olmamak üzere kendi belirleyecekleri tutarda geçici teminat vereceklerdir.

12. Bu ihalede elektronik e-kıltime yapılmayacaktır.

13. Verilen tekliflerin geçerlilik süresi, ihale tarihinden itibaren 90 (Doksan) takvim gündür.

14. Konsorsiyum olarak ihaleye teklif verilemez.

15. Diğer hususlar:

Teklif fiyatı ihale komisyonu tarafından asgırı düşüz olarak tespit edilen istekillerden Kanunun 38 inci maddesine göre açıklama istenecektir.

Resmî İhtilar www.ih.gov.tr/de BASIN: 2228096

Local Newspaper

Bir Tarafda Zam, Diğer Tarafda Yarı Fiyat! Erbaa'da Ekmek Savaşı Başladı



Erbaa'da ekmek fiyatları bir yandan yükselirken, diğer yandan şaşkırtan bir gelişme yaşandı. Erbaa'da faaliyet gösteren bir işletme, standart ekmeği yalnızca 4 TL'den satışa sundu. Bu fiyat, Erbaa'daki ortalama ekmek satış fiyatının yarsına denk geliyor. ERBAA'DA EKMEK FİYATLARI... 3'TE

Erbaa Cumartesi Pazarı'nda Fiyatlar Merccek Altında: Vatandaş Ne Diyor?

Erbaa'da her hafta kurulan Cumartesi Semt Pazarı, yaz sezonunun başlamasıyla birlikte yeniden canlandı. Taze meyve-sebze ve doğal köy ürünlerinin sergilendiği pazarda, fiyatların makul seviyede olması vatandaşların memnuniyetini artırıyor. YAZ TEZGAHLARINDA BOL ÇEŞİT, RENKLİ GÖRÜNTÜ 3'TE



TARAFSIZ HABER GAZETESİ

KELKIT

www.kelkitgazetesi.com PAZARTESİ HARİÇ HER GÜN ÇIKAR

YIL 19 SAYI 3063 FİYATI 5 TL 18.05.2025 PAZAR

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GAYRİMENKUL
EMLAK
ANAHTAR TESLİM İNŞAAT

Tokat'ta 12 Milyarlık Sulama Hamlesi: 80 Bin Dekar Arazi Suya Kavuşuyor



Tokat'ın Zile ilçesi, tarım alanlarını canlandırarak dev bir projeye suya kavuşuyor. Yozgat'taki Süreyya Bey Barajı'ndan Zile'ye uzanacak 24 kilometrelik kapalı sulama sistemi için boru döşeme işlemleri başladı. AK Parti Tokat Milletvekili Mustafa Arslan, proje sayesinde 80 bin dekar arazinin sulanacağını ve Tokat'ın tarımda bölgesel lider olacağını söyledi.

SANİYEDE 25 METREKÜP SU TAŞINACAK
Devlet Su İşleri (DSİ) tarafından yürütülen çalışmada, çapı 3 metre 80 santim olan CTP borular döşeniyor. Bu borular, barajdan bölgeye saniyede 25 metreküp su taşıyabilecek kapasiteye sahip. İlk etapta 16 metreküplük su transferi yapılacağı, projenin tamamlanmasıyla bu kapasitenin arttırılacağı belirtildi... 2'DE

Tokat'ta Feci Kaza: İki Otomobil Çarpıştı, 1 Kişi Hayatını Kaybetti



Zile'de gece saatlerinde meydana gelen trafik kazasında iki otomobilin çarpışması sonucu bir kişi yaşamını yitirdi, iki kişi ise yaralandı. Olay, Zile ile Turhal arasında bulunan kara... 2'DE

Tokat'tan 188 Kişilik Hac Kafillesi Dualarla Uğurlandı



Tokat'ta hac ibadetini yerine getirmek üzere yola çıkan ikinci hac kafillesi, 16 Mayıs Cuma sabahı Tokat Havalimanı'nda düzenlenen törenle kutsal topraklara uğurlandı. Hac yolculuğuna çıkan 188 kişi, dualarla ve göz yaşlarıyla... 2'DE

