

**STATE INSTITUTION “DRINKING WATER SUPPLY AND WASTEWATER DISPOSAL”
UNDER THE WATER RESOURCES SERVICE
OF THE MINISTRY OF WATER RESOURCES, AGRICULTURE
AND PROCESSING INDUSTRY OF THE KYRGYZ REPUBLIC**



Project Implementation Unit

CLIMATE RESILIENT WATER SERVICES PROJECT

**Environmental and Social Management Plan (ESMP)
Rehabilitation of Water Supply System Aybike Subproject
in Leylek District of Batken Oblast**

May 2025

TABLE OF CONTENTS

Abbreviations.....	3
Executive Summary	5
1. Introduction	7
2. Legal and Regulatory Framework	8
2.1. National Legislation and International Standards.....	8
2.2. World Bank Environmental and Social Framework Policy (ESF).....	8
2.3. Comparison of national legislation and the World Bank's environmental and social standards requirements.....	8
3. General Information on the project area.....	15
3.1. Leylek district of Batken oblast	15
3.2. Environmental and social baseline information for the Aybike subproject.....	16
3.3. Existing Water Supply System	20
4. Scope of Works and Identification of Related Environmental and Social Impact Assessment.....	21
4.1. Scope of works of water supply system construction	21
4.2. Environmental Risks	22
4.3. Social Risks.....	24
4.4. Involuntary resettlement.....	25
5. Proposed mitigation measures	26
6. Environmental and Social Impact Mitigation Plan.	30
7. Institutional Arrangement.....	49
8. Monitoring Plan	50
9. Monitoring and Reporting.....	52
10. Stakeholder engagement.....	54
11. Grievance Redress Mechanism.....	55
11.1. Grievance Redress and Resolution Process.....	56
11.2. Handling sensitive grievances	58
11.3. WB Grievance Redress Service	59
Annex 1. Environmental Screening.....	61
Annex 2. Social Screening	69
Annex 3. Code of Conduct	76
Annex 4. Asbestos-containing materials management plan (example).....	79

Abbreviations

AO	Ayil Okmotu
ACM	Asbestos-Containing Material
BOD	Biological Oxygen Demand
WB	World Bank
BOQ	Bills of Quantity
FUEL	Fuels and Lubricants
SIDWSWD	State Institution “Drinking Water Supply and Wastewater Disposal”
KR	Kyrgyz Republic
PAP	Project Affected Persons
MWSE	Municipal Water Supply Enterprise
MWRAPI	Ministry of Water Resources, Agriculture and Processing Industry
MNRETS	Ministry of Natural Resources, Environment and Technical Supervision
GRM	Grievance Redress Mechanism
EIA	Environmental Impact Assessment
LSG	Local Self Governments
EP	Environmental Protection
EHS	World Bank’s Environmental, Health, and Safety Guidelines
RPF	Resettlement Policy Framework
GIIP	Good International Industry Practice
PIU	Project Implementation Unit
RAP	Resettlement Action Plan
CRWSP	Climate Resilient Water Services Project
DED	Design and Estimates Documentation
ESMP	Environmental and Social Management Plan
ACMMP	Asbestos-Containing Materials Management Plan
ESMF	Environmental and Social Management Framework
DDPCSSES	District Disease Prevention Centers and State Sanitary and Epidemiological Surveillance
SanPiN	Sanitary Rules and Regulations
WRS	Water Resources Service
PPE	Personal Protective Equipment
MEDIA	Mass Communication Media
SNiP	Construction Rules and Regulations
ESS	Social and Environmental Standards

SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SMW	Solid Municipal Waste
PDO	Project Development Objectives

Executive Summary

The purpose of the document: The Environmental and Social Management Plan (hereinafter - ESMP) for the Aybike Subproject Water Supply System Rehabilitation is a strategic tool to ensure sustainable development and minimize environmental and social risks. It is developed in accordance with the national regulations of the Kyrgyz Republic and international standards of the World Bank.

The document includes information on the decisions taken on construction of the village water supply system, a set of measures to prevent, mitigate and monitor the project impacts on the environment, social environment, local community and regulates institutional responsibility for their implementation. The main chapters of the ESMP describe the types of impacts and mitigation methods/measures on environmental/social parameters (soil, water resources, atmospheric air, waste generation, noise impacts, safety and health of workers and population, etc.) with indication of responsible organizations and individuals. In addition, the document provides information on: the possible impact of the project on the social environment, which generally improves conditions for workers and residents; the current legal framework governing the protection and use of natural resources; the grievance redress mechanism for citizens, feedback mechanism. The ESMP includes the site screening checklist, which will be used to monitor the progress of construction work of the contracting organization.

Subproject Brief Description

Aybike village is located in Leylek district of Batken oblast. The local population of the village experiences lack of safe drinking water, which adversely impacts the health and socio-economic conditions of the villagers.

The Project aims to improve the water supply system by:

- drilling one artesian well to enhance the reliability of water supply;
- construction of two reservoirs of 200 m³ each to stabilize water supply;
- reconstruction and expansion of the network of water distribution pipelines with a total length of 8.7 km.

These activities will ensure reliable access to drinking water for 3,066 people living in Aybike village, including vulnerable groups (women, children, elderly people) and reduce the impact of climatic factors on the water supply system.

Environmental and social risks and mitigation measures

The main environmental and social risks include:

- Soil and water contamination during construction.
- Noise and dust impacts on local communities.
- Possible social inconvenience, including temporary access restrictions to water supply.

To minimize these risks, the project provides for:

- Organizing effective monitoring of environmental compliance during construction.
- Introduction of safe waste management practices, including asbestos-containing materials.
- Conducting an information campaign among the population to ensure awareness of temporary inconveniences and mitigation measures.

Stakeholder engagement

The project envisages active engagement of the local community at all stages of its implementation. During public consultations, the residents expressed their expectations and suggested improvements, which were taken into account in the project documentation. The main focus is on equitable access to water resources and consideration of the interests of women and vulnerable groups.

This document describes the following information:

- the potential social and environmental impacts of the project;
- on the current legal framework regulating the protection and use of natural resources;

- public hearings for population in the implementation of the project;
- grievance redress mechanism.

Capacity building

To ensure successful implementation of the ESMP, capacity building activities for personnel and local governments are envisaged. The training will cover the following key aspects:

- Monitoring and compliance with environmental standards.
- Waste management, including safe disposal of construction materials.
- Community engagement and transparency of project implementation.

Monitoring and reporting

The implementation of the ESMP is monitored through a regular monitoring system including:

- Air, water and soil quality measurements at construction sites.
- Preparation of quarterly contractor reports on fulfillment of environmental and social commitments.

Budget and Resources

The financing for the ESMP implementation is included in the overall project budget with funds for:

- Topsoil Removal – 6848 m
- Tree and shrub cutting – 10 pcs
- Dust suppression measures – 10217 m

Conclusion

The Aybike Village Water Supply System Rehabilitation Project is a socially and environmentally sustainable initiative aimed at ensuring reliable access to water and improving the quality of life of the population. Implementation of the ESMP will minimize adverse environmental impacts, take into account the needs of the local community, and ensure the compliance of project activities with international standards.

1. Introduction

The Climate Resilient Water Services Project development objectives are to (i) improve access to water services in selected basins and (ii) improve institutional capacity for climate-resilient water supply and management services at local and national levels.

The project aims to improve - in selected river basins - the coverage, quality and efficiency of water supply, sanitation and irrigation services, as well as capacity building to improve integrated water resources management and the capacity of relevant service providers in the selected basins.

At the national level, the Project will improve the institutional capacity of water resources management in terms of climate resilience. Regarding the first part of the PDO, climate resilient water services are defined as water services that achieve coverage and meet quality standards despite possible climate risks (droughts, high temperatures and extreme heat, urban flooding and wastewater overflows, floods and mudflows).

Investments in infrastructure will also help reduce:

- (a) environmental pollution of Aybike village;
- (b) public health risks associated with exposure to untreated wastewater in the event of climate change-induced flooding, and
- (c) the energy and greenhouse footprint of service provision.

These investments will be designed to minimize greenhouse gas emissions by reducing energy consumption by:

- (i) prioritizing gravity flow solutions for irrigation and drinking water supplies;
 - (ii) improving pump efficiency for service delivery;
 - (iii) reducing nitrous oxide emissions, methane and dioxide emissions carbon as well as biological oxygen demand (BOD) through adequate wastewater treatment and sanitation services; and
 - (iv) promoting water conservation through water accounting and on-farm activities.
- Consequently, this component, by its intensity, has an indirect benefit in terms of climate resilience.

The Environmental and Social Management Framework (ESMF) was prepared for the Project in accordance with the requirements of the WB Social and Environmental Standards.

This ESMP is an ESF instrument aimed at minimizing, compensating and controlling adverse environmental and social impacts arising during project implementation and operation. Its main objective is to ensure sustainable development of the project by implementing a set of mitigation measures, monitoring their effectiveness and establishing institutional mechanisms for risk management.

The ESMP is a key/working document for the Contractor in terms of identifying/analyzing/mitigating measures affecting the environment/social sphere and is included in the tender documents for the performance of work.

Key tasks of the ESMP include:

- Identification and assessment of potential environmental and social risks of the project;
- Development and implementation of measures to eliminate, reduce to an acceptable level or compensate for them;
- Organization of monitoring to control the effectiveness of implemented measures;
- Identification of responsible structures and coordination mechanisms for implementation of the envisaged actions.

The ESMP therefore provides a tool for ensuring environmental and social responsibility of the project, contributing to its compliance with both national requirements and international standards of sustainable development.

This ESMP outlines environmental impacts and mitigation measures related to the rehabilitation of water supply investments in Aybike subproject. ESMP activities will be included in bidding and contract documents as integral part of both construction and technical supervision phases.

2. Legal and Regulatory Framework

2.1. National Legislation and International Standards

This section analyzes the legal and institutional framework of the project, including compliance with the national legislation of the Kyrgyz Republic and World Bank (WB) standards. In accordance with paragraph 26 of the WB Social and Environmental Standard 1 (ESS1), the analysis covers national legal regulations and their compliance with international requirements, including possible gaps and mechanisms to fill them.

The laws and regulations governing environmental protection, natural resource management, health protection and citizens' rights are in force in the Kyrgyz Republic. The main laws providing the legal framework for the project are:

- Law on Environmental Protection (1999);
- Law on Environmental Expertise (1999);
- Law on Water (1994);
- Law on Waste of Production and Consumption (2001);
- Law of the Kyrgyz Republic on Safety of Drinking Water (2011);
- Land Code of the Kyrgyz Republic (2 June 1999, No. 45, as last amended on 5 August 2022, No. 85);
- Labor Code of the Kyrgyz Republic;
- Other laws regulating the environmental and social aspects of the project.

These regulations regulate environmental assessment procedures, waste management, water protection, and community engagement in the decision-making process.

2.2. World Bank Environmental and Social Framework Policy (ESF)

The project is financed by the World Bank and, in addition to national legislation, is subject to mandatory compliance with the WB's Environmental and Social Framework (ESF). The following Social and Environmental Standards (ESS) will be applied under the project:

ESS 1: Assessment and Management of Environmental and Social Risks and Impacts

ESS 2: Labor and Working Conditions

ESS 3: Resource Efficiency and Pollution Prevention and Management

ESS 4: Community Health and Safety

ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS 8: Cultural Heritage

ESS 10: Stakeholder Engagement and Information Disclosure.

2.3. Comparison of national legislation and the World Bank's environmental and social standards requirements.

Environmental and Social Standard	Relevant to the Project	WB ESS requirements	National legislation requirements
ESS 1- Assessment and Management of Environmental and Social Risks and Impacts	Yes	ESS1 sets out the Client's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs). As required by the standard, the	The environmental risk classification system under Kyrgyz law is based on the inclusion of a list of activities that are either subject or not subject to EIA. Whereas under the SEP the risk is classified based on the due diligence and opinion of the Bank's team. However, some provisions of ESS1 are not fully reflected in national legislation - for example, with regard to social risk

		ESA shall be conducted on the basis of current information, including a description and definition of the project and any related aspects, and environmental and social baseline data with an appropriate level of detail sufficient to characterize and identify risks and impacts and mitigation measures. The assessment evaluates the potential environmental and social risks and impacts of the project, paying particular attention to those that may fall disproportionately on disadvantaged and/or vulnerable social groups; explore project alternatives; identify ways to improve project selection, location, planning, design and implementation to apply a mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project.	assessment, the need to identify vulnerable and disadvantaged groups, and the application of differentiated measures to prevent disproportionate impacts or adverse impacts when sharing development benefits. National legislation also does not provide details on other types of social risk assessment and mitigation, such as public health and safety, although some of these aspects are present in other states' regulations, for example on air or water pollution and food safety.
ESS 2 - Labor and Working Conditions	Yes	ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. ESS2 applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers. Taking into account these requirements, The Borrower will develop and implement written labor management procedures applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. The procedures will address the way in which	The Kyrgyz labor legislation has changed over the past twenty years as additional laws were adopted and amendments were made to the basic labor laws. The Kyrgyz Republic has also ratified eleven ILO Conventions on issues such as forced and child labor, freedom of association, the right to organize and negotiate collectively, non-discrimination, and labor inspection The National Labor Law, as amended in April 2021, establishes state guarantees of labor rights and freedoms of citizens, creates favorable working conditions, and protects the rights and interests of workers and employers. In addition to this Act, the Government has approved fourteen other laws and more than twelve regulatory legal acts that directly relate to labor

		this ESS will apply to different categories of project workers including direct workers, and the way in which the Borrower will require third parties to manage their workers in accordance with ESS2.	relations. In combination, the legislative acts enacted in the country cover many of the objectives and requirements of ESS2. There are complete or partial gaps in ESS2 legislation on issues such as child labor and minimum age for employment, clear definitions of non-discrimination and harassment, obligations for contractors and contractor management, due diligence of key suppliers, provision of a workplace grievance mechanism, and monitoring and enforcement of labor laws. Grievance registration and subsequent procedures are available in the Law on Citizen Appeals; however, these are common to all project affected persons and do not define a specific grievance process for employees as required in ESS 2.
ESS 3 - Resource Efficiency and Pollution Prevention and Management	Yes	ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with	The national legal framework for pollution prevention prioritizes the protection of public health and is based on the definition of threshold values of permissible concentrations of pollutants to which people may be exposed. The environmental regulation requires the calculation of expected characteristics of emissions (including noise), discharges, wastes in the framework of EIA/EPA to demonstrate compliance of the proposed project with the established threshold values.

		GIIP.	
ESS 4 - Community Health and Safety	Yes	ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities. ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.	The general principles of health and safety of citizens and communities are stipulated in the Constitution of the Kyrgyz Republic and the Environmental Protection Law. These laws state that everyone has the right to live in a natural environment that is not harmful to their health. To achieve this goal, thresholds are established to limit human exposure to hazardous environments based on several physical, chemical and biological parameters.
ESS 5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Yes	ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement. Affected persons eligible for compensation: (a) who have formal legal rights to land or assets; (b) who do not have formal legal rights to land or assets but have a right to land or assets recognized or	The Land Code of the Kyrgyz Republic states that land acquisition (withdrawal) is an exceptional measure to terminate the right to a land plot. The Constitution and several laws refer to the need for compensation for land acquisition, although there are no specific requirements to prepare land acquisition or resettlement action plans with a detailed procedure. Under the national law of the Kyrgyz Republic, affected persons are those who either have formal legal rights to land or property and/or have a right to land or property recognized under national law. The latter mainly refers to rights to land allocated by the relevant authorities but not yet registered in accordance with legislation. Users of land or property without proof of such a recognizable claim are not entitled to compensation. This is one of the major legal gaps that exist between national

		recognized under national law; or (c) who have no recognized legal right or claim to the land or assets they occupy or use. Compensation alone is not sufficient to restore or improve the livelihoods and social security of displaced households and communities.	legislation and the SEP. There is nothing in the national legislation about rehabilitation and improvement of housing conditions of project-affected households, special attention to vulnerable persons and additional assistance to them.
ESS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources	Yes	ESS6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the nonliving environment. All habitats support complexities of living organisms and vary in terms of species diversity, abundance and importance. This ESS also addresses sustainable management of primary production and harvesting of living natural resources.	The Kyrgyz Republic has a strong legal and regulatory framework for the protection, conservation and restoration of biodiversity, but legal provisions for the sustainable use of living natural resources do not provide a legal and regulatory framework to meet the social needs of forest-dependent communities and maximize the benefits of their economic use while preserving forest ecosystems and preventing forest degradation and depletion of forest resources. National legislation is mainly focused on species protection and conservation and to a lesser extent on habitat conservation. The Red Data Book and Red List of Species Act prohibits any activity that damages habitats that support protected species, which means that any proposed activity in such habitats must prove that the proposed mitigation measures are sufficient to fulfil this requirement.
ESS 7 - Indigenous Peoples/ Sub-Saharan African	Not relevant, as there are no such social groups in the Kyrgyz Republic.		

