TÜRKİYE: EARTHQUAKE RECOVERY AND RECONSTRUCTION PROJECT (TERRP)

ILICA (KAHRAMANMARAŞ)-WASTEWATER TREATMENT PLANT CONSTRUCTION PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

JUNE 2025

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1. Introduction

Türkiye Earthquake Recovery and Reconstruction Project (TERRP), supported by the World Bank and implemented by ILBANK, aims to improve basic municipal services, and restore access to these services in cities declared as earthquake zones.

The Ilıca settlement area water and wastewater infrastructure project include both a Wastewater Treatment Plant (WWTP) and the renewal of the existing, unsystematically constructed, and earthquake-damaged drinking water and wastewater network. This ESMP, however, is specific to the WWTP sub-project. Separate environmental and social management considerations have been developed for the network renewal sub-project.

There is no wastewater treatment plant in Ilıca neighborhood, however, engineering design stage has been completed before earthquake. The location of the wastewater treatment plant, whose project was prepared by Fetih Engineering in 2017, before earthquake, were needed to be revised after earthquake. The new wastewater treatment plant was designed by Pyramid Engineering & Consultancy Company. The location of the new wastewater treatment plant project was selected in Dönükler location in the southern part of the development plan.

The Final Design Deliverables for the Ilıca Wastewater Treatment Plant Project, finalized by Liv – Liban Consult AGM JV, include the Design Review Report, Project Identification Document, Environmental and Social Management Plan, and Screening Form. This work was completed under RFP No: KMARAS-TERRP-C1/A, "Procurement of Consultancy Services for Design/Design Review, Procurement Implementation Support, Preparation of Environmental and Social Documents, and Supervision Services.

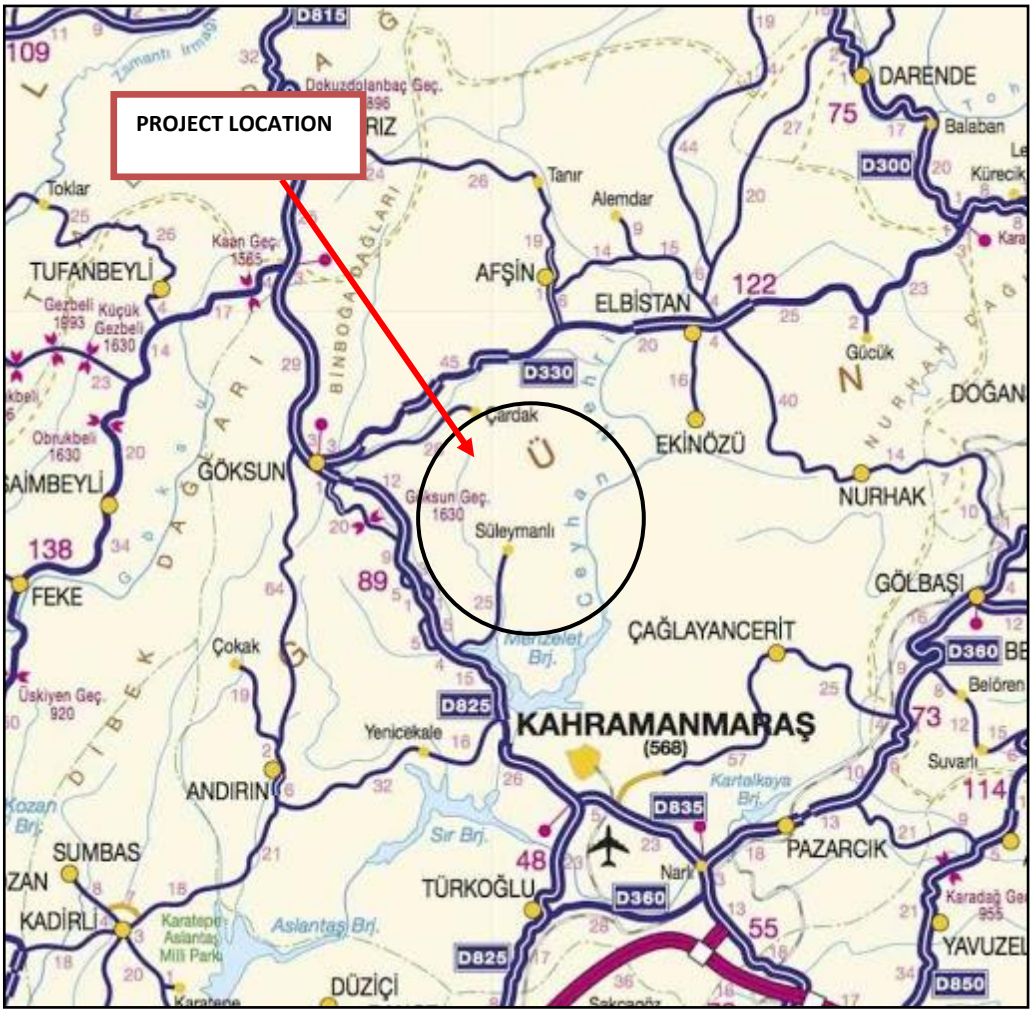


Figure 1. Location of Kahramanmaraş Province and Ilıca Neighborhood

An Environmental and Social Management Plan (ESMP) has been prepared to identify the environmental and social risks and impacts of the subproject activities and to propose appropriate mitigation measures to manage these risks and impacts.

Environmental risks are expected to be temporary and site specific for wastewater treatment plant construction works. These environmental risks can be mitigated by applying good construction practice guidelines and mitigation measures identified in this ESMP. The existing infrastructure of Ilıca settlement area was constructed by the municipality without a project in accordance with the increasing population needs over many years. The wastewater treatment plant will be constructed on a 5,386 m^2 site (parcel number 404 of block 31) in the Ilıca neighborhood of Kahramanmaraş. This land has been allocated to the Kahramanmaraş Metropolitan Municipality, eliminating the need for expropriation or economic/social displacement.

The potential environmental and social risks associated with the Project construction activities identified in the TERRP Environmental and Social Management Framework are identified as follows;

- Air pollution (dust, odor, vehicle exhaust, etc.)
- Noise and vibration
- Soil pollution
- Water pollution

- Hazardous and non-hazardous waste management
- Working and working conditions (Labor Management)
- Disruptions in public services and infrastructure
- Traffic safety risks
- Occupational Health and Safety
- Community health and safety issues
- Restriction of land use, loss of livelihoods, potential exclusion of vulnerable groups.

The construction of the Ilıca Wastewater Treatment Plant (WWTP) will significantly protect surface water resources by eliminating illicit discharges and ensuring proper wastewater collection and treatment. While the Project anticipates positive environmental impacts, potential risks during operation are recognized. However, compliance with national regulations and WB standards will mitigate these risks. In particular, air quality will be monitored through regular odor testing, ensuring compliance and addressing potential odor issues arising from WWTP operations. The impact of odor on air quality will be reduced as there are no sludge digestion and sludge drying processes during the operation phase and the sludge generated will be transferred to Kahramanmaraş central wastewater treatment plant. Wastewater discharge will be monitored monthly in accordance with local monitoring laws and equivalent population criteria and treated to meet all applicable water quality standards, protecting surface and groundwater. To prevent environmental contamination and odor, excess sludge will be immediately transferred off-site using licensed and covered vehicles and on-site storage will be eliminated. Maintenance and repairs may create minor, short-term impacts such as waste and increased noise, but these are expected to be temporary and site specific. Overall, the Ilıca WWTP project prioritizes environmental protection through proactive measures and strict regulatory compliance.

1.1. Project Information

Ilıca is a neighborhood located in Onikişubat district of Kahramanmaraş Province. Ilıca neighborhood is surrounded by Ekinözü District to the north-east, Dulkadiroğlu neighborhood to the south-east, Andırın district to the west, Göksun district to the north and Kahramanmaraş center to the south. Ilıca neighborhood is situated 59 km from Kahramanmaraş city center, 77 km from Dulkadiroğlu District, 93 km from Andırın District and 70 km to Göksun District.

A 2,194 m^3/day WWTP, utilizing an Sequential Batch Reactor (SBR) process with advanced biological treatment for N and P removal, will discharge the treated wastewater to the Ilıca stream in a way to meet the parameters specified in the Water Pollution Control Regulation and Urban Wastewater Treatment Regulation (COD:125, BOD5:25, AKM:35, TN:10, TP:2), protecting the Menzelet Dam downstream. Based on a population projection of 19,500 people for the year 2055. This system will use a Sequential Batch Reactor (SBR) for advanced biological nutrient (N and P) removal. Process Units including; Inlet Structure and Screening, Compact Preliminary Treatment, Equalization Tank and Distribution Structure, 3 pcs of SBR Tank, Valve Chamber, Filtrate Water Pumping Center and Buildings for Administration, Sludge Dewatering and Blower.

A wastewater treatment plant is planned for construction on parcel number 404 of block 31 in the Ilıca neighborhood of Kahramanmaraş. The total area of these parcels is 5,386 m^2. Within the scope of the project, the area designated for the construction of the wastewater treatment plant was allocated to Kahramanmaraş Metropolitan Municipality. The relevant allocation form is provided in Annex-2.

Natural thermal hot water resources in the Ilıca neighborhood have led to the development of local tourism. Ilıca has become a tourist destination known for its hot springs for local visitors from

Kahramanmaraş and surrounding provinces. Given the neighborhood's tourism-oriented nature and the significant fluctuations in population between summer and winter, the variability in wastewater volumes caused by changing populations highlights the importance of choosing a system that is not overly sensitive to these flow rate variations. For this reason, the Sequential Batch Reactor (SBR) system, which is widely used worldwide, has been selected for the Ilıca wastewater treatment plant.

A key advantage of this system is its ability to carry out both aeration (reaction) and sedimentation processes within a single tank. This eliminates the need for additional components, such as sedimentation tanks, scrapers, return pumping stations, and pumps, thereby reducing the required space for the facility and significantly lowering initial investment costs. The Sequencing Batch Reactor (SBR) is a fill-and-draw activated sludge system that integrates multiple treatment processes—such as equalization, aeration, and clarification—into a single reactor vessel.

Process Units:

1. **Inlet Structure and Screening**: Initial screening removes large debris from the influent wastewater.
2. **Combined Sand Trap**: This unit removes sand and grit, preventing damage to downstream equipment.
3. **Equalization Tank and Distribution Structure**: Two 375 m^3 capacity balancing pools store wastewater, ensuring a consistent flow to the SBR tank.
4. **SBR Tank**: The core of the system, where wastewater undergoes sequential phases: filling, reaction (aeration), settling, decanting, and idle.
5. **Valve Chamber**: Controls the flow of wastewater into and out of the SBR tank.
6. **Filtrate Water Pumping Center**: Pumps treated effluent to the next stage or discharge point.

The wastewater treatment plant (WWTP) will utilize a Sequencing Batch Reactor (SBR) system designed for effective nitrogen (N) and phosphorus (P) removal. Discharge to the Ilıca stream will be strictly regulated, requiring full compliance with both the Water Pollution Control Regulation and the Urban Wastewater Treatment Regulation. These stringent regulations are in place to safeguard the sensitive Menzelet Dam located downstream. The treated effluent must meet the following strict limits: COD (125 mg/L), BOD5 (25 mg/L), SS (35 mg/L), Total Nitrogen (TN) (10 mg/L), and Total Phosphorus (TP) (2 mg/L). The focus on nitrogen and phosphorus removal is critical to prevent eutrophication in the Menzelet Dam.

Sludge, a by-product of the wastewater treatment process, will be generated at the WWTP. This sludge will undergo mechanical dewatering to achieve 22% solids content before being disposed of according to the Waste Management Regulation. The sludge generated at a rate of 0.5-1 m^3 per day will be stored in the sludge tank (trailer etc.) located at the end of the treatment system. KASKİ has declared that the sludge will be collected by vacuum trucks at two or three-day intervals. The treatment sludge to be generated at Ilıca WWTP will be sent by KASKI's vacuum trucks to Kahramanmaraş Merkez advanced biological wastewater treatment plant and will be included in the sludge process. After dewatering at the central advanced biological wastewater treatment plant, the sludge will be sent to licensed companies for disposal. Treatment sludge generated at Kahramanmaraş Central Advanced Biological Wastewater Treatment Plant is disposed of by sending it to be licensed disposal facilities authorized

by the Ministry of Environment, Urbanization and Climate Change and to cement factories in the region as raw material. General domestic solid waste generated during both the construction and operational phases of the WWTP will be collected and disposed of by municipal services through authorized waste disposal companies.

In summary, the SBR system offers a compact, energy-efficient, and flexible solution for wastewater treatment, integrating multiple processes into a single reactor vessel and simplifying maintenance requirements.

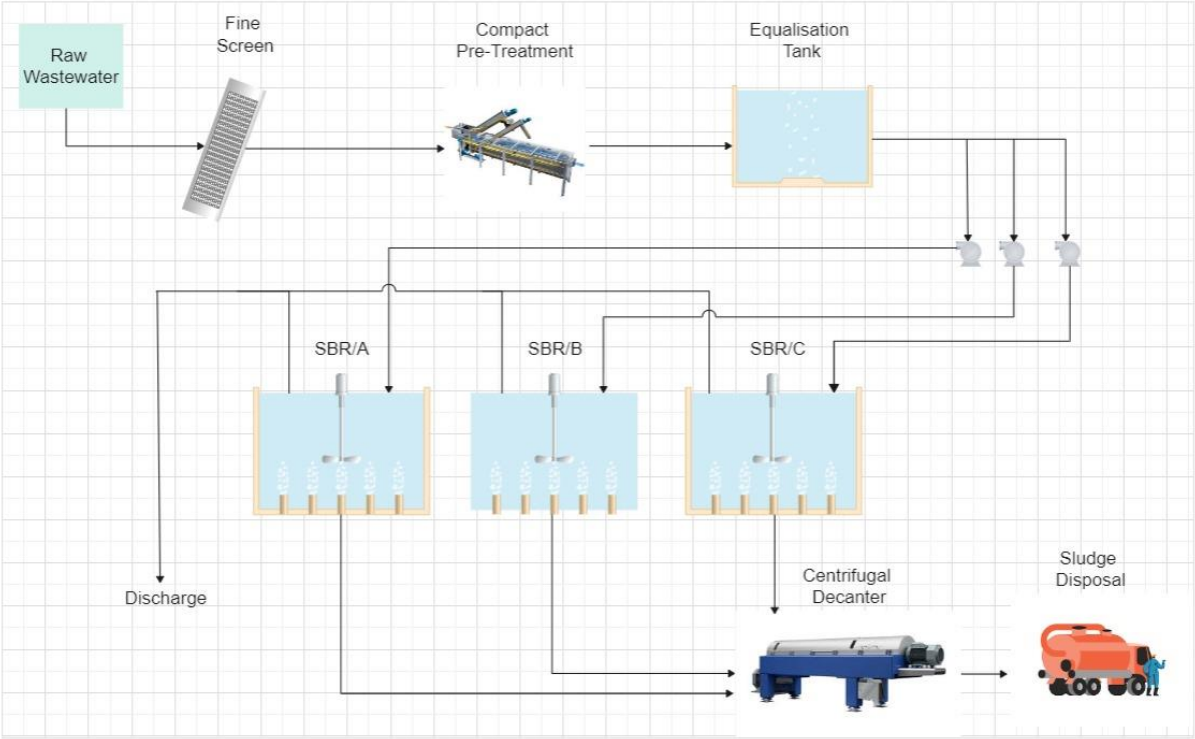


Figure 2 Ilıca WWTP Process Flow Chart

Awareness raising activities related to the project will be carried out by Contractor, Consultant and KASKI before the commencement of sub-project works, which are likely to affect the daily life of the local people. Along with the subproject visibility studies, consultation meetings and public participation meetings will be held with the communities living in Ilıca neighborhood and the subproject will be introduced. A stakeholder engagement plan has also been prepared under the TERRP project and measures to address the concerns of local communities during the project implementation phase have been identified. During the project implementation phase, a work plan will be made in sensitive areas such as places of worship, schools and hospitals that will not disrupt the daily life of the people living in Ilıca. Before the contractor starts the works, the communities living in that area will be informed about the works. Thus, the communities living in Ilıca will be informed about the subproject and their concerns will be addressed.