Erbaa Marif Korosu'ndan 19 Mayıs'a Özel Türkü Akşamı



Erbaa'da 19 Mayıs Atatürk'ü Anma, Gençlik ve Spor Bayramı, özel bir konser programıyla taçlanacak. Erbaa Kaymakamlığı bünyesinde faaliyet gösteren Marif Korosu, "Ustaların İzinden 1: Neşet Ertaş Türküleri" temalı konseriyle Erbaalılar karşısına çıkacak. Şef Aynur Bakır yönetimindeki koro, 19 Mayıs Pazar akşamı saat 20.00'de Ahmet Yenihan Kongre ve Kültür Merkezi'nde sahne alacak. Türkü dolu bu özel gece, halka açık ve ücretsiz olarak gerçekleştirilecek. Konser... 2'DE

Erbaa'da Keşfedilecek Doğal ve Tarihi Güzellikler



Tarihi köprülerden göl manzaralarına, kültürel doğanın buluştuğu Erbaa rotası...
Tokat'ın bereketli ilçelerinden Erbaa, hem doğaseverleri hem de kültürel mirasa ilgi duyanları cezbeden destinasyonlarıyla hafta sonu kaçamakları için ideal bir rota sunuyor. İşte Erbaa'da ziyaret edilebilecek öne çıkan yerler ve doğayla iç içe vakit geçirmenizi sağlayacak öneriler...

TARİHİN İZİNDE: HOROZTEPE HÖYÜĞÜ
Erbaa şehir merkezine oldukça yakın bir konumda yer alan Horoztepe, geçmiş M.Ö. 4000'lere kadar uzanan bir höyük olarak dikkat çekiyor. Hattı Uygarlığı'na ait izler taşıyan bu alan, Alacahöyük'le benzerlik gösteriyor. Burada bulunan en çarpıcı arkeolojik eserlerden... 3'TE

TOPLANTI İLANI
ERBAA İLÇESİ ATIKSU ARITMA TESİSİ
KAPASİTE ARTIŞI PROJESİ

Paydaş Katılımı ve Halkın Bilgilendirilmesi Toplantısı: Finansman Dünya Bankası tarafından sağlanacak ve İLBANK AŞ tarafından yürütülen "Türkiye Deprem, Sel ve Yangın Acil İmar Projesi" (TEFWER) kapsamında "ERBAA İlçesi Atıksu Arıtma Tesisi Kapasite Artışı Projesi" gerçekleştirilecektir. Aşağıda belirtilen tarih ve saatte proje ile ilgili olarak paydaşları ve halkı bilgilendirmek, görüş ve önerilerini almak için "Paydaş Katılımı ve Halkın Bilgilendirilmesi Toplantısı" yapılacaktır.

Halkımıza saygı ile duyurulur.

İlgili belgelere aşağıdaki adresten ulaşabilirsiniz:
<https://erbba.bel.tr/Site/duyuru/atiksu-aritma-tesisi-kapasite-artisi-projesi>

Toplantı Yeri: Ahmet Yenihan Kongre ve Kültür Merkezi Toplantı Salonu
Toplantı Yerinin Adresi: Cumhuriyet Mahallesi İstiklal Caddesi No:63
Toplantı Tarihi: 30.05.2025 Cuma
Toplantı Saati: 15:00 – 17:00

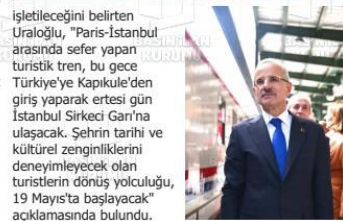
Proje Sahibi: ERBAA BELEDİYESİ
İletişim: +90 542 220 17 33 Mustafa Bolat (Çevre Mühendisi)
Mail: 1mustafabolat@gmail.com
Müşavir Firma: ENVESU Çevre Enerji İnş. ve Müh. A.Ş.
Tel: +90 312 284 94 14 - **Mail:** info@envesu.com

Resmi İlanlar www.ilan.gov.tr

İlan no: 2226902

Bakan Uraloğlu: Uluslararası 2 Turistik Tren, İstanbul'a Geliyor

Ulaştırma ve Altyapı Bakanı Abdulkadir Uraloğlu, Macaristan Ulusal Demiryolu Şirketi'nin (MAV) turistik treninin yarın, Simplon Orient Ekspresi'nin ise 4 Haziran'da İstanbul'a ulaşacağını açıkladı. Ulaştırma ve Altyapı Bakanı Abdulkadir Uraloğlu, yaptığı yazılı açıklamada, MAV'in işlettiği turistik tren ve Simplon Orient Ekspresi'nin rotasını bir kez daha İstanbul'a çevirdiğini kaydetti. Bakan Uraloğlu, Fransa'nın başkenti Paris'ten yola çıkan MAV treninin, İsviçre, Avusturya, Slovenya, Hırvatistan, Sırbistan ve Bulgaristan güzergahını takip ederek Türkiye'ye geleceğini kaydetti. Trenin Kapikule-İstanbul parkuru arasında TCDD Taşımacılık A.Ş. tarafından



