Environmental Monitoring Report

PUBLIC

#10 Semiannual Report (January–June 2025)
July 2025

Kyrgyz Republic: Naryn Rural Water Supply and Sanitation Development Program

Prepared by the Community Development and Investment Agency of the Kyrgyz Republic (ARIS) for the Kyrgyz Republic and the Asian Development Bank (ADB).

CURRENCY EQUIVALENTS

(as of 1 July 2025)

Currency Unit	–	som (Som)
Som 1.00	=	$0.011
$1.00	=	Som 87.25

ABBREVIATIONS

ADB	–	Asian Development Bank
AO	–	Aiyl Okmotu
ARIS	–	Agentstvo Razvitya i Investirovanya Soobshestv (Community Development and Investment Agency)
BFM	–	beneficiary feedback mechanism
DED	–	detailed design and cost estimation documentation
GRM	–	grievance redress mechanism
HSE	–	health, safety, and environmental protection
PPE	–	personal protective equipment
RBL	–	results-based lending
SI DWSS	–	State Institution “Drinking Water Supply and Sewerage” under the Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic
SSEMP	–	site-specific environmental management plan
WSS	–	water supply and sanitation

NOTE

In this report, "$" refers to United States dollars.

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1 INTRODUCTION

1.1 Preamble

1. This report represents the semiannual environmental monitoring report for the Naryn Rural Water Supply and Sanitation Development Program (Program).

2. This report represents the **tenth** semiannual environmental monitoring report under the Program for the period of January–June 2025.

1.2 Headline Information

3. The objective of the Program is inclusive and reliable access to safe water supply and improved sanitation for rural communities in Naryn Region.

4. There was no disbursement of funds under the Program during the first half of 2025. Based on projections provided, disbursements are expected to take place in the second half of 2025 and will be reported in the next semiannual environmental monitoring report.

5. **Environment Category.** The safeguards categorization for environment for the results-based lending (RBL) Program is Category B. Works under the program will be relatively small and widely spread across the Naryn Region. Due to the small nature of the works, the impacts on environment will be site-specific and limited to construction phase of the Program activities.

6. The Program Safeguards Officer has prepared a list of key documents on Program's environmental safeguards as of 30 June 2025 (see Appendix 2).

2 PROGRAM DESCRIPTION AND CURRENT ACTIVITIES

2.1 Program Description

7. The proposed Asian Development Bank (ADB) assistance contributes to the Government of the Kyrgyz Republic's national development strategy, 2018–2040, goal of clean water and sanitation for all. The government's state (nationwide) program for the water and sanitation sector, the Strategy for the Development of Water Supply and Sewerage Systems in Settlements of the Kyrgyz Republic, 2016–2026, is aimed to improve access to safe and quality water supply and sanitation (WSS) services in all settlements. The government program sets out the strategic and policy framework to develop WSS infrastructure and services, and improve the capacity of government departments, agencies, and operators for the sustainable delivery of WSS services. The focus of ADB's operation is a results-based approach to support the government program to achieve inclusive and reliable access to safe water supply and improved sanitation for rural communities.

8. The government program in expanding access to safe water supply and improved sanitation for rural communities in Naryn Region, as requested by the government. The Program will therefore support infrastructure construction and rehabilitation, backed up by measures to strengthen the capacity of the Community Development and Investment Agency (ARIS), the implementing agency, operators, and improve the sustainable management of the WSS facilities.

9. ARIS was established by a Decree of the President of the Kyrgyz Republic dated 15 October 2003 in order to deepen measures taken to attract investments to overcome poverty, develop and support private entrepreneurship within the framework of the National Poverty Reduction Strategy, strengthen the activities of local governments and strengthening local communities and community organizations. ARIS is a nonprofit organization with the status of a legal entity.

   The Program will support infrastructure construction/rehabilitation and provide support through supporting capacity building measures to ARIS, the program implementing agency, and operators, and improve sustainable management of WSS facilities.

State institution “Drinking Water Supply and Sanitation Development” under the Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic acts as the executing agency for the Program and will be responsible for the overall monitoring of Program results.

10. The RBL modality is the most suitable for this program since:

i. there is a clearly defined scope for development partners’ support;

ii. given ADB’s prior involvement in rural WSS, the RBL modality provides the opportunity for all stakeholders to work together and demonstrate strong commitment to achieving verifiable results;

iii. the modality is able to incentivize institutional strengthening in procurement, internal audit function, and sustainable operations and maintenance of WSS facilities at the community level;

iv. the strengthened mechanisms will pave the way for future stepped-up engagement in the sector; and

v. the RBL modality will sharply reduce transaction costs, given the multiple small transactions at village and district level required by the Program.

11. At the impact level, the RBL program is aligned with the government’s goal of improving the health and quality of life of residents and reducing adverse environmental impact by 2026. The program’s outcome will be inclusive and reliable access to safe water supply and improved sanitation for rural communities in Naryn Province. Due to the limited availability of funds, the priority focus will be on 64,000 population. Two output level results will contribute to the outcome:

Output 1: water supply and sanitation infrastructure expanded, and sanitation solutions piloted, and

Output 2: institutional capacities strengthened for enhanced sustainability in the rural water supply and sanitation sector.

12. The ongoing RBL program aims to provide potable water and sanitation to 64,000 rural population and benefit 21 education and health facilities in Naryn Region.

Additional financing for Naryn Rural Water Supply and Sanitation Development Program. The additional financing will scale up the existing scope of the ongoing RBL program to reach 100,000 people and 37 education and health facilities, while also supporting sector reform and climate change initiatives using the same financing modality. Additional funding for the Program included 23 villages (see Table 1).

Table 1: List of Villages of Additional Financing of the Program

No.	Name of the District	Name of the Aiyl Okmotu[1]	Name of the Villages	Population (Data from Design Institutes and National Statistics Committee of Kyrgyz Republic for 2022)
1	At-Bashy	At-Bashy	At-Bashy	20,150
2			Ak-Zhar	
3	Zhumgal	Min-Kush	Ken-Suu	534
4			Kotur-Suu	
5			Tabylgy	
6			Sary-Bulun	304
7			Kyzyl-Sook	217
8	Naryn	Zherge-Tal	Zherge-Tal	3,364
9		Min-Bulak	Ornok	637
10			Echki-Bashy	1,979
11			Ottuk	1,771
12		Dobolu	Kenesh	752
13			Alysh	544
14		Emgek-Talaa	Emgek-Talaa	1,961
15		Chet-Nura	Ak-Bulun	325
16	Kochkor	Kum-Dobo	Arsy	769
17		Ormon-Han	Semiz-Bel	1,327
18			Epkin	1,890
19			Tendik	4,643
20		Cholpon	Tuz	1,560
21		Kara-Suu	Kyzyl-Dobo	2,068
22	Ak-Talaa	Kara-Burgon	Zhany-Tilek	376
23		Baetov	Ugut	917
Total			**23**	**46,088**

[1] Aiyl Okmotu (village board) – is the executive-administrative body of the aiyl (village) or village council managing within the limits of his authority, the affairs of life support and the life activities of the local community.

The Loan and Grant Agreements for the Program additional financing between the Cabinet of Ministers of the Kyrgyz Republic and the ADB were signed on 4 November 2024 in Bishkek city.

The Law of the Kyrgyz Republic No. 83 dated 28 April 2025 "On Ratification of the Loan Agreement between the Kyrgyz Republic and the Asian Development Bank for the project "Naryn Rural Water Supply and Sanitation Development Program - Additional Financing" and the Grant Agreement between the Kyrgyz Republic and the Asian Development Bank for the project " Naryn Rural Water Supply and Sanitation Development Program - Additional Financing" signed on 4 November 2024 in Bishkek City" was adopted.

2.2 Program Contacts and Management

13. The Program will be executed under the overall responsibility of State Institution "Drinking Water Supply and Sewerage" (SI DWSS), under the Water Resources Service of the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic. [2]

The Program implementation is carried out by ARIS.

ARIS works in close cooperation with the SI DWSS, participating Aiyl Okmotus (AOs) and other key the Program stakeholders and counterparts (see Table 2).