The Contractor will prepare and submit for approval sub-management plans including mitigation measures during the sub-project construction phase in accordance with the guidelines in the ESMP. In addition, experts will be assigned for the duration of the project to monitor these sub-management plans (e.g. water pollution control, traffic management plan, OHS, noise-dust control management plans and public health and safety management plan etc.) on site.

The contractor will not prepare an SEP. The contractor will include communication and information dissemination as a part of C-ESMP and other sub-management plans. The contractor will also implement worker's GRM and one layer of general GM. The PIU will implement the project level SEP by engaging with identified affected and interested stakeholders for this subproject and maintain GM as per SEP. Project workers will be regularly trained before commencement of work and at regular intervals within the framework of the ESMP and sub-management plans and will be ensured to work in accordance with the subproject mitigation measures.

1.2. Objectives

Under the TERRP Environmental and Social Management Framework, this ESMP has been developed for this subproject following Environmental and Social (E&S) Screening. The E&S Risk Rating has been assessed as 'Moderate' based on the anticipated E&S risks and impacts. Based on this screening assessment, this ESMP has been prepared for this subproject in line with the overarching ESMF, covering risks and mitigation measures specific to this subproject area.

The rights of the local people living in Ilıca will be protected during the construction phase of the subproject and the participation of all stakeholders in the project process will be ensured by raising awareness. The works will be carried out by taking measures that will not disrupt the daily life cycle in the neighborhood and will not interfere with the commercial activities of the workplaces and tradesmen on the project route. Code of Conduct trainings will be given by the Contractor's experts, especially for the workers employed in the project and coming from different provinces, in order to behave in accordance with the culture of the local people of Ilıca.

To reduce the impacts of the subproject on transportation and daily life in Ilıca neighborhood, works will be started after taking all kinds of measures, determining alternative transportation routes, and taking occupational safety measures. Thus, a work plan will be prepared, and works will be conducted to minimize the impacts on transportation and traffic in the Ilıca neighborhood.

This ESMP has assessed the risks and impacts of the proposed project based on information such as risks, findings, and capacity of the beneficiary in Ilıca neighborhood where WWTP project will be developed and implemented. The assessment of risks and impacts was carried out in accordance with the World Bank Environmental and Social Management Framework (ESMF) and national legislation. Risk identification, mitigation and monitoring activities were assessed for the two main phases of the project, namely "Land Preparation and Construction" and "Operation". This ESMP is a framework document that summarizes all environmental and social measures and which all parties to the project are obliged to comply with. As the Project progresses, this document will be continuously reviewed and updated in line with the changes indicated below:

- Changes in national and international legislation and standards,
- Changes in the project design parameters that may occur during the detailed design and tender document preparation phases,
- Monitoring results and
- Results of tests and trials carried out during the operation phase of the project.

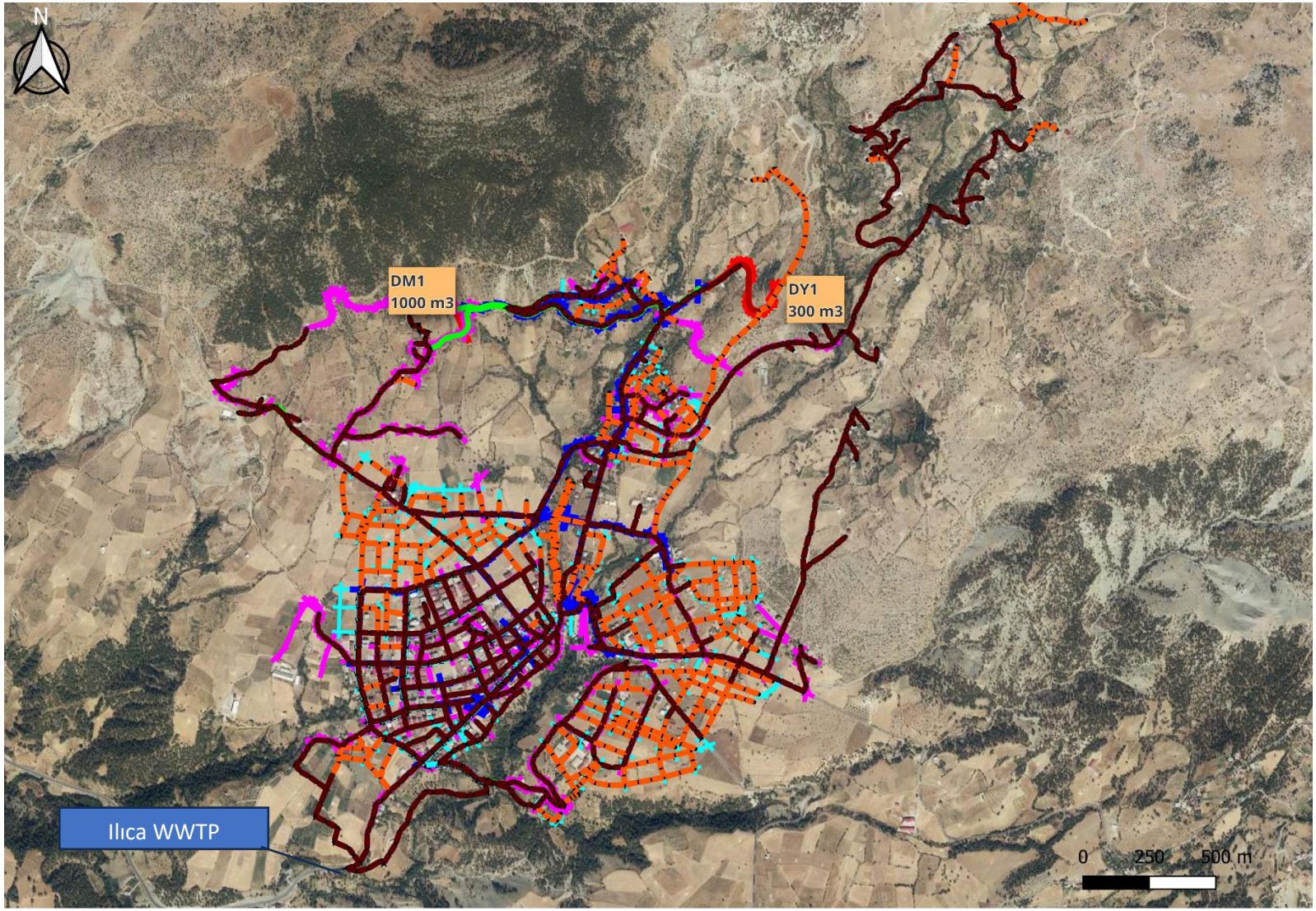


Figure 3. Location of the Project and Ilıca Neighborhood

2. Legal and Institutional Framework

National Legislation applicable to the management of environmental, social, health and safety aspects of the Proposed Project is described under this section. Environmental Law No. 2872 (Law No. 6486) published in the Official Gazette No. 18132 dated 11.08.1983 and subsequently revised in the Official Gazette No. 28661 dated 29.05.2013 constitutes the basic legal framework of environmental legislation in Turkey and is largely in line with the EU EIA Directive. This law is supported by numerous regulations. National laws, regulations, and legislations as well as international standards need to be complied with during the subproject implementation phase. World Bank environmental and social standards will be followed and implemented at all stages of the project, especially during the mitigation process as described in the Project's ESMF (please follow the link below for ESMF).

https://www.ilbank.gov.tr/storage/uploads/uidb/ilbank_terrp_esmf_wb_comments_01032024_tr_pdf_1709909725.pdf

3. Roles and Responsibilities

The roles and responsibilities of the Contractor, Consultant, KASKI and ILBANK during sub-project preparation, construction and operation phases are defined in Table 1 below. These roles and responsibilities have been determined for the WWTP Project to be constructed in Ilıca neighborhood. These roles and responsibilities are defined to determine the duties of organizations and companies on environmental and social responsibilities, construction activities, reporting and stakeholder engagement etc. and to ensure that they comply with these responsibilities.

Table 1. Roles and Responsibilities

Roles	Responsibilities
Contractor	• The Contractor shall adhere to its responsibilities set out in this ESMP. • The Contractor will prepare and submit sub-management plans and procedures such as OHS Plan, waste management plan, air quality and dust control management plan and community health and safety to ILBANK PIU under the supervision of consultant prior to construction works. • The contractor will be aware of its duties and responsibilities under this ESMP for compliance with national regulations and WB's ESSs. • The construction contractor will employ a full-time occupational health and safety (OHS) specialist and a full-time environmental specialist and a fulltime social specialist to instruct and advise workers on the implementation of the ESMP and EMP. The Contractor is required to report to directly to ILBANK, through the Supervision Consultant/PMC (as appropriate) within 24 hours in the event of any serious health incident, such as loss of limb, death, or any case where more than 3 days of hospitalization is required, in accordance with ESIRT guidelines. • In case of any Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) situation, the contractor must report the case directly to ILBANK within 24 hours through the Monitoring Consultant/PMC (as appropriate), in accordance with the ESCP guidelines. • During the construction phase, the contractor will provide regular trainings on environmental and social issues (including OHS, GM, SEA/SH, CoC) to its workers as per WB's ESSs and national regulations to raise environmental and social awareness. • The contractor will establish a grievance mechanism to resolve any issues encountered during the subproject and ensure its functioning. It must be ensured that the Grievance Mechanism is accessible, functional, and well managed. • The Contractor must establish labor standards, including fair working conditions and non-discrimination, and take measures to prevent behavior contrary to the culture of the local people of Ilıca and provide Code of Conduct trainings. • The Contractor will manage the flow of labor and prioritise local employment as far as possible. • They are required to comply with labor standards, including fair practices and non-discrimination, and include managing the flow of labor to avoid negative impacts on the local community.

Roles	Responsibilities
	• During the defects liability period, the construction contractor will be responsible for any repairs of the newly constructed facilities in accordance with legal regulations from provisional acceptance. During the liability period, the contractor shall implement the measures specified in the Environmental and Social Management Plan for the operation. • The Contractor will prepare and submit to the consultant Monthly, Quarterly and Semi-annual Environmental and Social Monitoring Reports to demonstrate project progress and compliance with the ESMP.
KASKI Project Team	• KASKI will coordinate closely with ILBANK's Project Implementation Unit (PIU) to facilitate project execution. • KASKI will provide technical and administrative support as reasonably requested by ILBANK. • KASKI will support the Project Grievance Mechanism established by ILBANK PIU the Contractor and ensure that it operates effectively to address any public concerns related to the project. • KASKI Project Team will attend periodic meetings with ILBANK PIU regarding the progress in the implementation of the contract, as well as contract modification and contract finalization. • On the date of transfer of the Subproject to KASKI, KASKI will be responsible for the operation and maintenance of the Subproject assets and assumes legal responsibility for any liabilities incurred in connection with the Subproject. • KASKI's Project Team will participate in capacity building and training programs provided by ILBANK PIU to enhance the skills and knowledge of their staff related to project management, environmental and social governance (including ESMP requirements, operation of the grievance mechanism, etc.) • KASKI is required to monitor the project activities under their jurisdiction and report back to ILBANK regarding progress, compliance, and any issues encountered. KASKI, upon becoming aware of incidents through the Contractor's report or observations must promptly notify ILBANK PIU. • KASKI shall be responsible for necessary UKOME decisions and other permits to carry out the Works if needed under the Project. • During the DLP, the KASKI will notify ILBANK PIU about any identified or reported defects and issues. • KASKI will keep in working condition and use appropriately all subproject assets after handover by the ILBANK PIU throughout the subproject's lifespan, in accordance with applicable laws and regulations. • KASKI will operate and maintain the reconstructed and/or rehabilitated facilities in accordance with technical, environmental, and social standards and in a compliance with updated legislations affiliated with environmental law in order to receive environmental permits for operation. • KASKI will be responsible for the opening of the closed zoning roads and the compensation of the loss of rights caused by the opening of the roads. • KASKI will implement the Resettlement Plan prepared by ILBANK. Required expenditures under the Expropriation Law No. 2942 and those mandated by ESS5 that cannot be covered under the Expropriation Law must be covered by KASKİ from its social assistance fund.

Roles	Responsibilities
	• KASKI will be responsible for all correspondences regarding chance finds discovered during subproject construction activities in line with Project ESMF.
Supervision Consultant	• The Supervision Consultant will serve as controller within the scope of the project and will control both the technical including environmental and social and administrative progress of the contract packages and the implementation of the measures. • The Supervision Consultant shall be on site on a daily basis to monitor and supervise project activities. • The Supervision Consultant is tasked with regular reporting on the progress and compliance of the subprojects with the established E&S standards. This includes collecting data, documenting findings, and coordinating the submission of these reports. • They consolidate site inspection findings and review reports submitted by the contractor's E&S team. • After consolidating and reviewing the necessary reports, the Supervision Consultant submits them to the KASKI and ILBANK Project Implementation Unit (PIU). • They prepare Quarterly Environmental, Social, Health and Safety (ESHS) Monitoring Reports. These reports are reviewed by the local PMC before being finalized by ILBANK PIU and submitted to the World Bank. • The Supervision Consultant ensures that all construction and operation activities comply with the environmental and social standards of the project, and they address any issues that arise related to compliance. • 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. • The Site Supervisor will inform ILBANK within 24 hrs of any incident involving loss of life or loss of limb, or serious incident requiring 3 or more days of hospital care. • The Site Manager of the Consultant shall inform İLBANK within 24 hours in the event of any situation related to Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH).
General Directorate of ILBANK	• ILBANK will act as the PIU under the Department of International Relations, which will be responsible for managing and implementing the project. • ILBANK will oversee the entire implementation process of the subprojects, ensuring that all project activities comply with World Bank's environmental and social standards. • ILBANK will monitor the project's compliance with the Environmental and Social Commitment Plan (ESCP) and ensure the project is implemented in line with the Environmental and Social Management Framework (ESMF) and other relevant documents of ILBANK. • ILBANK will prepare necessary environmental and social documents such as the Environmental and Social Management Plan (ESMP), Resettlement Plan, and Stakeholder Management Plan. • ILBANK will ensure the establishment of a Grievance Mechanism for the project and ensure its effective operation throughout the life cycle of the project.