seferini 60 yolcu ile gerçekleştireceğini ifade etti. Uraloğlu, 29 Mayıs'ta ise Paris-İstanbul treninin oluşturan trenin bu yıl ilk

geleceğini bildirdi. **'SIMPLON ORIENT EKSPRESİ TEKRAR GELİYOR'** Bakan Uraloğlu, Simplon Orient Ekspresi'nin 2024 yılında 5 Haziran ve 28 Ağustos'ta Türkiye'ye geldiğini anımsatarak, geçen yıl 148 yolcunun seyahat ettiğini aktardı. Bakan Uraloğlu, bu yılın ilk seferinde de 16 vagonlu trenin, Paris-İstanbul yönünde 67 yolcuyla, İstanbul-Paris yönünde ise 37 yolcuyla bulunduğunu belirterek, "Avrupa'nın birçok ülkesini kapsayan güzergahın en güzel destinasyonlarından biri de İstanbul. Fransa-Almanya-Avusturya-Macaristan-Romanya-Bulgaristan-Türkiye güzergahında işletilen Simplon Orient Ekspresi bu yıl 4 Haziran'da İstanbul'a ulaşacak. Dönüş yolculuğu ise 6 Haziran'da başlayacak" dedi. (DHA)

AK Parti'li Yalçın: Türkiye, İnsan Haklarında Dünyanın En Güvenli Adası Olabilir

AK Parti Genel Başkan Yardımcısı Hasan Basri Yalçın, "Dünyanın büyük sınamalarından geçtiği bir dönemde hepimiz biliyoruz ki Türkiye aslında insan hakları bakımından dünyanın en güvenli adası haline gelebilir. Bunu kurmak, bunu inşa etmek sizin, bizim elimizde" dedi. AK Parti Genel Başkan Yardımcısı Hasan Basri Yalçın, AK Parti İnsan Hakları Başkanlığı tarafından Ankara'nın Kızılcahamam ilçesinde düzenlenen '81. İl Teşkilatı Eğitim ve İstisare Kampı'nın açılışında konuştu. Yalçın, teşkilat mensuplarıyla bir araya gelmenin gurur ve mutluluğunu yaşadıklarını belirterek, "AK Parti olarak yine her zamanki inanc ve motivasyonumuzla yeni dönem hazırlıklarına başlamamızın heyecanı içindeyiz. Yeni bir dönem başlangıcında, yine her zaman olduğu gibi AK Parti'nin öncü bir rol oynayacağına dair inançla hazırlıklarımızı yapıyoruz, küresel siyasetin yeni gerçekliğini, Türkiye'nin yeni imkanlarını göz önünde bulundurarak yapacağımız istisareler sayesinde önümüzdeki döneme insan hakları bağlamında kapsamlı çalışmalarla hazırlık yapmayı hedefliyoruz" ifadelerini kullandı.

'İNSANLAR ARASI İLİŞKİLER DE CİDDİ BİR DÖNÜŞÜM İÇİNDE' Dünya siyasetinin büyük bir dönüşümden geçtiğini belirten Yalçın, "Bu gerçek çok uzun süredir birçok zeminde, birçok aktör tarafından dile getiriliyor. Ancak yapılan değerlendirmelerin birçok eski usule, sadece devletler arası ilişkiler, jeopolitik ve jeoekonomik değişimleri odaklanıyor.



Uluslararası güç dengelerinin değiştiği, yeni küresel aktörlerin ortaya çıktığı, klasik bazı büyük güçlerin sahnedeki çekilebileceği gibi yorumlar yapılıyor. Bu tür değerlendirmeler çoğunlukla haklılık payına sahip olsa da dünya siyasetinde yaşanan dönüşümün derinliğini kavramaktan uzak değerlendirmelerdir. Bugün sadece devletler arası ilişkiler değil, insanlar arası ilişkiler de ciddi bir dönüşüm içinde. Uluslararası düzenin tüm boyutlarını oldukça derinden etkileyen bir kırılma yaşamaktayız. Bu anlamda uluslararası kurumların rolü sorgulanıyor, küresel ticaretin yapısı değişiyor; normlar, kurallar, ilkelere yeniden tanımlanıyor. İşte bu nedenle sadece devletler değil, bireyler de bu dönüşümün merkezinde yer alıyor" diye konuştu.