Historically Underserved Traditional Local Communities			
ESS 8 - Cultural Heritage	Yes	ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. It sets out measures designed to protect cultural heritage throughout the project life cycle. The requirements of ESS8 apply to cultural heritage regardless of whether or not it has been legally protected or previously identified or disturbed; intangible cultural heritage only if a physical component of a project will have a material impact on such cultural heritage or if a project intends to use such cultural heritage for commercial purposes.	National legislation comprehensively covers many aspects related to historical and cultural heritage. The Law on the Protection and Use of Historical and Cultural Heritage obliges the State to recognize the common cultural values of humankind, to support cultural development and international cultural relations, to ensure that cultural property is accessible to the public and to preserve the freedom of expression of each citizen's own cultural identity. The State establishes a system for the protection of objects of local, national and international historical or cultural significance.
ESS 9 - Financial Intermediaries	The project will not use financial intermediaries.		
ESS 10 - Stakeholder Engagement and Information Disclosure	Yes	This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation. Client will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables	Generally, there is robust legislation in place, but it needs to be applied consistently. In the case of investment projects, national laws and regulations focus mainly on stakeholder engagement at the project preparation stage. The existing legal framework describes the grievance procedure in detail, with no division between local, regional/central levels, as in IFI-financed projects. There are no specific rules in national legislation regarding the participation of vulnerable or disadvantaged individuals and groups in the public consultation process and

		meaningful consultations with stakeholders on project design. The nature, scope and frequency of stakeholder engagement will be proportionate to the nature and scale of the project and its potential risks and impacts. In consultation with the Bank, the Borrower will develop and implement a Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and its potential risks and impacts.	project activities. Provisions for information disclosure and meaningful consultation with project-affected persons are not as well defined as in the SEP.
--	--	---	---

The ESS requires that the World Bank Group Environment, Health and Safety (EHS) Guidelines apply to the project.

The EHS Guidelines are technical reference documents with generic and industry-specific examples of Good International Industry Practice (GIIP) referenced in the EFS. The EHS Guidelines contain performance levels and measures generally acceptable to the World Bank Group and that are considered to be achievable in new facilities at a reasonable cost using existing technologies. The World Bank Group requires borrowers to apply the appropriate levels or measures of the EHS Guidelines. When host country regulatory requirements differ from the levels and measures presented in the EHS Guidelines, projects will need to be achieved whichever is more stringent.

Applicable EHS guidance for the subproject includes but is not limited to the following:

- General EHS Guidelines of the World Bank Group (2007);
- EHS Guidelines for Water and Sanitation
<https://www.ifc.org/content/dam/ifc/doc/2000/2007-water-and-sanitation-ehs-guidelines-en.pdf>
- “WBG 2022 publication by the Water Department on Wastewater Treatment and Reuse- A Guide to Help Small Towns Select Appropriate Options.”

PIU will pay particular attention to the following General EHS Guidelines¹:

- EHS 1.0 – Environmental;
- EHS 2.0 - Occupational health and safety;
- EHS 3.0 - Community health and safety;
- EHS 4.0 - Construction and decommissioning.

<https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines>

Prioritizing standards in the project

In the event of discrepancies between national legislation and World Bank policies, more stringent requirements consistent with the WB ESF are applied. This ensures compliance with international best practices in environmental and social protection.

Conclusion

The project is being implemented in compliance with national legislation and World Bank requirements, ensuring its compliance with high environmental and social standards. Application of the best international practices in combination with compliance with national norms will minimize risks, increase the level of social responsibility and ensure project sustainability.

¹ EHS in Russian:

https://www.ifc.org/wps/wcm/connect/be37221a-fc47-4379-b539-eca3fe72c3e6/General%2BEHS%2B-%2BRussian%2B-%2BFinal_.pdf?MOD=AJPERES&CVID=jqel79F&ContentCache=NONE&CACHE=NONE

3. General Information on the project area

This subproject involves the rehabilitation of the water supply system in Aybike village of Leylek district of Batken oblast. Aybike village (formerly known as Madaniyat) is located in Leylek district of Batken oblast of Kyrgyzstan and covers an area of 117.0 hectares.

Due to the absence of reservoirs and surface water near the project area, the project envisages to use groundwater to rehabilitate the village's water supply system.

The project envisages a pressure water supply system for the village, with water supplied from two wells: a designed well and an existing well. The water will be disinfected by a bactericidal unit, sent through a water pipe to two designed reservoirs with a capacity of 200 m³, and then to the Aybike village water supply network.

The estimated maximum water intake capacity of Aybike village is 4.5 l/sec.

The water distribution network is designed to cover all existing streets in the village. The network is looped and equipped with water wells with fire hydrants and control valves, and cross-connections with water distribution units are provided in the wells for future connection of customers. The total length of the distribution network is 8,705 m.

The project assumes a construction period of 18 months and a defect liability period of 12 months after the facility is put into operation.

3.1. Leylek district of Batken oblast

Leylek district is one of three administrative districts of Batken oblast of Kyrgyzstan. The district occupies an area of 4653 km². The total number of permanent population according to the National Statistical Committee of the Kyrgyz Republic is 150.9 thousand people. The administrative center of the district is Razzakov town.

Leylek district occupies the low-lying Isfara-Isfani depression (absolute elevation of the bottom of the depression 900-1600 m), bordering the Fergana valley from the north.

The main rivers of the district area are Ak-Suu, Sumbula, Kozy-Baglan and Isfana. The Osh - Razzakov and Sulukta - Razzakov roads pass through the district. A narrow-gauge railroad connects Sulukta and Proletarsk (Republic of Tajikistan). There is an airport in Razzakov town.

Leylek rayon includes 1 town of district significance - Razzakov town and 9 aiyl aimaks covering 47 villages.



Figure 1. Leylek district

3.2. Environmental and social baseline information for the Aybike subproject

3.2.1. Geographical location



Figure 2. Location of Aybike village (former name Madaniyat)

Aybike village (former name Madaniyat) is located in Leylek district of Batken oblast of Kyrgyzstan. It is a part of Toguz-Bulak aiyl aimak. The village is located in the western part of the oblast, on the bank of the Uymeren River, at a distance of approximately 16 kilometers (in a straight line) east of the city of Razzakov, the administrative center of the district. The absolute elevation is 1389 meters above sea level. The nearest railway station is in Kyzyl-Kiya at a distance of - 230 kilometers.

The region is characterized by continental climate with hot dry summers and cold winters. The landscape includes flat and hilly areas suitable for agricultural use.

The main source of water supply in the village is groundwater used for drinking and household needs.

3.2.2. Social and economic characteristics of Aybike village

The population of the village according to the data of aiyl okmotu at the beginning of 2024 is 3066 people, living in 684 households. Most local employment is related to agriculture and small business.

Number of cattle - 1750, small cattle - 1208.

The following municipal social facilities are located on the territory of the village:

- 1 general educational institution;
- 2 preschool institutions;
- 1 rural health post/FAP;
- 1 administrative building (AO);
- 1 information center.

Access to water infrastructure remains limited which impacts on sanitary and hygienic living conditions.

The project aims to improve the quality of drinking water and increase the resilience of the water supply system to climate change. This project seeks to ensure that vulnerable communities, including low-income families, the elderly, people with disabilities, and women-headed households, have reliable and equitable access to safe drinking water. By strengthening the water supply system against climate change impacts, the initiative will protect these at-risk groups from water shortages and contamination. As a result, they will benefit from improved health, with fewer waterborne diseases, and better sanitation conditions, reducing their exposure to preventable illnesses and enhancing their overall well-being.

Land resources of village

Lands of settlements	117,0 ha
Agricultural lands of which:	20917,0 ha
• arable	869,0 ha

• irrigated	175,0 ha
• fallow	0,0 ha
• hay harvest	106,0 ha
• pastures	21643,0 ha
• gardens	124,0 ha

Characteristics (environmental/social) of Leylek district

Land use. Land resources of Leylek district represent a complex mosaic of different types of land use, formed under the influence of natural conditions and centuries-old traditions of the local population.

On the territory of about 1.5 thousand km² there are three main categories of land, each of which plays a special role in the life of the district.

Agricultural land occupies approximately 35% of the territory and is the basis of the local economy. Irrigated lands in the valleys of Ak-Suu and Leylek rivers, where wheat, barley and fodder crops are grown, are considered the most valuable.

In the foothills, rainfed lands are widespread, used mainly for cattle grazing and limited farming. Traditional orchards with apricots, apple trees and vineyards take particular notice in the area, producing not only crops but also forming a unique cultural landscape.

Extensive pastures, including summer highland jailoo and winter kyshtoo, provide a fodder base for cattle breeding, the most important branch of the local economy.

The natural territories of the district, occupying about 60% of the area, include juniper woodlands, mountain meadows, steppes and rock complexes. These lands have essential ecological functions - regulating the water regime, preserving biodiversity and protecting soils from erosion.

Settlements and infrastructure facilities of the district occupy about 5% of the territory. There are 12 rural administrative units (aiyl okmotu) in the district, which are connected by a network of local roads. A special place in the infrastructure is occupied by irrigation systems, the condition of which directly determines the productivity of agricultural lands. Industrial facilities are represented mainly by small processing enterprises.

A characteristic feature of land use in the district is the prevalence of small contour land plots, which is associated with the mountainous relief and traditional forms of farming. Perpetuation of traditional farming methods is combined with the need to introduce modern agro-technologies. The issues of land reclamation and water supply are of particular importance, and the future of agriculture in the district depends on the solution of these issues.

Land resources remain the basis of the economy and livelihood of Leylek district, which requires special attention to the issues of their rational use and protection. Preservation of land productivity while maintaining the ecological balance is a key task for sustainable development of the territory.

3.2.3. Area Climatic Condition Characteristics

Climatic conditions of the high-mountainous area of the river basin are determined by the general system of atmospheric circulation over Central Asia, dominated by western and north-western transport of air masses.

Climatic characteristics are given by Isfana meteorological station of Leylek district. The site is located on the upper right bank terrace of the Isfanasai River in the eastern part of Isfana.

According to climatic zoning, the study area belongs to the III climatic region, III B climatic sub-area and dry zone by degree of humidity.

Average outdoor air temperature by months, t⁰c

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
---	----	-----	----	---	----	-----	------	----	---	----	-----

-4.0	-1.4	4.2	9.8	14.9	19.0	21.6	20.1	15.3	9.0	9.6	-0.2
------	------	-----	-----	------	------	------	------	------	-----	-----	------

- Average annual air temperature 9,3°C.
- Absolute minimum air temperature -28°C
- Absolute maximum air temperature 37°C
- Average relative humidity of outside air at 13 hours
- In the coldest month of the year -52%
- In the hottest month of the year- 32%
- Amount of precipitation per year - 393mm.
- Weight of snow cover on 1m² of horizontal ground surface-28 kg.s/m².
- Wind speed at a height of 10m above the ground-20m/s.
- Wind speed coefficient is 1,0.

Standard depth of seasonal freezing of soils under open snow-covered surface of horizontal site:

- loams and clays - 54cm,
- sandy loam and sand - 66cm,
- gravelly, coarse and medium sands - 71cm,
- coarse clastic soils – 80cm.

Air Quality

The air in Leylek district of Batken oblast is characterized by purity, especially in mountainous and rural areas, due to the absence of large industrial enterprises and relatively low population density. However, its quality can vary depending on the season, relief and anthropogenic factors.

The area is located in the zone of dry continental climate, so the air here is usually dry, with low humidity. In summer it warms up to +30°C and above, becoming particularly hot and dusty as winds lift sand and dust particles from the ground. Wind is one of the key factors affecting the air: strong gusts occur in spring and fall, which can carry dust from neighboring desert areas of Uzbekistan and Tajikistan.

In winter, the air is cold, with temperatures sometimes dropping below -15°C. On windless days it appears clean and clear, but smog may appear in populated areas due to heating of houses with coal and firewood. In mountain villages, especially closer to the Fergana Range, the air is thin, fresh and oxygenated, which makes it particularly useful for breathing.

Vegetation also plays a role in shaping the local microclimate. In the valleys and foothills, orchards, walnut groves and fields slightly mitigate the dryness of the air, while in the mountain's juniper forests emit phytoncides - natural substances with beneficial effects on health.

Water resources

Leylek district has significant water resources, represented mainly by the Ak-Suu, Leylek and Sumba rivers with their numerous tributaries. These waterways originate in the highlands of the Fergana and Alay ranges, fed mainly by melted snow and glacial waters. They are characterized by a strong seasonal regime with maximum water level in the period from May to August, when mountain snows are actively melting, and minimum in winter months.

The most important role in water supply of the district is played by the developed network of irrigation facilities, among which Leylek canal and Ak-Suu irrigation system are of special importance. These hydraulic structures provide water for agricultural lands, which are the basis of the local economy. There are numerous natural springs, such as Kara-Bulak and Toguz-Bulak, located in the foothills and valley areas, which are traditionally used by the local population as sources of drinking water.

High-mountain glaciers are of particular value and play a key role in maintaining the water balance of the area, especially in summer. However, in recent years there has been a steady tendency to reduce their area, which raises justified concerns about the future of water supply in the district.

The main challenges in the water sector include seasonal water shortages, insufficient existing irrigation infrastructure, pollution of water sources by domestic and agricultural wastewater, and potential conflicts related to the use of transboundary watercourses. The solution to these

issues lies in the modernization of water supply systems, construction of new reservoirs and improvement of water use practices.

The main source of water supply in the district is the underground aquifer. Hydrogeological studies show a sufficient level of water reserves, although seasonal fluctuations in groundwater levels are observed during droughts.

It should be noted that there are no water bodies and surface waters in the vicinity of the project area.

3.2.4. Biodiversity

Leylek district has a unique biodiversity formed due to its special geographical location and diversity of landscapes. Almost all altitude belts are represented here on a relatively small territory - from semi-desert foothills to eternal snows, which creates conditions for the existence of a variety of ecosystems.

The project area is not included in protected natural zones and does not contain any rare or endangered species of flora and fauna. The main ecosystems are pastures and agricultural lands used by the local population.

The project implementation includes measures to minimize environmental impacts, including prevention of soil degradation and preservation of green areas. More detailed description is provided below.

Flora.

The flora of the area is particularly rich, with more than 800 species of higher plants registered here. Pistachio sparse forests prevail in the lower belt (900-1500 meters), which above are replaced by majestic juniper forests. There are picturesque subalpine meadows with a variety of herbs at elevations of 2500-3000 meters, and above that the realm of alpine vegetation starts with its miniature but surprisingly hardy plants.

The vegetation of the area is mainly represented by trees planted along the road and flowers. The main tree species in this subproject are poplar, elm, apricot tree, and apple tree.

The population mainly grows wheat, potatoes, onions, garlic, cotton, rice and establishes fruit plantations.

No plants listed in the Red Book of the Kyrgyz Republic were found in the territory of the water supply system construction works. The first fresh fruits and vegetables after winter are brought from these areas. Wheat, potatoes, onions, garlic, cotton, rice and fruit plantations are predominantly planted. There was not a single plot of land free of crops.

Fauna.

Fauna in the project village is represented mainly by birds: sparrows, pigeons, thrushes, swifts, tits, crows, jackdaws and others.

Mammals in the village consist of bats, rodents (house mouse, gray hamster, rats).

No species listed in the Red Book of the Kyrgyz Republic were found in the construction area and adjacent territories.

3.2.5. Relief and geomorphological characteristics

Leylek rayon occupies the low-lying Isfara- Isfana depression (absolute elevation of the bottom of the depression 900-1600 m), bordering the Fergana valley from the north. From the south, the area is bounded by the Turkestan Range with an average elevation of 4400 m (the highest point is Pyramidal Peak at 5509 m). Within the area there are Beli-Synyk, Almaly, Kyrk-Karakchy, Kekche-Too and Ak-Tash ranges with average elevation from 1200 to 3800 meters. The main rivers of the area are the Ak-Suu, Sumbula, Kozy-Baglan and Isfana rivers.

Land use

The project area is mainly represented by residential and agricultural land. The land plots are used for household farming, grazing and gardening. The project does not envisage land acquisition, but temporary restrictions on access to some plots may occur during construction. The geographical location of the village is shown in Figure 2, section 3.2.1.

3.2.6. Geological and lithological characteristics

In the geological structure of the site of water intake, reservoirs and the route of distribution networks of Aybike village (Madaniyat) proluvial-deluvial deposits of Upper Quaternary-modern age (pQiii-iy) are present.