Roles	Responsibilities
	• ILBANK is responsible for satisfactory implementation of the sub-project including the environmental and social performance. • ILBANK will monitor the construction contractor's, KASKI Project Team's, and Supervision Consultant's performances relating with ESHS compliance. • ILBANK will review the quarterly reports of contractors during the construction phase. ILBANK will inform the WB by providing regular semi-annual monitoring reports on the ESHS performance of the project. • ILBANK will be in liaison with KASKI about the environmental, social and technical issues regarding the implementation of the subproject and ensure KASKI participates in the process and embraces the project. • In case of any environmental and social non-conformities related to the Contractor's works, ILBANK PIU will instruct the 'Contractor' to rectify these non-conformities. The adequacy of the Contractors' measures will be assessed by ILBANK PIU. • ILBANK PIU will be responsible for informing the World Bank (WB) of any such incidents.

4. Environmental and Social Management Plan Matrix

The table below represents the Environmental and Social Management Plan (ESMP), outlining the necessary measures for the Contractor, Supervision Consultant and ILBANK to adhere to during the sub-project activities.

This plan encompasses anticipated environmental and social risks and effects specific to the sub-project, along with recommended mitigation measures. It details the stages where these risks/effects are expected to occur, indicators within the monitoring system, frequency and responsibilities. The contractor will include the cost of the implementation of the mitigation measures in its proposals. ILBANK will reserve the adequate budget for the measures that is under its responsibility from the project management component. This ESMP comprehensively defines the strategies to address these risks/effects throughout the project timeline.

The contractor will prepare its ESMP (C-ESMP) to show how it will implement the specified measures given in Table 2. This C-ESMP will be reviewed by the supervision consultant and then will be approved by the ILBANK after all necessary revisions are made. The Contractor will establish an effective system for managing and monitoring E&S matters related to sub-project activities which will be also included in the C-ESMP. The effectiveness of the implementation of the measures, the Contractor's organizational structure, and the monitoring plan to be implemented by the Contractor will be monitored by the supervision consultant.

All the implementing parties specified in Table 2 will carry out their own self-monitoring processes. In addition, the supervision consultant will supervise the activities implemented by the contractor and ILBANK will monitor the activities of contractor and the supervision consultant.

Table 2. Environmental and Social Impact Management Plan for the Planning, Construction and Operation Phases

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
GENERAL										
Environmental and social management	The C-ESMP will be prepared by the Contractor and submitted to ILBANK PIU for approval after consultant check and then implemented by the Subcontractors. The C-ESMP shall be submitted prior to commencement of construction works and no construction activities shall be carried out within the scope of the sub-project until the C-ESMP is approved. The C-ESMP will include the following site specific sub-management plans in relation to the sub-project: • Air Quality Management Plan (Dust Control Management Plan) • Noise Management Plan • Waste Management Plan • Water Resources Management Plan • Soil Pollution Management Plan • Traffic and Safey Management Plan • Community Health, Safety and Security Plan • Labor management plan (to be prepared in accordance with project LMP) • Occupational Health and Safety Management Plan • Emergency Response and Action Plan • Stakeholder Engagement Management Plan and Grievance Mechanism	X	X		C-ESMP will be approved prior to construction and implemented throughout the construction period.	X			Contractor (implementation) Supervision Consultant (supervision) PIU *(Monitoring of compliance and reporting)* *KASKİ (supports PIU where necessary)*	Included in Works Contract
Reporting of Environmental and Social Performance	• The ESHS performance of the subprojects will be monitored by the responsible contractor' E&S team on a daily basis and the team will report the site findings on a monthly basis to the supervision consultant for review. • The supervision consultant will check and add their site inspection findings and submit the consolidated monthly monitoring reports to İLBANK PIU. • These reports will be sent to Supervision Consultant for submission to ILBANK within the first week of the month following the period covered by the Report.		X		Visual inspection Records of complaints Number of Non-compliance		X		Contractor (implementation) Supervision Consultant PIU	

[1] The costs cannot be fully determined at this stage. They will be calculated for each activity in the activity specific ESMPs.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• ILBANK will submit Monthly Environmental and Social Monitoring Reports (ESMR) to WB as an annex of the semi-annual progress reports.								*(Monitoring of compliance and reporting)*	
Permitting	• All necessary permits/consents/approvals (including construction permits) will be obtained in accordance with national legislation (e.g. environmental permits and licenses). • Prior to the start of excavation works, necessary permits will be obtained from the relevant institutions and organizations to dispose excess waste material in WWTP area. • The sub-project components will be designed, constructed, and operated in accordance with Turkish regulations and standards for protection against seismic activity. Building Earthquake Regulations (R.G. date/no: 18.03.2018/30364) will be complied with during all construction works. • Within the framework of the Traffic Management Plan, permits for road closure and alternative transport routes to be taken for excavation works will be obtained from the relevant institutions and then construction works will be started. • Solid Waste Management: The WWTP will dewater and dispose of sludge in compliance with regulations, manage domestic waste via municipal services using licensed disposal companies, and explore advanced sludge treatment for potential reuse	X	X		All permits are taken. Records of all permits obtained	X			Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)* *KASKİ (supports PIU where necessary)*	Included in Works Contract
Spills/ accidents and contaminated land	• The storage of chemicals, hazardous materials, and other potential contaminants will be kept to a minimum as feasible through inventory management in order to reduce or eliminate the potential onsite and off-site consequences of releases due to accidental and emergency incidents. • Drummed hazardous materials with a total volume equal or greater than 1,000 L will be stored in areas with impervious floor that are sloped or bermed to contain a minimum of 25% of the total storage volume. Drip trays will be used for fuelling mobile equipment. • Appropriate secondary containment structures consisting of berms, dikes, or walls to contain at least 110 percent of the largest tank or 25% percent of the combined tank volumes will be provided at tank farms with above-ground tanks with a total storage		X	X	Visual inspection Records of incident and the disposal of contaminated soil Amount and number of Spill-Kits on site		X		Contractor (implementation) Supervision Consultant (supervision)	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	volume equal or greater than 1,000 L. Secondary containment will be made of impervious, chemically resistant material. • Any spillages from handling fuel and liquids will be immediately contained on site and the contaminated soil will be removed from the site for suitable treatment and disposal. • Pollution due to spillage of fuel and chemical liquids will be responded to immediately with spill kits on site and the spread of pollution and leakage to the ground will be prevented. • Secondary containment, drip trays or other overflow and drip containment measures will be provided for hazardous material containers at connection points or other possible overflow points. • Secondary containment, drip trays or other overflow and drip containment measures will also be provided for all mobile generators to be used by the Contractor at the site. • During operation, maintenance will be carried out by experienced technicians and spills that may occur will be prevented by using drip pans during machine oil change. Waste oil and contaminated wastes will be disposed of within the framework of a protocol with licensed companies.									
Protection of topsoil and soil erosion	• Before the start of excavation and construction activities of wastewater treatment plant, topsoil (vegetation cover, fertile soil layer) stripping will be carried out. • Topsoil and subsoil will not be mixed during soil stripping and necessary measures will be taken for separate storage. • The separately stored topsoil will be used for landscaping after the construction works are completed. • Stockpiles will be protected from erosion and contamination impacts. Topsoil and subsoil will be stored separately, and possible erosion and sedimentation will be prevented in the long term through rehabilitation/planting. • Contaminated soils (if generated) will be disposed of at an appropriately licensed disposal site. • The use of cement and wet concrete in or near exposed areas will be carefully controlled. • Debris and other surplus excavated material from earthworks which is classified as "acceptable fill" shall, wherever practicable, be recovered and used in the construction		X		Visual inspection Records of incident		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	works. The relevant authorities will be consulted on a site-by-site basis to ensure that reuse of the material is acceptable. • Surplus construction material will be made available to third parties for reuse in local development projects if it cannot be utilized on site. • Erosion protection and stabilisation measures will be provided to prevent acceleration of and / or increase in the erosion as a result of the construction activities. • During construction activities, hazardous and non-hazardous materials and wastes will be handled in accordance with the site-specific Waste Management Plan. • Proper drainage systems will be created which will remove the underground, surface and wastewater from the site. • Length and steepness of slopes will be contoured and minimized to prevent soil erosion at the construction sites. • While draining the groundwater accumulated in the excavation trench, systems such as straw bales and flow rate reducing drainage tanks etc. will be used to prevent erosion depending on the flow rate. The contractor shall start the works after obtaining approval from ILBANK PIU and the consultant before applying the drainage method to be used.									
Protection of surface water	• Good construction site practices (i.e. measures described below such as using designated areas for storage of materials, regular inspections at construction sites, training of construction workers, installation of sediment traps and/or oil/water etc.) will be adopted to minimize water pollution risks. • Soil stockpiles will be stored as required in designated areas outside the work area and the quality of excavation materials and backfill materials (e.g. from external sources) will be controlled. Measures will be taken at soil and overburden stockpiles to prevent sediment transport and fugitive dust emissions. • Runoff and site drainage will be managed to prevent direct discharge to surface waters. • The Contractor will submit the records and explanations indicating the working methods of the discharge systems to be installed to ILBANK PIU and the consultant and the relevant systems will be installed after approval is obtained. • Contaminated surface runoff will be sent for treatment before discharge to the environment.		X	X	Visual inspection Water analysis results Approved discharge systems Records of working methods Incident logs		X		Contractor (implementation) Supervision Consultant (supervision)	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• In-situ impermeable (i.e. polythene) septic tanks will be used for the collection of domestic wastewater from the camping sites and necessary agreements will be made with the municipality for the collection and disposal of wastewater by vacuum trucks to prevent direct discharge of wastewater to the environment. • There will not be any surface water abstraction for the project water demand. Water demand for construction activities and dust suppression will be supplied from the existing municipality line. • The oil and fuel systems of the machinery and equipment to be used in the construction works will be checked regularly and will be operated after taking measures to prevent any oil and fuel leakage. • During operation, wastewater discharge will be continuously monitored by automatic sample and will be monitored officially by an accredited laboratory ,on a monthly basis, in accordance with national monitoring regulations and equivalent population criteria, and treated to meet all applicable water quality standards, safeguarding surface and groundwater.									
Protection of groundwater	• Construction activities will be regularly inspected on site. • Construction workers and related personnel will be trained in the application of good construction site practices and spill response and prevention measures. • Project employees will be trained in the use of spill response kits and drills. • Refueling will only take place in designated areas away from surface drainage routes discharging off-site. • No hazardous materials will be stored in the excavation areas and all operations related to hazardous materials will be carried out under special supervision. • Storage areas will be designed and constructed to provide secondary protection for hazardous substances and wastes stored on site. • Spill kits will be available in areas where liquid materials are stored to prevent groundwater contamination in case of spillage, and the drainage systems of the areas where these materials are stored will be designed to prevent spills and leaks from reaching the storm water system.		X		Visual inspection Training Records Records of incident		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
MATERIAL RESOURCES AND WASTE MANAGEMENT										
Supply of Material	• Materials will be sourced as close to the Project site as possible to minimize the impact of transport routes and distance. Where possible, local suppliers will be prioritized for procurement of materials and services to maximize local benefits. • Materials from quarries, borrow pits, crushing plants, concrete batching plants and asphalt plants will be sourced from suppliers with valid environmental and other permits and licenses and where sites are managed in full compliance with all applicable environmental, health and safety and social standards and specifications. • The appropriate storage conditions of these materials/chemicals will be determined in line with relevant chemical and health and safety regulations and international guidelines. • Chemical materials without material safety certificates will not be kept and stored at the project site.		X		Records of supplied materials	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract
Excavated Material Management	• Topsoil and excavation material stripped from construction sites will be stored separately in temporary Excavation Material Storage Areas designated by Onikişubat Municipality/KASKI. • The topsoil will be preserved through mitigation measures during the storage and finally used for the landscaping. • If appropriate, the excavated material will be used as backfill material at the project site. • Excavation materials will not be deposited on site and will be transported to the excavation storage area authorized by Onikişubat Municipality/KASKI. • The excavation wastes will be managed in accordance with the Regulation on Control of Excavation, Construction and Demolition Wastes.		X		Visual inspection Records of disposal amount and area	X			Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract
Waste Management	• A site-specific Waste Management Plan (WMP) will be prepared for the construction phase in line with Turkish Legislation and WBG ESM provisions. • Wherever possible, priority will be given to minimize the amount of waste and raw material use through recovery and re-use of raw materials and the waste will be managed in accordance with the waste management hierarchy.		X	X	Visual inspection of control measures Waste generation and disposal records		X		Contractor (implementation) Supervision Consultant (supervision)	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• All waste will be collected, sorted, labelled, and temporarily stored on site in accordance with the requirements of relevant Turkish regulations addressing waste minimization, segregation, labelling, storage, transport, and recycling/disposal. • Hazardous or non-hazardous labelling, waste code, amount of waste stored, and storage date will be indicated/labelled on the wastes classified according to their characteristics and temporarily stored. Waste will be prevented from reacting with each other with the measures taken in the Temporary Storage Area. • Permission to store wastes other than municipal and packaging wastes (e.g. hazardous and other special wastes) in the Temporary Waste Storage Area will be obtained from the relevant authority • Spillages should be dealt with immediately in accordance with the appropriate Waste Management Plan to be prepared prior to construction works and, if necessary, soil clearance and removal and disposal of soil should be initiated. • Wastes will be collected in closed containers suitable for the waste type before final disposal and stored in the Temporary Waste Storage Area to be established on site. • Recycling, transport, and disposal of wastes will be carried out through licensed companies and/or relevant municipalities. • Secured area for refueling and transfer of other toxic fluids distant from settlement area (and at least 50 m from drainage structures and 100 m from important water bodies); ideally on a hard/non-porous surface will be used. • Maintenance of machinery and equipment will not be carried out at the work site. Small amounts of maintenance materials such as oily rags, oil filters, used oil, etc. will be collected in sealed contaminated waste bins and at the end of the work, they will be collected in the hazardous waste section of the temporary waste storage area and disposed of properly. Used oil will never be poured on the ground and waterways as it may contaminate the soil and groundwater (including drinking water aquifers). • The records will be kept for all waste generation, on-site storage and off-site waste transport activities to third party waste management facilities. • The excavation materials removed from excavation works will be transported to the excavation storage area permitted by Onikişubat Municipality. • All employees will be trained on the Waste Management Plan.				Training registrations Records of complaints				PIU *(monitoring of compliance and reporting)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
Water requirement and wastewater generation	• Water Resources Management Plan will be prepared and implemented prior to construction works. • The Regulation on Water for Human Consumption (R.G. date/no: 17 February 2005/25730) will be complied with regarding drinking water for personnel. • Activities shall not affect the availability of water for drinking and hygienic purposes. • No contaminated materials, solid wastes, toxic or hazardous substances shall be stored, poured, or disposed of in water resources for dilution or disposal purposes. • Sealed septic tanks should be constructed for domestic wastewater that will be generated during the construction phase of the Project and the wastewater collected here should be transported by vacuum trucks to the wastewater treatment plant of the municipality of Kahramanmaraş. • The flow of natural waters should not be blocked or diverted in a way that may cause the riverbeds to dry up or settlements to be flooded.		X		Visual inspection of control measures Septic tank effluent disposal records (if any) Effluent quality measurement records (if any) Records of complaints		X		Contractor (implementation) Supervision Consultant (supervision)	Included in Works Contract
Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH)	• Where possible and feasible, local employment options will be considered at all stages of the Project. • All project staff will be trained on Code of Conduct at induction to minimize the impact of cultural differences. • Project staff will be trained on SEA/SH and CoC and those involved in sexual exploitation will have their employment contracts terminated. • It will be mandatory for project employees to sign the CoC. • Enable multiple channels in the Project grievance mechanism (GM) and workers' grievance mechanism (WGM) through which complaints can be registered in a safe and confidential manner to enable women (or victim) to safely access the GM/WGM. • Women's complaints of sexual abuse will be handled in a confidential manner and women staff (e.g. Women Social Workers) will be employed within the grievance mechanism to ensure that these complaints are shared. • Women's sexual exploitation complaints will be handled confidentially and female employees (e.g. Female Social Experts) will be employed within the grievance mechanism to ensure the sharing of these complaints. • The content of E&S trainings to be provided to project employees will include Sexual Exploitation and Sexual Harassment.		X		Number of training courses related to SEA/SH and CoC Number of workers that have signed CoC. Successful integration of channels in GM/WGM to receive SEA/SH grievances. Number of SEA/SH grievances Number of		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(implementation at PIU level and monitoring of compliance by contractor and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Community level awareness raising and communication activities will be conducted by the Social expert				awareness raising activities					
AIR QUALITY MANAGEMENT										
Dust emissions during construction	• A Dust Control Management Plan will be prepared to include mitigation measures to reduce dust emissions during construction. • Minimal particulate emissions from construction activities will be maintained by good management and housekeeping practices and the use of dust suppression methods. Water spraying will be performed at dust generating areas inside the Project site, particularly during dry weather conditions. • Internal roads will be covered with materials to prevent dusting and these roads will be kept clean. • Excavated soil will be stockpiled in areas designated by Onikişubat Municipality and placed as far away from settlements as possible. • Burning of site clearing residues (trees, bushes) or construction waste materials will be prohibited. The following mitigation measures will be implemented to minimize dust emissions from the transport of materials during construction: • Speed limits specified in the Traffic Management Plan will be respected to and vehicle drivers will be trained in dust control. • Transfer roads will be sprayed with water as necessary (for example using mobile water truck) to prevent significant dust emissions especially in dry weather conditions. • Open top lorries carrying excavated soil will be covered before leaving the construction site. • Frequently used and long-haul roads will be paved to prevent dust generation (e.g. asphalt, concrete, etc.). • Daily visual inspections will be carried out at stockpiles, haul roads and during heavy vehicle movements to identify sources of dust emissions.		X		Visual inspection of air quality control measures Records of maintenance Records of complaints Excavation waste storage area permits	X			Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Within the scope of the Dust Control Management Plan and depending on the complaints received, PM10 measurements will be made when necessary and mitigation measures will be implemented according to the results. • In Ilıca, consultation meetings will be held with local people and mukhtars and additional irrigation measures will be taken in areas with intense dust problems. • Additional measures will be taken to prevent dust formation in areas where there are regionally intense complaints received through the grievance mechanism or the number of working teams will be reduced, and the teams will be distributed homogeneously in the working area.									
Exhaust emissions during construction	• The construction equipment and trucks will be maintained regularly to keep them in good working condition to minimize exhaust emissions caused by poor performance. • Poor performance vehicles and equipment that cause exhaust emission problems will be replaced with new ones. • Engines of the equipment/trucks will be prevented from idling and running unnecessarily. • Unnecessary Project traffic will be avoided inside and outside of the Project side by adequate planning of material transport. • A Construction Traffic Management Plan will be prepared and implemented which will decrease the impacts of the construction traffic. • Periodic inspections of exhaust emissions of work equipment will be carried out regularly and vehicles and equipment with negative reports will not be used in the project. • Project employees will be trained on air quality impacts and mitigation measures. • Transportation trucks, especially those carrying materials that will cause dust and emissions, will be covered with tarpaulins when entering and leaving the construction site and on public roads. • Speed limits will be applied to all vehicles used within the scope of the Project, especially trucks.		X		Visual inspection of air quality control measures Records of maintenance Records of complaints		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
NOISE MANAGEMENT										
Noise	A Noise Management Plan will be prepared prior to commencement of construction works and submitted to ILBANK PIU for approval after consultant check. The Noise Management Plan will include the following mitigation measures: • The machinery and equipment to be used during the land preparation and construction activities will not be operated at the same point/location but homogeneously distributed in the site. • During the construction phase, 'low noise' equipment will be used as far as possible. • Machines will be shut down or throttled down to a minimum when not in operation. • Maintenance procedures will be implemented to keep the equipment in good working order and minimize extraneous noise caused by underperformance. • Night work will not be permitted within the scope of the subproject. • Noise related to construction traffic will be properly managed through implementation of a Traffic Management Plan. • Nearby communities will be contacted and informed about the work plan, especially before noisy activities. • Awareness will be increased among construction workers regarding noise mitigation. • An appropriate public relations program should be developed and the public in close settlements should be informed by the social expert. • An effective grievance mechanism will be established to collect complaints from local residents regarding noise and vibration in order to prevent any discontent by the local communities. • Noise measurements will be made in areas where complaints received through the grievance mechanism are intense and the noise level will be reduced to legal values with necessary mitigation measures, including noise diverting screens etc.		X		Visual inspection of noise control measures Records of complaints Noise measurement results (if any)	X			Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract
TRAFFIC MANAGEMENT										
Project Traffic	A Project specific Traffic Management and Safety Plan will be prepared and implemented. • Mitigation measures as part of the construction Traffic Management and Safety Plan will be developed in consultation with affected communities, vulnerable people or		X		Traffic accident records Records of		X		Contractor (implementation) Supervision	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	groups in communities and stakeholders. The appropriate consultation measures will be provided in the Plan. • Necessary consultation with the relevant authorities will be conducted related to the implementation of the Plan. • An effective grievance mechanism will be implemented to collect complaints from local residents and other stakeholders on the potential traffic problems. • Before starting the planned Subproject works, road closure permits will be obtained from the relevant institutions and alternative routes will be determined to prevent the local people from suffering. • A Traffic Management Plan will be implemented to minimize the impact of vehicul and pedestrian traffic on public facilities such as schools and health centers. Excavation areas will be surrounded by safety barriers to ensure pedestrian traffic and prevent accidents. • In particular, platforms with railings will be used to manage pedestrian traffic within the project area and to prevent access to workplaces and residential areas. • Measures will be taken to ensure that the traffic density that will be created by the project will not hinder the commercial activities of the workplaces. • Appropriate and directive traffic signs and marking will be placed in the working areas.				complaints				Consultant (supervision) PIU *(monitoring of compliance and reporting)*	
BIOLOGICAL ENVIRONMENT MANAGEMENT										
Impact on Flora and Fauna	• Construction activities will not leave the designated work area. Soil, vegetation and trees outside the work area will not be damaged. • Construction machinery, equipment and vehicles will not be parked outside the work area and drivers and operators will be trained. • Construction sites and access roads will be separated from other areas with appropriate signboards, signs and fences to limit the staff and vehicle access to the other areas. • Measures will be taken to prevent pollution of water resources around the project area and employees will be trained. Disposal and/or dumping of wastes into water environments will be prohibited. • Biodiversity awareness will be created in the training content given to the project staff and information will be provided on necessary mitigation measures.		X		Tree plantation records Visual inspection of control measures		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• As far as possible, no trees will be cut within the scope of the subproject. Trees that obstruct construction works will be relocated to forested areas if possible. If it is inevitable to cut trees that cannot be removed and relocated, at least 2 saplings will be planted in forested areas for each tree cut. In cases such as relocation, transportation and felling of trees, permits will be obtained from the relevant institutions and the number of trees will be recorded. • Unnecessary destruction of habitats will be prevented and trees or vegetation outside the project area will not be interfered with. • Dust emissions will be minimized by lightly watering the immediate vicinity of the construction sites and wetting the stored material. • Construction waste resulting from construction activities will not be stored in the work area but will be stored in predetermined storage areas and then disposed of.									
LABOUR AND WORKING CONDITIONS										