'TERÖRLE MÜCADELEDE BİRÇOK SINANMADAN GEÇTİK'

Terör örgütünün silah bırakma açıklamasıyla birlikte önemli bir eşikten geçildiğini altını çizen Yalçın, "Türkiye olarak bu yeni döneme en hazır giren ülkelerden biriyiz. Cumhurbaşkanımız Recep Tayyip Erdoğan liderliğinde terörsüz Türkiye hedefiyle beraber terör belasından da kurtulma anlamında önemli gelişmelerin yaşandığı bir dönemin içindeyiz. Önümüze yeni kapılar açılmış, yeni imkanlar mümkün hale gelmiştir. Şunun altını bir kez daha çizmek gerekir ki başta PKK, PYD, YPG olmak üzere ülkemize musallat olan tüm terör örgütleriyle gerek sınırlarımız içinde gerekse de sınırlarımız dışında kararlılıkla ve başanlı bir şekilde mücadele ettikten sonra bu

sürecin artık nihai noktasına gelmiş bulunuyoruz. Terörle mücadele sürecinde devlet ve millet olarak birçok sınamadan geçtik. İçerde ve dışarda birçok meydan okumayla karşılaştık. Bu süreçte şehitler verdik, gazilerimiz oldu. Ancak tüm bunlara rağmen, bugüne kadar millet olarak kardeşliğimize bir an olsun bile halel gelmedi. Kardeşlik hukukumuz bir gram bile lekelenmedi. Bu topraklarda tüm yüzlerimizle, bin yıldır kardeşçe var olduğumuz gibi Türkiye Yüzyılı'nda da aynı şekilde bir olarak, kardeş olarak, büyük ve güçlü Türkiye yolunda yürümeye devam edeceğiz" açıklamasında bulundu.

'TÜRKİYE'YE BAKIŞ MUAZZAM DEĞİŞTİ'

Yalçın, devamında şöyle konuştu: "Dünyanın büyük sınamalarından geçtiği bir dönemde hepimiz biliyoruz ki Türkiye aslında insan hakları bakımından dünyanın en güvenli adası haline gelebilir. Bunu kurmak, bunu inşa etmek sizin bizim elimizde. Her gün dünyanın dört bir tarafında yaşanan silahlı çatışmalar ve insan hakları meseleleri söz konusu olduğunda görüyoruz ki Türkiye'ye bakış muazzam bir şekilde değişmiş durumda. Bugün Amerika Birleşik Devletleri Başkanı, bugün Rusya Devlet Başkanı, Ukrayna'daki bir çatışmanın son bulması için Türkiye'nin kapısını çalıyorsa, Suriye'nin hem bir diktatöryal, totaliter rejimden kurtulması konusunda hem de yeniden inşası konusunda Recep Tayyip Erdoğan'a bakıyorsa, onun ol arkadaşları olarak bizlere, hepimize çok önemli görevler düşüyor demektir." (DHA)

10 İlde Suç Örgütü Operasyonları: 86 Tutuklama

İçişleri Bakanı Ali Yerlikaya, 10 ilde 11 organize suç örgütüne yönelik düzenlenen operasyonlarda 86 şüphelinin tutuklandığını açıkladı.

İçişleri Bakanı Yerlikaya'nın sosyal medya hesabından yaptığı açıklamaya göre; Cumhuriyet başsavcılıkları ve Emniyet Genel Müdürlüğü koordinesinde 10 ilde faaliyet yürüten 11 organize suç örgütüne yönelik son 2 hafta boyunca operasyonlar düzenlendi. İstanbul, Diyarbakır, Ankara, Gaziantep, Şanlıurfa, Samsun, Bursa, Kocaeli, Tekirdağ ve Uşak'ta gerçekleştirilen operasyonlarda, T.B., Ş.T., R.A., S.Y., M.A., C.A. ve F.M.T. isimli elebaşlarının da

içerisinde bulunduğu organize suç örgütü üyesi 142 şüpheli yakalandı. 48 ruhsatsız tabanca, 30 ruhsatsız av tüfeği, 3 çelik yelek, muhtelif miktarda uyuşturucu madde ile 12 kumar makinesi ele geçirildi. Şüphelilerden 86'sı tutuklandı, 44'ü hakkında adli kontrol kararı verildi, diğerlerinin işlemleri devam ediyor.