Table 2: Responsibility of Partner Organizations in the Program Implementation

No.	Organization	Responsibilities
1	Asian Development Bank PTL Gia Heeyoung Hong hyhong@adb.org; Country Environmental Focal Lizandro Racoma lracoma@adb.org; ADB Environmental Consultants: Jyldyz Moldosanova jmoldosanova.consultant@adb.org; Sultan Bakirov sbakirov.consultant@adb.org	ADB is the Financing Organization and is supporting the design and implementation of the results-based lending (RBL) program

[2] Resolution of the Cabinet of Ministers of the Kyrgyz Republic No. 98 dated 7 March 2024 on the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic.

No.	Organization	Responsibilities
2	Program Executing Agency is SI DWSS Director – Azamat Shadmanov enesay24.info@yandex.ru	This State Institution "Drinking Water Supply and Sewerage" (SI DWSS) under the Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic is responsible for development of both the rural and urban water supply and sanitation sectors, including policy, planning and sector coordination. The SI DWSS role in the program is as the overall executing agency, which includes, among other activities: overall sector coordination and policy support. Government and donor liaison, participation in all procurement activities (for example, as a member of evaluation committee), identification and prioritization of sector interventions (including infrastructure investments and institutional support), and as the responsible agency of the cabinet of Ministers of the Kyrgyz Republic, provision of support to ARIS in implementation (as required)
3	Program Implementing agency - ARIS Ulan Baigonchokov – The Program Coordinator UBaigonchokov@aris.kg Beknazar Abduraimov – The Program Safeguards Officer BAbduraimov@aris.kg	ARIS will be responsible for overall program implementation, including fiduciary and safeguards compliance. ARIS was created by Decree of the President of the Kyrgyz Republic in October 2003 as a legally and operationally autonomous institution
4	Heads of Naryn District State Administration - Akims	Executive power in the region is carried out by the local state administration. The local state administration is a state executive body that ensures the coordinated activities of territorial divisions of ministries, state committees, administrative departments, and other state bodies of the Kyrgyz Republic within the territory of the districts, their interaction with local governments and exercising state control over their activities in terms of functions and powers delegated
5	OJSC Design Institute "KyrgyzGiprostroy" Andrei Alekseevitch Putilov, Chief Design Engineer Gipro75@mail.ru Environmental Specialist Zinina Olga Valerievna zinola@yandex.com	The design institute is responsible for development of detailed design and cost estimation documentation (DED) for 13 villages in the Naryn region (Stage I): – Tosh-Bulak, Oruk-Tam, Orto-Saz, Ak-Kiya, Zhalgyz-Terek, Zherge-Tal, Zhan-Bulak, Kulanak, Uchkun Villages in Naryn district; – Baetov and Kaiyndy-Bulak Villages in Ak-Tala district; – At-Bashi and Ak-Zhar Villages in At-Bashyn district
6	LLC Design Institute "ENKON" Khromov Alexander Sergeevich encon@mail.ru Environmental Specialist Zinina Olga Valerievna zinola@yandex.com	The design institute is responsible for development of detailed design and cost estimation documentation (DED) for 15 villages in the Naryn region (Stage II): – Zherge-Tal Village in Ak-Tala district; – Kyzyl-Sook, Sary-Bulun, Ken-Suu, Kotur-Suu, Tabylgy, Aral, Kichi-Aral, Lama, Chaek, Besh-Terek Villages in Zhumgal district; – Moldo-Kylych, Isakeyeva, Kochkor, Kara-Too Villages in Kochkor district

No.	Organization	Responsibilities
7	Construction Contractors: Consortium LLC "EKARAS-5" and LLC "Construction company “Sher-Kurulush" ekaras777@mail.ru OJSC "YUG-STROYSERVIS" almazbekKD-77@mail.ru LLC “Metag Inshaat Tijaret Anonym Shirketi” metagkg@gmail.com LLC “MS Building” CJSC “Kaynar” zaokaynar@mail.ru Consortium “Profit-Express” LLC and “Turan Grupp” LLC profit-express@mail.ru	Responsible for the construction of water supply systems in compliance with the requirements of site-specific environmental management plan (SSEMP), and occupational HSE

14. Active contracts within the framework of the Program are shown in the table below (see Table 3).

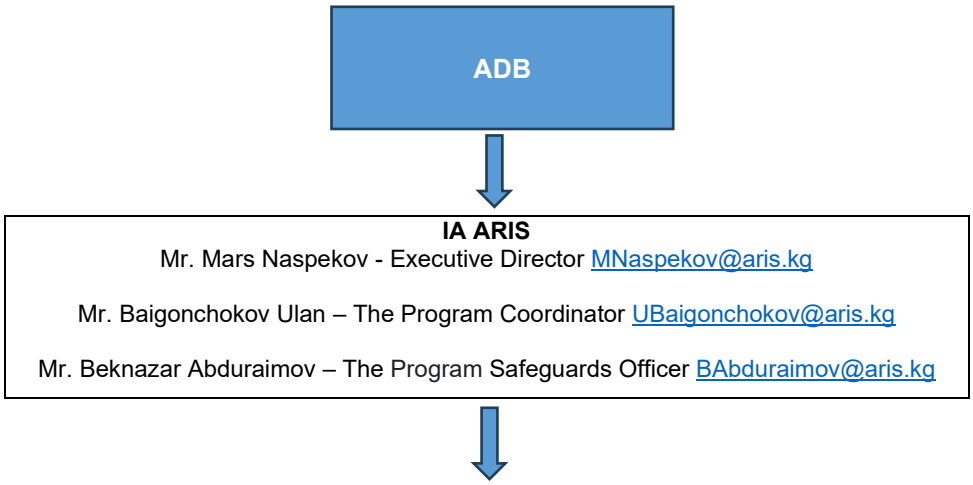
Table 3: Program Contracts

No.	Name of the Village	Contracts, Signed Dates (Start Date - End Date)	Title	Construction Contractors	Percentage of work completed as of 30 June 2025
1	Zherge-Tal in Ak-Talaa District	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-04, 30 June 2023 (30 June 2023 – 30 December 2024)	Construction of a water supply system for the Zherge-Tal subproject	OJSC "YUG-STROYSERVIS"	99 %
2	Ak-Kiya	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-03, 7 July 2023 (7 June 2023 – 30 June 2025)	Construction of a water supply system in villages of Chet-Nura AO (Ak-Kiya Subproject)	Consortium LLC "EKARAS-5" and LLC "Construction company “Sher-Kurulush"	96 %
3	Lama	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-07/RT/L1 21 June 2024 (21 June 2024 – 30 June 2026)	Construction of a water supply system in Aral, Kichi-Aral, Lama, Besh-Terek and	LLC “Metag Inshaat Tijaret Anonym Shirketi”	56 %
	Aral and Kichi-Aral				68 %
	Besh-Terek				78 %

No.	Name of the Village	Contracts, Signed Dates (Start Date - End Date)	Title	Construction Contractors	Percentage of work completed as of 30 June 2025
	Chaek (zone #4)		Chaek (zone #4) Villages Lot #1		39 %
4	Chaek (zones #1, #2, #3)	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-07/RT/L2 21 June 2024 (21 June 2024 – 30 June 2026)	Construction of a water supply system in Chaek (zones #1, #2, #3) Village Lot #2	LLC "Metag Inshaat Tijaret Anonym Shirketi"	52 %
5	Kochkor	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-06/RT/L2 21 June 2024 (21 June 2024 – 30 June 2026)	Construction of a water supply system in Kochkor Village Lot #2	LLC "Metag Inshaat Tijaret Anonym Shirketi"	10 %
6	Kara-Too	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-06/RT/L1 21 June 2024 (21 June 2024 – 30 June 2026)	Construction of a water supply system in Kara-Too, Isakeev and Moldo-Kylych Villages Lot #1	LLC "Metag Inshaat Tijaret Anonym Shirketi"	54 %
	Isakeev				35 %
	Moldo-Kylych				42 %
7	Baetovo	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-08/L1 21 June 2024 (21 June 2024 – 31 December 2025)	Construction of a water supply system in villages of Baetov AO (Baetovo Village) Lot #1	LLC "MS Building"	25 %
8		ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-08/L2 21 June 2024 (21 June 2024 – 31 December 2025)	Construction of a water supply system in villages of Baetov AO (Baetovo Village) Lot #2	LLC "Metag Inshaat Tijaret Anonym Shirketi"	
9	Kaindy-Bulak	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-08/L3 21 June 2024 (21 June 2024 – 31 December 2025)	Construction of a water supply system in villages of Baetov AO (Kaindy-Bulak Village) Lot #3	LLC "Metag Inshaat Tijaret Anonym Shirketi"	35 %