Labor and working conditions	A Labor Management Plan will be prepared and implemented during the Project, including:
	• Personnel Selection and Employment Procedure;
	• Workers' Grievance Mechanism will be developed and will:
	  ○ be open to all Project employees (including employees of contractors),
	  ○ be easily accessible by workers,
	  ○ be free of retribution,
	  ○ allow anonymous complaints to be raised and addressed,
	  ○ Employees will be informed about this mechanism at the time of hiring and through regular trainings,
	  ○ Handle grievances of an SEA/SH nature.
	• The Contractor shall establish and implement a Labor Management Procedure, including a Code of Conduct.
	• After recruitment, workers shall be made to sign contracts containing terms and conditions of employment and their rights in accordance with national legislation and a copy will be given to the workers.
			X		Employee records
					
					Training registrations
					
					Records of employee grievances
							X		Contractor (implementation)
									
									Supervision Consultant (supervision)
									
									PIU *(implementation at PIU level and monitoring of compliance by contractor and reporting)*
										Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Data files will be maintained, including Employee Contracts, training records, signed Codes of Conduct, information on close relatives and medical surveillance reports. • The salary amount specified in the contract will be paid to employees on time and in full. • Person(s) without an employment contract will not be employed by the contractor and subcontractor. • Recruited employees will enter the work area after receiving all trainings within the scope of OHS and this ESMP. Employees whose trainings are not completed will not be allowed to enter the work site. • Local employment will be prioritized.									
Occupational health and safety	• An Occupational Health and Safety Management Plan will be prepared and implemented in line with applicable national health and safety legislation and international standards. • Dust emissions and noise generation will be minimized to the extent possible through the implementation of mitigation measures and workers' exposure to dust and noise will be measured at regular intervals. • Fence installation, placing of warning and directional signs at site in clearly and visible manner will be installed for safety of workers and public. • For the safety of workers and the public, a continuous fence with a minimum height of 2.5 meters will be established covering the work area. • A job specific OHS toolbox talk will be given to workers (including subcontractors) before starting work each day and necessary personal protective equipment will be provided. • PPE (hard hat, work shoes, safety glasses, gloves, etc.) will be provided to all workers involved in the subproject. • Employees who are not provided with and/or do not use personal protective equipment will not be allowed to enter the work site. • All employees (including subcontractors) will be provided with legally mandatory induction training prior to travelling to the work site when they are first hired and employees who have not received training will not be allowed to start work.		X		• Visual inspection • Employee records • Equipment records • Visual inspection of control measures • OHS records. • Incident statistics and records	X			Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• Work permits will be required for high-risk activities such as working at height, use of heavy equipment and similar high-risk activities. • All workers (including subcontractors) will be trained in health and safety and an Emergency Preparedness and Response Plan will be prepared to respond to incidents in a timely manner. • Response teams will be formed within the framework of the emergency preparedness and response plan. • The efficiency of health and safety practices will be monitored through internal and external audits and corrective actions will be taken if required. • The Site Supervisor, the Employer (Municipality) and ILBANK will be informed within 24 hrs of any incident involving loss of life or loss of limb, or serious incident requiring 3 or more days of hospital care. • All accidents and incidents will be recorded in line with Environmental and Social Incident Response Toolkit (ESIRT) and the National laws and regulations (Occupational Health and Safety (No 6331) etc.) • The effectiveness of health and safety practices will be monitored through internal and external audits and corrective measures will be taken when necessary. • It will be ensured that subcontractors and primary suppliers in the WWTP construction in accordance with sub-project OHS plans and procedures and that mitigation measures are implemented. • In case of encountering with asbestos pipes, to be in line with the Regulation on Health and Safety Precautions When Working with Asbestos, following measures will be taken: ➢ Workers dealing with asbestos pipes will use protective masks, ➢ Workers will not eat, drink, chew or smoke within any work area containing asbestos, ➢ Drop cloths will not be re-used, ➢ Before leaving the work area, workers must decontaminate their protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, and • Workers are provided with suitable hand and face washing facilities and shower facilities for dusty work. Workers must wash their hands and face before leaving the work area									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
COMMUNITY HEALTH, SAFETY AND SECURITY										
Community health, safety and security	• A Community Health, Safety and Security Plan will be prepared and implemented for the Project construction phase. • Staff will be trained on the importance of community health and safety measures and codes of conduct. • Adequate quality accommodation and campsite services will be provided for Project personnel to minimize contact with local communities. • Communities in the vicinity of the work area will be informed through consultation meetings, leaflets and information signage prior to commencement of works. • Transportation and material transportation in areas with heavy traffic will be carried out during the hours when traffic density is reduced. • Pedestrian crossing equipment will be used in construction areas where possible for safe pedestrian access. • All relevant measures will be taken to ensure that sacred buildings, tombs and places of worship in Ilıca neighborhood center will not be damaged during the project. Team members will be trained and briefed before works commence to avoid damaging objects of sentimental value to local communities. • The work plan will be made in a way that will not prevent the commercial activities of the workplaces and commercial establishments in the project area. In particular, road closures that will prevent commercial activities will be carried out after alternative routes are determined and information is provided. • Construction activities will be carried out in a way that will not disrupt the daily functioning of sensitive areas such as schools, hospitals, and mosques. • Information sharing and consultation activities will be carried out with communities and other stakeholders in line with the Stakeholder Engagement Plan (SEP). • Emergency Preparedness and Response Plan will be prepared and implemented. • Traffic Management Plan will be developed and implemented.		X		Visual inspection of control measures Traffic accident records Records of grievances		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*)	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	• A grievance mechanism will be established to enable the community to raise concerns throughout the life of the Project and visibility of the grievance mechanism will be ensured. • A stakeholder engagement plan was prepared within the scope of the subproject and measures to address the concerns of local communities during the project implementation phase were identified. • Local culture and values of Ilıca will be taken into consideration in all phases of the Project and employees will be trained on codes of conduct. • Any behavior that may cause culture clashes will be avoided and employees will be trained on this issue.									
Dust and noise impacts on the nearby community	• Air Quality Management Plan will be prepared and implemented during the construction phase of the Project. • Transfer roads will be sprayed with water where necessary (e.g. using mobile watering vehicles) to prevent significant dust emissions, especially in dry weather conditions • A Noise Management Plan will be prepared as part of the C-ESMP and implemented during the construction phase of the Project. • The Contractor will carry out dust and noise measurements according to the intensity of complaints received during the Project construction phase. • A Community Health and Safety Management Plan will be prepared including commitments to implement key measures to protect the community from adverse impacts during construction (noise, dust, other emission risks related to materials and hazardous materials and accidents, etc.). • As the sub-project will be implemented in Ilıca neighborhood center, night works will not be allowed to prevent noise pollution.		X		Records of grievances		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract
Life and fire safety	• Emergency Preparedness and Response Plan will be prepared and implemented. • Necessary precautions will be taken for work offices and worker accommodation areas. Emergency assembly areas and signs, escape routes and signs and emergency warning systems will be installed. • Adequate and easily accessible fire extinguishers and equipment will be available in the accommodation camp areas of workers.		X		Visual inspection		X		Contractor (implementation) Supervision Consultant (supervision) PIU	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
									(monitoring of compliance and reporting)	
Security	• Security will be provided in a manner that does not jeopardize community's safety or Project Company's relationship with the community and that is consistent with national requirements and international standards. The grievance mechanism will allow communities and workers to express concerns regarding security issues and behavior of security personnel. • Special security units will be established to prevent unauthorized entry and exit to and from the workers' accommodation campsite.		X				X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)*	Included in Works Contract
LAND ACQUISTION AND INVOLUNTARY RESETTLEMENT										
Land related impacts including physical / economic displacement	• Damages to vegetation, agricultural lands and structures, pastures, livestock facilities will be avoided. • It will be ensured that construction activities do not restrict/obstruct the social and economic life of the local community. • It will be ensured that workers and heavy equipment will work without leaving the work area designated for the Subproject. • The Project for construction of WWTP and will not cause involuntary resettlement. • Social Expert will carry out consultations with local communities. • There will be no expropriation under the sub-project. • A grievance mechanism will be established for stakeholders affected by sub-project activities. • Private and public lands outside the project study area will not be entered and all measures will be taken to prevent this. • It will be ensured that workers and heavy equipment do not enter private property. The works will not be carried out on privately owned parcels unless they are expropriated,	X			Records of Consultation Form Records of complaints Surveys Reports Surveys Reports	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(operation of effective grievance mechanism; monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
	or their easement rights are established or rented which are all subject ILBANK's approval.								*KASKİ (supports grievance mechanism operated by PIU*)	
CULTURAL HERITAGE										
Damage to Archeological Sites	• If archaeological remains are encountered during the excavation works, the works will be stopped, and the relevant institutions will be contacted in accordance with the Chance Finds Procedure in the ESMF. The Contractor shall immediately (within 24 hours) notify the Employer and ILBANK of such a finding. • Trainings on Chance Finds Procedure will be delivered to the project workers, including contractor and subcontractor employees, on the procedures to follow in case chance finds are discovered. • All relevant measures will be taken to ensure that sacred structures, shrines and places of worship in the Ilıca neighborhood will not be damaged during the Project. Team members will be trained and briefed before works commence to avoid damaging objects of sentimental value to local communities.		X		Chance find records Number of trainings on chance finds procedures		X		Contractor (implementation) Supervision Consultant (supervision) PIU *(monitoring of compliance and reporting)* *KASKI (supports PIU for correspondences*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for Monitoring	Frequency of Monitoring			Responsibility for Implementation and Monitoring	Estimated Cost [1]
		Planning	*Construction*	*Operation*		*Continuous*	*Monthly*	*Quarterly*		
									regarding chance finds)	
STAKEHOLDER ENGAGEMENT										
Grievance Mechanism	• As indicated in the Roles and Responsibilities table; ILBANK will establish a Grievance Mechanism for the project and ensure its effective operation throughout the life cycle of the project with KASKI. • The implementation of the Stakeholder Engagement Plan (SEP) and Grievance Mechanism will be the responsibility of ILBANK PIU • SEP to be updated annually and if there are significant changes in the Project; • Visibility of the SEP and Grievance Mechanism will be ensured, including contact details of staff responsible for grievance handling. • Social Expert Community Liaison Officer will be appointed to monitor the grievances of the surrounding communities regarding construction activities and maintain relations with the affected communities. • Posters and brochures will be prepared and distributed to all people of Ilıca to increase the accessibility of the Grievance Mechanism and project visibility. • All records received through the grievance mechanism and other channels will be recorded in a grievance log for the duration of the project by ILBANK PIU.		X		Records of grievance Stakeholder engagement records		X		PIU *(implementation of SEP, operation of grievance mechanism, and reporting)* *KASKİ (supports PIU where necessary)* Contractor *(implementation of actions to address grievances)* Supervision Consultant *(supervision)*	Included in Works Contract