Organize suç örgütü üyesi şüphelilerin haklarında; 'Suç işlemek amacıyla örgüt kurmak', 'Tehdit', 'Genel güvenliğin kasten tehlikeye sokulması', 'Kasten öldürmeye teşebbüs', '6136 sayılı Kanun'a muhalefet', 'Kasten yaralama', 'Nitelikli yağma', 'Silahlı tehdit', 'Cinayet', 'Tefecilik', 'Uyuşturucu

madde ticareti', 'Mala zarar verme' ve 'Hakaret' suçlarından soruşturma başlatıldı. (DHA)



TOPLANTI İLANI ERBAA İLÇESİ ATIKSU ARITMA TESİSİ KAPASİTE ARTIŞI PROJESİ

Paydaş Katılımı ve Halkın Bilgilendirilmesi Toplantısı

Finansmanı Dünya Bankası tarafından sağlanacak ve İLBANK AŞ tarafından yürütülen "Türkiye Deprem, Sel ve Yangın Acil İmar Projesi" (TEFWER) kapsamında "ERBAA İlçesi Atıksu Arıtma Tesisi Kapasite Artışı Projesi" gerçekleştirilecektir. Aşağıda belirtilen tarih ve saatte proje ile ilgili olarak paydaşları ve halkı bilgilendirmek, görüş ve önerilerini almak için "Paydaş Katılımı ve Halkın Bilgilendirilmesi Toplantısı" yapılacaktır.

Halkımıza saygı ile duyurulur.

İlgili belgelere aşağıdaki adresten ulaşabilirsiniz:
<https://erbaa.bel.tr/Site/duyuru/atiksu-aritma-tesisi-kapasite-artisi-projesi>

Toplantı Yeri: Ahmet Yenihan Kongre ve Kültür Merkezi Toplantı Salonu

Toplantı Yerinin Adresi: Cumhuriyet Mahallesi İstiklal Caddesi No:83

Toplantı Tarihi: 30.05.2025 Cuma

Toplantı Saati: 15:00 – 17:00

Proje Sahibi: ERBAA BELEDİYESİ

Tel: +90 542 220 17 33 Mustafa Bolat (Çevre Mühendisi)

Mail: 1mustafabolat@gmail.com

Müşavir Firma: ENVESU Çevre Enerji İnş. ve Müş. A.Ş.

Tel : +90 312 284 94 14 - **Mail:** info@envesu.com

Resmî İlanları www.ilan.gov.tr

İlan no: 2226902

Atık su artırma tesisi paydaş katılımı ve halkın bilgilendirilmesi toplantısı yapıldı

02 Haziran 2025, 10:25



Erbaa Belediyesi Atık Su Arıtma Tesisi kapasite artışı projesi kapsamında bilgilendirme toplantısı gerçekleştirdi.

Erbaa Belediyesi tarafından atık su arıtma tesisinin kapasite artırımı projesi kapsamında Paydaş katılımı ve halkın bilgilendirilmesi' toplantısı yapıldı. Ahmet Yenihan Kongre ve Kültür Merkezi'nde 30 Mayıs 2025 günü saat 15.00'de gerçekleşen toplantıya birim müdürleri ve Erbaa Belediye Başkanı Ertuğrul Karagöl katıldı. Bilgilendirme toplantısında projenin ayrıntıları, tesisin kapasite artırım ihtiyacı değerlendirildi.

Appendix-4: Stakeholder Consultation Meeting Brochure for the Sub-Project

ŞİKÂyet MEKANİZMASI

Projenin etkilenen vatandaşların ve proje çalışanlarının inşaat ve işletme aşamasında Proje ile ilgili görüşlerini, şikâyetlerini ve önerilerini iletebilmesi adına bir **Şikâyet Mekanizması** kurulmuştur.

Şikâyetler, Erbaa Belediyesi tarafından atanan görevliler tarafından kabul edilecek ve yanıtın sağlanması veya daha ayrıntılı değerlendirme için zaman çerçevesi esas olarak dile getirilen konunun karmaşıklığına bağlı olacaktır, ancak ideal olarak bu süre 14 günü aşmayacaktır.