No.	Name of the Village	Contracts, Signed Dates (Start Date - End Date)	Title	Construction Contractors	Percentage of work completed as of 30 June 2025
10	Uchkun	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-09/L1 14 February 2025 (14 February 2025 – 30 August 2026)	Construction of WSS in Uchkun and Kok-Zhar Villages (Lot #1)	Consortium LLC “Profit-Express” and LLC “Turan Grupp”	9 %
11	Kulanak	ARIS-ADB-NRWSSDP-CW-NCB-DLI-1-09/L2 14 February 2025 (14 February 2025 – 30 August 2026)	Construction of WSS in Kulanak Village (Lot #2)		9 %
12	Zherge-Tal in Naryn District	ARIS-ADB-NRWSSDP-AF-CW-NCB-DLI-1-10 11 March 2025 (11 March 2025 – 11 September 2026)	Construction of WSS in Zherge-Tal Village	CJSC “Kaynar”	33

Scheme 1: Environmental Management of the Program as of June 2025



Villages/Construction Contractors/HSE Specialists			
Zherge-Tal Village in Ak-Talaa District OJSC "YUG-STROYSERVIS" HSE Specialist: Mr. Almazbek Kalbaev almazbekKD-77@mail.ru	Ak-Kiya Village Consortium LLC "EKARAS-5" and LLC "Construction company "Sher-Kurulush" HSE Specialist: Mr. Zhenish Ibraimakunov ekaras777@mail.ru	Lama, Aral, Kichi-Aral, Besh-Terek and Chaek (zones #1, #2, #3 and #4) Villages LLC «Metag Inshaat Tijaret Anonym Shirketi» HSE Specialists: Mr. Maratbek Akmatov, Mr. Anarbek Muktarov, Mr. Taalaibek Anarbekov, Mr. Urmat Ailchiev, Mr. Nurbek Sydykov metagkg@gmail.com	Kochkor, Kara-Too, Isakeev and Moldo-Kylych Villages LLC «Metag Inshaat Tijaret Anonym Shirketi» HSE Specialists: Mr. Koldosh Maksudov, Mr. Zhyldyzbek Alymbekov, Mr. Zakirjan Ilgeldiev Mr. Erishbek Dooranov metagkg@gmail.com
Baetovo and Kaindy-Bulak Villages LLC «Metag Inshaat Tijaret Anonym Shirketi» HSE Specialists: Mr. Nurlanbek Akimaliev, Mr. Azat Teltaev metagkg@gmail.com	Kulanak and Uchkun Villages Consortium LLC "Profit-Express" and LLC "Turan Grupp" HSE Specialist: Mr. Akbar Rahymbek uulu profit-express@mail.ru	Zherge-Tal Village in Naryn District CJSC "Kaynar" HSE Specialist: Mr. Kubatbek Toktombaev zaokaynar@mail.ru	

15. Implementation of the Program has been started in all districts of Naryn Region, therefore ARIS is cooperating with the Aiyl Okmotu Heads. The table below is a list of Aiyl Okmotus established after administrative and territorial reform in accordance with a Decree of the President of the Kyrgyz Republic # 85 dated 3 April 2023 (see Table 4).

Table 4: Contact Details of Local Self-Government Bodies covered by the Program

Aiyl Okmotus (AOs) in Naryn Region				
No.	**Name of the AO**	**AO Head**	**Contact Phone**	**Website, E-mail Address**
1	Chet-Nura AO	Altynbek Okenov	(03522) 6-00-21	chetnura.naryn-region.kg
2	Zherge-Tal AO in Naryn District	Talantbek Sydykbekov	(03522) 5-14-25	jergetal.naryn-region.kg
3	Zhan-Bulak AO	Ulanbek Boskunchiev	(03522) 6-09-13	janbulak.naryn-region.kg
4	Uchkun AO	Almasbek Botoiarov	(03522) 3-63-28	uchkun.naryn-region.kg uchkun.okmot@mail.ru
5	Baetov AO	Arstanbek Akiev	(03537) 9-15-12	baetov.naryn-region.kg
6	Ala-Buga AO in Ak-Talaa District	Ulukbek Nuraliev	(03537) 6-07-43	zhergetal-ao@mail.ru
7	At-Bashi AO	Ruslan Dokoev	(03534) 2-31-66	atbashyao@inbox.ru
8	Min-Kush AO	Bakyt Koshaliev	(03536) 3-12-81	
9	Zhumgal AO	Tolobai Karmshakov	(03536) 2-27-26	jumgal.naryn-region.kg
10	Chaek AO	Taalaibek Kuchmuratov	(03536) 2-37-13	chaekaiylokmotu@mail.ru
11	Cholpon AO	Zakir Kozubekov	(03535) 2-25-57	
12	Ormon-Han AO	Burkanbek Akishov	(03535) 2-15-33	niazbekovna@mail.ru
13	Kum-Dobo AO	Mirlan Israilov	(03535) 2-19-56	schorgoeva@gmail.com

16. A number of State Authorities are responsible for management and protection of the environment in the Kyrgyz Republic. The Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic has the main powers to implement environmental protection legislation (see Table 5).

Table 5: Government Bodies Performing Environmental Protection Functions

Key State Authorities Performing the Functions of Environmental Protection	**Relevant Functions**	**Source of Ecological Information**
Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic (MNRETS KR) http://mnr.gov.kg	- establishes the state policy in the field of environmental protection; - publishes quality norms and environmental protection standards; - establishes specially protected areas; - creates an environmental monitoring system; - carries out ecological expertise of the designs and business activities	Atmospheric air and climate change Water resources Land resources Biodiversity State Forest Resources Wastes
Environmental and Technical Supervision Service under the MNRETS KR http://mnr.gov.kg	Performs control functions for compliance with environmental legislation by users of natural resources	Discharge of hazardous pollutants Discharge of waste waters

Key State Authorities Performing the Functions of Environmental Protection	Relevant Functions	Source of Ecological Information
Kyrgyz Complex Hydrogeological Expedition State Agency for Geology and Mineral Resources http://www.gkpen.kg	Collects data related to the quantity and quality of ground waters	Data on reserves of ground waters, mineral resources and use thereof
Ministry of Health of the Kyrgyz Republic www.med.kg Department of Disease Prevention and State Sanitary and Epidemiological Surveillance	Performs bacteriological and chemical monitoring of the quality of drinking water	Drinking water quality Morbidity rate.
Agency for hydrometeorology under the Ministry of Emergency Situations of the KR www.meteo.ktnet.kg	Monitors the state of atmospheric air and surface waters	The quality of atmospheric air. The quality of water resources Wastes (uranium and etc) Hydrological data
Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic https://www.water.gov.kg/	Plans, organizes and implements measures for administrative, economic and normative and legal regulation of water use during operation of water management facilities, protection of lands of water reserves regulates interstate relations related to use of water resources that form on the territory of the Kyrgyz Republic	Use of water resources, including intergovernmental water apportioning
Kyrgyz State Design Institute for Land Management Kyrgyzgiprozem under the State Agency for Land Resources, Cadastre, Geodesy and Cartography under the Cabinet of Ministers of the Kyrgyz Republic gpi.giprozem1@mail.ru	Carries out a complex of land management and cadastral activities throughout the Kyrgyz Republic territory, regardless of the organizational and legal form of land management entities. Issues a conclusion on the types of land, categories and areas of land upon land acquisition, as well as upon receiving a State Act, Certificate and Land Plot Certificate to land users, including water supply and sanitation facilities	Monitoring of land resources, soil analysis, Planning for the use of land resources Definition: - type of land, - land categories, - area of land, - the location of the lands indicated on large-scale maps
Naryn, Ak-Tala, At-Bashi, Jumgal and Kochkor districts Departments of the “Cadastr” State Institution under the Land Resources Service under the Ministry of Agriculture of the Kyrgyz Republic. Phones: Naryn (03522) 5-10-34; Ak-Tala (03537) 9-21-48; At-Bashy (03534) 2-41-43; Jumgal (03536) 6-01-09; Kochkor (03535) 5-10-2.	Carries out land management and cadastral activities within the territory of their rayons, regardless of the organizational and legal form of land management entities. Issues conclusions on the types of land, categories and areas of land upon land acquisition, as well as upon receiving a State Act, Certificate and Land Plot Certificate to land users, including water supply and sanitation facilities	land accounting, registration of rights to real estate