5. Stakeholder Engagement

Summary of the stakeholder engagement after the disclosure of the ESMP will be added.

6. Environmental and Social Management

During the construction and operation phases of the Project, there will be environmental and social impacts resulting from Project activities. Potential impacts during the construction phase of the Project will generally be short-term, low to moderate in magnitude and locally significant. These impacts will mainly relate to traffic, noise, vibration, air quality, soil disturbance and contamination, waste management, community health and safety, and labor and working conditions (including occupational health and safety).

In addition to this ESMP, a Stakeholder Engagement Plan has been prepared to identify and monitor the environmental and social impacts of the Project and identify mitigation measures. In addition, the C- ESMP and other sub-management plans to be prepared by the contractor will minimize impacts and ensure a proactive work.

The Contractor shall prepare the Contractor Environmental and Social Management Plan and Sub-Management Plans before the commencement of the construction works and submit to ILBANK PIU for approval after consultant check.

The sub-management plans to be prepared by the Contractor will be as follows.

1. Air Quality Management Plan (Dust Control Management Plan)
2. Noise Management Plan
3. Waste Management Plan
4. Water Resources Management Plan
5. Soil Pollution Management Plan
6. Traffic and Safety Management Plan
7. Community Health, Safety and Security Plan
8. Labor Management Plan (to be prepared in accordance with the project LMP)
9. Occupational Health and Safety Management Plan
10. Emergency Response and Action Plan
11. Stakeholder Engagement Management Plan and Grievance Mechanism (developed by ILBANK and it will be implemented by the Contractor)

7. Training

In order to raise awareness and develop responsible capacities, a series of trainings for KASKI Project Team and Contractor's management team should be provided.

In this context, the Consultant will be responsible for the environmental and social trainings. Environmental and Social team of the Consultant will provide necessary trainings to all personnel of KASKI Project Team and Contractor's management and employees before start of construction works. At the time of each employment for KASKI Project Team, the Consultant will provide training to the new member of the team.

Consultant will repeat its training to KASKİ Project Team and contractor representatives semi-annually and whenever it is deemed necessary.

Main subjects of the trainings for KASKI Project Team are listed as;

- A brief information about content of Environmental and Social Management Plan and Monitoring Plan,
- Responsibilities on environmental and social mitigation procedures and monitoring of implementation of measures,
- Soil pollution control,
- Waste management,
- Water pollution control,
- Air quality,
- Noise control,
- Protection of biological environment,
- Community health and safety,
- Grievance mechanism,
- SEA/SH and CoC
- Requirements associated with land acquisition and involuntary (physical and economical) resettlement,
- OHS measures and emergency preparedness and response,
- World Bank Environmental and Social Standards.

The Consultant will ensure that the Contractor provides the same trainings for its own personnel. In addition to the trainings on environmental and social issues, occupational health and safety trainings will be provided for each new employee as per the legal obligation. Personnel whose occupational health and safety trainings and environmental and social trainings are not completed will not be allowed to go to the work site. The Supervision Consultant is responsible for monitoring the Contractor's training activities. At the time of each employment for Contractor, the Contractor will train the new personnel.

Contractor(s) will repeat the training to their personnel semi-annually and whenever it is deemed necessary by contractor itself or Consultant.

Main subjects of the trainings for Contractor's are listed as follow;

- A brief information about content of Environmental and Social Management Plan and Monitoring Plan,
- Responsibilities on environmental and social mitigation procedures,

- Soil pollution control,
- Waste management,
- Water pollution control,
- Air quality,
- Noise control,
- Protection of biological environment,
- Community health and safety,
- Grievance mechanism,
- SEA/SH and CoC
- Toolbox talks,
- OHS measures and emergency preparedness and response,
- Work-specific talks,
- Code of Conduct.

Furthermore, the contractor, KASKI and the Consultant should receive obligatory trainings as per national legislation.

8. Monitoring and Reporting

Monitoring plays a key role in ensuring the continuity and effectiveness of the implementation of the identified mitigation management strategies. The main objective of the Monitoring Plan is to assess the implementation of the measures and requirements envisaged in this ESMP. Information gathered through monitoring can be used to improve management plans at all stages of the Project. Although impact assessment endeavors to cover all relevant potential impacts to determine their significance and include appropriate responses for these impacts, unexpected impacts may arise that can be managed or mitigated before they become an issue using the information obtained through monitoring. Therefore, monitoring will ensure that management plans are successfully implemented, and that the environment is protected through good practice at all stages of the Project.

The Contractors will be responsible for implementing the mitigation measures included in the E&S risk management documents (ESMPs) under the control of the supervision consultant and under the supervision of ILBANK PIU, and submit monthly, quarterly, and semi-annual Environmental and Social Monitoring Reporting (ESMR) to ILBANK PIU through the supervision consultant on ESHS performance in accordance with the criteria specified in the relevant tender documents and contracts.

The ESHS performance of the subprojects will be monitored by the responsible contractor' E&S team on a daily basis and the team will report the site findings on a monthly basis to the supervision consultant for review. The supervision consultant will check and add their site inspection findings and submit the consolidated reports to ILBANK PIU. ILBANK PIU has the right to share these reports to the local PMC for review.

The E&S Reports to be prepared by the Contractors will use the report format prepared by ILBANK These reports will be sent to the Consultant for submission to ILBANK within the first week of the month following the period covered by the Report. The annexes and supporting documents included in the report will also be submitted with the report.

9. Implementation Schedule and Budget Sources

Under this heading, expenditure items for the implementation of the ESMP are presented. ESMP budget source is given in Table 3.

Table 3. ESMP Budget Sources

Budget Item	Budget source
Recruitment of environmental, social and OHS experts (one expert for each discipline) for ILBANK PIU Monitoring of compliance and reporting by ILBANK PIU	Permanent experts will be financed under the budget of ILBANK and consultant experts will be financed under budget of TERRP/Component 4.1
Assignment of social focal point for KASKI	Shall be financed under KASKI's own budget (*)
Recruitment of environmental, social and OHS experts (one expert for each discipline) for supervision consultancy	Included in Supervision Consultant's budget (**)
Recruitment of environmental, social and OHS experts (one expert for each discipline) for Contractor	Included in Contractor's budget (**)
Implementation of ESMP measures	Included in Contractor's budget (***)
Monitoring of ESMP Measurements and laboratory analyses where necessary by supervision consultant	Included in Supervision Consultant's budget

(*) Since KASKİ permanent staff will be appointed to these positions, there will be no extra cost to the Project budget.
(**) Recruitments of specialists shall be financed under the budget of supervision consultancy services. Relevant cost estimates are taken into account at the initial stage of the consultant selection. The contractors are obliged to hire environmental, social and OHS experts for the implementation and monitoring of ESMP within the scope and price of their bids. .At this stage monthly cost estimated per specialist is 1,000 €/month)
(***) The laboratory and testing obligations and relevant reporting responsibility will be included within the works contract, during the construction period and the defect liability period. Later, for the operation stage, this responsibility will be transferred to KASKİ.

" ILICA (KAHRAMANMARAŞ) - Wastewater Treatment Plant Construction Project " investment is planned to be realized in the period 2025-2028. In addition, one more year will be given for the defect liability period.

WWTP Construction work contract is envisaged especially for this project. It is planned that the tender documents will be prepared by ILBANK, and the tender process will be realized in the second half of 2025.

The WWTP contract are planned to last 24 months. In addition, a one-year Defects Liability Period is planned, during which the contractor will be responsible for the repair of the newly constructed facilities.

The timeline is given below.

Table 4. Project Implementation Timeline

NO	YEAR	2025				2026				2027				2028				2029			
	Subcomponent / Months	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**
1	**Ilıca (Kahramanmaraş) Wastewater Treatment Plant Construction Projects**																				
	Investment and Tender Documents																				
	Construction Activities																				
	Defect Liability Period																				

With this subproject, it is aimed to provide urgent solutions to the infrastructure needs of Ilıca neighborhood in the short and long term.

10. ANNEXES

10.1. Ilıca WWTP Layout
10.2. Ilıca WWTP Land Allocation Permit
10.3. Relevant Permits
10.4. Grievance Forms
10.5. Minutes of Meeting for Public Consultation
10.6. Screening Form
10.7. KASKI-Ilıca WWTP Sludge Management Letter

10.1. Ilıca WWTP Layout

10.2. Ilıca WWTP Land Allocation Permit

TAHSİSLİ TAŞINMAZ TESLİM VE TESELLÜM TUTANAĞI

TAŞINMAZIN			
Taşınmaz No	46110102106	Cinsi	Hali Arazi
Fiili Durumu		Yüzölçümü (m²)	5.391,06
İli	Kahramanmaraş	Hazine Hissesi	1,00/1,00
İlçesi	Onikişubat	Tapu Tarihi	08.05.2019
Mahallesi / Köyü	Ilıca Mahallesi	Pafta / Cilt No	/
Caddesi / Sokağı	/	Ada / Sahife No	404/
Yöresi		Parsel / Sıra No	31/

TAHSİS İLE İLGİLİ BİLGİLER		
Tahsis Edilecek Olan İdare	Kahramanmaraş Belediyeleri(Kahramanmaraş Büyükşehir Belediyesi)	
Tahsis Amacı	Atık su arıtma tesisi	
Tahsis Süresi / Yüzölçümü		5.391,06
Yasal Dayanak	327 Sayılı Milli Emlak Genel Tebliği	
Tahsis Yetkisi	Defterdarlık	
Tahsis Tarih ve No	14.10.2022	4766331
Genel Müd. Dosya No		

ÜZERİNDE BULUNAN MUHDESATIN
Cinsi: Nevi: Miktarı:

Yukarıda özellikleri yazılı taşınmaz tahsis amacında kullanılmak üzere ve tahsis amacı kalmadığında idaremize iade edilmek üzere aşağıda adı, soyadı ve görev ünvanı yazılı bulunan şahsa teslim edildiğine dair iş bu tutanak birlikte tanzim ve imza altına alındı. 18/10/2022

TESLİM EDEN — **TESLİM ALAN**

Serdar SARIKAYA
İnşaat Teknikeri

Kenan E. BAYRAM

NOT: Teslim alan idarenin; tahsisli taşınmazı işgal ve tecavüzlere karşı korumak için her türlü tedbiri alması, işgal ve tecavüz halinde idari ve adli yollara başvurması ve durumu derhal illerde Defterdarlığa (Milli Emlak Müdürlüğü), ilçelerde Malmüdürlüğüne (Milli Emlak Servisi) bildirmesi ve tahsisli taşınmazlarla ilgili olarak harcamalara katılma payı dahil her türlü gideri ödemesi gereklidir.

10.3. Relevant Permits

The Ministry of Environment, Urbanization and Climate Change, Opinion Letter regards to EIA Scope Assessment will be attached.