Şikâyetlerde bulunan tüm paydaşlar, şikâyet ve önerilerini gizli bir şekilde iletme fırsatına sahip olacaktır. Erbaa Belediyesi şikâyetçinin adının ve iletişim bilgilerinin rızası olmadan ifşa edilmemesini sağlayacaktır.

Bu mekanizma aracılığıyla iletilen şikâyetler, hızlı ve hassas bir şekilde ele alınacaktır. Bu kapsamda aşağıda verilen iletişim kanalları kullanılabilir.

- Şikâyet Mekanizması İletişim Bilgileri:
 - o Erbaa Belediyesi
 - o Telefon: 0850 633 00 60
 - o E-posta: erbaa@erbaa.bel.tr
 - o Proje alanında yer alan şikâyet ve talep kutuları.

Paydaşlar, belirtilen kanallardan tatmin edici bir çözüme ulaşılamaması durumunda Cumhurbaşkanlığı İletişim Merkezi (CİMER), Yabancılar İletişim Merkezi (YİMER) ve ilgili hukuki kurumlara başvurulabileceklerdir.

PROJE TARAF LARI

Bu Projenin uygulayıcı ve aynı zamanda kredi faydalanıcı kuruluşu Erbaa Belediyesi'dir (EB).

Projenin gerçekleşmesi adına İLBANK'a finansman başvurusunda bulunulmuştur. Bu kapsamda, Proje için, Paydaş Katılım Planı (PKP) ve Çevresel ve Sosyal Yönetim Planı (ÇSYP) hazırlanmıştır. Proje'nin yürütülmesi sırasında bahse konu planda belirtilen çevresel ve sosyal etkiler dikkate alınarak gerekli tedbirler ÇSYP'ye uygun olarak alınacaktır.

EB, PKP ve ÇSYP'nin yürütülmesinden ve raporlarda belirtilen etki azaltma önlemleri ve iyi uygulamaların sahadaki uygulamalarından inşaat ve işletme dönemi boyunca sorumlu olacaktır.

Bu Proje Türkiye Cumhuriyeti'nin Kanun ve Yönetmelikleri ile Dünya Bankası Çevresel ve Sosyal Standartlarına uymakla yükümlüdür.

İletişim Bilgileri

ERBAA BELEDİYESİ

Adres : Cumhuriyet Mahallesi İstiklal Caddesi No:85 Erbaa/TOKAT

Telefon : 0850 633 00 60

E-posta : erbaa@erbaa.bel.tr

ENVESU Çevre Enerji İnşaat ve Müşavirlik A.Ş.

Adres : Beştepe Mah. Nergis Sok. No:7 Via Tower D:53-54
Yenimahalle / Ankara

Telefon : +90 (312) 284 94 14-24

E-mail : info@envesu.com

ERBAA BELEDİYESİ

ERBAA MEVCUT ATIKSU ARITMA TESİSİ KAPASİTE ARTIŞI PROJESİ

Proje Bilgilendirme Broşürü



MAYIS 2025

PROJENİN YERİ

- Alt proje alanına bitişik mevcut Erbaa Atıksu Arıtma Tesisi, Erbaa Organize Sanayi Bölgesi (OSB) sınırları içinde, Erek Mahallesi, Çorak Mevkii, 1367 ada 1 parselinde yer almaktadır
- Alt projenin çevresel ve sosyal etkileri dikkate alınarak, Erbaa OSB dahil olmak üzere 2,5 km yarıçaplı bir Etki Alanı (EA) belirlenmiştir.
- EA içinde Erek, Kelkit mahalleleri ve Tosunlar köyü ile 200 m batıda yer alan bir hayvan pazarı hassas alıcı olarak yer almaktadır.