Key State Authorities Performing the Functions of Environmental Protection	Relevant Functions	Source of Ecological Information
National Statistics Committee of Kyrgyz Republic www.stat.kg	It is the key state information and statistical body that organizes and manages accounting and statistics throughout the Kyrgyz Republic	Statistics of the condition of the environment

17. Based on the tender results on selection of a consultant to develop detailed design and cost estimation documentation (DED) for rural water supply infrastructure in the Naryn Region, the following contracts were signed:

A. With the KYRGYZGIPROSTROY OJSC Design Institute, the first contract No. ARIS-ADB-NRWSSDP-QCBS-01-2021 dated 15 September 2021. Table below is reflecting the list of villages for which, the DED packages were developed under this Contract (see Table 6).

Table 6: Information on the Program Subprojects under the First Contract for DED Packages (KYRGYZGIPROSTROY OJSC Design Institute)

No.	Name of the District	Name of the AO	Name of the Subproject	Village Covered under the Subproject	Population
1	Naryn	Chet-Nura	Tosh-Bulak	Tosh-Bulak	210
2			Oruk-Tam	Oruk-Tam	197
3			Orto-Saz	Orto-Saz	820
4			Ak-Kyia	Ak-Kyia	985
5		Zherge-Tal	Zhalgyz-Terek	Zhalgyz-Terek	1,245
6			Zherge-Tal	Zherge-Tal	3,364
7		Zhan-Bulak	Zhan-Bulak	Zhan-Bulak	2,527
8		Uchkun	Kulanak	Kulanak	6,544
9				Uchkun	
10	Ak-Talaa	Baetov	Baetov	Baetov	11,893
11				Kaiyndy-Bulak	
12	At-Bashi	At-Bashy	At-Bashy	At-Bashy	20,150
13		Ak-Zhar		Ak-Zhar	
TOTAL	**3**	**7**	**10**	**13**	**47,935**

B. With the ENKON LLC Design Institute, the second contract No. ARIS-ADB-NRWSSDP-QCBS-02-2021 dated 16 November 2021.

Table below is reflecting the list of villages for which, the DED packages were developed under this Contract (see Table 7).

Table 7: Information on the Program Subprojects under the Second Contract for DED Packages (ENKON LLC Design Institute)

No.	Name of the District	Name of the AO	Name of the Subproject	Village Covered under the Subproject	Population
1	Ak-Talaa	Ala-Buga	Zherge-Tal	Zherge-Tal	585
2	Zhumgal	Min-Kush	Kyzyl-Sook	Kyzyl-Sook	217
3			Sary-Bulun	Sary-Bulun	304
4			Kabak	Ken-Suu	534
5				Kotur-Suu	
6				Tabylgy	
7		Chaek	Chaek	Chaek	13,535
8				Беш-Терек	
9			Aral	Aral	660
10				Kichi-Aral	
11		Zhumgal	Lama	Lama	636
12	Kochkor	Cholpon	Moldo-Kylych	Moldo-Kylych	1,090
13		Ormon-Han	Isakeyev	Isakeyev	2,287
14			Kochkor	Kochkor	14,397
15		Kum-Dobo		Kara-Too	
TOTAL	**3**	**7**	**10**	**15**	**34,245**

Currently, full detailed design and cost estimation documentation packages were prepared for all 28 villages.

For 15 villages: Ornok, Echki-Bashy, Ottuk, Kenesh, Alysh, Emgek-Talaa, Ak-Bulun, Arsy, Semiz-Bel, Epkin, Tendik, Tuz, Kyzyl-Dobo, Zhany-Tilek, and Ugut design and cost estimation documentation packages are under development.

2.3 The Program Activities During Current Reporting Period

18. **Subprojects completed in 2023-2024:** Post-Construction Environmental Audit Reports (PCEARs) for the Completed Subprojects Orto-Saz, Zhalgyz-Terek and Zhan-Bulak Lot #2 in the SAEMR for the period of July–December 2023;

PCEAR for the Completed Subproject Tosh-Bulak in the SAEMR for the period of January–June 2024;

PCEARs for the Completed Subprojects Zhan-Bulak Lot #1 and Oruk-Tam in the SAEMR for the period of July–December 2024.

Subprojects at the completion stage: Ak-Kiya in Naryn District and Zherge-Tal in Ak-Tala District.

Active subprojects:

Lama, Aral (Aral and Kichi-Aral villages), Chaek (Chaek and Besh-Terek villages) in Zhumgal District; Kochkor (Kochkor and Kara-Too villages), Isakeev, Moldo-Kylych in Kochkor District; Baetov (Baetovo and Kaiyndy-Bulak villages) in Ak-Tala District; Kulanak (Kulanak and Uchkun villages), Zherge-Tal in Naryn District.

Water supply sources in villages:

1) Orto-Saz - borehole;
2) Zhalgyz-Terek - borehole;
3) Zhan-Bulak - borehole;
4) Tosh-Bulak - spring catchment;
5) Oruk-Tam - spring catchment;
6) Ak-Kiya - borehole;
7) Zherge-Tal (in Ak-Tala District) - spring catchment;
8) Lama - spring catchment;
9) Aral - borehole;
10) Kichi-Aral - borehole;
11) Besh-Terek – spring capture;
12) Chaek– spring capture;

13) Kochkor – borehole;

14) Kara-Too – borehole;

15) Isakeev – borehole;

16) Moldo-Kylych – borehole;

17) Baetov – borehole;

18) Kaiyndy-Bulak – borehole;

19) Kulanak – spring capture;

20) Uchkun – borehole;

21) Zherge-Tal (in Naryn District) – spring capture;

22) At-Bashy – underflow waters (drainage in the form of tapping);

23) Ak-Zhar – underflow waters (drainage in the form of tapping);

24) Kyzyl-Sook – underflow waters (drainage in the form of tapping);

25) Sary-Bulun – spring capture;

26) Ken-Suu – spring capture;

27) Kotur-Suu – spring capture;

28) Tabylgy – spring capture.

19. The following construction and installation works (CIW) were completed during the reporting period (see Table 8).

Table 8. Summary of Civil Works Contracts and Works' Progress

No.	Villages	Contractors	Lots	Signed Date	Civil Works		Overall Progress of works as of 30 June 2025
					Start Date	End Date	
1	Zherge-Tal in Ak-Talaa District	OJSC "YUG-STROYSERVIS"	-	30 June 2023	30 June 2023	30 December 2024	99 %
2	Ak-Kiya	Consortium: LLC "EKARAS-5" and LLC "CC Sher-Kurulush"	-	7 June 2023	7 June 2023	30 June 2025	96 %
3	Lama	LLC «Metag Inshaat Tijaret Anonym Shirketi»	#1	21 June 2024	21 June 2024	30 June 2026	56 %
4	Aral and Kichi-Aral						68 %

No.	Villages	Contractors	Lots	Signed Date	Civil Works		Overall Progress of works as of 30 June 2025
					Start Date	End Date	
5	Besh-Terek Village						78 %
6	Chaek (zone #4)						39 %
7	Chaek (zones #1, #2, #3)	LLC «Metag Inshaat Tijaret Anonym Shirketi»	#2	21 June 2024	21 June 2024	30 June 2026	52 %
8	Kochkor	LLC «Metag Inshaat Tijaret Anonym Shirketi»	#2	21 June 2024	21 June 2024	30 June 2026	10 %
9	Kara-Too	LLC «Metag Inshaat Tijaret Anonym Shirketi»	#1	21 June 2024	21 June 2024	30 June 2026	54 %
10	Isakeev						35 %
11	Moldo-Kylych						42 %
12	Baetovo	LLC “MS Building”, LLC «Metag Inshaat Tijaret Anonym Shirketi»	#1 and #2	21 June 2024	21 June 2024	31 December 2025	25 %
13	Kaindy-Bulak	LLC «Metag Inshaat Tijaret Anonym Shirketi»	#3	21 June 2024	21 June 2024	31 December 2025	35 %
14	Kulanak	Consortium: LLC “Profit-Express” and LLC “Turan Grupp”	#2	14 February 2025	14 February 2025	30 August 2026	9 %
15	Uchkun		#1				9 %
16	Zherge-Tal in Naryn District	CJSC “Kaynar”	-	11 March 2025	11 March 2025	11 September 2026	33

1) Construction works during reporting period in Lama Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

Installation of transformer - 1 set.