Lithologically, the site of the projected construction of the water intake (projected well) of the reservoir site and the route of distribution networks are represented by light brown sandy loam, with a thickness of 0.70-1.0m, covered with a top soil and vegetation layer and in some places filled soils with a thickness of 0.30 m.

The face is gravelly soil with sandy loam aggregate, with boulder inclusions up to 5%.

The soil group on difficulty of manual excavation for loam - II, for gravel soil - III (SNiP KR 11-01-98).

Geologically, the water intake site is located on the right bedrock side of a huge mudflow sai. The relief is complex, with a sharp slope to the south. The geologic and lithologic structure of the water pipeline route and reservoir site is composed of colluvial deposits of Upper Quaternary-modern age (pQiii-iy), represented by sandstone, gravelly and shell rock fragments. Sandy clayey boulders up to 20%, different rounded fragments are mainly developed on the slopes.

The reservoir site is located on the south-eastern edge of the village, on the surface of the transition zone of the bedrock to the adyr zone. The adyr zone is represented by light-brown loams, macroporous, semi-hard consistency, with pebble and gravel inclusions. The loam has II type subsidence property. The exposed thickness of the loam is 6.0m

The bedrock is represented by boulder-pebbles, weakly cemented, different rounded fragments. The thickness is more than 20.0m meters.

The soil group on difficulty of manual excavation for pebble soil is III. (SNiP-IY-5-82). Design resistance for pebble soil is - 4.5 kgf/cm² (SNiP KR 11-01-98).

3.2.7. Hydrogeological conditions and prediction of area flooding

Groundwater is located at a depth of less than 10 meters from the ground surface. Water formed by precipitation shall be drained away from the construction sites. Grade elevations shall correspond to the natural slope of the surface.

The ditch (aryk) network shall be laid in concrete flumes, excluding leakages. It is necessary to provide maximum preservation of green plantings, minimum asphaltting of the territory in order to avoid the increase of soil humidity.

3.2.8. Seismicity

Initial seismicity of the work area according to SNiP KR 20-02:2009 is 8 points. Type of soil conditions by seismic properties II (gravel soil, loam, sandy loam).

3.2.9. Archaeological and Cultural Monuments Characteristics

According to the information provided by the design institute, no archaeological monuments or finds were found in the subproject area. If artefacts and other signs of historical and cultural heritage materials, as well as fossils are found, it is necessary to stop all construction works and report the findings to the local government, the department of the Ministry of Culture, Information, Sports and Youth Policy responsible for the protection of cultural heritage and archaeological specialists in line with the project's ESCP and WB's ESS8.

3.3. Existing Water Supply System

The existing water supply system in Aybike village of Toguz-Bulak AO was constructed in 1978-1979. Water supply of the village is currently provided from two sources. There are also wells and standpipes, but all of them are broken. Due to the lack of irrigation network of irrigation sources, many household lands are irrigated with water from the canal through the reservoir and for household and drinking needs.

The project includes a combined domestic and fire-fighting water supply system. The water supply scheme is pressure, provides water supply from the designed well is disinfected by bactericidal plant and through the water pipeline, in the designed 2 reservoirs with a capacity of 200m³ and then the water supply network of the village Aybike.

The water supply scheme is gravity-pressure. The water supply system is combined domestic and firefighting. The adopted water supply scheme includes the following facilities and structures:

- Well drilling - 1 unit;
- Designed reservoir with capacity of 200m³ - 2 units;
- Bactericidal installation - 1 unit.
- Checkpoint building - 1 unit.

Groundwater is the source of the Aybike village water supply system: the project includes designed and existing wells. The water intake site is located on the south-west side of Aybike village about 1.8 km. Estimated maximum capacity of water intake of Aybike village is 4.5 l/sec.

The water distribution network is designed along all existing streets of the village. The network is ringed and water supply wells with fire hydrant, regulating gate valves are installed on the network, and for future connection of consumers crosses with water intake units are provided in the wells.

Prior to delivery to the village, water is disinfected by a bactericidal plant. From the reservoirs, water is supplied to the water distribution network of Aybike village through water pipelines. The water supply network is made of polyethylene pipes: PE100 SDR-17, SDR13.6 and 11 od 160x9,5mm D=110x6,6mm; od 90x5,4mm D=75x4,5mm; D=63x3,8mm; Steel pipes Ø20mm 220rm; Total length of the distribution network L=8705rm.

Water supply wells with all necessary pipe fittings, fire hydrants and water meters are installed on the network. Two types of distribution units, threaded and welded, are installed in each well for water distribution.

Duration of construction works - 18 months, defect liability period - 12 months after commissioning of the object.

Operation phase

After completion of construction work, operational activities will be carried out by the Municipal Water Supply Enterprise. As part of the project, training will be conducted for the operating organization. Repair and maintenance of the system will be the responsibility of the Municipal Water Supply Enterprise.

Environmental and Social Impact

The subproject's activities were also reviewed for compliance with the World Bank criteria and exclusion from the project. The planned work for the Aybike subproject is not included in the exclusion list. At the design stage, the PIU conducted environmental and social screening (Annexes 1, 2). Thus, the Aybike subproject was assigned the category "moderate".

4.2. Environmental Risks

During the Construction phase

Environmental Risks in Aybike Village

The Aybike Village Water Supply System Rehabilitation subproject implementation is accompanied by a number of environmental risks that require careful management and monitoring. The most important risks are related to changes in landscape structure, impact on water resources and air quality, which may affect the ecological balance of the area.

Significant social adverse impacts in Aybike village include:

Soil and water pollution.

- The majority of the population in Aybike village uses groundwater for drinking, therefore any spillage of fuel, lubricants or construction waste poses a threat to the water supply. Construction works should be carried out with strict waste storage and disposal standards to eliminate the risk of contaminants entering aquifers. There are strict waste management

controls and compliance with material storage and transportation regulations are in place to minimize the risk.

Air Quality Impacts.

- Dust and exhaust emissions from construction equipment can degrade air quality. Dust mitigation measures are in place, including regular water irrigation of construction sites and monitoring of equipment maintenance.

Noise Impacts.

During the period of active construction works near the residential areas of Aybike village, the permissible noise levels may be exceeded, which is especially important for children and elderly people. Noise mitigation includes the use of modern low-noise equipment, temporary protective barriers and limitation of machinery operation time. To reduce noise, there are restrictions on nighttime operations and the use of noise shields near residential areas.

Risks of soil degradation.

Excavation works may disturb the fertile soil layer. The project provides for remediation works for land reclamation and erosion prevention.

Biodiversity disturbance.

The countryside around Aybike is represented by pastures and natural landscapes, which may be subject to temporary changes due to construction works. It is important to ensure that the vegetation cover is restored after construction and to prevent the felling of trees in the vicinity of construction sites. To minimize the impact, measures to preserve green areas and restore vegetation cover after construction are envisaged.

During the operation phase

Some negative impacts are also possible during operation phase: water system leaks, water discharges when flushing water lines; exposure is possible for people working directly with chlorine; groundwater pollution in the absence of effective wastewater treatment and discharge of untreated water into the area; possible increase of water tariff.

Environmental Risk Management Measures

During construction phase the following risk management and mitigation measures are required.

The project implements the following measures to minimize and control environmental risks:

- Use of appropriate engineering design and technology
- Implementation of an environmental monitoring system with regular assessment of air, water and soil quality.
- Control of safe storage and disposal of waste, including potentially hazardous materials.
- Limitation of construction equipment operating hours and minimization of noise impacts.
- Development of an environmental emergency response (contingency) plan.
- Incorporation of biodiversity conservation mechanisms and compensatory measures for disturbance of natural ecosystems into the project.

During operation phase the following risk management and mitigation measures are required:

- Routine maintenance (12 months warranty period for the system)
- Ensuring proper and efficient use of water resources and preventing water losses and leakages and excessive water consumption - installation, operation and periodic inspection of water meters at water consumers
- In the event of a leak, the operating organization must shut off the water supply, determine the site and nature of the accident, and then carry out repair work
- The contractor will develop instructions for maintaining the water supply system, including instructions for working with chlorine (or Calcium Hypochlorite or any other chemicals)
- Proper control over the operation and efficiency of local treatment facilities

Conclusion on environmental risks in Aybike village

The project's environmental risks in Aybike village were studied in detail and measures to mitigate them were envisaged. The protection of water resources, reduction of soil and air pollution, and minimization of impacts on the biodiversity of the region were given primary attention. Integrated monitoring of air, soil and water quality, waste management control, and restoration activities will avoid significant adverse impacts. Compliance with World Bank environmental standards and national legislation will ensure the environmental sustainability of the project.

4.3. Social Risks

The project also includes potential social risks that require careful consideration during implementation.

Land acquisition and resettlement

This project does not involve the acquisition of land plots, as the designed sites do not affect privately owned land. The designed distribution networks and water pipelines are laid on municipal land; no restrictions on land use are envisaged (easement).

It should be noted that, in accordance with the project's adopted World Bank standards, the provisions of the Framework Program – Resettlement Policy Framework (RPF) will be applied if necessary, and a Resettlement Action Plan will be prepared. According to the design solutions, private land will not be affected during construction, all distribution networks and water mains will be laid along municipal plots, and there will be no restrictions on land use (easement).

Restrict access to water resources during the construction period.

The majority of the population in Aybike village depends on a stable water supply. Temporary interruptions may cause domestic inconvenience, especially in summer. In this regard, the project includes the provision of alternative water intake points for the duration of the works. In order to reduce the adverse impact, it is envisaged to carry out the works in stages and organize temporary water supply sources.

Employment and labor conditions.

The project envisages involvement of local workers, although it is necessary to ensure compliance of labor and working conditions with the World Bank standards (ESS 2). Compliance with labor safety and health requirements will be monitored as part of project monitoring.

Information Transparency, Community Engagement and Grievance Management.

Lack of awareness of the local population about the construction progress may cause social tension. The project provides for regular consultations with the community, publication of reports and operation of a hotline for citizens' appeals.

Labor Influx

The main focus will be on labor relations with female staff to eliminate the risk of sexual harassment. Prior to the start of project work, contractors will be briefed on the Code of Conduct (Annex 3 to the ESMP) to eliminate the risk of sexual exploitation, sexual violence, and sexual harassment. During the performance of work by Contractors, PIU employees will monitor compliance with the provisions/requirements of the Code of Conduct

Economic impacts on the population.

Potential temporary restrictions on the use of adjacent land and infrastructure may impact the income of some households.

To minimize the risks of impact on the local population during the performance of work on the sites, the project provides for the following measures: notification of the timing and scope of planned work; restriction of work in terms of time (from 08:00 to 18:00) on working days; construction equipment parking will not block or restrict local residents' access to their property and public places, or, if this is unavoidable, contractors will organize alternative temporary access roads; excavated trenches will be fenced off with warning tape; road signs and safety signs for pedestrians and drivers will be installed. Residents will be provided with a sufficient number of safe footbridges (across the trenches).

In case of the temporary allocation of land, the Rights Matrix of the Resettlement Policy framework will regulate the procedures of compensations, summarizing the types of loss and the corresponding nature and scope of rights, and which is consistent with national law and ESS5.

Risks to vulnerable groups.

Women, the elderly and people with disabilities may have difficulties in adapting to changes related to project implementation. Mechanisms for public engagement are provided to ensure inclusiveness.

Social risk management measures:

- Public consultations and engagement of local communities in the project monitoring process.
- Feedback mechanisms for prompt resolution of social issues raised.
- Social impact minimization strategy development, including community information support.
- Code of Conduct for project workers.
- Compensation mechanisms provided to affected households, if required.
- Particular measures introduced to support vulnerable groups.

Conclusion on social risks in Aybike village

The project social risks in Aybike village were carefully evaluated, taking into account the specifics of the local community and the socio-economic structure of the village. The introduced social risk management mechanisms, information support and community engagement is expected to manage and minimize the potential social impacts. The strategy implementation on awareness raising and engagement of community, grievance management, and social risk management mechanisms in place and vulnerable groups' rights protection will mitigate the potential social impacts. The project meets the World Bank requirements and national standards, ensuring social sustainability and support to the local community.

4.4. Involuntary resettlement.

Land acquisition and resettlement issues fall under the WB ESS5 "Land Acquisition, Restrictions on Land Use and Involuntary Resettlement". With regard to involuntary resettlement, no impacts have been identified that may result in land acquisition, restrictions on economic activities of the population, or physical resettlement.

A resettlement framework document, the Resettlement Policy Framework (RPF), has been developed for the project. The framework document was made publicly available to the target community, through public hearings and published on www.tunuksuu.kg. The RPF guides the preparation of Resettlement Action Plans (RAPs) during project implementation. In case of land acquisition, resettlement or damage to community assets, a Resettlement Action Plan will be prepared in accordance with the RPF.

According to design decisions, during construction, private lands will not be affected, all distribution networks, water pipelines will be laid by municipal participants; there will not be temporary or permanent restrictions on land use (easement).

5. Proposed mitigation measures

All work shall be performed only after the necessary permits and approvals are obtained. The following risk management and mitigation measures shall be taken during the construction stage.

Organizational Measures. Before starting construction work, local construction supervision and environmental protection inspections and the public shall be informed about the forthcoming activities through mass media and/or at sites open for public access (including works sites) by disclosing site-specific ESMPs for each subproject. All activities required for the implementation of environmental and social safeguards and monitoring shall be planned and budgeted in the work plans of the Employer, contractors and subcontractors. All work shall be performed in a safe and disciplined manner that minimizes impact on the public and the environment.

Air pollution control and dust minimization. During construction activities, waste shall be stored in a controlled area and sprayed with water to reduce dust generation. Open burning of construction and household waste is not allowed at the site. When transporting any dust-forming materials to the rehabilitation site, the materials must be covered. Dust generation at the rehabilitation site in dry seasons can be minimized by frequent watering the ground, while in hot seasons, it is necessary to spray water on the roads along the excavated trenches at least four times a day.

Prevention of soil and water contamination. Maintenance and refueling of construction machinery and equipment shall be performed at service centers located at the maximum possible distance from the work site. If this work is performed on-site, provide an impervious surface for refueling and have a supply of absorbents available in case of an accidental spill. Next, it is necessary to constantly inspect machinery and equipment in order to identify and eliminate malfunctions, as well as maintain mechanical equipment, tools and devices in order to prevent soil and water contamination. Car washing shall be prohibited near surface water bodies. Used motor vehicle oil, fuel and lubricant supplies and other hazardous substances shall also be stored on an impervious surface, preferably under cover, and shall be protected from fire. Where workers' accommodation is located in construction camps, septic tanks or pit latrines shall be provided, and their operation shall not allow direct discharge of water into surface water bodies or degradation of sanitary conditions.

Waste Management and Recycling. Waste should be minimized, segregated and handled appropriately, where possible. Open air burning and illegal dumping of any waste is strictly prohibited. Non-hazardous waste, as well as waste containing asbestos, will be disposed of at designated landfills as per ACM Management Plan. Excess excavated soil will be returned to officially designated areas. The contractor must obtain permission from the local authorities to remove the waste. Construction equipment and machinery should be maintained at dedicated place at the construction camp. Worn tires, filters and waste oil shall be disposed by the licensed company based on transfer agreement. Containers with lids shall be installed for the collection of household waste. The issue of regular household waste removal should be coordinated with local authorities.

Disposal of dismantled asphalt. During construction, the head of the aiyl okmotu will provide a landfill for the disposal of dismantled asphalt; in the absence of a landfill, the asphalt will be transferred for processing to an asphalt production organization. In this case of lack special disposal sites for construction wastes, aiyl okmotu with permission of the territorial unit of MNRETS will use dismantled asphalt for secondary roads in the village coverage.

Asbestos-Containing Materials Management. According to the inspection results of the Margun subproject, it was revealed that the distribution network is made of asbestos-cement and steel pipes. During water system rehabilitation, the existing asbestos cement pipes will not be removed; it will be possible to leave existing pipelines in the ground as much as possible. The new water lines will be located parallel to the existing water mains. In cases where existing asbestos-cement pipelines are dismantled, waste asbestos-containing materials will be collected,

removed and completely disposed of using special protective measures in accordance with hazardous waste management standards.

The contractor shall develop an Asbestos-Containing Waste Management Plan (an example plan is given in Annex 4). Sanitary norms and rules No. 2.2.3.013-03 "Work with asbestos and asbestos-containing materials" must be observed when working with asbestos-containing waste. Asbestos-containing materials must be disposed of in authorized municipal landfills.