10.4. Grievance Forms

Complaint Category			Total				Reporting Period			
			Registered	Pending*	Open	Open more than 15 business days	Registered	Pending*	Open	Open more than 15 business days
Appreciations										
Queries										
Requests										
Complaints and Concerns	Engineering	Improper engineering application/design								
		Prioritization of asphalting								
		Slow progress of construction works								
	Environmental	Disposal of hazardous waste								
		Disposal of non-hazardous waste								
		Dust/Mud								
		Impacts on the habitat/culture protected buildings								
		Noise								
		Odor								
		Random spoil piles								
		Other Issues								
	Land and Livelihood	Illegal acquisition of land								
		Impacts on the livelihood								
	Social	Community health and safety								
		Damage to personal assets								
		Disruption of public services								
		Esthetics								
		Inappropriate behavior of project staff								
		Occupational health and safety								
		Working hours								
		Other Issues								
TOTAL										

* Closing period is extended by the agreement with the complainant

10.5. Minutes of Meeting for Public Consultation

10.6. Environmental and Social Screening Form

TÜRKİYE EARTHQUAKE RECONSTRUCTION AND RECOVERY PROJECT
(TERRP)

Subproject Name	ILICA (KAHRAMANMARAŞ) WASTEWATER TREATMENT PLANT (LOT-3) Construction Project
Document Name	Environmental and Social Screening Form
Version	0.0
Submission Date	11/02/2025

1. Subproject Information:

Subproject Title	ILICA (KAHRAMANMARAŞ) WASTEWATER TREATMENT PLANT CONSTRUCTION PROJECT (LOT-3)
Subproject Location	Ilıca Neighborhood (Kahramanmaraş)
Regional Unit in Charge	Gaziantep Regional Directorate of ILBANK Project Management Consultant Supervision Consultant
Estimated Cost	3.02 million €
Start/Completion Date	2025 – 2028 Defect Liability Period included
Brief Description of Sub-project	Ilıca (Kahramanmaraş) Wastewater Treatment Plant Construction A domestic wastewater treatment plant is planned to be built on 31 block 404 parcels in Ilıca neighborhood of Kahramanmaraş. The total area of these parcels is 5,386 m^2. The area designated for the construction of the wastewater treatment plant within the scope of the Project has been allocated by the General Directorate of Kahramanmaraş Water and Wastewater Administration (KASKİ). A 2,194 m^3/day WWTP, utilizing a Sequencing Batch Reactor (SBR) process with advanced biological treatment for N and P removal, discharges treated wastewater to the Ilıca stream located downstream. Based on a population projection of 19,500 people for the year 2055. This system will use a Sequential Batch Reactor (SBR) for advanced biological nutrient (N and P) removal. Process Units including; Inlet Structure and Screening, Compact Preliminary Treatment, Equalization Tank and Distribution Structure, 3 pcs of SBR Tank, Valve Chamber, Filtrate Water Pumping Center and Buildings for Administration, Sludge Dewatering and Blower.

2. Environmental and Social Screening Questionnaires

Questions	Answer		Next Steps
	Yes	No	
ESS1			
1. Is the subproject likely to have significant adverse E&S impacts that are sensitive and unprecedented that trigger the 'Ineligible Activities' and exclusion? (Please refer Table 11 and Annex-7)		NO	The activities of the subproject are not within the World Bank Group IFC Exclusion List (2007) given in Annex-7 and Exclusion List given in Table 11 of the ESMF of TERRP. No, the sub-project is not likely to have a significant adverse environmental impact since (i) the sub-project area does not overlap with any nationally or internationally protected areas having important ecosystem features, or significant biodiversity value, (ii) it is not located within or adjacent to a sensitive site (historical archaeological or culturally significant site) or facility, (iii) the possible impacts of the construction activities will be low to medium-sized impacts which can be easily managed/mitigated, (iv) the impacts will be predominantly reversible, short-term, and are mostly limited to the project area and its immediate surroundings. This sub-project will make the necessary arrangements for the vulnerable and disadvantaged groups within the framework of national laws and regulations and in compliance with ESF and its associated ESSs.
2. Does the subproject involve new construction of ponds, wastewater sewerage systems, wastewater treatment systems, solid waste management systems, shelters, roads, community centers, schools, bridges and jetties?[2]	YES		There will be a construction of Wastewater treatment plant (WWTP) with a capacity of 2,194 m^3/day has been planned to provide high-quality effluent to the Ilıca stream.

[2] Questions 2 and 3 are critical questions in the Screening Form, as they will determine whether a subproject can use Project Level ESMP in Annex-5 (unless one of the questions below raises specific E&S risks and requires a site-specific ESMP). If all the subprojects are expected to

Questions	Answer		Next Steps
	Yes	No	
			The WWTP is designed to produce approximately 1 m^3/day of sludge based on the population of Ilıca. The sludge produced will be transported to Kahramanmaraş central wastewater treatment plant by the KASKİ's vacuum trucks without storage and drying process. The sludge management specified by KASKI is briefly explained below and the official letter sent by KASKI on sludge disposal is presented in Annex 4. The treatment sludge generated at Kahramanmaraş Central Advanced Biological Wastewater Treatment Plant, which is operated by KASKI General Directorate, is officially disposed of by sending it to be licensed disposal facilities authorized by the Ministry of Environment, Urbanization and Climate Change and cement factories in the region. Since Kahramanmaras Central Wastewater Treatment Plant has an "Environmental Permit and License Certificate", the necessary information and official documents are included in the "Integrated Environmental Information System". The ESMP, included as Annex 4 to the ESMF, will be customized for the proposed sub-project. E&S risk management measures will be included in the tender and contract documents.
3. Does the subproject involve renovation or rehabilitation of any small-scale infrastructure, such as groundwater wells, latrines, showers/washing facilities, or shelters?		NO	No. Land allocation is Government-Owned Land and Vacant area. The subproject does not include the renovation or rehabilitation of small-scale infrastructure such as groundwater wells, latrines, showers/washing facilities, or shelters.
4. Will construction or renovation works require new borrow pits or quarries to be opened?		NO	The subproject will use a small amount of concrete, and the contractor will source materials from existing pits, eliminating the need to open new quarries or borrow pits. ESMP and E&S risk management measures will be included in the contracts with the subcontractors supplying the materials to be used in the infrastructure project.
ESS2			
5. Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?		NO	This subproject will not use any goods or equipment produced using forced labor, child labor, or other exploitative labor practices. All procurement contracts will include provisions ensuring that labor conditions throughout the supply chain comply with WB ESS2.
6. Does the subproject involve recruitment of workforce including direct, contracted and/or primary supply workers?	YES		The project workforce will consist of contracted workers and primary supply workers. Local hiring from nearby communities will be prioritized. The project's Labor Management Plan (LMP) prepared for the TERRP will be implemented, and the work will include civil, architectural, mechanical, and electrical components.
7. Do workers need PPE relative to the potential risks and hazards	YES		All workers involved in both the *construction* and *operation* phases of the Wastewater Treatment

be low and moderate risk, then all subprojects may be able to use the Project Level ESMP. However, if there are some subproject activities, which may propose substantial risk, these may require ESIA to be prepared

Questions	Answer		Next Steps
	Yes	No	
associated with their work?			Plant (WWTP) will be provided with appropriate Personal Protective Equipment (PPE) to address potential job-related risks. Before work begins in either phase, the contractor will supply PPE (hard hats, work shoes, safety glasses, gloves, *respirators if needed*, *chemical-resistant suits and gloves if needed*, etc.) and mandatory Occupational Health and Safety (OHS) training, following both the project's Labor Management Plan (LMP) and a contractor-developed OHS plan that meets national and international standards. Workers performing specialized tasks during *construction* or *operation* at the WWTP will receive additional PPE (e.g., *specific respirators for certain gases*, *eye protection for UV or chemical exposure*, *hearing protection*, etc.). Specific PPE will be readily available for any planned or unplanned work during *construction* or *operation* involving hazardous materials or processes, such as chemical handling, confined space entry, or work with biological hazards. This includes considerations for both the initial construction activities and the ongoing maintenance and operational tasks of the WWTP.
8. Is there a risk that women may be underpaid when compared to men when working on the project construction?		NO	This subproject is designed to comply with relevant World Bank Environmental and Social Standards (ESSs). Specifically, regarding gender, no gender-based risks are anticipated. Consistent with ESS2 (Labor and Working Conditions), staff salaries are determined by position and experience, not gender, ensuring equal pay for equal work. Furthermore, recruitment practices will adhere to a non-discriminatory approach, in line with ESS2 (Labor and Working Conditions) and promoting equal opportunities.
9. Does the project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable.[3]		NO	No, the project is not anticipated to lead to any disproportionate risks or impacts on individuals or groups who, due to their particular circumstances, may be disadvantaged or vulnerable. However, to ensure this remains the case, the contractor's Public Safety Plan and Stakeholder Engagement Plan will address and mitigate any potential risks that may unexpectedly arise. These plans will outline procedures for identifying and addressing potential vulnerabilities, ensuring that all community members, including any potentially disadvantaged or vulnerable individuals or groups, have access to information about the project, can voice their concerns, and can benefit from project opportunities. The Stakeholder Engagement Plan will detail specific strategies for communication and consultation with diverse groups, taking into account potential language barriers, accessibility needs, and other factors that might affect participation. This proactive approach aims to minimize any potential adverse impacts and promote

[3] "Disadvantaged or vulnerable" refers to those individuals or groups who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or ethnic peoples status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits.

Questions	Answer		Next Steps
	Yes	No	
			equitable access to project benefits.
ESS3			
10. Is the project likely to generate solid or liquid waste that could adversely impact soils, vegetation, rivers, streams or groundwater?	YES		A new 2,194 m^3/day wastewater treatment plant (WWTP) is planned, designed to serve a projected population of 19,500 by 2055. The treated effluent will meet the specified parameters as (COD:125,BOD5:25,SS:35,TN:10,TP:2) in the Water Pollution Control Regulation and the Urban Wastewater Treatment Regulation for discharge to the Ilıca stream in accordance with regulations protecting the Menzelet Dam, which is located on downstream. Menzelet Dam is used for hydropower purposes as the final sensitive receiving environment. The treatment sludge to be generated at Ilıca WWTP will be sent by KASKİ's vacuum trucks to Kahramanmaraş Merkez advanced biological wastewater treatment plant and will be included in the sludge process. After dewatering at the central advanced biological wastewater treatment plant, the sludge will be disposed of by sending it to be licensed disposal facilities authorized by the Ministry of Environment, Urbanization and Climate Change and to cement factories in the region as raw material. General domestic solid waste from the WWTP's construction and operation will be collected and disposed of by municipal services.
11. Are any of the construction works involve the removal of asbestos or other hazardous materials?		NO	No, the subproject site is on vacant, government-owned land. Furthermore, construction activities will not involve the removal of asbestos or other hazardous materials.
12. Are works likely to cause significant negative impacts to air and/or water quality?		NO	While construction activities may temporarily generate dust and exhaust emissions, these impacts are predictable and easily mitigated through standard control measures outlined in the Environmental and Social Management Plan (ESMP). Similarly, the risk of groundwater contamination from potential spills will be addressed through mitigation measures detailed in the ESMP. The ESMP will also include sub-management plans (dust, waste, water resources, and spill prevention/remediation) to further mitigate any potential air or water quality impacts. Since no untreated wastewater will be discharged during the operation phase, no negative impact on water quality is expected. The treatment sludge will be transferred to the central WWTP by KASKI after sludge dewatering and then disposed of by licensed waste sludge companies. Therefore, since sludge digestion and sludge drying processes are not within the scope of the subproject, odor formation is not expected during the operation phase. No other activities are expected to negatively affect surface or groundwater quality.
13. Does the activity rely on existing infrastructure (such as discharge points) that is inadequate to prevent environmental impacts?	YES		After the construction of the sewerage network, another subproject, the lack of a Wastewater Treatment Plant in Ilıca neighborhood is considered as inadequate infrastructure. The

Questions	Answer		Next Steps
	Yes	No	
			construction of the Wastewater Treatment Plant will be operated together with the sewerage network, which is another subproject, and will prevent the discharge of untreated wastewater. Thus, the existing infrastructure damaged by the earthquake will be renewed and uncontrolled wastewater discharge and negative environmental impacts will be prevented.
14. Is there any potential to have impact on soil due to agro-chemicals (e.g., pesticides) used in farmlands due to the consequences of the sub-project activities (e.g., development of irrigation system, agriculture related activities, seed and fertilizer assistance)?		NO	Biologically treated sludge from the facility will be mechanically dewatered. In operation phase, WWTP's sludge management strategy involves transfer to KASKI centralized WWTP with thermal sludge dryers and final disposal will be done by authorized disposal companies.
ESS4			
15. Is there a risk of increased community exposure to communicable disease (such as COVID-19, HIV/AIDS, Malaria), or increase in the risk of traffic related accidents?	YES		Yes, there is a potential risk of increased community exposure to communicable diseases, and a risk of increased traffic accidents. These risks will be mitigated through several measures. Disease transmission will be addressed by implementing proper sanitation protocols in contractor site offices and dormitories. Traffic risks will be managed through a traffic management plan, dust control measures, and diligent application of health and safety procedures, including on-the-job training and internal audits.
16. Is an influx of workers, from outside the community, expected? Would workers be expected to use health services of the community? Would they create pressures on existing community services (water, electricity, health, recreation, others?)	YES		While local hiring will be prioritized, some workers, particularly those with specialized skills, are expected to be recruited from outside the community. While these external workers may utilize existing community services, their limited number (expected to be fewer than 50) is not anticipated to significantly strain those services.
17. Is there a risk that SEA/SH may increase as a result of project works?	YES		To ensure responsible conduct and address potential grievances, a multi-faceted approach will be implemented. A comprehensive Code of Conduct will be enforced for all project personnel, complemented by a dedicated worker grievance mechanism enabling employees to voice concerns. Consultant-led training will be provided on gender equality, SEA/SH (Sexual Exploitation and Abuse/Sexual Harassment), and the Code of Conduct, with all staff required to sign a written commitment to compliance. The project's Labor Management Plan (LMP) will be implemented to further safeguard worker rights. A dedicated Gender Based Violence (GBV) Social Expert will monitor the project and engage with the local community throughout the project lifecycle. As part of the Stakeholder Engagement Plan (SEP), a Grievance Mechanism (GM) will be established to receive and resolve feedback and complaints. The GM will offer multiple submission channels, including in-person, phone, email, and website options, and accessible grievance boxes will be located in the neighborhood to ensure inclusivity for all stakeholders, including disadvantaged groups such as women, children, and persons with disabilities. Furthermore, a misconduct information code will be signed upon job

Questions	Answer		Next Steps
	Yes	No	
			commencement, and on-the-job training will be provided, detailing the code of conduct and outlining the direct punishment mechanism for violations.
18. Would any public facilities, such as schools, health clinic, and mosque be negatively affected by construction?		NO	The subproject site is located on vacant, government-owned land. No public facilities, such as schools, health clinics, or mosques, are located in the vicinity and will therefore not be negatively affected by construction. The closest houses are located 230 m from the facility.
ESS5			
19. Does the subproject involve involuntary land acquisition?		NO	The subproject site is located on vacant, government-owned land; therefore no involuntary land acquisition will occur.
20. Does the subproject involve physical and/or economic displacement of people?		NO	Because the subproject site is located on vacant, government-owned land, no physical or economic displacement of people will occur.
ESS6			
21. Does the subproject involve activities that have potential to cause any significant loss or degradation of critical natural habitats[4] whether directly or indirectly, or which would lead to adverse impacts on natural habitats?		NO	Located on vacant, government-owned land, the subproject's excavation works will be preceded by topsoil stripping to preserve and protect this valuable resource. Topsoil and subsoil will be kept separate, and the topsoil will be reinstated after backfilling is complete for use in landscaping.
22. Will the project involve the conversion or degradation of non-critical natural habitats?	YES		The sub-project area includes the conversion of non-critical natural habitats. The sub-project area is located on an allocated land with a few trees and bushes. In the WWTP construction area, some brush and tree vegetation will need to be cleared, including native vegetation in the interior. Topsoil stripping will be carried out and topsoil will be protected to reduce the impact on non-critical natural habitats. Topsoil will be used for landscaping after construction works are completed to reduce construction impacts.
23. Will this activity require clearance of trees, including inland natural vegetation?	YES		This activity will necessitate the clearance of some trees and inland natural vegetation. Consequently, a degree of vegetation clearing, including trees if present, is unavoidable. However, with the observed presence of trees, the following additional actions will be implemented: First, alternative solutions for the affected trees, such as relocation, will be explored. Second, local authorities will be consulted regarding the natural flora, particularly the trees, on the allocated land, and their guidance and any required permits for tree removal or relocation will be obtained. Third, a thorough survey of the existing flora, including tree species, size, and health, will be conducted. The survey will clarify decisions on tree management and guide topsoil management and restoration.