Construction of strip foundation for guardhouse and chlorination room. Construction of fencing for the reservoir site.

Construction of 2 - km road to catchment (see Photo 1).

Laying down PE pipes: d=110 mm – 1903 m; d=90 mm – 2,826 m; d=63 mm – 2,322 m;

Construction and installation works are ongoing (see Photo 2).

Photos 1–2: Construction of the road to the water supply source. Excavation of water pipeline trench (Lama village, status: May 2025)

2) Construction works during reporting period in Aral and Kichi-Aral Villages (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

Laying PE pipes: d=90 mm – 5,844 m, d=75 mm – 397 m, d=63 mm – 4,124 m.

The trench has been excavated and concrete base of the reservoir has been poured. The foundation for the chlorination room and the guardhouse has been poured. A transformer KTP - 6/0.4 kV - 25 kVA has been installed at the reservoir site. The fencing posts of the reservoir site have been installed.

The fencing posts were installed at the water intake site. The foundation for the guardhouse has been poured. A transformer KTP - 6/0.4 kV - 25 kVA has been installed at the water intake site (see Photo 3). The crossing over the alternative North-South Road has been completed using the “Pipe-Jacking” (pushing) method (see Photo 4).


Photos 3–4: Checking the Transformer substation by the Electrical Engineer (Consultant). Crossing the alternative North-South Road (Kichi-Aral village, status: May 2025)

3) Construction works during reporting period in Besh-Terek Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

Laying of the PE pipes for village network – 8,564.2 m.

Laying of the water main from PE pipes – 1,780 m.

Catchment chambers are completed by 70% of the total volume (see Photo 5).

The foundation for the guardhouse has been poured, preparation for construction of the reservoir has been made, the buildings of the guardhouse and chlorination room have been made, the fence has been produced (see Photo 6).


Photos 5–6: Spring catchment chambers. Reservoir site (Besh-Terek village, status: May 2025)

4) Construction works during reporting period in Chaek Village (<u>zones #4 and #1,</u> Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

Construction of the reservoir (concrete works are in progress).

PE pipes laid: d=225 mm – 6,218.5 m, d=160 mm – 11,320.6 m, d=110 mm – 4,309.4 m, d=63 mm – 2,509.2 m (see Photos 7 and 8).

Photos 7–8: Excavation of water pipeline trench (Chaek Village (Zone # 4), status: April 2025)

Installation of a water pipeline made of PE pipes: d=160 mm – 1,354 m, d=225 mm – 762 m. Installation of reinforced concrete wells - 297 pcs.

Manifolds were installed - 474 pcs.

The reflective warning signs and fences on trenches have been installed in the settlement (see Photos 9 and 10).

Photos 9–10: Reflective warning signs and fences have been installed on the trenches (Chaek village (Zone #1), status: May 2025)

Also, works are carried out to rehabilitate sanitary facilities in the building of the Zhumgal General Medical Practice Center (GMPC) (see Photos 11 and 12).


Photos: 11–12. Works on rehabilitation of sanitary facilities in the General Medical Practice Center (GMPC) building (Chaek Subproject, status: May 2025).

5) Construction works during reporting period in Kochkor Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

Excavation of water supply network trench by an excavator and manual finishing – 5,858 m.
Construction of trench-bedding from soft soils – 5,858 m.
PE pipes were laid: d=250 mm - 560 m, d=225 mm - 263 m, d=900 mm - 257 m, d=63 mm - 413 m.
A new borehole was drilled, the borehole priming was done, including taking the water samples for analysis. Rehabilitation of the existing borehole has been carried out.
The water intake and reservoir sites, as well as the village water supply network are located within the AO municipal land (see Photos 13 and 14).


Photos 13–14: Water supply networks (Kochkor village, status: May 2025)

6) Construction works during reporting period in Kara-Too Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

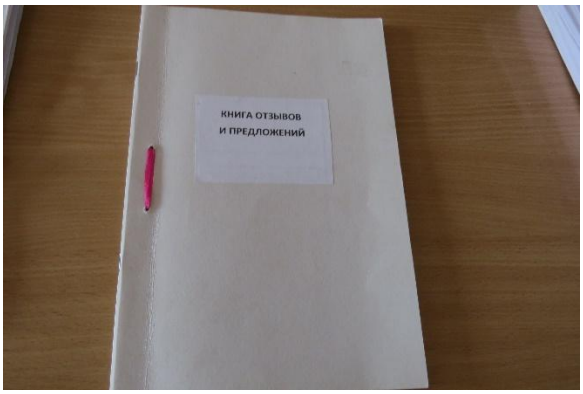
A 70-m borehole has been drilled. Drilling operations were fully completed, and the well was plugged and abandoned.

Laying of PE pipes: d=110 mm – 2,354.2 m, d=90 mm – 2,708.4 m, d=63 mm – 1,265.8 m.

Installation of reinforced concrete wells - 68 pcs.

The water supply networks were fully laid down (see Photo 15).

As part of the grievance redress mechanism (GRM) functioning, a Log for Reviews and Suggestions has been established (see Photo 16).



Photos 15–16: Water supply network. The Log for Reviews and Suggestions (Kara-Too village, status: May 2025)

7) Construction works during reporting period in Isakeev Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

The excavation of a pit with a volume of 476 m³ was completed. The sub-concrete layer has been poured, and right now the works on assembling the reservoir reinforced frame of the bottom and walls are carried out.

The borehole has been drilled by 105 m.

The sanitary facilities in the building of the Secondary School named after Satarkul Ismailov have been rehabilitated (see Photo 17).

Laying PE pipes: d=110 mm – 2,900 m (see Photo 18).


Photos 17–18: Sanitary room in the secondary school building. Monitoring and control of construction and installation works (Isakeyev village, status: May 2025)

8) Construction works during reporting period in Moldo-Kylych Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

PE pipes d=110 mm – 40 m were laid at the reservoir site.

Reinforced concrete wells were installed - 31 pcs.

A borehole with 80 m depth has been drilled. Drilling works were fully completed.

Laying of PE pipes: d=110 mm – 2,061 m, d=63 mm – 1,712 m, d=90 mm – 1,630 m.

The village roads and streets were restored after completion of excavation works (see Photos 19 and 20).


Photos 19–20: The village roads and streets were restored (Moldo-Kylych village, status: May 2025)

9) Construction works during reporting period in Baetov Village (Contractors: "MS Building" LLC and Metag Inshaat Tijaret Anonym Shirketi LLC):

Excavation works to construct the pit for reservoirs were completed including the bottom soil compaction. Wells #1, #2, #3 and #4 have been drilled (with 80 m deep). Drilling works were fully completed.

Laying of PE water supply pipes: d=160 mm – 800 m, d=180 mm – 800 m, d=250 mm – 400 m.

Laying of PE network pipes: d=160 – 420 m, d=110 – 1458 m, d=90 – 457 m.

Installation of reinforced concrete wells – 22 pcs.

The sites of reservoirs, water intake and water supply network are located within the AO municipal lands (see Photos 21 and 22).

Photos 21–22: The reservoir site and water supply network (Baetovo village, status: May 2025)

10) Construction works during reporting period in Kaiyndy-Bulak Village (Contractor: Metag Inshaat Tijaret Anonym Shirketi LLC):

A borehole has been drilled by 70-meter depth. Drilling operations were completed.

Laying of PE pipes: d=110 mm – 1,349 m, d=90 mm – 1,704.5 m.