Tree Felling/Cutting Down. During construction of water supply networks, trees and shrubs may be cut down. No mass cutting is envisaged under this subproject, only single cases. Before starting construction work, inventory of green areas along the route of the planned water pipeline should be carried out to identify those to be cut down. The cutting of trees on the municipality's balance sheet will take place only in the presence of appropriate permits, taking into account compensation measures of cut green spaces in the ratio of 1:3. In the case of private tree felling, a RAP will be prepared in accordance with the WB ESS5. If trees of several owners are felled, one RAP can be prepared for a subproject.

Child and forced labor. Child labor and forced labor shall not be used in the subproject. The contractor shall make a commitment against the use of child and forced labor, implement mitigation measures against gender-based violence, and the PIU staff responsible for supervising the contractor will monitor and report on the absence of forced labor. The minimum age for admission to work is over 18 years of age due to the nature of the risk.

Safety and health of workers during construction works. Construction workers must wear personal protective equipment (hereinafter referred to as PPE): safety helmets, safety glasses, safety harnesses (belts) and safety shoes. Before starting construction work, workers shall be trained/instructed on the labor safety rules at the project sites. Further, it is necessary to conduct constant inspection of machinery and equipment in order to identify and eliminate malfunctions, to observe equipment repair periods, to train and instruct workers who perform maintenance of mechanical equipment, tools and devices in safe methods and means of work. It is prohibited to: give defective or untested tools for work, as well as leave unattended mechanical tools connected to the electrical network or to compressed air hoses; pull out and twist cables and air hoses; cables and hoses must not intersect with wire ropes, electrical cables; it is prohibited to hold rotating elements of mechanized tools. The applicable national regulations on the safe operation of cranes/earthmoving machines and welding work must be strictly observed.

Procedures in case of accidental finds of cultural heritage. Before starting construction work, the PIU shall instruct the contractor's working personnel in case cultural and historical objects are found. If a "chance finds" is discovered during excavation, the contractor shall implement the Chance find Procedure including immediately stopping all physical work on the site and notifying the PIU. The PIU should forward the information to the Ministry of Culture, Information, Sports and Youth Policy of the Kyrgyz Republic and suspend the work until written notification is received from the Ministry with permission to restart the work.

Decision on the matter of disturbance to local communities. Local communities should be notified of the timing and scope of the planned works. Working hours should be strictly limited to daytime (08:00 to 18:00) on weekdays and the area should be sprayed with water to prevent dust generation. Temporary storage of construction materials and debris shall be done in the subproject area, parking of construction machinery shall not block or restrict access of local residents to their property and public areas or, if unavoidable, alternative temporary access routes shall be organized. Waste and material storage areas, work camps and access roads shall be identified by the Project works and clearly marked. All project employees shall comply with the Code of Conduct (Annex 3).

The following risk management and mitigation measures are required during the operational phase.

- Use of environmentally acceptable fuel.
- Regular maintenance (system warranty period is 12 months)

- Ensure that all warranties and certificates are obtained in accordance with fire safety requirements and emission/air concentration monitoring.
- Ensure correct and efficient use of water resources and prevent water losses, leaks and excessive water consumption - install, operate and periodically check water meters at water consumers.
- In the event of a leak, the operator must shut off the water supply, determine the location and nature of the fault, and then carry out repair work.
- Component 3 includes the procurement of equipment for operation and maintenance, as well as training in the operation of the system.
- When flushing the water mains, water will be discharged into irrigation canals.
- The contractor will develop instructions for the maintenance of the water supply system, including instructions for working with chlorine (or calcium hypochlorite or any other chemicals).
- The project will include training and information work.
- Proper control over the operation and efficiency of local treatment facilities.
- Regular monitoring of the efficiency of treatment facilities.
- Obtaining permission for water use in accordance with the requirements of the legislation of Kyrgyzstan.
- Timely cleaning of the outdoor toilet to be used as needed.

Trainings on gender-based violence (GBV), sexual violence and harassment (SEA/SH) should be held for the contractor team with the objective to sensitize worker on the roles and responsibilities of actors involved in the project, processes for reporting incidents of project-related GBV, and the corresponding accountability structures. The awareness-raising activity should be conducted in parallel to the setting up of the complaint management system in order to develop a comprehensive response to GBV.

The table below lists the responsible parties and their associated activities.

Table 1. Responsible parties

Responsible site	Description of duties
Aiyl Okmotu	On a weekly basis, conducts working planning meetings with the participation of representatives of contractors, the municipal water supply company and regional project specialists in order to discuss and agree of a plan for civil works in certain areas of the village. Based on the results of joint planning of civil works, the Aiyl Okmotu, through its quarterly employees, informs the population about upcoming civil works in their area.
Contracting company	According to the Civil Works schedule, installs information boards and road signs at construction sites in order to regulate the movement of vehicles and the local population. Conducts daily briefings among its workers on occupational health and safety issues and Code of Conduct during the construction works in the subproject. Take action to accelerate disturbance to the local community during the civil works.
PIU CRWSP	Distribution of information to the local population about upcoming civil works schedules of contractors via WhatsApp messenger. The PIU technical supervision engineers and regional specialists on institutional development provide support and control in the

	organization of the abovementioned activities in the subproject. Conducting public hearings for the population in the project implementation area. Coordination of project implementation with local authorities, the population, the contractor, and the water committee are envisaged. Conducts/coordinates the GRM work. Technical supervision engineers and regional institutional development specialists provide support and control in organizing the above activities within the subproject in accordance with the activities (environmental/social design solutions) specified in the Project and ESMP. PIU specialists conduct monthly monitoring of the Contractor's compliance with the provisions/requirements for environmental/social safeguards in the performance of work. Under the PIU guidance, the designer supervision is provided in accordance with the requirements of the Kyrgyz Republic legislation for the proper/accurate implementation by the Contractor of the obligations accepted under the project and the measures specified in the ESMP, the requirements of the Kyrgyz Republic legislation and the World Bank standards. Training sessions for the operating organization are planned. In the event of land acquisition, resettlement, or damage to community assets, a Resettlement Action Plan will be prepared by PIU in accordance with the RPF, with the participation of local government representatives. Prior to the start of project activities, contractors will be briefed on the Code of Conduct (Annex 3 to the ESMP) to eliminate the risks of sexual exploitation, sexual violence and sexual harassment. Compliance with the provisions/requirements of the Code of Conduct will be monitored.
Community Water Committee	Receives requests and complaints from the population regarding construction work of the water supply system and, together with regional specialists of the PIU project, discusses and makes decisions at the local level. Assists the PIU in the timely dissemination of information about the project activities in the subproject.

Conclusion

Project implementation in the area requires consideration of local environmental and social conditions. The measures envisaged for monitoring and mitigation of adverse impacts will minimize risks and ensure sustainable development of water supply in the region.

6. Environmental and Social Impact Mitigation Plan.

Table 2. Potential environmental and social impact mitigation measures proposed.

Environmental and Social Elements	Impacts and Risks	Proposed Environmental Impact Mitigation Measures	Cost of Mitigation Measures	Institutional Responsibility for the Implementation of Measures
Construction Period				
Physical Environment				
Noise and vibration	During construction works the sources of non-permanent noise and vibration are operating mechanisms (engines) of construction machinery and equipment. There may also be temporary increases in noise and vibration levels along material supply routes.	- No noise protection measures are foreseen; the machinery and equipment will be equipped with silencers. - Use of vibration devices that comply with standards, as well as vibration and noise protection devices. - Machinery and equipment will only work from 8 a.m. to 6 p.m. on working days, no work will be done at night or weekends. - During work, the engine covers of generators, air compressors and other drive mechanisms should be closed; the equipment should be located as far away from residential premises as possible. - The use of noise barriers near residential areas is envisaged. - Avoid the use of worn-out vehicles or heavy machinery producing significant noise and air emissions	Criteria /specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item	The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Development Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body

Soil Pollution	Soil and water pollution during leak detection; water pollution with petroleum products from the use of machinery During the construction period, the impact is caused by the following types of work: - earthworks: excavation, embankments (earthfilling), backfilling, levelling; - operation of construction machinery; generation of solid waste.	• Ensure proper selection of areas for construction site location, where SDW collection and safe toilets (possibly bio-toilets) should be provided. • Timely cleaning of territories from fuel oil in case of their contact with the soil • No washing of machinery and equipment in the construction area • Fueling of machinery will be carried out at specialized fuel stations • Vehicles with a defective fuel system exceeding the exhaust gas toxicity standards and hydraulic systems shall not be permitted. • Use of vehicles that have passed technical inspection • No storage and stockpiling of fuel and lubricants and construction materials on the construction site area is allowed to prevent pollution from entering the river • Daily inspections of machinery and equipment for oil leaks	It is not considered as a separate cost item	The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Development Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body.
		• Topsoil Removal Improvement of the territory in accordance with the project.	It is considered as a separate cost item in the EP BoQ. (6848 m3)	
Atmospheric Air (dust pollution)	Dusting during reconstruction work will be minor and temporary. Air pollutant emissions are	• Dust suppression measures during warm weather up to 4 times a day and appropriate household activities such as spraying water to prevent dust and use of curtains, and construction site fencing. • Installation of information boards. • Use of PPE (masks, gloves and	Water irrigation of unpaved roads (wet dust suppression of on-site roads and sites) is considered as a separate cost item in the EP	The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring

	expected: - from motor vehicles (machinery) -during road leveling -when using electrical welding - temporary soil piling from trenches	protective clothing etc). • Limit vehicle speeds and select appropriate transportation routes to minimize exposure to dust-sensitive receptors. • Equip vehicles transporting bulk materials with removable tents. Cement is delivered to construction sites only in pre-packed hermetically sealed bags. • The above machinery is ordered only for the period of specific operations and is not permanently located at the construction site. • Vehicles with a defective fuel system exceeding the exhaust gas toxicity standards shall not be permitted. • It is prohibited to burn construction and household waste on the work site. • Keep the surrounding area clean and free from construction debris to minimize dust and contamination. • Organization of proper storage and transportation of flammable and hazardous materials (gas cylinders, bituminous materials, paints, solvents, glass and rockwool). It should be noted that the construction of facilities will not take place in parallel, but in stages and sequentially, from one facility to another.	BoQ. (10 217 m)	of potential environmental and social risks. PIU Environmental Specialist, Social Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body
	Use of calcium hypochlorite (chlorine)	• During construction work, chlorine is not expected to be handled, so exposure is avoided. During operational period, it is possible for people working	It is not considered as a separate cost item	

		directly with chlorine (in the working area) to be exposed. Resolution of the Kyrgyz Republic dated 29.10.2019 No. 576 "On Approval of the Safety Rules for Handling Strong Poisonous Substances in the Kyrgyz Republic"		
Water resources	Pollution of ground and surface waters, flooding and erosion of soil	• Do not allow spills/leaks of fuel oil into the ground, in case of inadvertent spills remove contaminated soil and transport to appropriate locations. • Timely cleaning of areas from fuel oil in order to prevent their entry into local water courses and groundwater together with atmospheric precipitation. • Vehicles with a defective fuel system exceeding the exhaust gas toxicity standards and hydraulic systems shall not be permitted. • Cleaning of outdoor toilet pit from liquid waste and its removal to the municipal treatment facilities according to the Removal Act • No excavation near groundwater sources. • Work areas with machinery, concrete mixers and fuel tanks should be located outside of water protection zones. • Installation of special pallets and other prefabricated equipment in places of possible leaks and spills of fuel and lubricants, technical	It is not considered as a separate cost item	

		solutions - Disinfection of pit toilet and filling with soil in accordance with building regulations. Conducting educational and informational trainings and seminars for operating organizations and landowners whose plots are located within the Sanitary Protection Zone of waterintake. Zones of sanitary protection: 1) The first zone (strict regime): Protection from bacterial contamination, includes water intakes and water supply structures. 2) The second zone: Protection from microbial contamination. 3) The third zone: Protection from chemical contamination. SanPin 2.1.4.027-95 "Zones of Sanitary Preservation of Water Supply Sources and Water Pipelines for Economy and Drinking Purposes"		
Construction waste	Contamination of adjacent territories, soil and water resources	- Before the start of works, to sign an agreement with the local municipality for disposal of construction and household waste at the municipal landfill. - Determination of methods of waste collection and disposal prior to the commencement of work, as well as locations for the main types of waste	It is not considered as a separate cost item The contractor is required to establish a formal	

		generated during demolition and construction work • Mineral waste from construction works and waste generated during dismantling of facilities shall be separated from organic, liquid and chemical wastes at the work site, after which they shall be stored at a proper site • All records and documentation of waste removal and disposal should be properly maintained as evidence of proper waste management practices on site as designed • Recycling of inert material waste (except asbestos) is allowed whenever possible • Construction waste shall be removed at the contractor's expense to the storage sites.	agreement with the Municipal Enterprise "Tazalyk" for the efficient removal and management of solid waste.	
	Dismantled asphalt	• During construction, the head of the aiyl okmotu will provide a landfill for the disposal of dismantled asphalt; in the absence of a landfill, the asphalt will be transferred for processing to an asphalt production organization	It is not considered as a separate cost item	
Asbestos-containing materials	Pollution of the adjacent territory and negative impact on the human body	• Some construction debris may contain asbestos. The Contractor shall train its employees to assess the presence of asbestos-containing materials and determine procedures for safe disposal of asbestos using appropriate protective equipment, storage in sealed	It is not considered as a separate cost item	The contractor shall develop an Asbestos-containing Waste Management Plan PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the

		containers. Safety requirements for asbestos management are specified in Annex 4. • Asbestos should be handled and disposed of by qualified and experienced specialists using proper protection (masks, gloves and overalls). • Before removal (if removal is necessary), the asbestos will be treated with a wetting agent to minimize the generation of asbestos dust. • Asbestos-containing materials shall not be subjected to breaking or cutting. • Workers should avoid crushing/destruction of asbestos waste and dispose of it in an organized manner at construction sites with subsequent removal to designated areas or burial. • If asbestos material is to be temporarily stored, its waste must be securely isolated in closed containers and labeled as hazardous material. • Hazardous waste transportation to landfills is carried out by specially equipped own transport of the enterprise or specialized transport companies. • Transportation of unpackaged asbestos in open bodies of vehicles is not allowed. • ACM should be safely disposed of at a local hazardous waste landfill, if available, or at a municipal landfill after prior arrangements have been made with the landfill operator for safe		construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body
--	--	--	--	--

		storage.		
Vehicles	Local air pollution, terrain; Hazard when moving around in a populated area; Hazard when maneuvering	• Authorization of technically serviceable vehicles for operation • Observance of speed limits • Vehicle complete set is: medical kit; fire extinguisher; emergency stop sign or flashing red light; wheel stops (at least two). • Sound the horn when reversing • Open parking areas shall have markings identifying parking spaces and driveways.	It is not considered as a separate cost item	The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body
	Littering of adjacent property; Restriction of free movement of pedestrians and vehicles	• Temporary storage of construction materials and debris shall be organized in the subproject area; • Parking of construction machinery and equipment shall not obstruct or restrict local residents' access to their property and common areas. Arrange alternative temporary access routes if necessary.	It is not considered as a separate cost item	
Organization of the construction site and dismantling of the site after completion of construction works	An adverse impact may occur if the Contractor fails to ensure that the area is cleared of construction debris, production waste and reclamation of disturbed land during the construction process	Ensure removal of all waste and construction debris from the facilities for disposal at a municipal authorized construction waste landfill in accordance with the Waste Disposal Contract. Ensure removal of materials, dismantled equipment, etc.	It is not considered as a separate cost item	
Biological Environment				

Flora and fauna	Tree and shrub cutting when laying the pipeline routes.	Tree and shrub cutting, crown pruning should be carried out strictly along pipe laying routes only after obtaining permits from territorial environmental authorities in coordination with the local governments, taking into account compensatory planting. If it is necessary to cut down municipal trees, the contracting organization should request a cutting permit from Aiyl Okmotu. Then, AO with the approval of the local environmental authorities will obtain a permit to cut down the specified number of trees. When the water pipeline route is completed, a tree inventory should be conducted with the municipality to identify potential trees to be cut for compensation. In case of cutting down municipal trees, compensation in the form of seedlings will be made (the compensation amount is stipulated in the bill of quantities (BoQ)). For one tree felled, 3 will be planted. The contractor shall plant saplings in the places determined by the aiyl okmotu (AO), drawing up a planting act. In the case of private tree felling, a RAP will be prepared in accordance with the SES5. If trees of several owners are felled, one RAP can be prepared for a subproject.	It is considered as a separate cost item in the EP BoQ.(10 pcs)	The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body
Social Environment				