[4] Critical natural habitats such as legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, or recognized as protected by traditional local communities.

Questions	Answer		Next Steps
	Yes	No	
24. Will there be any significant impact on any ecosystems of importance (especially those supporting rare, threatened or endangered species of flora and fauna)?		NO	No. This location does not pose a significant risk to any ecosystems of importance, particularly those supporting rare, threatened, or endangered species of flora and fauna.
ESS8			
25. Is the subproject to be located within or adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?		NO	There is no registered area in the area where the subproject will be implemented (historically, archaeologically, or culturally important area).
26. Locate near buildings, sacred trees or objects having spiritual values to local communities (e.g. memorials, graves or stones) or require excavation near there?		NO	No, the project is not located near any buildings, sacred trees or objects having spiritual value to local communities (e.g., memorials, graves, or stones), nor will it require excavation near such sites. However, as a precaution, if any such sites are encountered during construction, the Kahramanmaraş Museum and the Provincial Directorate of Cultural Heritage Preservation will be immediately notified.

3. Conclusion

Based The sub-project activities are not included in the exclusion list of TERRP's ESMF. Therefore, the sub-project is evaluated as eligible for financing. The subproject includes the construction of meeting the infrastructure needs damaged by the earthquake and reconstruction will be carried out on-site.

Concerning ESS1: Assessment and Management of E&S Risks and Impacts;

- Limited Environmental Impact: The project's environmental impacts are assessed as low to medium, localized, short-term, and predominantly reversible, primarily stemming from construction activities. Waste generation is anticipated but considered temporary and site-specific, with mitigation details addressed in relevant ESSs. No disruption of ecosystems, habitats, or water bodies is expected.
- No Sensitive Sites Affected: The project will not impact any protected areas or sensitive sites, including historical, archaeological, or culturally significant locations.
- Mitigation Measures in Place: Construction-related impacts (dust, noise, traffic, business disruptions) are considered low to medium risk and will be mitigated through the project-level ESMP and sub-management plans. The WWTP will be constructed on a specific, vacant, government-owned parcel of land (parcel number 404 of block 31, Ilıca Neighborhood, Kahramanmaraş, totaling 5,386 square meters).

Concerning ESS2: Labor and Working Conditions;

- Ethical Labor Practices: The project prohibits the use of forced labor, child labor, and other exploitative labor practices. All procurement contracts will include provisions ensuring compliance with ESS2 (Labor and Working Conditions) throughout the supply chain.
- Workforce and Hiring: The project workforce will consist of contracted and primary supply workers, with local hiring prioritized. The project's Labor Management Plan (LMP) will be implemented.
- Occupational Health and Safety: All workers, during both construction and operation, will be provided with appropriate PPE and mandatory OHS training. Specialized PPE will be available for specific tasks involving hazardous materials or processes. Contractor-developed OHS plans will meet national and international standards.

- Gender Equality and Non-Discrimination: The project complies with relevant World Bank ESSs, ensuring equal pay for equal work and non-discriminatory recruitment practices (ESS2). No gender-based risks are anticipated.
- Vulnerable Groups and Stakeholder Engagement: While no disproportionate risks to vulnerable groups are anticipated, the contractor's Public Safety Plan and Stakeholder Engagement Plan will address any potential risks. These plans will ensure access to information, facilitate feedback, and promote equitable access to project benefits for all community members, including potentially disadvantaged or vulnerable individuals or groups.

Concerning ESS3: Resource Efficiency and Pollution Prevention and Management;

- Wastewater Treatment and Effluent Quality: A 2,194 m^3/day WWTP, utilizing an SBR process with advanced biological treatment for N and P removal, discharges treated wastewater to the Ilıca stream in accordance with regulations protecting the Menzelet Dam (given in Annex-II), which is located on downstream as a final sensitive receiving body, which is used for hydroelectric purpose.
- The treatment sludge to be generated at Ilıca WWTP will be sent to Kahramanmaraş Merkez advanced biological wastewater treatment plant and will be included in the sludge process. After dewatering at the central advanced biological wastewater treatment plant, the sludge will be sent to licensed companies for disposal. Treatment sludge generated at Kahramanmaraş Central Advanced Biological Wastewater Treatment Plant is disposed of by sending it to be licensed disposal facilities authorized by the Ministry of Environment, Urbanization and Climate Change and to cement factories in the region as raw material.
- Solid Waste Management: Dewatered sludge will be managed according to regulations, with potential disposal in a sanitary landfill (including leachate analysis) or beneficial reuse in soil applications (after analysis and permitting, and in compliance with regulations for soil amendment). General solid waste from construction and operation will be managed by municipal services.
- Air and Water Quality Protection: Construction-related dust and exhaust emissions will be mitigated through standard control measures in the ESMP. Spill prevention and response measures, also detailed in the ESMP, will minimize the risk of groundwater contamination. No other negative impacts on surface or groundwater quality are anticipated. For the operational phase, environmental laws and regulations concerning air and water quality will be strictly adhered to. Specifically, regarding air quality, regular odor tests will be implemented to monitor and control potential odor issues from the WWTP operations. These tests will ensure compliance with regulatory limits and help maintain acceptable air quality standards in the surrounding area. Similarly, wastewater discharge from the WWTP will be monitored and treated to meet all applicable water quality standards, protecting both surface and groundwater resources. The sludge generated at the wastewater treatment plant will be transferred to Kahramanmaraş central advanced biological wastewater treatment plant by KASKİ's vacuum trucks periodically , i.e. no storage and drying process will be on the planned WWTP, and will be included in the sludge process in Kahramanmaraş central advanced biological wastewater treatment plant. Therefore, no odor problem and contamination to be caused by sludge management are expected.
- New Infrastructure: This subproject will ensure that the domestic wastewater generated in Ilıca neighborhood is treated and discharged at standards in accordance with the regulations and prevent environmental pollution.

Concerning ESS4: Community Health and Safety;

- Disease and Traffic Risks: The project acknowledges potential risks related to increased community exposure to communicable diseases (including COVID-19) and traffic accidents. These risks will be mitigated through sanitation protocols at work sites and dormitories, a traffic management plan, dust control, and rigorous health and safety procedures, including training and audits.
- Influx of Workers: While local hiring is prioritized, some external workers (fewer than 50) are expected. Their limited number is not anticipated to significantly strain existing community services.
- SEA/SH Risks: The project recognizes the risk of increased SEA/SH (Sexual Exploitation and Abuse/Sexual Harassment) and will implement a comprehensive mitigation strategy. This includes a Code of Conduct, a worker grievance mechanism, mandatory training on gender equality, SEA/SH, and the Code of Conduct, a written commitment to the Code of Conduct, implementation of the LMP, a dedicated GBV

Social Expert, and a multi-channel Grievance Mechanism (GM) as part of the SEP. A misconduct information code and associated training will also be provided.

- Impact on Public Facilities: No public facilities (schools, clinics, mosques) will be negatively affected by construction, as the subproject site is located on vacant, government-owned land.

Concerning ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;

- Involuntary Land Acquisition: No involuntary land acquisition will occur, as the subproject site is located on vacant, government-owned land.
- Physical/Economic Displacement: No physical or economic displacement of people will occur, as the subproject site is located on vacant, government-owned land.

Concerning ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;

- Impact on Critical Natural Habitats: No, the subproject will not any loss or degradation of critical natural habitats.
- Conversion of Non-Critical Natural Habitats: Yes, the project will involve the conversion or degradation of some non-critical natural habitats within the WWTP construction area. Mitigation will include topsoil stripping and reinstatement.
- Natural Vegetation Clearing: Yes, some shrub and tree vegetation clearing will be required in the WWTP construction area, including natural vegetation in the interior. Topsoil will be protected and restored after construction.
- Impact on Important Ecosystems: No, the project is not expected to have impact on any ecosystems of importance, especially those supporting rare, threatened, or endangered species. The WWTP will be constructed on a specific parcel of land (parcel number 404 of block 31, Ilıca Neighborhood, Kahramanmaraş) that does not pose a significant risk to such ecosystems.

Concerning ESS8: Cultural Heritage;

Sensitive Sites: No, the subproject is not located within or adjacent to any registered historical, archaeological, or culturally significant sites or facilities.

Sacred Sites and Objects: No, the project is not located near any buildings, sacred trees, or objects having spiritual value to local communities (e.g., memorials, graves, or stones), nor will it require excavation near such sites. However, a protocol is in place to notify the Kahramanmaraş Museum and the Provincial Directorate of Cultural Heritage Preservation should any such sites be encountered during construction.

The Wastewater Treatment Plant will be a very small plant with a capacity of 2,194 m^3/day and 19,500 people in 2055. The distance of the nearest residential house to the Wastewater Treatment Plant is approximately 230 m. Since untreated wastewater will not be discharged during the operation phase, no negative impact on water quality is expected. The sludge from Ilıca WWTP, which will produce an approximately 1 m^3/day of treatment sludge, will be transferred to Kahramanmaraş Merkez advanced biological wastewater treatment plant by KASKI's vacuum truck and will be included in the sludge process. After dewatering at the central advanced biological wastewater treatment plant, the sludge is disposed of by sending it to be licensed disposal facilities authorized by the Ministry of Environment, Urbanization and Climate Change and to cement factories in the region as raw material. Therefore, since sludge digestion and sludge drying processes are not within the scope of the sub-project, odor formation is not expected during the operation phase. If the Wastewater Treatment Plant is constructed, the wastewater collected by the sewerage network will be discharged after treatment, thus preventing illegal discharge.

To sum up, the environmental impacts, mostly related to construction activities, are deemed low to medium-sized and predominantly reversible and short-term. These impacts are localized and confined to the project area, allowing for easier management and mitigation. Upon the environmental screening of the sub-project, for the reasons explained above, the environmental risk rating of the sub-project is "moderate" since the possible impacts of the construction activities will be low to medium-sized impacts which can be easily managed.

Based on the result of the above screening, the E&S risk management instruments to be prepared and implemented is proposed to be "**moderate risk".** This category signifies that the potential environmental impacts of the project are minimal or negligible. They are easily managed with standard mitigation measures, and no significant adverse effects are anticipated.

1- Customized Project Level ESMP

Annex – I Ilıca WWTP Layout

Annex-II Wastewater Treatment Plant Discharge and Menzelet Location (Satellite)

Annex - III Ilıca WWTP Land Allocation Permit

Annex – IV KASKI-Ilıca WWTP Sludge Management Letter

Project Management Consultant

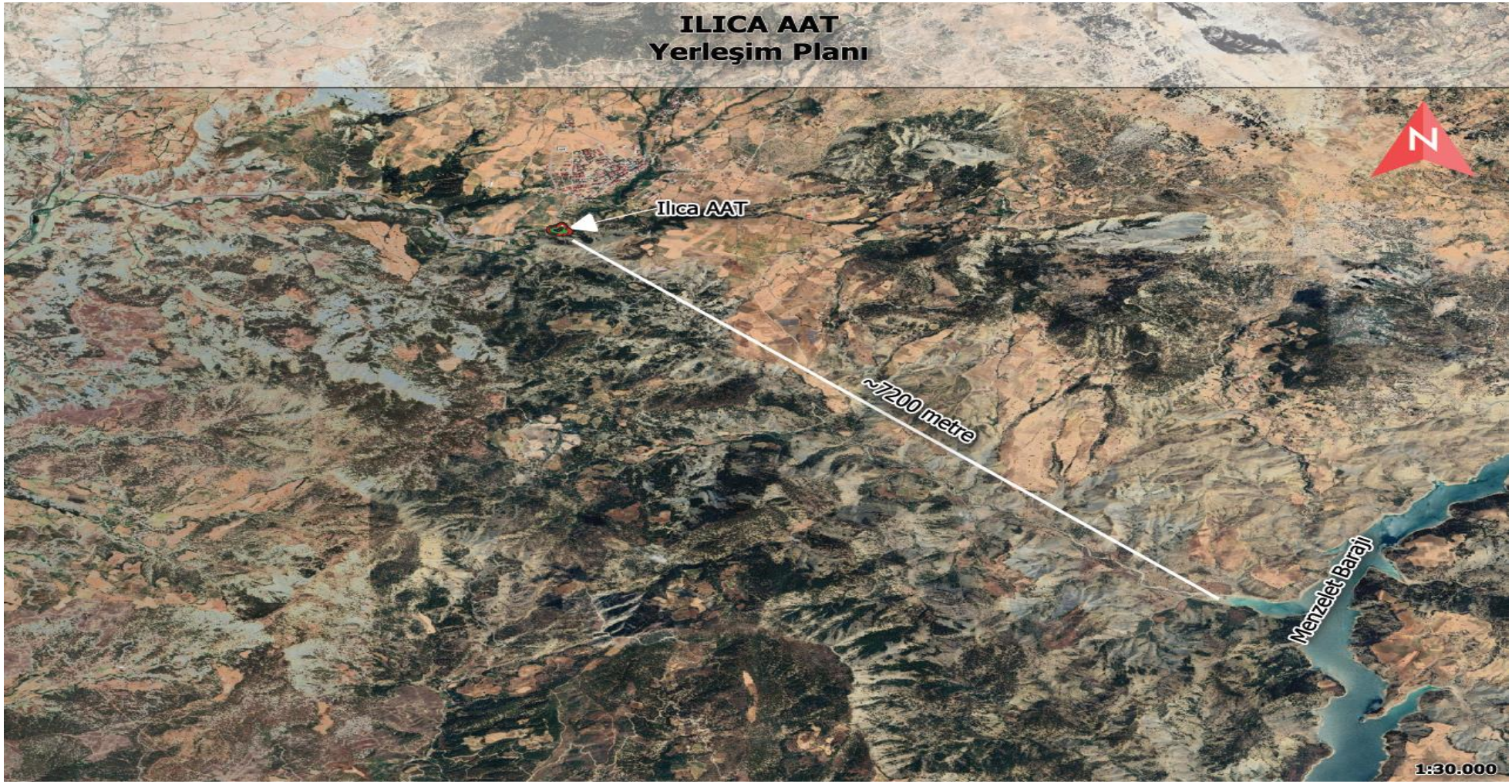
NEJDET BULUS	***ENVIRONMENTAL EXPERT***	***11.02.2025***	
SERKAN DELİDERE	***SOCIAL EXPERT***	***11.02.2025***	
SEDAT ERBERK	***PROJECT E&S TEAM MANAGER***	***11.02.2025***	