Installation of reinforced concrete wells - 22 pcs.

Temporary walkways with handrails have been installed on the trenches (see Photo 23).

Upon the completion of excavation works the village roads were restored (see Photo 24).

Photos 23–24: Temporary crossing bridges have been installed on the trenches. The village roads have been restored (Kaiyndy-Bulak village, status: May 2025)

11) Construction works during reporting period in Kulanak and Uchkun Villages (Consortium: Profit Express LLC and NSK Turan Group LLC):

Laying the water pipeline from PE pipes: d=110 mm – 400 m, d=160 mm – 2,600 m (see Photo 25).

An inspection of the water supply source was carried out together with the Technical Supervision Engineer (TSE), the Quality Control Engineer, the Program Safeguards Officer and the contractor's site foreman (see Photo 26).

Photos 25–26: Laying the water pipeline from PE pipes. Inspection of the water supply source (Kulanak village, status: May 2025)

12) Construction works during reporting period in Zherge-Tal Village (Kainar CJSC):

The following works on laying down the PE pipes were done: water main d=125 mm – 4,920 m and village network d=90 mm – 1,500 m.

Installation of reinforced concrete wells - 18 pcs.

After laying the water main, the soil is compacted (see Photo 27). The contractor's banner was installed (see Photo 28).

Photos 27–28: Compaction after laying the water pipeline. Contractor's banner (Zherge-Tal village, status: May 2025)

20. The following table provides information on the number of working contractors (see Table 9).

Table 9: Information about the Number of Workers

Active Villages	Contractors	Number of Workers by Month					
		January	February	March	April	May	June
Lama	LLC «Metag Inshaat Tijaret Anonym Shirketi» Lot #1	-	-	-	16	16	15
Aral and Kichi-Aral		-	-	-	18	9	18
Besh-Terek		-	-	-	10	12	15
Chaek (zone #4)		-	-	-	18	18	19
Chaek (zones #1, #2, #3)	LLC «Metag Inshaat Tijaret Anonym Shirketi» Lot #2	-	-	-	18	18	17
Kochkor	LLC «Metag Inshaat Tijaret Anonym Shirketi» Lot #2	-	-	-	8	14	14
Kara-Too	LLC «Metag Inshaat Tijaret Anonym Shirketi» Lot #1	-	-	-	12	12	12
Isakeev		-	-	-	8	12	12
Moldo-Kylych		-	-	-	4	4	4
Baetov	LLC “MS Building”, LLC «Metag Inshaat Tijaret Anonym Shirketi» Lots #1 and #2	-	-	-	8	8	8
Kaindy-Bulak	LLC «Metag Inshaat Tijaret Anonym Shirketi» Lots #3	-	-	-	11	9	9
Uchkun and Kulanak	Consortium: “Profit Express” LLC and NSK “Turan Group” LLC	-	-	-	-	10	20
Zherge-Tal	“Kainar” CJSC	-	-	-	10	18	33

2.4 Description of Any Changes to the Program Design

21. Additional funding for the Rural Water Supply and Sanitation Development Program in the Naryn region included 23 villages, where 46,088 people live.

22. The program safeguard systems assessment and the environmental assessment and review framework documents for additional financing for the Program have been updated and disclosed on ADB website.

2.5 Description of Any Changes to Agreed Construction methods

23. There were no changes to agreed construction methods.

3 ENVIRONMENTAL SAFEGUARDS ACTIVITIES

3.1 General Description of Environmental Safeguard Activities

24. During the reporting period, the contractor developed SSEMPs of At-Bashi and Ak-Zhar Villages and the the Program Safeguards Officer reviewed and improved. Modified SSEMPs of At-Bashi and Ak-Zhar Villages approved by a Program Safeguards Officer on 4 February 2025.

25. The Program Specialists, together with the Design Institutes, organized and held public consultations to inform the local residents and community about the Program and discuss the SSEMP, including anticipated environmental impacts and corresponding mitigation measures for construction of a water supply system (see Table 10).

Table 10: List of Villages, Where Public Consultations Held

No.	Name of Subproject	Name of Village	SSEMP Approval Date by a Program Safeguards Officer	Date of Informing SSEMP (PUBLIC Hearing)	Representatives of Design Institute	ARIS
WSS						
1	Zhalgyz-Terek	Zhalgyz-Terek	1 September 2022	7 September 2022	OJSC "KyrgyzGiprostroy"	Safeguard Officer, Institutional Development Specialist, Sanitation and Hygiene Specialist, Infrastructure Engineer, MOS specialist
2	Orto-Saz	Orto-Saz	1 September 2022	8 September 2022	OJSC "KyrgyzGiprostroy"	
3	Zhan-Bulak	Zhan-Bulak	1 September 2022	8 September 2022	OJSC "KyrgyzGiprostroy"	
4	Moldo-Kylych	Moldo-Kylych	9 September 2022	15 September 2022	LLC "ENKON"	
5	Kochkor	Kochkor	9 September 2022	16 September 2022	LLC "ENKON"	
6	Isakeev	Isakeev	9 September 2022	16 September 2022	LLC "ENKON"	
7	Oruk-Tam	Oruk-Tam	1 November 2022	9 November 2022	OJSC "KyrgyzGiprostroy"	
8	Ak-Kiya	Ak-Kiya	1 November 2022	10 November 2022	OJSC "KyrgyzGiprostroy"	
9	Tosh-Bulak	Tosh-Bulak	1 November 2022	10 November 2022	OJSC "KyrgyzGiprostroy"	
10	Lama	Lama	14 November 2022	16 November 2022	LLC "ENKON"	
11	Aral	Aral and Kichi-Aral	14 November 2022	17 November 2022	LLC "ENKON"	
12	Kochkor	Kara-Too	17 January 2023	19 January 2023	LLC "ENKON"	
13	Chaek	Chaek	17 January 2023	20 January 2023	LLC "ENKON"	
14	Zherge-Tal	Zherge-Tal Ak-Talaa District	17 January 2023	27 January 2023	LLC "ENKON"	
15	Baetov	Baetov and Kaindy-Bulak	3 July 2023	11 July 2023	OJSC "KyrgyzGiprostroy"	
16	Zherge-Tal	Zherge-Tal Naryn District	15 January 2024	17 January 2024	OJSC "KyrgyzGiprostroy"	
17	Kulanak	Kulanak and Uchkun	17 January 2023	18 January 2024	OJSC "KyrgyzGiprostroy"	

No.	Name of Subproject	Name of Village	SSEMP Approval Date by a Program Safeguards Officer	Date of Informing SSEMP (PUBLIC Hearing)	Representatives of Design Institute	ARIS
18	At-Bashi	At-Bashi and Ak-Zhar	4 February 2025	12 February 2025	OJSC "KyrgyzGiprostroy"	
Non-network Local treatment facilities (LTF)						
1	Lama	Lama	29 March 2024	23 April 2024	LLC "ENKON"	Safeguard Officer, Institutional Development Specialist, Sanitation and Hygiene Specialist, Infrastructure Engineer, MOS specialist
2	Isakeev	Isakeev	29 March 2024	23 April 2024	LLC "ENKON"	
3	Chaek	Chaek (12 pieces multi-stores buildings)	29 March 2024	24 April 2024	LLC "ENKON"	
4	Zherge-Tal	Zherge-Tal Ak-Talaa District	29 March 2024	25 April 2024	LLC "ENKON"	

1,952 people took part in the above-mentioned public consultations, including 923 were women, which in its turn made 47.3 %.[3]

26. During the public consultations, the Program Safeguards Officer presented to all participants a presentation on the topic "Environmental and Social Safeguards in Subprojects under the Program". At the end of the public consultations technical design solution for the Subprojects were approved.

27. The SSEMP for the At-Bashi (At-Bashi and Ak-Zhar Villages) Subproject was approved by the Program Safeguards Officer, and findings and results were presented at public consultations and included in the tender and contract documentation.

28. The contractor's workers (LLC "MS Building" LLC, "Metag Inshaat Tijaret Anonym Shirketi", "Kainar" CJSC and Consortium: "Profit Express" LLC and NSK "Turan Group" LLC) live in the houses of local village residents. There is no separate work camp created for them.