Occupational safety of workers, health and safety, fire safety	Occupational injuries	• Compliance with approved occupational health and safety instructions. • All works have to be carried out using safety methods and disciplines to minimize the negative impact on the public and the environment. • Personal protective equipment must comply with safety standards (mandatory use of protective helmets, masks, if necessary, belts and shoes). • The contractor shall provide workers with: - drinking water during working hours; - sanitary facility including mobile biotoilets when the crew works with more than 8 people; - medical kits for each construction site to render first-aid - anti-noise headphones, earplugs • Compliance with all occupational health and safety, and fire safety requirements • The sites will be equipped with appropriate information boards and signs informing workers about the rules and regulations of work •	It is not considered as a separate cost item	The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Specialist and Infrastructure Engineer are responsible for overall supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body.
Stakeholders engagement	Engagement of the project-affected parties, vulnerable	Stakeholders engagement include the following methods:	It is not considered as a separate cost	

	groups and other interested parties	• Public consultations/hearings • Mass/social media • Communication materials • Trainings and workshops • Grievance mechanism • Information boards	item	
Grievances redress mechanism	Handling complaints and distributing contacts	As required by the World Bank's ESS10, a dedicated grievance mechanism will be established. Special communication materials (GM brochures, posters) will be printed to help local residents introduced to the channels and procedures to consider complaints. Internal GM training will also be provided for PIU employees and (sub)contractors. The Project website will contain clear information on how any interested parties can submit feedbacks, questions, comments, concerns and • complaints, and include the ability to submit complaints electronically The grievance redress mechanism (GRM) is applied in the process of activities (see ESMP section 11). The GRM will regulate the process of receiving, reviewing and resolving appeals that may arise as a result of the implementation of Project activities in the subproject	It is not considered as a separate cost item	
Aesthetics and Landscape	Landscape disturbance can be	Once the works are completed, planning and restoration works will be carried out		

	associated with the accumulation of construction debris	on the distribution network sections and water intake catchment area.		
Historical and cultural sites	The works will not affect cultural and historical sites. If previously unknown cultural heritage is encountered during project activities, the Chance Finds procedure will be followed.			The Contractor must stop construction work in this area / site and notify the PIU PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including Chance Find; will notify the PIU The PIU (safeguard specialists) will send a notification letter to the Ministry of Culture, Information, Sports and Youth Policy of the Kyrgyz Republic The Ministry of Culture should outline the procedures
Safety and health of workers	Workers can be injured during their work The construction, installation and operation of this project may expose workers to significant OHS risks s. These risks include Physical Injuries, Manual Handling and Ergonomic Risks,	• Mitigating OHS risks will include use of appropriate engineering design and technologies, the provision of PPE, training, safe working practices, emergency preparedness, health monitoring, and effective site management. • Regional inspectors of the Ministry of Natural Resources, Ecology and Technical Supervision, who control construction works and environmental safety will be duly notified of the forthcoming project works. • Service for control and supervision of		The Contractor shall be responsible for implementation of environmental and social mitigation measures. PIU Technical Supervision Engineer / Technical Supervision Company will provide overall supervision of the construction site, including monitoring of potential environmental and social risks. PIU Environmental Specialist, Social Specialist and Infrastructure Engineer are responsible for overall

	Slip, Trip, and Fall Hazards, Entrapment and Restricted Movement, exposure to harmful substances, , and hazardous working conditions.	labor legislation under the Ministry of labor, social security and migration of the Kyrgyz Republic, which is engaged in the protection of labor rights of workers and employers • All work shall be performed in a safe and disciplined manner and organized so as to eliminate work-related injury, impact of harmful substances, eliminate hazardous working conditions. • Personal protective equipment of workers must meet work safety standards (with mandatory permanent wearing of helmets, protective masks in those conditions where it is necessary, safety goggles, safety harnesses and safety shoes). • Appropriate directional and informational signage will be posted at the site to inform workers of the basic rules and regulations of the work to be performed. • Daily safety briefings on work safety procedures are planned for the sites. • Warning signs, signage, and signal tapes shall be installed for the safety and protection of workers, pedestrian crossings are installed. • Contractors shall develop and agree with PIU/relevant government agencies (within their competence) Plans for response/elimination of accidents/emergency situations. • Prior to commencement of work, the Contractor shall require workers to		supervision/ monitoring the performance of work for compliance with design/technical/environmental/social requirements. State control will be carried out by the authorized state body
--	--	---	--	--

		undergo medical examination.		
Public safety and health	Occupational injuries	• Regional inspectors of the Ministry of Natural Resources, Environment and Technical Supervision, local communities should be appropriately informed about upcoming project activities. • Local communities will be appropriately informed about the works through publications and/or media alerts and/or information boards in public places (and at work sites). • All permits required by law for the use of waste landfill/dump, as well as approvals from the Sanitary Inspectorate, etc. during construction and rehabilitation works at the site must be obtained. • The contractor shall: - organize parking of machinery at a safe distance from social facilities (schools, kindergartens, hospitals, etc.); - fence the excavated trenches with warning signal tapes; - install road signs, safety signs for pedestrians and drivers; - provide residents with a sufficient number of safe crossing bridges (over trenches).	It is not considered as a separate cost item	

Inflow of workers and labor issues	Conflict situations in employment. Unsatisfactory living conditions. Harassment of local residents or vice versa	Require workers to: • comply with working and rest conditions, • comply with the labor schedule • Provide job skills training to increase community participation • Provide adequate sanitary facilities (toilets and washing facilities) at the workplace with sufficient supplies of hot and cold running water, soap and hand drying devices. • Install a temporary septic tank system for any residential labor camp without causing pollution to nearby waterways. • Raise employees' awareness of the overall management of community relations, establish a Code of Conduct in line with international practices and strictly enforce them, including dismissal of employees and financial sanctions on an appropriate scale. Prior to the start of project activities, contractors will be briefed on the Code of Conduct (Annex 3 of the ESMP) to eliminate the risks of sexual exploitation, sexual violence and sexual harassment. Compliance with the provisions/requirements of the Code of Conduct is monitored	It is not considered as a separate cost item	
Human Communities	Existing communications failure	Timely warning of the population about upcoming shutdowns. Quickly restore the operation of utilities.		Local Self Governments PIU

	Gender quota	• Equal participation, consideration and reflection of women's interests and opinions throughout the project implementation period. • At least 30% of participants in all project meetings and hearings will be women. Under the project, communities will be invited to establish rural settlement water committees. At that, at least 30% of the committee members will be women.		Local Self Governments PIU
	Poverty	A plan will be developed under the project to connect poor households to water services.		Aiyl Okmotu (AO) Municipal water supply enterprise PIU
	Possible social resistance against tariff increases	Social mobilization under the project, community outreach (public works, hearings, development and implementation of information campaign plans). Tariffs will be developed taking into account community views received during public consultations.		Aiyl Okmotu (AO) Municipal Water Supply Enterprise (MWSE)/Community Drinking water Users Union (CDWUU) supported by the PIU
	Limited capacity of local governments	The project includes selected activities aimed at capacity building and technical support to local governments		PIU
	Actual project implementation delays or construction delays that may pose a threat to public safety	Delays in the implementation of construction work can cause some discontent. In such cases, community outreach will be conducted.		Contractor PIU

Operation stage				
Water supply system leaks, water discharge during flushing of water pipelines	Water supply leaks and pressure reductions can lead to deterioration of water quality (dirty water in the pipeline). In addition, some households could be temporarily without water.	• Ensure the use of environmentally acceptable fuel • Routine maintenance (12 months warranty period for the system) • Ensure that all assurances and certificates are obtained in accordance with fire safety and air emissions/concentrations monitoring requirements • Ensuring proper and efficient use of water resources and preventing water losses and leakages and excessive water consumption - installation, operation and periodic inspection of water meters at water consumers. • In case of leakage, the operating organization shall shut off the water supply, determine the location and nature of the accident, and then carry out repair works. • Component 3 includes procurement of operation and maintenance equipment and training on system operation. • When flushing water pipelines, water will be discharged into irrigation canals. • In the event of non-compliance with water quality standards, the operating organization shall suspend water supply to customers, identify the causes, and take measures to eliminate them. • In cases of soil subsidence due to	Activities, trainings and meetings	Municipal Water Supply Enterprise, PIU

		excessive water consumption, the operating organization shall develop and agree with the relevant government agencies on Plans/projects to eliminate the specified reason		
Using calcium hypochlorite (or calcium hypochlorite, or any other chemicals)	During the construction period, work with chlorine or other chemicals is not expected, so exposure is excluded. During operation of the water supply system, exposure is possible for people working directly with chlorine or other chemicals (in the work area/chlorination room).	- The contractor will develop instructions for servicing the water supply system, including instructions for handling chlorine (or calcium hypochlorite, or any other chemicals). - Educational and informational work will be carried out as part of the project.	Activities, trainings and meetings	Municipal Water Supply Enterprise, PIU, Department of Disease Prevention and State Sanitary and Epidemiological Surveillance
Wastewater management	Pollution of groundwater due to the lack of effective wastewater treatment and discharge of untreated water into the area	- Proper control over the operation and efficiency of local treatment facilities. - Regular monitoring of the efficiency of treatment facilities. - Obtaining permission for water use in accordance with the requirements of the legislation of Kyrgyzstan. - Timely cleaning of the street toilet, which will be used as needed	Activities, trainings and meetings	School/kindergarten administration, Department of Disease Prevention and State Sanitary and Epidemiological
Possible increase	Currently, utility rates	The project will build the capacity of local	Activities, trainings	Municipal Water Supply Enterprise,

in water tariffs	are below cost recovery levels and it is likely that water rates will be revised upwards once the system is operational. This could lead to public discontent.	authorities and municipalities responsible for the provision of water services in the project areas. This will include topics and support on tariff setting, billing and collection systems, training on operations and maintenance (e.g. disinfection), water quality testing, customer management, grievance mechanisms, human resources and commercial management. The project will also support the preparation of service contracts to clarify and formalize the respective responsibilities of the operator and asset owner and support the management of service quality, tariffs and financing mechanisms. Institutional support at the local level will also focus on strengthening the capacity of the department at the district level, with a focus on sector monitoring and technical support on complex operations and maintenance issues. The project will support the development of connection subsidy strategies and tariff setting mechanisms to meet the needs and requirements of the poorest and most vulnerable.	and meetings	SIDDWSWD
------------------	---	---	--------------	----------

7. Institutional Arrangement

The ESMP institutional mechanism ensures implementation, control and monitoring of environmental and social measures under the project. It includes allocation of roles, responsibilities and procedures among the project participants.

Organizational Structure.

The project will be implemented under the overall responsibility of the State Institution “Drinking Water Supply and Wastewater Disposal” under the Water Resources Service of the Ministry of Water Resources, Agriculture and Processing Industry. This institution is responsible for the development of the rural and urban water supply and sanitation sector, including policy development, planning and coordination of activities within the sector. The SIDWSWD under the WRS will coordinate the project and develop the necessary capacity at regional and local levels to deliver services, including implementation of reforms and performance-based grants for the establishment of autonomous service providers and, where feasible, public-private partnerships. The SIDWSWD regional offices will provide full support in regular communication with the target sites to ensure that the PIU is fully informed (water system specifications, previous monitoring results, information from the SIDWSWD database), and facilitate site visits where possible.

The PIU will carry out overall coordination and make key decisions. The tactical management is assigned to the project's environmental and social specialists, who will deal with the operational part of the ESMP implementation. At the executive level are contractors and specialized units that directly implement the planned activities.

The key actors and their responsibilities are distributed as follows. The PIU provides the required financing of the ESMP activities, approves the plan and oversees its implementation, as well as reviews regular implementation reports; organizes daily monitoring, collects and analyzes environmental and social data, prepares reports and coordinates the work of contractors.

Contractor organizations are responsible for the practical implementation of mitigation measures, strict compliance with environmental and social standards, and are required to promptly report any incidents.

Independent supervision bodies conduct monitoring inspections, carry out performance audits and handle complaints and appeals. A special role is played by local communities, which participate in public monitoring, provide feedback and take part in consultation meetings.

The reporting system provides for established frequency of reporting, standard document forms, data verification procedures and mechanisms to ensure public access to information. An important element is the training program, including compulsory staff training, professional development courses, best practice sharing and emergency response training.

All these arrangements are developed on a project-specific and local basis to ensure practical feasibility of the ESMP provisions. Particular focus is given to establishing effective communication channels between participants through regular briefings, a feedback system and clear procedures for resolving disagreements. This integrated approach ensures that the project environmental and social objectives are achieved in compliance with all regulatory requirements.

8. Monitoring Plan

Table 3. Parameter of activities to be monitored.

Which parameter is to be monitored	Where to be monitored	How will be monitored (instrument type)	When (Measurement frequency)	Monitoring cost. (equipment cost or the amount of contractor costs required to implement the monitoring?)	Institutional Responsibility for monitoring	Start Date
Noise	At construction site and waste dump	Visually	Continuous	Criteria /specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item	1. Site inspection is carried out by the PIU to ensure compliance with the ESMP. 2. The state inspectors will oversee the implementation of design solutions during construction and installation works or during the reconstruction of facilities, the quality of construction materials and structures. They will participate in the commissioning of completed construction projects. 3. The state inspectors, implementing the state environmental supervision, have the right to supervise in accordance with the established procedure after providing relevant identification documents in accordance with environmental regulations, standards, environmental protection measures during the project implementation. 4. The person responsible for the protection of the environment and social environment and occupational safety of the contractor organization on regular base instructs workers on compliance with safety measures and registers with a specially created logbook about the	After handover of the facility to the Contractor
Air	At construction site	Visually	On weekly basis			
Transportation	At and near the construction site	Visually	Continuous			
Waste disposal and storage	At construction site and waste dump	Visually	According to plan, but at least weekly			
Soil Pollution	At construction site	Visually	Continuous			
Construction	At	Visually	According to			

site dismantling	construction site		plan		completion of the instruction.	
Trees, shrubs	At construction site	Visually	Continuous		5. The contractor provides workers with special protective equipment, taking into account seasonality.	
Safety of workers	At construction site	Visually	Continuous		6. The contracting organization provides workers with adequate housing, food, first aid kit and also creates sanitation conditions both in the camp/residence base and in the construction site by concluding contracts for the provision of the above types of services mainly with the local population, which have appropriate conditions.	
Public safety	Work sites	Visually	Continuous			

9. Monitoring and Reporting

Supervision of the ESMP implementation measures.

During the ESMP implementation activities, the PIU Environmental Specialist and Specialist on Social Issues will be responsible for general monitoring to ensure that the measures specified in the ESMP are properly implemented. Specialists in cooperation with local authorities will monitor socio-environmental activities during the construction period.

The Field Supervision Engineer/Company shall be on the construction site at all times. Further, the PIU Environmental Specialist, Specialist on Social Issues or Infrastructure Engineer should visit the construction site at least once a month to monitor the fulfillment of the ESMP requirements during subproject implementation.

Upon monitoring completion, the PIU Environmental Specialist and Social Development Specialist should submit a site visit report to the Project Coordinator. In case of non-compliance with environmental protection measures, a statement should be prepared indicating the period of elimination of violations for the contractor.

Field Supervision Engineer/Company monitors construction work on a daily basis and records violations in the work log and notifies PIU; submits a monthly report to the PIU, including a section on safeguard measures.

Per ESMP PIU will submit to the World Bank semi-annual reports on the environmental, social, health, and safety (ESHS) performance of the Project.

When conducting socio-environmental monitoring, special attention will be paid to accidents. If any accidents resulting in serious injury or death are detected, the contractor or technical supervision engineer shall immediately notify the PIU and they will be recorded in the subproject registry.

The accident should be classified as severe, serious or minor, with a description of the type and cause of the accident. If accidents are identified, they will be recorded in the report and categorized as severe, serious and minor with a description of the type and cause of the incident.

PIU should notify the Bank within 48 hours after learning of the incident or accident using such reporting formats as the Bank may require.

Regular subproject progress reports submitted to PIU by the Field Supervision Engineer/Company should include information on the implementation of the environmental and social management plan. The section should contain a summary and brief description of the monitoring activities, as well as a description of the problems occurred and methods for correcting them.

In case of accident Field Supervision Engineer/Company will inform the PIU immediately. In line with the ESMP PIU will notify the World Bank within 48 hours after learning about the incident or accident.