ILBANK PIU

Merve GENÇTÜRK *Environmental Staff of the PIU*	*Evironmental Engineer*	***11.02.2025***	
Gülçin HOŞAFCI *Social Staff of the PIU*	*Evironmental Engineer*	***11.02.2025***	
Nevzat TOĞRUL *E&S Team Manager of the PIU*	*Manager*	***11.02.2025***	

Annex – I Ilıca WWTP Layout

Annex II Wastewater Treatment Plant Discharge and Menzelet Location (Satellite)



Annex - III Ilıca WWTP Land Allocation Permit

TAHSİSLİ TAŞINMAZ TESLİM VE TESELLÜM TUTANAĞI

TAŞINMAZIN			
Taşınmaz No	46110102106	Cinsi	Hali Arazi
Fiili Durumu		Yüzölçümü (m²)	5.391,06
İli	Kahramanmaraş	Hazine Hissesi	1,00/1,00
İlçesi	Onikişubat	Tapu Tarihi	08.05.2019
Mahallesi / Köyü	Ilıca Mahallesi	Pafta / Cilt No	/
Caddesi / Sokağı	/	Ada / Sahife No	404/
Yöresi		Parsel / Sıra No	31/

TAHSİS İLE İLGİLİ BİLGİLER		
Tahsis Edilecek Olan İdare	Kahramanmaraş Belediyeleri(Kahramanmaraş Büyükşehir Belediyesi)	
Tahsis Amacı	Atık su arıtma tesisi	
Tahsis Süresi / Yüzölçümü		5.391,06
Yasal Dayanak	327 Sayılı Milli Emlak Genel Tebliği	
Tahsis Yetkisi	Defterdarlık	
Tahsis Tarih ve No	14.10.2022	4766331
Genel Müd. Dosya No		

ÜZERİNDE BULUNAN MUHDESATIN
Cinsi: Nevi: Miktarı:

Yukarıda özellikleri yazılı taşınmaz tahsis amacında kullanılmak üzere ve tahsis amacı kalmadığında idaremize iade edilmek üzere aşağıda adı, soyadı ve görev ünvanı yazılı bulunan şahsa teslim edildiğine dair iş bu tutanak birlikte tanzim ve imza altına alındı. 18/10/2022

TESLİM EDEN

Serdar SARIKAYA
İnşaat Teknikeri

TESLİM ALAN

Kenan E. BAYRAM

NOT: Teslim alan idarenin; tahsisli taşınmazı işgal ve tecavüzlere karşı korumak için her türlü tedbiri alması, işgal ve tecavüz halinde idari ve adli yollara başvurması ve durumu derhal illerde Defterdarlığa (Milli Emlak Müdürlüğü), ilçelerde Malmüdürlüğüne (Milli Emlak Servisi) bildirmesi ve tahsisli taşınmazlarla ilgili olarak harcamalara katılma payı dahil her türlü gideri ödemesi gereklidir.

Annex - IV KASKI-Ilıca WWTP Sludge Management Letter

T.C.
KAHRAMANMARAŞ SU VE KANALİZASYON İDARESİ
GENEL MÜDÜRLÜĞÜ
Arıtma Tesisleri Dairesi Başkanlığı

Sayı : E-28172077-314.04-130932 24.04.2025
Konu : Ilıca ve Kale Mahallelerine Yapılacak Olan Arıtmalar Hakkında

İLLER BANKASI ANONİM ŞİRKETİ GENEL MÜDÜRLÜĞÜNE
Uluslararası İlişkiler Dairesi Başkanlığı

Genel Müdürlüğümüz uhdesinde işletilen Kahramanmaraş Merkez İleri Biyolojik Atıksu Arıtma Tesisinde oluşan arıtma çamurları, Çevre, Şehircilik ve İklim değişikliği Bakanlığı'nın yetkilendirdiği Lisanslı Bertaraf Tesislerine ve bölgede bulunan çimento fabrikalarına gönderilerek resmi olarak bertaraf edilmektedir. Merkez Atıksu Arıtma Tesisimizin "**Çevre İzin ve Lisans Belgesi**" bulunduğu için, "**Entegre Çevre Bilgi Sistemi**'nde gerekli bilgiler ve resmi belgeler yer almaktadır.

Ilıca ve Kale mahallelerinde yapılması planlanan Atıksu Arıtma Tesisleri, Kahramanmaraş Merkez İleri Biyolojik Atıksu Arıtma Tesisine yakın olmalarından ötürü, oluşacak arıtma çamurları bu tesisimize getirilecek, buradan anlaşmalı olduğumuz lisanslı bertaraf firmasına gönderilecektir.

Genel Müdürlüğümüz, Arıtma Tesisleri Daire Başkanlığımıza bağlı "**Atıksu Arıtma ve İşletme Şube Müdürlüğü**" vasıtasıyla farklı proses türlerinde (Uzun Havalandırmalı Aktif Çamur, Simultane Nitrifikasyon-Denitrifikasyon, SBR vb.) aşağıdaki tabloda isimleri ve proses türleri belirtilen 7 adet Atıksu Arıtma Tesisinin işletmesini kesintisiz olarak sürdürmektedir.

Tesisin Adı	Kapasite	Proses Türü
K.Maraş Merkez İleri Biyolojik Atıksu Arıtma Tesisi	111.023 m^3/gün	Simultane Nitrifikasyon Denitrifikasyon
Elbistan İleri Biyolojik Atıksu Arıtma Tesisi	22.457 m^3/gün	Simultane Nitrifikasyon Denitrifikasyon
Afşin İleri Biyolojik Atıksu Arıtma Tesisi	11.000 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Pazarcık-Narlı İleri Biyolojik Atıksu Arıtma Tesisi	11.000 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Türkoğlu-Kılılı İleri Biyolojik Atıksu Arıtma Tesisi	6018 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Nurhak İleri Biyolojik Atıksu Arıtma Tesisi	1555 m^3/gün	Uzun Havalandırmalı Aktif Çamur

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Belge Doğrulama Kodu : 3MYH-VZDY-8EOY Belge Doğrulama Adresi : https://ebys.maraskaski.gov.tr/sorgu/sorgula.aspx

Adres: Y. Selim Mh. R. Tayyip Erdoğan Bulv. No : 79 Dulkadiroğlu / Kahramanmaraş
Telefon No : 344 236 0 333 Fax No : 344 236 1 333
e-Posta : İnternet Adresi : www.maraskaski.gov.tr
Kep Adresi : kmrs.kaski@hs01.kep.tr
Bilgi İçin :Alim KIR
Çevre Mühendisi
Dahili No:0344 236 03 33 - 1272

T.C.
KAHRAMANMARAŞ SU VE KANALİZASYON İDARESİ
GENEL MÜDÜRLÜĞÜ
Arıtma Tesisleri Dairesi Başkanlığı

Yeşilyöre Paket Atıksu Arıtma Tesisi	800 m^3/gün	SBR sistemi

Ayrıca İdaremiz Arıtma Tesisleri Daire Başkanlığı'na bağlı "**Arıtmalar Yatırım Şube Müdürlüğü**" bünyesindeki PIU ekibimizle, Dünya Bankası FRIT 2 finansman kaynağıyla yapımı devam eden 3 adet yeni Atıksu Arıtma Tesisi hem projelendirilme ve tasarım aşamasında hem de ihale ve sonrası yapım döneminde, müşavir eşliğinde, düzenli saha kontrolleri ve haftalık ilerleme toplantıları aracılığıyla devreye alınma aşamasındadır.

Tesisin Adı	Kapasite	Proses Türü
Andırın İleri Biyolojik Atıksu Arıtma Tesisi	1590 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Çağlayancerit İleri Biyolojik Atıksu Arıtma Tesisi	2724 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Ekinözü İleri Biyolojik Atıksu Arıtma Tesisi	1524 m^3/gün	Uzun Havalandırmalı Aktif Çamur

Yapımı planlanan Ilıca ve Kale mahallelerindeki Atıksu Arıtma Tesisleri için, Tesislerin yapım sürecinde ve özellikle lokasyonları dikkate alınarak, daha önce işletmeye alınmış olan Tesislerimizde uygulādığımız şekilde, İdaremize devri sonrasında, sorunsuz işletilmesini sağlayacak nitelikli personeller alınacak ve bu personellere, idaremizce verilecek olan oryantasyon eğitimiyle, işletme aşaması için yetkin hale getirileceklerdir.

Bilgilerinizi ve gereğini arz ederim.

e-imzalıdır
Necati ÇALIK
Genel Müdür

Adres: Y. Selim Mh. R. Tayyip Erdoğan Bulv. No : 79 Dulkadiroğlu / Kahramanmaraş
Telefon No : 344 236 0 333 Fax No : 344 236 1 333
e-Posta : İnternet Adresi : www.maraskaski.gov.tr
Kep Adresi : kmrs.kaski@hs01.kep.tr
Bilgi İçin :Alim KIR
Çevre Mühendisi
Dahili No:0344 236 03 33 - 1272

10.7. KASKI-Ilıca WWTP Sludge Management Letter

T.C.
KAHRAMANMARAŞ SU VE KANALİZASYON İDARESİ
GENEL MÜDÜRLÜĞÜ
Arıtma Tesisleri Dairesi Başkanlığı

Sayı : E-28172077-314.04-130932 24.04.2025
Konu : Ilıca ve Kale Mahallelerine Yapılacak Olan Arıtmalar Hakkında

İLLER BANKASI ANONİM ŞİRKETİ GENEL MÜDÜRLÜĞÜNE
Uluslararası İlişkiler Dairesi Başkanlığı

Genel Müdürlüğümüz uhdesinde işletilen Kahramanmaraş Merkez İleri Biyolojik Atıksu Arıtma Tesisinde oluşan arıtma çamurları, Çevre, Şehircilik ve İklim değişikliği Bakanlığı'nın yetkilendirdiği Lisanslı Bertaraf Tesislerine ve bölgede bulunan çimento fabrikalarına gönderilerek resmi olarak bertaraf edilmektedir. Merkez Atıksu Arıtma Tesisimizin "**Çevre İzin ve Lisans Belgesi**" bulunduğu için, "**Entegre Çevre Bilgi Sistemi**"nde gerekli bilgiler ve resmi belgeler yer almaktadır.

Ilıca ve Kale mahallelerinde yapılması planlanan Atıksu Arıtma Tesisleri, Kahramanmaraş Merkez İleri Biyolojik Atıksu Arıtma Tesisine yakın olmalarından ötürü, oluşacak arıtma çamurları bu tesisimize getirilecek, buradan anlaşmalı olduğumuz lisanslı bertaraf firmasına gönderilecektir.

Genel Müdürlüğümüz, Arıtma Tesisleri Daire Başkanlığımıza bağlı "**Atıksu Arıtma ve İşletme Şube Müdürlüğü**" vasıtasıyla farklı proses türlerinde (Uzun Havalandırmalı Aktif Çamur, Simultane Nitrifikasyon-Denitrifikasyon, SBR vb.) aşağıdaki tabloda isimleri ve proses türleri belirtilen 7 adet Atıksu Arıtma Tesisinin işletmesini kesintisiz olarak sürdürmektedir.

Tesisin Adı	Kapasite	Proses Türü
K.Maraş Merkez İleri Biyolojik Atıksu Arıtma Tesisi	111.023 m^3/gün	Simultane Nitrifikasyon Denitrifikasyon
Elbistan İleri Biyolojik Atıksu Arıtma Tesisi	22.457 m^3/gün	Simultane Nitrifikasyon Denitrifikasyon
Afşin İleri Biyolojik Atıksu Arıtma Tesisi	11.000 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Pazarcık-Narlı İleri Biyolojik Atıksu Arıtma Tesisi	11.000 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Türkoğlu-Kılılı İleri Biyolojik Atıksu Arıtma Tesisi	6018 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Nurhak İleri Biyolojik Atıksu Arıtma Tesisi	1555 m^3/gün	Uzun Havalandırmalı Aktif Çamur

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Belge Doğrulama Kodu : 3MYH-VZDY-8EOY Belge Doğrulama Adresi : https://ebys.maraskaski.gov.tr/sorgu/sorgula.aspx

Adres: Y. Selim Mh. R. Tayyip Erdoğan Bulv. No : 79 Dulkadiroğlu / Kahramanmaraş
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Bilgi İçin :Alim KIR
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T.C.
KAHRAMANMARAŞ SU VE KANALİZASYON İDARESİ
GENEL MÜDÜRLÜĞÜ
Arıtma Tesisleri Dairesi Başkanlığı

Yeşilyöre Paket Atıksu Arıtma Tesisi	800 m^3/gün	SBR sistemi

Ayrıca İdaremiz Arıtma Tesisleri Daire Başkanlığı'na bağlı "**Arıtmalar Yatırım Şube Müdürlüğü**" bünyesindeki PIU ekibimizle, Dünya Bankası FRIT 2 finansman kaynağıyla yapımı devam eden 3 adet yeni Atıksu Arıtma Tesisi hem projelendirilme ve tasarım aşamasında hem de ihale ve sonrası yapım döneminde, müşavir eşliğinde, düzenli saha kontrolleri ve haftalık ilerleme toplantıları aracılığıyla devreye alınma aşamasındadır.

Tesisin Adı	Kapasite	Proses Türü
Andırın İleri Biyolojik Atıksu Arıtma Tesisi	1590 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Çağlayancerit İleri Biyolojik Atıksu Arıtma Tesisi	2724 m^3/gün	Uzun Havalandırmalı Aktif Çamur
Ekinözü İleri Biyolojik Atıksu Arıtma Tesisi	1524 m^3/gün	Uzun Havalandırmalı Aktif Çamur

Yapımı planlanan Ilıca ve Kale mahallelerindeki Atıksu Arıtma Tesisleri için, Tesislerin yapım sürecinde ve özellikle lokasyonları dikkate alınarak, daha önce işletmeye alınmış olan Tesislerimizde uygulādığımız şekilde, İdaremize devri sonrasında, sorunsuz işletilmesini sağlayacak nitelikli personeller alınacak ve bu personellere, idaremizce verilecek olan oryantasyon eğitimiyle, işletme aşaması için yetkin hale getirileceklerdir.

Bilgilerinizi ve gereğini arz ederim.

e-imzalıdır
Necati ÇALIK
Genel Müdür

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