29. Main functional responsibilities of a Program Safeguards Officer:

- Carry out activities to monitor the implementation of Program activities for compliance with the requirements of the legislation of the Kyrgyz Republic and ADB's Safeguard Policy Statement (2009) on environmental safeguards;
- Coordinate and oversee the implementation of projects in line with environmental safeguard requirements, ensuring compliance with ADB's Safeguard Policy Statement and Kyrgyz Republic's environmental legislation and procedures;

[3] According to DLI 8, women's participation in public hearings should be at least 40%.

- Shall provide regular quarterly reports at the end of each quarter and prepare semiannual environmental monitoring reports, semiannual social safeguard monitoring reports at the end of each half year, as well as any other reports urgently required in certain situations.
- Monitor the functioning of the GRM approved within the framework of the program, timely consideration of complaints and proposals received, with appropriate notes in the registration logs;
- Preparation of documents regarding provision of social safeguards, occupational health and safety, land acquisition and resettlement plans;
- Approval of the SSEMPs, consideration of issues on adaptation to climate change, etc.

3.2 Site Audits

30. The Program Safeguards Officer checked compliance with environmental safeguards in the subprojects, where construction and installation works have been carried out to construct the water supply systems (see Table 11).

Table 11: Site Visits and Audits

Organization	Performed by	Purpose	Summary of Significant Findings	Date
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Lama Village	The contractor complied with all HSE. Workers have been provided with special clothing and PPE, etc.	20 April 2025 22 May 2025
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Aral and Kichi-Aral Villages	The contractor complied with all HSE. Workers have been provided with special clothing and PPE, etc.	17 April 2025 22 May 2025
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Chaek	The contractor complied with all HSE. Workers have been provided with special clothing and PPE. The water intake area and reservoir site are completely fenced, etc.	21 April 2025 21 May 2025

Organization	Performed by	Purpose	Summary of Significant Findings	Date
		and Besh-Terek Villages		
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Kochkor and Kara-Too Villages	The contractor complied with all HSE. Workers have been provided with special clothing and PPE. The water intake area is completely fenced, etc.	17 April 2025 24 May 2025
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Isakeev and Moldo-Kylych Villages	The contractor complied with all HSE. Workers have been provided with special clothing and PPE, etc.	18 April 2025 24 May 2025
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Baetovo and Kaindy-Bulak Villages	The contractor complied with all HSE. Workers have been provided with special clothing and PPE. The water intake area is completely fenced, etc.	15 April 2025 20 May 2025
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Kulanak and Uchkun Villages	The contractor complied with all HSE. Workers have been provided with special clothing and PPE, etc.	14 April 2025 30 April 2025 20 May 2025
ARIS	Program Safeguards Officer - Beknazar Abduraimov	Monitoring and supervising the civil works in terms of compliance with HSE requirements by the contractor at the sites of Zherge-Tal Village	The contractor complied with all HSE. Workers have been provided with special clothing and PPE, etc.	29 April 2025 19 May 2025

Site audit findings.

31. Based on the results of checking compliance with Environmental and Social Safeguards in subprojects, by the Program Safeguards Officer with the participation of the Technical Supervision Engineers and the contractor's foremen, compiled Civil Work Monitoring and Supervision Checklists of construction works.

32. During the reporting period, there were no accidents or incidents at construction sites that resulted in problems which resulted or could have resulted in population and the working personnel health and safety.

33. The contractor complies with all health and safety requirements.

    The reservoir site is completely fenced to restrict access by unauthorized persons and animals (see Photo 29).

Photo 29: The reservoir site is completely fenced (Lama Subproject, Status in June 2025)

During construction and installation works, reflective signs were installed (see Photo 30).

Photo 30: Installed Warning Signs (Isakeev Subproject, Status in June 2025)

In trenches and in reinforced concrete water intake wells temporary stairs for construction and installation works (see Photo 31).

Photo 31: Installed temporary ladders for construction and installation work (Baetov Subproject, Status in June 2025)

In order to protect people and animals from accidental falls, protective portable fences on trenches have been installed in the settlement (see Photo 32).

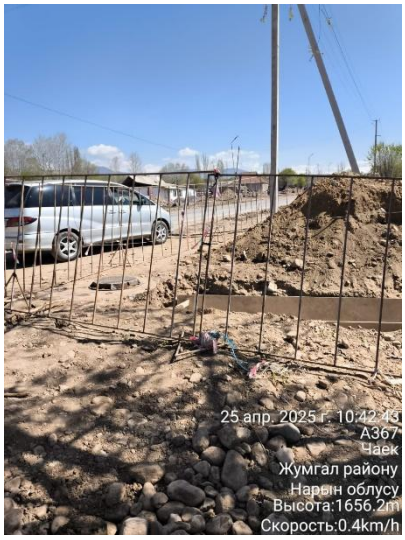


Photo 32: The trenches have been installed protective portable fences (Chaek Subproject, Status in June 2025)

34. From the consultants' part, monitoring and control of quality of civil works is constantly carried out by Technical Supervision Engineers, Quality Engineer, Hydrogeological Engineer, Electrical Engineer and Social Safeguard Specialist specially hired for the Program under SEFF A2.

3.3 Issues Tracking (Based on Non-Conformance Notices)

35. During the inspection, no non-conformance notices to eliminate deficiencies regarding compliance with SSEMP and occupational health, safety, and environmental protection (HSE) standards and requirements.

3.4 Trends

36. There are some improvements by contractors of HSE aspects of working processes in this reporting period. Contractors comply with the construction schedule.

3.5 Unanticipated Environmental Impacts or Risks

37. During the reporting period, during visual monitoring by the Program Safeguards Officer of construction sites did not reveal any unexpected impacts on the environmental, as well as risks, at the active subprojects Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal.

4 RESULTS OF ENVIRONMENTAL MONITORING

4.1 Overview of Monitoring Conducted during Current Period

38. By the Program Safeguards Officer overview monitoring in terms of compliance with environmental safeguards was carried out in subprojects Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal, where construction and installation work to construct water supply systems is ongoing.

39. Instrumental measurements of quality parameters for water and air are not specified in the SSEMPs.

    According to Table 4-3 of the SSESMP of Lama village, the noise level and water quality in the spring were monitored. The noise level during civil work in Lama village was measured on 22 May 2025, using a noise meter, as a result, the noise level withing 50 m from the construction site was 60 dB, which does not exceed the established standards.

    During the development of the detailed design and cost estimation documentation, on 11 October 2022, the quality of spring waters in Lama village was monitored by the Zhumgal department of the Kochkor Inter-district Center for Disease Prevention and State Sanitary and Epidemiological Surveillance. Analysis of the quality of the spring water "Kymyzdyk-Bulak" for physical and chemical indicators, the water complied with the requirements of the Technical Regulations "On the Safety of Drinking Water" of the Law of the Kyrgyz Republic #34 dated 30 May 2011. Construction and installation work is currently ongoing in Lama village. Following the completion of the construction and installation work of the water supply system, it is planned to re-sample the spring water of Lama village for compliance with current standards.

    Also, during civil work on 24 May 2025, noise levels were measured with a noise meter in the villages Kochkor, Kara-Too, Isakeev, and on 17 April 2025 in the villages of Aral and Kichi-Aral. The measurements showed the following result: Kochkor - 61 dB, Kara-Too - 60 dB, Isakeev - 57 dB, Aral - 58 dB and Kichi-Aral - 58 dB, which does not exceed the established standards.

40. There were no significant dust emissions from work carried out during the reporting period. Dust suppression with water was carried out regularly at the site.

41. Emissions from excavators during excavation and from trucks when transporting cement, gravel and concrete are minimal.

42. Foremen and site managers regularly conduct training on occupational health and safety (OHS) for working personnel. Each construction site has a Health and Safety Instruction Logbook (see Photo 33 and 34).

Photos 33–34: Health and Safety Instruction Logbook (Moldo-Kylych and Isakeev Subprojects, Status in June 2025)

43. During the reporting period, no accidents or serious incidents occurred with the working personnel.

44. During the reporting period, no accidents or serious incidents occurred at construction sites that would have resulted in public health or safety problems.

45. The SSEMPs for Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal subprojects are being successfully implemented. No changes to the SSEMPs are required.