Table 4. Institutional responsibility for the ESMP implementation

No	Responsible	Duties
1	Ministry of Natural Resources, Ecology and Technical Supervision of Kyrgyz Republic	Reviews the "Environmental Protection" section developed by the design institute as part of the design and estimate documentation for the rehabilitation of the water supply system, and issues an environmental conclusion.
2	Environmental and Technical Supervision Service under the	Carries out state supervision and control on environmental and technical safety issues at construction sites of subprojects

	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	
3	Department of Disease Prevention and State Sanitary and Epidemiological Surveillance under the Ministry of Health of the Kyrgyz Republic	It is a state supervisory body responsible for monitoring the quality of drinking water. Conducts surveys and takes samples of drinking water, examining physicochemical and microbiological indicators. Samples shall comply with the requirements of the Law of the Kyrgyz Republic Technical Regulations "On the Safety of Drinking Water".
4	Local Self Governments	Ensure that stakeholders are informed Fulfill the terms and conditions of the Cooperation Agreement Assist in conducting public hearings. Resolving grievances during the implementation of the RAP. Pay compensation for land and assets of PAPs, as per the RAP
5	PIU Environmental Specialist	Full project environmental support. Environmental Screening. ESMP preparation. Environmental monitoring of construction works. Training for stakeholders (contractors, LSGs, community, etc.) Issuing instructions to contractor.
6	PIU Specialist on Social Issues	Full project social support. Social screening. ESMP preparation. Social monitoring of construction works, including stakeholder engagement, grievance management, land acquisition, and labor influx management (including, among others, Codes of Conduct and SEA/SH). Training for stakeholders (contractors, LSGs, community, etc.) Issuing instructions to contractor. GRM management
7	Technical Supervision Engineer / Company	Conducts daily socio-environmental monitoring of construction works Issues instructions to contractor

		Conducts training and outreach to contractor Submits monthly report to PIU on fulfillment of socio-environmental requirements
8	Contractor	Performs the ESMP activities and the Environmental Protection Section, which received a positive state environmental conclusion. Submits monthly report to PIU on the implementation of socio-environmental activities.
9	Community Drinking Water Users Union and/or municipal water utilities	Actively participate in the process of construction and/or rehabilitation of drinking water supply systems, public supervision of construction work and compliance with the requirements of the ESMP. Providing the local population with safe drinking water. Ensure sustainability of water supply systems after construction and/or rehabilitation.

10. Stakeholder engagement

Public consultations/hearings

The public consultation activities must be consistent with the project's Stakeholder Engagement Plan (SEP).

As part of the project startup, the PIU would organize meetings to launch project activities in the project area. The PIU Environmental and Social Safeguards Team will organize and conduct public meetings according to the schedule of Project activities during the lifecycle of the subproject. Minutes of public meetings, hearings, and introductory meetings will be recorded, and participant sign the registration sheets and photos will be attached to confirm the activities conducted. The PIU Public Relations Specialist is involved in the project activities to prepare and post information about the subproject on the PIU website and social media throughout the project cycle in the state and official languages. Social media channels will be used as much as possible to disseminate information, since social media usage rates are high among beneficiary users of different ages and backgrounds.

The organization and conduct of public consultations/hearings would be carried out with the active participation of stakeholders, as listed in the table below.

Table 5. Responsibilities of parties during public consultations/hearings.

Responsible site	Description of duties
PIU	Prepare an official letter addressed to the head of the AO about the intention to hold a public hearing on social and environmental safeguard measures during the project implementation period. Conducts a preliminary meeting in the subproject with the participation of the head of the AO, the management of the municipal water supply enterprise, and the chairman of the Aiyl Kenesh regarding the organization of a public hearing for the local population. Prepares presentation materials about the Project, social and

	environmental safety measures. Based on the results of the public hearing, makes additions or changes to the ESMP and submits it to the WB for approval.
Aiyl Okmotu	Responsible for organizing the premise for holding a public hearing. Informs the local population about the upcoming public hearing on the water supply project and assists in ensuring maximum community participation. Moderates the public hearing, keeps minutes and registers participants of the public hearing.
Design Institute	Presents the final design decision of the subproject to the participants of the public hearing.

The ESMP will be available on www.tunuksuu.kg to inform stakeholders and the public about the CRWSP development objectives and the World Bank's social and environmental standards applied to the Project as a whole, and to the Aybike subproject. Thereafter, together with the head of aiyl okmotu, a public hearing will be held with participation of the chairman of aiyl kenesh, deputies of aiyl kenesh, chairmen of aksakals council, women and youth, heads of state social institutions, head of local drinking water service provider, representatives of ethnic minorities and vulnerable category of the village. In the course of the public hearing, the PIU SIDWSWD team will provide the participants with presentations on the Project development objectives and social-environmental safeguards during the water supply and sanitation system construction/rehabilitation in the Aybike subproject of Batken oblast.

11. Grievance Redress Mechanism

The public consultation activities must be consistent with the project's Grievance Redress Mechanism (GRM) included as part of the Stakeholder Engagement Plan (SEP).

The subproject GRM will streamline the process of receiving, reviewing and resolving grievances that may arise as a result of the implementation of Project activities in the subproject.

The GRM process is necessary to enable direct and indirect beneficiaries, stakeholders and Project staff, at all stages of Project implementation:

- have access to information about the Project;
- to submit their appeals for improvement of the Project activities;
- increase transparency and openness in the process of implementation of the Project activities;
- timely address issues/problems preferably at no cost and with a guarantee of timely resolution.

Citizens' appeals directly related to the Project implementation are subject to consideration. Appeals or complaints can be either individual or collective. The mechanism will also allow for anonymous complaints to be filed and addressed. In accordance with the Law of the Kyrgyz Republic "On the Procedure for Consideration of Citizens' Appeals" dated 4 May 2007 No.67, citizens/residents of subprojects can send any appeals on issues related to the scope of the Project at all stages of its implementation. This GRM will apply to the entire Project, but will focus on the construction and/or rehabilitation component of the water supply system, as direct adverse impacts from Project activities will be experienced by residents/populations living in the Project area, and social, environmental, and other issues may arise during the design, construction, and/or rehabilitation of the drinking water supply and sanitation system.

GRM key objectives:

- Register, verify, review, follow up and respond to complaints or appeals received related to social, environmental and any other issues related to Project activities;
- To reach mutually agreed solutions satisfactory to both the Project and Project-affected persons, and to resolve any grievances locally in consultation with the aggrieved party;
- To facilitate the development process at the local level while maintaining transparency, as well as to establish accountability to project affected persons;
- Establish feedback;
- Encourage vulnerable individuals and/or groups to express their views.

11.1. Grievance Redress and Resolution Process

The mechanism for addressing /appeals of citizens affected during the Project implementation period and providing appropriate responses on social and environmental safety measures and gender issues will be implemented according to the following three levels, i.e. grievance commissions will be established.

It is important to note that the PIU will implement the approach used in the community mobilization activities through the establishment of Water Committee (hereinafter WC) of rural settlement consisting of representatives of aiyl okmotu, aiyl kenesh, council of aksakals, council of women, council of youth, vulnerable category of population, ethnic minorities, Municipal Water Supply Enterprise, and interested rural residents. The main purpose of forming and interacting with the WC is to facilitate the Project to broadly involve rural residents in the process of addressing the rural settlement water supply and sanitation issues, as well as in:

- dissemination among the rural residents of reliable information on the progress of the project on construction/rehabilitation of water supply system (WSS) and modernization of sanitary facilities of social institutions;
- assistance in increasing transparency and openness in the process of implementation of the Project activities;
- conducting joint monitoring of activities of aiyl okmotu and MWSE on water supply system management and provision of safe drinking water to the population.

Establishment of the Community Water Committee (WC) of the rural settlement at the subproject level is carried out at the introductory meeting of the rural settlement, where information on the Project, agreement on the composition of the WC and the adopted Regulation on the WC are provided, which are all together recorded in the Minutes of the general introductory meeting of the rural settlement. At the first meeting of the WC, a chairperson, a secretary and a person responsible for promotion of the GRM in the subproject are elected.

Further, the Commission for consideration of citizens of the local level is established at the level of aiyl okmotu on the basis of the Order of Aiyl Okmotu consisting of the head of Aiyl Okmotu, who is the Chairman of the Commission, the Chairman of Aiyl Kenesh is appointed as the Co-Chairman of the Commission, representatives of the regional branch of the state institution “Cadastre”, the territorial department of the MNRETS KR, the DDPSSSES of the MH KR, director of MWSE, the Chairman of the WC subproject, rural resident and representative of the PIU in the subproject.

Regarding the Commission for consideration of citizens' appeals at the national level within the framework of the ongoing SIDDWSWD PIU Project, this Commission was established by the Order of the DDWSWD with No. 27/p dated 09.11.2023.

The Commission is composed of:

- The Director of State Institute for Development of Drinking Water Supply and Wastewater Disposal (SIDDWSWD) is the Chairman of the Commission for consideration of citizens' appeals;

- The head of the Department of Drinking Water and Wastewater Disposal of SIDDWSWD is the co-chair of the Commission;
- A representative of the State Civil Service Agency and Local Government;
- Representative of the Department of the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic;
- Representative of the Department of Disease Prevention and state sanitary and epidemiological supervision of the Ministry of Health and Social Development of the Ministry of Health of the Kyrgyz Republic;
- PIU Director;
- PIU Environmental Specialist;
- PIU Social Safeguards Specialist.

In table 5 provides information on levels, timeframe and responsible persons for consideration of appeals and complaints of citizens and stakeholders.

Table 5. Matrix for managing appeals/complaints from citizens affected by the Project.

Step	Impact level	Process	Timeframe
1	Decision at the subproject rural water committee (WC) level.	At the initial stage, the WC listens to the Applicant and proposes acceptable solutions. If, the Applicant is not satisfied with the decision of the WC, he or she shall file a complaint in writing with the local Grievance Commission.	2-3 working days
2	Decision at the aiyl okmotu level	Upon receipt of a written request from the Applicant, the AO Commission at the local level will analyze the request and prepare a package of documents. The decision of a majority of the Commission members shall be considered final and the final MoM shall be signed. The decision shall be made within 14 working days with sending the conclusion of the commission's decision to the Applicant. If the Applicant is not satisfied with the decision of the Commission, he/she shall submit an appeal in writing to the Central Level Commission with the opinion and supporting documents received at the local level.	14 working days
3	Central level solution	Upon receipt of a written appeal from the Applicant, the Commission at the central level will review and prepare the appeal package. The formal hearing shall be held on a date agreed upon by the Commissioners. Members of the Commission will contact the Applicant by telephone and organize a visit to the Applicant's community to verify an objective assessment of the facts and verify their accuracy if necessary. Within 14 working days of the filing of	14 working days

		the appeal, the Commission shall make a decision and sign the final MoM for further submission to the Applicant.	
--	--	--	--

At all levels, the PIU Social Safeguards Specialist will maintain direct communication with the Project Affected Person (PAP). The project will determine the validity of the grievance, notify the complainant that he/she will be provided assistance. A response will be provided within the above timeframes indicated in the matrix above, during which time meetings and discussions will be held with the affected person. In the cases when the resolution of a complaint requires a special inspection (expert examination), requesting additional materials or taking other measures, the deadlines for resolving complaints may be exceptionally extended, but for no more than 30 calendar days in accordance with the Law of the Kyrgyz Republic dated 4 May 2007 No. 67 "On the Procedure for Consideration of Citizens' Appeals". The project will support PAPs at all stages to resolve the complaint and ensure that their complaint is addressed in the best possible way.

The Project's GRM is not an obstacle to appeal to the court, in accordance with the legislation of the Kyrgyz Republic, a PAP has the right to appeal to the court at any stage of consideration of his/her grievance. Anonymous complaints will be reviewed and actions will be taken on them within the Project.

Register of appeals/complaints.

All incoming complaints or appeals are to be registered in a local and national complaints register, the information from which is duplicated in an electronic database. The database should contain, at a minimum, relevant information on the date of submission, registration number, nature of the issue, responsible person, timeframe for problem resolution and feedback (positive/negative).

The following communication channels have been established under the current PIU project through which residents/beneficiaries can send appeals at different stages of project implementation:

- WhatsApp group is an instant text messaging system for mobile devices with voice and video support to the following GRM numbers: + 996 998 544 575 и +996 707 544 575;
- oral or written communications received during on-site working meetings and by Project field specialists in the subproject;
- incoming correspondence on purpose to the PIU reception desk;
- incoming e-mail correspondence office@tunuksuu.kg
- by mail - Bishkek, Baytik Baatyr str. 34.
- by phone: + 996 (312) 54-54-45.

At the Project level, a Grievance Redress Mechanism/appeals from citizens affected during the Project implementation period and providing relevant responses on social and environmental safeguards and gender issues will be implemented according to the following three levels, i.e., the grievance commissions will be established at all levels:

at the subproject level;

at the local level (AO);v

at the central level (SIDWSWD).

Information signs with contact numbers will be posted/placed on the project site, in the buildings of aiyi aimak, schools, rural health centers, and the Contractor's construction sites.

11.2. Handling sensitive grievances

Given the Standards for the Prevention of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), which the World Bank requires all WB-financed projects to adhere to, these standards and responsibilities are also to be adhered to, whereby measures are taken to raise awareness on prevention and mitigation of SEA/SH. At all stages of project implementation, all the PIU staff and contractors will be informed on understanding the principles of control and prevention of the

SEA/SH risks. The GRM will ensure access and confidentiality of the grievance mechanism, and will ensure that the applicant does not fear likely retaliation. These complaints will be investigated without any delay and all responsible will be held accountable. The SEA/SH issues will require certain additional measures:

- Gender sensitivity will be taken into account in the hiring of social work specialists to work in the PIU.
- Safeguards specialists will be informed of the SEA/SH issues.
- In addition to sociocultural sensitivity and non-violent communication in employee training, the SEA/SH will be on the agenda as well. Training for employees will include the following information about the SEA/SH:
 - ✓ Definition of violence against women in national and international instruments;
 - ✓ Types of violence (physical, sexual, economic, emotional);
 - ✓ Legal Sanctions.
- The grievance mechanism will be accessible and will ensure the confidentiality of personal information.
- Awareness-raising activities will be conducted to inform women about the application of the mechanism. The following types of information will be provided in these activities:
 - ✓ Women's rights;
 - ✓ Self-defense in cases of violence and sexual assault. Emergency phone numbers;
 - ✓ Contact information of institutions and organizations to which they can apply;
 - ✓ Grievance mechanism and privacy policy.
- The principle of confidentiality of the grievance mechanism will be repeated in all information materials.

The Project will use additional mitigation measures proportional to the risk. The Contracting organization will be responsible for developing personnel management procedures, health and safety plans, and the SEA/SH protocols that will apply to its own employees and employees of (sub)contractors who are employed by the Project. These procedures and plans will be submitted to the PIU for review and approval before contractors are allowed to begin construction work. All contractors will be required by contract to commit against the use of child labor and forced labor, to take measures regarding the effects of the SEA/SH, and PIU personnel responsible for contractor oversight will monitor and report on the absence of forced labor and incidents of the SEA/SH. All personal data and complaints received by GRM will be treated confidentially unless the Applicant consents to the disclosure of their personal information. In particular, the confidentiality of sensitive issues and the SEA/SH complaints from communities will be respected.

11.3. WB Grievance Redress Service

Communities and individuals who believe that they are adversely affected by a World Bank-supported Project may also file complaints directly with the Bank through the Bank's Grievance Redress Service (GRS) (<http://projects-beta.worldbank.org/en/projectsoperations/products-and-services/grievance-redress-service>). A complaint may be submitted in English, Kyrgyz or Russian, although complaints written in languages other than English will require additional time. You can file a complaint with the Bank's GRS through the following channels:

- by e-mail: grievances@worldbank.org
- by fax: +1.202.614.7313
- by mail: The World Bank, Grievance Redress Service, MSN MC10-1018, 1818 H Street Northwest, Washington, DC 20433, USA
- To the World Bank Office in the Kyrgyz Republic, Bishkek, J. Abdrahmanov Str. 191, Bishkek, Kyrgyz Republic, bishkek@worldbank.org, and by phone: +996 312 625262

The complaint should clearly state the adverse impact allegedly caused or likely to be caused by the Bank-supported project. It should, where possible, be supported by available documentation

and correspondence. The applicant may also indicate the desired outcome of the complaint. The complaint must include the name of the applicant or designated representatives and contact information. Grievances filed through the GRS shall be addressed as soon as possible so that Project-related issues can be quickly resolved.

Annex 1. Environmental Screening

1. Project Name: Aybike

2. Summary Subproject Description

The project provides for a combined domestic and firefighting water supply system. Water supply scheme is pressure, provides water supply from the designed well disinfected by bactericidal plant and through the water pipeline, in the designed reservoir with capacity of 200 m³ - 2 pcs. and then the water supply network of Aybike village.

The water supply scheme is gravity-pressure. The water supply system is combined domestic and fire-fighting. Water consumption calculation is summarized in the table and attached. The adopted water supply scheme includes the following buildings and facilities:

- Well drilling - 1 unit;
- Designed reservoir with a capacity of 200 m³ - 2 units;
- Bactericidal plant - 1 unit;
- Checkpoint building - 1 unit.