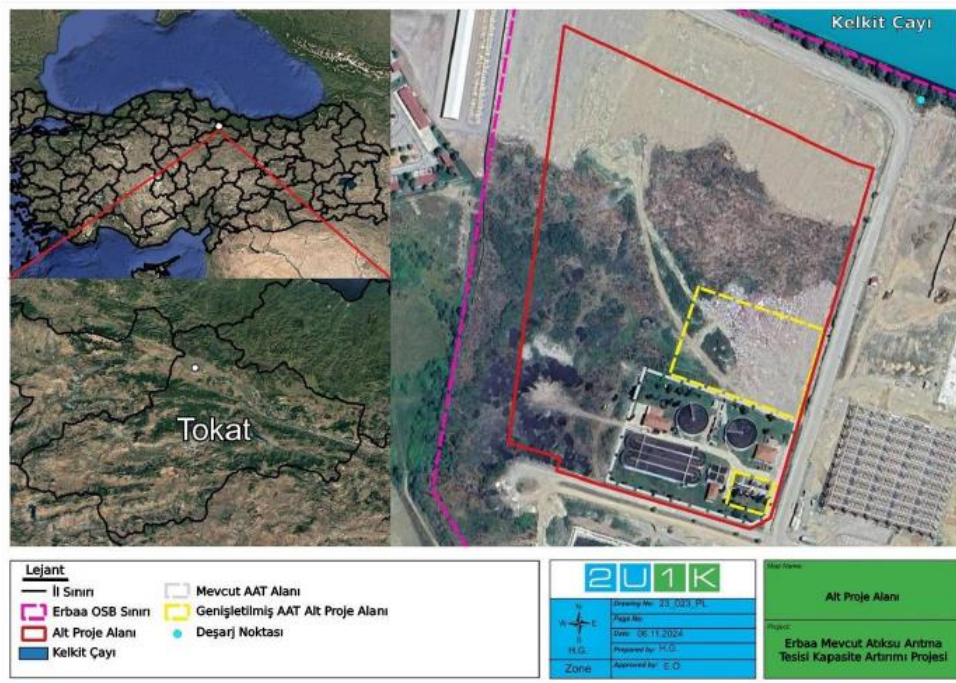
PROJENİN TANIMI

- Alt proje, Tokat ili Erbaa ilçesinde, Erbaa OSB sınırları içindeki mevcut 12.000 m³/gün kapasiteli Erbaa Atıksu Arıtma Tesisi'nin (AAT), artan nüfusa hizmet verebilmesi amacıyla kapasitesinin **24.000 m³/gün'e** çıkarılmasını hedeflemektedir. Aynı sistem özellikleriyle işletilecek tesisin deşarj noktası **Kelkit Çayı** olup, inşaat çalışmalarının Ekim 2025'te başlayarak **22 ayda, Temmuz 2027'nin** sonunda tamamlanması planlanmaktadır.
- Alt proje kapsamında herhangi bir arazi edinimine gerek bulunmamaktadır.

PROJENİN POTANSİYEL ETKİLERİ VE AZALTMA ÖNEMLERİ

Projenin inşaat aşamasında gerçekleştirilecek faaliyetlerin olası olumsuz etkilerini ve bu etkileri en aza indirmek için alınması gereken önlemleri ve bu önlemlerin hayata geçirilmesine yönelik koşulları açıklamak adına PKP ve ÇSYP hazırlanmıştır. ÇSYP'de sunulan başlıca etkiler ve bu etkilere yönelik azaltma önlemleri aşağıda listelenmiştir:

- İnşaat aşamasında yoğunlaşması beklenen trafik faaliyetlerinin ve oluşacak gürültünün etkisini en aza indirmek için, çalışma saatleri ulaşımın yoğun olduğu saatlere göre ayarlanacaktır.
- İnşaat süresi boyunca çalışan araçların belirlenen hız limitine uymalarını sağlamak için gerekli önlemler alınacaktır.
- Proje süresi boyunca ortaya çıkacak atıklar lisanslı firma ile bertaraf edilmesi için gönderilecektir.
- Kamyon ve ekskavatör gibi araçlardan kaynaklanacak sera gazı emisyonlarını sınırlamak için motor bakımları düzenli yapılacak ve yakıt tüketimi izlenecektir.
- Dış kaynaklardan gelen toz, yığınları örtmek ve nem içeriğini artırmak gibi kontrol önlemleri alarak en aza indirilecektir.
- Projenin inşaat ve işletme dönemlerinde meydana gelebilecek ve acil müdahale gerektiren beklenmedik olayları (yangın, deprem vb.) yönetmek amacıyla, bir Acil Durum Hazırlık ve Müdahale Planı ile bir İş Sağlığı ve Güvenliği Yönetim Planı hazırlanacak ve tüm çalışanlarla paylaşılacaktır.



Annex-5: Stakeholder Consultation Meeting Poster Organised for the Sub-Project