The Aybike village water supply system source is groundwater: the project envisages designed and existing well. The water intake site is located on the south-western side of Aybike village approximately 1.8 km.

Estimated maximum capacity of water intake of Aybike village is 4.5 l/sec.

The duration of construction work is 18 months; the defect liability period is 12 months after the facility is put into operation.

3. The E&S Screening procedure comprises of two stages-process:

(i) Initial screening by using the Exclusion List- *This type of subproject are not listed in the WB exclusion list.*

(ii) Screening the proposed activities to identify the approach for E&S risk management.

Environmental component	Construction Phase	Operational phase	Mitigation measures
Earth environment			
Land and soil degradation: will there be excavation work in the project?	Yes	No	Ensure proper selection of areas for construction site location, where solid waste collection and safe toilets (possibly composting toilets) should be provided.
Soil and groundwater contamination	Yes	No	Timely cleaning of territories from fuel oil in case of oil spills on the soil Washing of machinery and equipment on the construction site is prohibited. Fueling of machinery will be carried out at specialized fuel stations. Vehicles with bad fuel systems exceeding emission standards and hydraulic systems are not permitted. Use of vehicles that have passed technical inspection. Storage and warehousing of fuels,

			lubricants and construction materials is not allowed to prevent pollution from entering the river. Daily checks of machinery and equipment for oil leaks. Topsoil removal. Improvement of the territory in accordance with the project.
Generation of solid waste, including toxic waste?	Yes	No	Before the start of works, to sign an agreement with the local municipality for disposal of construction and household waste at the municipal landfill. Determine waste collection and disposal methods before work begins, as well as storage locations for the main types of waste generated during demolition and construction work. Mineral construction waste and waste generated during dismantling of objects must be separated from organic, liquid and chemical waste at the work site, after which they are stored at the appropriate site. All records and documentation of waste removal and disposal must be properly maintained as evidence of good waste management practices at the site as intended. Recycling of waste inert materials (except asbestos) is permitted where possible. Construction waste is transported at the contractor's expense to storage sites. Some construction debris may contain asbestos. The Contractor must train its employees to assess the presence of asbestos-containing materials and determine procedures for the safe disposal of asbestos using appropriate protective equipment and storage in sealed containers. Safety requirements for asbestos management are specified in Annex 4. Work with and disposal of asbestos must be carried out by qualified and experienced specialists using

			appropriate protection (masks, gloves and overalls). Before removal (if removal is necessary), the asbestos is treated with a wetting agent to minimize the generation of asbestos dust. Asbestos-containing materials must not be crushed or cut. Workers should avoid crushing/destruction of asbestos waste and dispose of it in an organized manner at construction sites, followed by removal to designated areas or disposal. If asbestos material is to be temporarily stored, its waste must be securely isolated in closed containers and labeled as hazardous material. Hazardous waste transportation to landfills is carried out by specially equipped own transport of the enterprise or specialized transport companies. Transportation of unpackaged asbestos in open bodies of vehicles is not permitted. ACM should be safely disposed of at a local hazardous waste landfill, if available, or at a municipal landfill after prior arrangement with the landfill operator for safe storage.
Activities with positive or negative impacts on ecosystem services or biodiversity	Yes	No	The cutting down of trees and shrubs and pruning of crowns should be carried out strictly along the routes for laying pipes only after obtaining permits from territorial environmental authorities in agreement with local authorities, taking into account compensatory plantings. If it is necessary to cut down municipal trees, the contracting organization should request a cutting permit from Aiyl Okmotu. Then, AO with the approval of the local environmental authorities will obtain a permit to cut down the specified number of trees. Once the water pipeline route is

			completed, the municipality must conduct a tree inventory to identify potential trees that will be cut down as compensation. In case of felling of municipal trees will be provided compensation in the form of seedlings (the amount of compensation is indicated in the bill of quantities (BoQ)). For one tree cut down, 3 will be planted. The contractor plants seedlings in places determined by aiyl okmotu (AO), drawing up act of planting. In the case of private tree felling, a RAP will be prepared in accordance with ESS 5. If trees of several owners are cut down, one RAP may be prepared for the subproject.
Air Quality			
Does the project involve emissions of pollutants?	Yes	No	Dust control measures and related household activities such as spraying water to prevent dust, using curtains and barriers at the construction site. Use of masks, gloves and protective clothing. Limit vehicle speeds and select appropriate transport routes to minimize exposure to dust-sensitive receptors. Equip vehicles carrying bulk materials with removable awnings. Cement is delivered to construction sites only in packaged, hermetically sealed bags. The above equipment is ordered only for the period of specific work and is not permanently located on the construction site. Vehicles with bad fuel systems exceeding emission standards are not permitted. It is prohibited to burn construction and household waste at the work site. Keep the surrounding area clean and free of construction debris to minimize dust and contamination. Organization of proper storage and

			transportation of flammable and hazardous materials (gas cylinders, bituminous materials, paints, solvents, glass and rockwool). It should be noted that the construction of facilities will not take place in parallel, but in stages and sequentially, from one facility to another.
Aquatic Environment			
Quantity of water: will the project include water use?	Yes	No	Avoid spills/leaks of fuel oil into the ground; in case of unintentional spills, remove contaminated soil and transport it to appropriate places.
Water Quality/Pollution: Will the project contribute to surface water pollution?	Yes	No	Timely cleaning of areas from fuel oil in order to prevent their entry into local water courses and groundwater together with atmospheric precipitation. Vehicles with bad fuel systems exceeding emission standards and hydraulic systems are not permitted. Cleaning the outdoor toilet pit from liquid waste and its removal to municipal wastewater treatment plants according to the Disposal Law. Excavations near groundwater sources are prohibited. Work areas with equipment, concrete mixers and fuel tanks should be located outside the water protection zones. Installation of special pallets and other prefabricated equipment in places of possible leaks and spills of fuel and lubricants, technical solutions. Disinfection of pit toilet and filling with soil in accordance with SNiPs.
Social and Economic Environment			
Will the project ensure the absence of deterioration in human health, labor safety and unhindered living of residents near the project area, including traffic and road safety?	Yes	Yes	Compliance with approved occupational health and safety instructions. All work must be carried out using safe practices and procedures to minimize negative impacts on the public and the environment. Personal protective equipment must comply with safety standards

			(mandatory use of protective helmets, masks, if necessary, belts and shoes). The contractor is obliged to provide workers with: - drinking water during working hours; - portable toilets when a crew of more than 8 people is working; - medical kits for each construction site for first aid; - anti-noise headphones, earplugs. Compliance with all fire safety requirements. The sites will be equipped with appropriate information boards and signs notifying workers about labor rules and regulations.
Does the project require public consultation to address environmental issues and suggestions from local residents?	Yes	No	Public consultations/hearings will be held on the anticipated socio-environmental risks and impacts, as well as mitigation measures. Suggestions from local communities and public organizations will be taken into account in the finalization of the ESMP.
Social Implications	Yes	Yes	Local communities will be appropriately informed about the works through publications and/or media alerts and/or information stands in public places (and at workplaces). All permits required by law for the use of landfill/waste dump, as well as permits from the Sanitary Inspectorate, etc. during construction and restoration work at the site must be obtained. The Contractor is obliged to: - organize parking of machinery at a safe distance from social facilities (schools, kindergartens, hospitals, etc.); - fence off the opened trenches with warning tapes; - install road signs, safety signs for pedestrians and drivers;

			- provide residents with a sufficient number of safe bridges crossings (across trenches).
Actions that may affect cultural heritage	No	No	

Part 2. (to be completed by the PIU based on the results of the environmental impact assessment)

1. Environmental category of the subproject (High (H), Significant (S), Moderate (M) or Low (L)) **Moderate (M)** (if the project is classified as H, the following items do not need to be filled in - the subproject cannot be included in the project)

2. Will the project activities be implemented?

a) in or near sensitive and valuable ecosystems - wetlands, wildlife and endangered species habitats - **NO** (yes or no)

b) in areas with archaeological and/or historical monuments or active cultural and social institutions or near them - **NO** (yes or no)

c) in regions prone to intensive development or where there are conflicts in the distribution of natural resources; along watercourses, in aquifer recharge zones or water bodies used for drinking water supply; and on lands or waters containing valuable resources (such as fisheries, minerals, medicinal plants, basic agricultural soils) - **NO** (yes or no)

If "yes", the subproject will be excluded from the Program.

3. Environmental assessment required (yes or no) **YES** (the following items should be filled in only for significant, moderate subprojects)

4. Types of required EIA documents (please circle):

a) Partial ESIA, including site assessment and Environmental and Social Management Plan (ESMP) for subprojects with significant risk;

b) Environmental and Social Management Plan for subprojects with moderate risk;

c) ESMP checklists for low-risk subprojects;

d) Draft Environmental Impact Report (for Kyrgyz subprojects categories 2-4)

e) Environmental Impact Report (only for Kyrgyz subprojects of category 2-3)

5. What environmental and social issues are raised in the subproject?

It is expected that these works may cause a variety of minor to moderate local impacts, which may include:

increased pollution from construction waste;

generation of dust, noise and vibration during the operation of construction machinery and mechanisms;

associated risks due to improper disposal of construction waste and asbestos-containing materials that can be found in old water pipes;

operational or emergency spills of fuel and lubricants from construction machinery and equipment;

inadequate restoration of construction sites after completion of work;

increased road traffic/transport traffic, as well as health, safety and public safety issues;

potential temporary local disturbance of biodiversity and living natural resources.

Conclusion (can the subproject be included in the program and if so, under what conditions): the subproject can be implemented provided that all social and environmental mitigation measures are included in the project. 10. If an environmental and social impact assessment is required, what specific issues need to be addressed?

Part 3. Final Environmental Impact Assessment Checklist

Has an Environmental and Social Management Plan been prepared? (Yes or no) **YES** If yes, was this done?

The assessment was carried out within the framework of the "Environmental Protection" section, which received a positive conclusion of the state environmental expertise.

Has an Environmental and Social Management Plan been prepared? (Yes or no) **YES**

Are the mitigation measures to be included in project implementation adequate and appropriate? (Yes or no) **YES**

Will the project meet existing emission and waste control standards? (Yes or No) **YES** If no, is an exception necessary? _____

Do you need an environmental monitoring plan? (Yes or No) **YES** If yes, was it prepared? (Yes or no) **YES**

Have public consultations been held on the potential environmental impacts of the proposed subproject? (Yes or no) **YES** Were the MOM made? (Yes or no) **YES**

Part 4. Final Environmental Assessment Checklist

(to be filled in by the PIU based on a review of proposed mitigation measures and an environmental and social impact assessment (if necessary))

Is the design documentation ready? If not, what is missing? *DED is ready*

Are permits required for the use of land and resources? If so, were they obtained? *Yes, the solid waste disposal permit is required. Permits will be obtained after the contractor has been selected.*

Do solid waste permits need to be obtained? If so, were they obtained? *Yes, will be obtained after the contract with the contractor is awarded*

Are waste water discharge permits required? If so, were they obtained? *Yes, will be obtained after the contract with the contractor is awarded*

Is sanitary inspection required? Is the permit issued? *Yes*

Is an environmental assessment obtained and approved? *Yes*

Is there any potential for soil degradation or contamination? If yes, were appropriate avoidance or mitigation measures planned and envisaged? *Yes, measures are envisaged*

Is there a potential for water quality deterioration or contamination? If yes, were appropriate avoidance or mitigation measures planned and envisaged? *Yes, measures are envisaged*

Is there a potential for air quality deterioration or pollution? *Yes, measures are envisaged*
If yes, were appropriate avoidance or mitigation measures planned and envisaged? *Yes, measures are envisaged*

Is there a threat to the biological environment? If yes, were appropriate avoidance or mitigation measures planned and envisaged? Is there any potential for adverse social impact? *Yes, measures are envisaged*

If yes, are the necessary preventative, mitigating or compensatory measures planned and envisaged? *Yes, measures are envisaged*

Was the level of public participation in design, planning and public consultation sufficient? Was public opinion raised during the consultation process? *Yes*

What is the desirable level, frequency and extent of environmental monitoring during the construction phase? *At least once a month*

What is the desirable level, frequency and extent of environmental monitoring during the operational phase? *Semi-annual*

Annex 2. Social Screening

Project Name:	CRWSP
Subproject Name:	Aybike
Location (oblast, city, village)	Batken oblast, Leylek rayon, Aybike village (former name Madaniyat) Toguz-Bulak aiyl aymak
Infrastructure under construction (all types of drinking water:	Aybike village in Leylek rayon, Batken oblast, Kyrgyz Republic.

Subproject Description:

Aybike village (*former name Madaniyat*) is located in Leylek rayon of Batken oblast of Kyrgyzstan. It is a part of Toguz-Bulak aiyl aymak. The village is located in the western part of the region, on the bank of the Uymeren River, at a distance of approximately 16 km (in a straight line) east of the town of Razzakov, the administrative center of the district. The absolute elevation is 1389 m above sea level. The nearest railway station is located in Kyzyl-Kiya at a distance of - 230 km.

The population of the village according to the data of aiyl okmotu at the beginning of 2024 is 3066 people, who live in 684 households.



Figure 1. Location of Aybike village (former name Madaniyat)

The following social institutions are functioning in this village:

- 1 general educational institutions;
- 2 preschool institutions;
- 1 rural health post;
- 1 administrative building (AO);
- 1 information center.

Land resources

Land of settlements	117,0 ha
Agricultural lands, of which:	20917,0 ha
arable	869,0 ha
irrigated	175,0 ha
fallow	0,0 ha

hay harvest	106,0 ha
pastures (AO)	21643,0 ha
gardens	124,0 ha
Livestock:	
cattle - 1750;	
small cattle - 10208.	
Summarized information about the subproject and its components, its objectives and benefits:	
Rehabilitation of the Aybike Subproject Water Supply System. Groundwater is the source of the Aybike village water supply system: the project includes designed and existing wells. The water intake site is located on the south-west side of Aybike village approximately 1.8 km. For the purpose of reliable and sufficient supply of drinking water to the village population, the following Project activities are proposed: construction of water pipeline with installation of metering units to increase water supply; construction of required pressure-regulating structures (2 clean water reservoirs (CWR)) and metering units to ensure uninterrupted operation of the water supply system; construction of a water distribution network.	
Detailed information on the existing condition of the structures and proposed construction works with volumes:	
The project includes a combined domestic and fire-fighting water supply system. The water supply scheme is pressure, provides water supply from the designed well is disinfected by bactericidal plant and through the water pipeline, in the designed 2 reservoirs with capacity of 200m³ and then the water supply network of the village Aybike. The water supply scheme is gravity-pressure. The water supply system is combined domestic and fire-fighting. The adopted water supply scheme includes the following facilities and structures: well drilling - 1 unit; designed reservoir with capacity of 200m³ - 2 units; bactericidal plant - 1 unit; checkpoint building - 1 unit. Groundwater is the source of the Aybike village water supply system: the project includes designed and existing wells. The water intake site is located on the south-west side of Aybike village approximately 1.8 km. Estimated maximum water intake capacity of Aybike village is 4.5 l/sec. The water distribution network is designed along all existing streets of the village. The network is	

ringed and water supply wells with fire hydrant, regulating gate valves are installed on the network, and for future connection of consumers crosses with water intake units are provided in the wells.

Prior to delivery to the village, water is disinfected by a bactericidal plant. From the reservoirs, water is supplied to the water distribution network of Aybike village through water pipelines. The water supply network is made of polyethylene pipes: PE100 SDR-17, SDR13.6 and 11 of 160x9,5mm D=110x6,6mm; od 90x5,4mm D=75x4,5mm; D=63x3,8mm; Steel pipes Ø20mm 220mm; Total length of the distribution network L=8705m.

Water supply wells with all necessary pipe fittings, fire hydrants and water meters are installed on the network. Two types of distribution units, threaded and welded, are installed in each well for water distribution.

Available map design showing the site and proposed activities to explain the work:

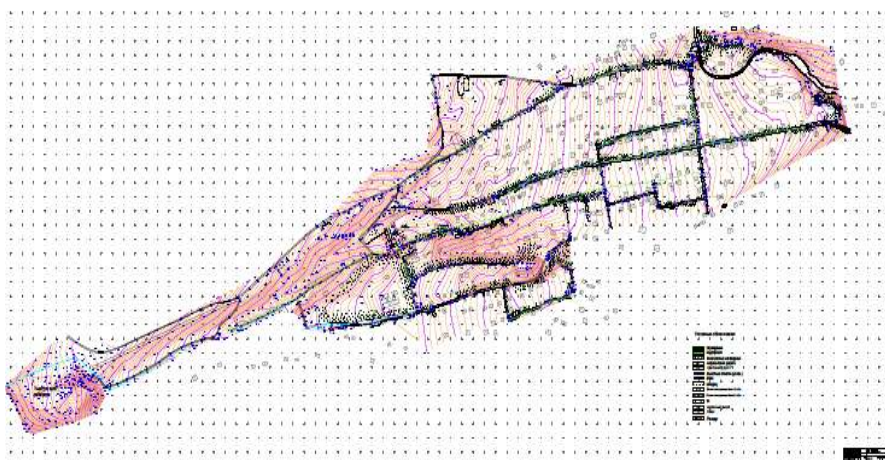


Figure 2. Distribution network layout of Aybike village.

Does the subproject include construction works, including construction of new facilities, extension, modernization or (re)construction of existing drinking water supply and wastewater disposal facilities?

Yes.

Is this subproject related to any other activities not financed under the Project?

No.

Will this subproject include any additional off-site impacts/activities?

No.

Questions	Yes	No	Unknown	Observations, comments
Impact due to acquisition/donation of land				
Is the land area required for the project known? (Indicate estimates in notes, including ownership status, area, land use type, etc.)				The following land plots were allocated for the construction of the water supply system in accordance with the Land Code of the Kyrgyz Republic. The land status is municipal property. Aiyl okmotu prepared all relevant title

				documents: for water intake with the area of 0.2 ha, there is a state act of series B №059591 dated 12.07.2024 for reservoir with the area of 0.59 ha, there is a state act of series B №059595 dated 01.05.2005 Land category corresponds to construction of water supply system (hereinafter referred to as WSS).
Is the ownership status and current use of the land to be used for construction known? (details in comments). Please clarify, is the site selected for this work free of encumbrances and owned by the subproject executor?				The land status is municipal property. The land allocated for the construction of the WSS is located on a municipal land area of 0.20 ha of the relevant category.
Is there any estimate of the land area owned/actually used by individuals/legal entities that is subject to land acquisition?				According to the DED, the WSS construction is planned only on municipal land.
Is there any estimate of the likely number of persons/organizations that will be displaced as a result of the Project?				No displacement of persons and organizations is expected under the project according to the DED and the assessment.
Is land available for mobilization of materials or transportation for construction works on the existing site (right-of-way/bypass road)? If not, provide details of the location of this land plot, availability, etc.				AO will provide a land plot for these purposes.
Will the project potentially include temporary or permanent and full or partial physical relocation? (Specify in the notes what type of displacement is assumed).				No
Will the Project potentially involve temporary or permanent and full or partial economic displacement (e.g., loss of assets or access to resources due to land acquisition/gift or access restrictions - even in the absence of physical resettlement)? (Specify in the notes what type of displacement is assumed).				After signing the contract for the construction of the WSS, Aiyl Okmotu will allocate plots for the base and warehouses of contractors.
Is there any impact on illegal land use practices? Are there any people without legal title who				There are no displacement issues, according to the DED and assessment.

live/have businesses on the proposed project areas/sites that will be used for construction work? If yes, provide details of temporary or permanent impact on them in the "Notes" section?				
If the site is in private ownership, can this land be acquired through negotiation?				No
Will the landowners provide land for the project?				No, municipal land
Will there be a loss of housing and/or residential land due to land acquisition/gift?				No
Will there be a loss of any productive assets due to land acquisition/gift?				No
Will there be loss of crops, trees and fixed assets due to land acquisition/gift?				No
Will there be a loss of business or enterprises due to the acquisition/gift of land?				No
Will there be loss of income sources and livelihoods due to land acquisition/gift under the subproject?				No
Will any social or economic activities be affected by land use-related changes?				No
Will people lose access to natural resources, communal facilities, services or other assets as a result of land acquisition/gift or project implementation? Provide details in the comments.				No
Would the project result in land use restrictions and/or servitude rights? Provide details in the comments.				No
Will access to public or government owned land and resources be restricted?				No
Is there a territorial dispute between two or more countries over the subproject area, its subsidiary aspects and related activities?				No
Have there been any previous land acquisitions and the identified land has already been acquired? Provide details in the "Note" section.				No
Is land acquisition taking place under this project but without World Bank financing? Provide details in the "Note" section.				No
Data on vulnerable groups				

Is there any estimate of the likely number of vulnerable groups/individuals that will be displaced as a result of the Project?				Vulnerable categories of groups/individuals are not expected to be displaced under this subproject.
Are there poor women heads of households or vulnerable to the risk of poverty? Provide some evaluation.				No
Whether the subproject is located in any vulnerable/sensitive areas, social facilities such as a residential area or school, or near them as well as the availability of municipal services (irrigation, drinking water, sewerage and waste collection services)?				No
Is the subproject located in or near any known cultural heritage sites?				No
Gender				
Is there likely to be an impact on gender equality and/or the situation of women and girls?				No
Will the Project potentially reproduce gender discrimination against women, especially with regard to access to assets, opportunities and benefits?				No
Whether the Project will potentially limit women's ability to use, develop and protect natural resources, taking into account the different roles and positions of women and men in accessing environmental goods and services?				No
Gender-based violence and sexual harassment				
Does the project site pose a significant risk of gender-based violence (GBV) and sexual exploitation and abuse (SEA)?				Generally, no, but there is a significant risk of GBV due to the fact that the WSS CIW will pass through the village. The project takes into account measures to manage gender-based violence through inclusion of the Code of Conduct section in the contracts of contracting organizations. In addition, training and briefings on gender-based violence will be provided by the Project's Safeguards officers.
Is recruitment of foreign manpower expected for the subproject, which may result in manpower influx?				The winner will be known at the end of the contest. If the winner is a foreign company or a local company that will

				hire foreign workers, the PIU staff will conduct explanatory work on the Code of Conduct for all employees, including foreigners.
GRM				
Does the subproject have a grievance mechanism, including at the central level, to which all employees have access and which is designed to respond quickly and effectively?				The mechanism for addressing /appeals of citizens affected during the Project implementation period and providing appropriate responses on social and environmental safety measures and gender issues will be implemented according to the following three levels, i.e. grievance commissions will be established at all levels: at the subproject level – PIU ESS specialists; at the local level – local commission under the Aiyl Okmotu (AO); at the central level (SIDDWSWD).
Other supplementary information (if required)				
Decision on categorization. After review of the above answers, the Aybike Subproject category is determined as Moderate .				
Prepared _____ Date _____				
Approved _____ Date _____				

Annex 3. Code of Conduct

CODE OF CONDUCT TO BE OBSERVED BY THE CONTRACTING ORGANIZATION (HEREINAFTER REFERRED TO AS THE CONTRACTOR)

Code of Conduct for Contractor Personnel: Form

We, the contractor, [enter Contractor's name], have signed a contract with [enter Employer's name] for [enter description of Work]. These Works will be carried out at [insert Site and other locations where the Works will be carried out]. Our contract requires us to take measures to address the environmental and social risks associated with the Works, including the risks of sexual exploitation, sexual violence and sexual harassment.

Note:

The minimum content of the Code of Conduct form established by the Employer shall not be materially altered. However, the Contractor may add requirements as necessary, including to address issues/risks associated with the Contract.

This Code of Conduct is part of our measures to address the environmental and social risks associated with our operations. It applies to all of our personnel, employees and others employed on the construction site or elsewhere where work is being performed. It also applies to the employees of each subcontractor and any other personnel assisting us in the performance of the Work. All such persons shall be referred to as "Contractor Personnel" and shall be bound by this Code of Conduct.

This Code of Conduct defines the behavior we require of all Contractor Personnel.

Our workplace is an environment where unsafe, abusive, angry or violent behavior is unacceptable and where all people shall feel comfortable raising issues and not fearing punishment.

REQUIRED BEHAVIOR

The Contractor's personnel shall:

1. perform their duties with integrity and competence;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and welfare of other Contractor Personnel and any other person;
3. maintain a safe working environment, including by:
 - ensuring that workplaces, machinery, equipment and processes under everyone's control are safe and free from health hazards;
 - wearing the necessary personal protective equipment;
 - using appropriate measures for chemical, physical and biological substances and reagents; and
 - following applicable emergency operating procedures.
4. report work situations that he/she believes are unsafe or pose a health hazard, and to withdraw himself/herself from work that he/she reasonably believes poses an immediate and serious danger to his/her life or health; treat others with respect and do not discriminate against certain groups such as women, people with disabilities, migrant workers or children; not engage in sexual harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor or Employer personnel;
5. not to engage in sexual exploitation, which means any actual or attempted abuse or misuse of a position of vulnerability, inequality of position or trust for sexual purposes, including but not limited to obtaining monetary, social or political advantage from the sexual exploitation of another person;
6. not to participate in forced sexual activity, which means actual coercion or coercion of a sexual nature by physical force, under unequal or coercive conditions;
7. not engage in any form of sexual activity with anyone under the age of 18, unless previously married;
8. attend appropriate training courses to be conducted on the environmental and social aspects of the Contract and to include health and safety, sexual exploitation and abuse and sexual harassment;
9. report violations of this Code of Conduct; and

10. not retaliate against any person who reports violations of this Code of Conduct, whether to us or to an employer, or who utilizes the grievance mechanism provided for contractor personnel or the project grievance mechanism.

RAISING CONCERNS

If any person witness's behavior that he/she believes may constitute a violation of this Code of Conduct, or that otherwise concerns him/her, he/she shall raise the matter immediately. This can be done in one of the following ways:

1. Contact *[enter the name of the PIU Specialist on Social Issues with relevant experience in handling cases of sexual exploitation, sexual abuse and sexual harassment, or, if such a person is not required by the Contract, another person designated by the Employer to handle these matters]* in writing at the following address [] or by telephone [] or in person at []; or
2. Call [] to the Employer's hotline (if available) and leave a message

A person's identity will be kept confidential unless suspected involvement is provided for under the laws of the country.

Anonymous complaints or claims may also be made and will be given due and appropriate attention. We take all reports of possible misconduct seriously and will investigate and take appropriate action. We will provide guidance and additional information to service providers who can help support the person experiencing the alleged incident, as appropriate.

No penalty will be imposed against any person who in good faith reports any conduct prohibited by this Code of Conduct. Such punishment will be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor Personnel may result in serious consequences, up to and including termination of employment and possible referral to law enforcement authorities.

FOR THE CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language I understand. I understand that if I have any questions about this Code of Conduct, I may contact *[enter the name of the Customer's contact person(s) with relevant experience]* to request clarification.

Name of Contractor's employee: *[insert full name]*

Signature _____

Date: (day/month/year): _____

Counter-signature of the Contractor's authorised representative:

Signature: _____

Date: (day/month/year): _____

Behaviors that constitute sexual exploitation and abuse (SEA) and behaviors that constitute sexual harassment (SH).

BEHAVIOR THAT CONSTITUTES SEXUAL EXPLOITATION AND ABUSE AND BEHAVIOR THAT CONSTITUTES SEXUAL HARASSMENT

The following is a partial list of prohibited behaviors.

(1) **Examples of sexual exploitation and abuse** include, but are not limited to, the following:

- Contractor personnel inform a local resident that he/she can obtain work related jobs (e.g., cooking and cleaning) in exchange for sexual favors.
- Contractor personnel who connect households to the electricity grid say they can connect female-headed households to the grid in exchange for sexual favors.
- Contractor personnel raping or otherwise subjecting a local resident to violent sexual acts.
- Contractor personnel will deny a person access to a construction site if they are not providing a sexual service.
- Contractor personnel inform the person applying for work under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) **Examples of sexual harassment in the work context**

- Contractor Personnel make comments about other Contractor Personnel's appearance (positively or negatively) and sexual attractiveness.

- When Contractor Personnel complain about another Contractor Personnel's comments about his/her appearance, the other Contractor Personnel responds by saying that he/she is "provoking him/her to do so" because of the way he/she dresses.
 - Unwanted touching of Contractor or Employer Personnel by other Contractor Personnel.
- The Contractor's Personnel informs the other Contractor's Personnel that he/she will receive a pay raise or promotion if he/she sends him/her nude photos of himself/herself.

Annex 4. Asbestos-containing materials management plan (example)

Applicability

The Asbestos Containing Materials Management Plan (ACMMP) applies to all construction or reconstruction sites and any related areas. Contractors employed by Project are legally responsible for their construction sites and related areas and must follow the provisions of the Project ACMMP within those locations. Specifically, this procedure must be used to ensure the safe handling, removal and disposal of any and all Asbestos Containing Materials (ACM) from those areas.

Immediate action

On discovering ACM on a Project site, the contractor must:

- Stop all work within a 5 m radius of the ACM and evacuate all personnel from this area;
- Delimit the 5 m radius with secure fencing posts, warning tape and easily visible signs warning of the presence of asbestos;
- If the site is in an inhabited area, place a security guard at the edge of the site with instructions to keep the general public away;
- Notify the PIU Safeguards Specialist and arrange an immediate site inspection.

Equipment

To remove asbestos from a construction site, contractors must provide the following equipment:

- Warning tape, sturdy fence posts and warning notices;
- Shovels;
- Water supply and hose fitted with a garden type spray attachment;
- Bucket of water and rags;
- Sacks of clear, strong polythene that can be tied to close;
- Asbestos waste containers (empty, clean, sealable metal drums, clearly labelled as containing asbestos).

Personal Protective Equipment (PPE)

All personnel involved in handling ACM must wear the following equipment, provided by the contractor:

- Disposable overalls with a hood;
- Boots without laces;
- New, strong rubber gloves;
- A respirator is not normally required if there are only a few pieces of ACM in a small area, and if the ACM is damp;
- There must be no smoking, eating or drinking on a site containing ACM.

Decontamination Procedure 1: Removing small pieces of ACM

- Identify the location of all visible ACM and spray each lightly but thoroughly with water;
- Once the ACM is damp, pick up all visible ACM with shovels and place in a clear plastic bag;
- If ACM debris is partially buried in soil, remove it from the soil using a shovel and place it in the plastic bag;
- Insert a large label inside each plastic bag stating clearly that the contents contain asbestos and are dangerous to human health and must not be handled;
- Tie the plastic bags securely and place them into labelled asbestos waste containers (clean metal drums) and seal each drum;
- Soil that contained ACM debris must not be used for backfill and must instead be shovelled by hand into asbestos waste containers;
- At the end of the operation, clean all shovels and any other equipment with wet rags and place the rags into plastic disposal bags inside asbestos waste containers.

Decontamination Procedure 2: Removing ACM-contaminated backfill

- If soil containing ACM debris has inadvertently been used for backfill this must be sprayed lightly with water and shovelled out by hand to a depth of 300 mm and placed directly into asbestos waste containers (i.e. not stored temporarily beside the trench);
- Any ACM uncovered during the hand shovelling must be placed in a clear plastic bag;
- Once the trench has been re-excavated to 300 mm, if there is no visible ACM remaining, the trench may be refilled by excavator using imported clean topsoil.

Disposal

ACM shall be disposed of safely at a local hazardous-waste disposal site if available, or at the city municipal dumpsite after making prior arrangement for safe storage with the site operator.

- The Contractor must arrange for the disposal site operator to collect the sealed asbestos waste containers as soon as possible and store them undisturbed at the disposal site.
- At the end of construction Contractors must arrange for the disposal site operator to bury all ACM containers in a separate, suitably-sized pit, covered with a layer of clay that is at least 250 mm deep.

a) Personal Decontamination

At the end of each day, all personnel involved in handling ACM must comply with the following decontamination procedure:

- At the end of the decontamination operation, clean the boots thoroughly with damp rags;
- Peel off the disposable overalls and plastic gloves so that they are inside-out and place them in a plastic sack with the rags used to clean the boots;
- If a disposable respirator has been used, place that in the plastic sack, seal the sack and place it in an asbestos waste container;
- All personnel shall wash thoroughly before leaving the site, and the washing area must be cleaned with damp rags afterwards, which are placed in plastic sacks as above.

6) Clearance and Checking-Off

- The decontamination exercise must be supervised by site supervisors (engineering or environmental).
- After successful completion of the decontamination and disposal, the Contractor shall visually inspect the area and sign-off the operation if the site has been cleaned satisfactorily.
- The contractor shall send a copy of the completion notice to the PIU, with photographs of the operation in progress and the site on completion.

Training

PIU Environmental Specialist may hire the specialized companies to conduct training on ACCMP implementation for Contractors staff and PIU on the implementation of ACCMP. The training will include a session focusing on ACM, which covered:

- Risks of contact with ACM;
- Responsibilities for dealing with ACM on project's construction sites;
- The Project's ACMMP and the Protocol for site clean-up;
- Awareness-raising for the contractor staff.

Cost estimate

Costs incurred by contractors in implementing the ACMMP are included in their budget in ESMP budget.