46. Analysis of implementation of the SSESMP of active subprojects shows that:

    - during the construction of the water supply system, emissions of pollutants into the atmosphere from excavation work, welding work, work on restoring the asphalt surface, as well as the operation of construction equipment were minimal.

    - during construction and installation works, the noise impact of construction machinery and specialized equipment was local and short-term in nature and was minimized due to correct methods of organizing works.

- contractors have implemented waste management plans to avoid land and water pollution.

- during the construction period there was no impact on flora and fauna. No cutting of shrubs or trees was carried out.

- during construction work, occupational safety and health standards were observed, and there were no accidents.

- construction and household waste were in small quantities, and it was taken to the AO landfills.

- no asbestos-containing materials were found during the digging of trenches for the new water supply network.

- no objects of historical and cultural heritage were discovered during the work carried out related to digging trenches and pits.

- GRM is functional.

- land plots envisaged for the placement of the water supply system were allocated from the municipal lands of the AO within the alienation strip in accordance with the design and estimate documentation required for the execution of a set of excavation and construction and installation works.

- land plots for permanent use have been allocated for water intake sites, water tanks and water towers, also from the municipal lands of the AO in accordance with the design and estimate documentation, for which State certificate on the right of perpetual (without specifying the term) use of the land plot have been received.

- the Program implementation does not involve the acquisition of land and impact on household assets, their structures used as commercial facilities. Social due diligence reports have been prepared in accordance with the ADB SPS 2009 to confirm the lack of land acquisition and resettlement (LAR) and to present appropriate measures to mitigate the impacts of the Program implementation. The social due diligence reports have been submitted to the ADB.

47. The mitigation measures at the construction phase and their implementation status during reporting period (see Table 12).

Table 12. Mitigation Measures and their Implementation Status

Actions	Mitigations Measures	Status of their Implementation for The Reporting Period
Implementation of environmental management plan	Training on implementation of SSESMP, including excavated soil/waste management, standard operating procedures (SOPs) for civil works; occupational health and safety (OHS), key labor legislation, applicable environmental legislation, etc.	Complied with. Contractors are informed about the SSESMP. There is a SSESMP at the site, a code of conduct on environmental, health and safety for contractor personnel, an emergency response plan, and a grievance redress mechanism.
Cultural Heritage Site: Incidental Finds	Contractors to observe measures when carrying out any excavation work. Raising awareness of workers, site supervisors, foremen and engineering supervision engineers about accidental finds during excavation work.	Complied with. The SSESMP contains a Plan for the protection of historical and cultural heritage sites.
Excavation works	Shoring of slopes of dug trenches to reduce the risk of soil collapses. The area of the dug trench will be securely fenced to protect against accidental falls of people and animals. Installation of warning boards, banners with the construction site billboard, warning tapes, reflective warning road signs.	Complied with.
Collection, storage and backfilling of excavated soil	Some of the excavated materials will be loaded onto trucks and transported to temporary storage sites.	Complied with. The site has a Sub-Plan for soil disposal for specific construction sites.
Social and community-based issues	Minimize disruption to the social environment and maximize the benefits of the program to the community. Comply with vehicle speed limits. Inform local communities prior to commencement of work, including visits to local schools. Ensure that noise levels above 70 dB are not audible within 50 m of any construction site. Stop work at night that generates significant noise (between 18:00 and 07:00).	Complied with. Banners with the construction site billboard, warning tapes, and reflective warning road signs have been installed.

Actions	Mitigations Measures	Status of their Implementation for The Reporting Period
Air quality	Maintenance of all fossil fuel burning equipment in accordance with manufacturers recommendations. The contractor shall use good quality equipment with minimal emissions. It is prohibited to leave equipment idling unless it is being used for construction work. Restriction of the speed of construction vehicles when driving through populated areas. Irrigating roads in and around construction sites and village streets upon backfilling of trenches. Elimination of possible leaks on vehicles used for transporting materials.	Complied with.
Occupational safety and health	The accommodation of workers shall comply with best practice. The contractor shall - conduct an introductory briefing on occupational health and safety for all personnel, as well as special training for personnel working on work areas; - provide all necessary personal protective equipment (PPE) to site workers free of charge, including safety shoes, high visibility vests, safety helmets and hearing protection; - train and appoint an occupational health and safety specialist as a responsible person for the duration of the project; - have a first aid kit on site.	Complied with.
Post-construction cleaning	Remove all embankments, debris, garbage, remove temporary structures. Restore roads and streets to their original condition. Restore damaged utilities.	Complied with.
Waste management	Provision of appropriate waste storage areas at all work areas. Introduction training for workers and regular on-the-job training to raise awareness of zero waste discharge to the environment. Zero tolerance for waste flowing to the watercourses or floodplains, including all materials (e.g., electrode stubs, wood, plastics and metals). The contractor will implement waste minimization measures, i.e.,	Complied with.

Actions	Mitigations Measures	Status of their Implementation for The Reporting Period
	procurement of materials with less packaging, refrain from ordering excessive materials, arrange with suppliers for the return of surplus and unused materials. All work areas will be cleaned and restored to their previous condition shortly upon completion of the work. All construction waste will be disposed of at AO landfills.	
Water resources	The contractor shall carry out a risk assessment of all activities near watercourses and apply appropriate control measures. No vehicles or equipment may be refueled in riverbeds or within 25 meters of the edge of a watercourse. No work will be carried out in water protection zones of irrigation canals.	Complied with.
Biodiversity	Tree felling is not planned.	Complied with.
Soil and groundwater	Fuel shall be stored in high-quality above-ground tanks located on an impermeable surface with a spillage containment facility. Refueling shall not be carried out near or in close proximity to watercourses. Soils shall be protected from water and wind erosion. Vegetation removal shall be kept to a minimum. Vegetation shall be removed from the construction site and stored for subsequent restoration.	Complied with.

48. Roads in and around construction sites and village streets were sprayed regularly after backfilling the trench.
49. Idle equipment does not remain idle on/off during the absence of construction work.
50. All vehicles undergo regular maintenance to minimize black smoke emissions.
51. The contractors provided the workers with personal protective equipment (PPE) (helmets, goggles, gloves, vests, construction boots, etc.) (see Photo 35).

Photo 35: Workers have been provided with special clothing and personal protective equipment (PPE) (Zherge-Tal Subproject, Status in June 2025)

4.2 Trends

52. There are improvements by contractors of environmental safeguards aspects of working processes in this reporting period.

53. The contractor complied with all health, safety requirements and environmental safeguards during construction work, there were no violations.

4.3 Summary of Monitoring Outcomes

54. No additional monitoring is required. In addition to regular visits to subprojects (monthly), the improvement of waste disposal is monitored daily by the contractors' foremen and foremasters that are available at construction sites.

55. No asbestos containing materials were found at the water intake and reservoir sites or on the village streets.

56. All the SSEMPs of subprojects include separate asbestos management plans in case of chance finding.

57. No cultural and historical-architectural monuments were found at the zone of the water supply system construction of the Subprojects. Due to the fact that works to be carried out are associated with excavation of trenches and pits, there is a possibility of chance finds of historical and cultural heritage objects of (hereinafter - HCHO).

To preserve these objects all the SSEMPs of subprojects include a Plan on Protection of Historical and Cultural Heritage Objects has been developed. Under Plan the HCHO means archaeological and paleontological monuments of objects/structures/artifacts of historical and/or cultural importance, as well as religious/spiritual importance objects and places.

58. The existing “Plan on Protection of Historical and Cultural Heritage Objects” describes an action plan in case of accidental discovery of historical and cultural heritage objects during civil and other works.

4.4 Material Resources Utilisation

4.4.1 Current Period

59. Monitoring of using material resources such as electricity and water is difficult due to the lack of separate meters for construction sites, so such type of monitoring is not carried out.

4.4.2 Cumulative Resource Utilisation

60. Monitoring of resource utilization is not provided in the SSEMP.

61. Household solid waste were collected and disposed of at the AO municipal landfills.

62. There is no agreement between the contractor and the AO, because the scope of household waste generated is small.

4.5 Waste Management

63. To avoid land and water pollution, the contractors implement Waste Management Plans.

    During the construction of the water supply system, there was no excess soil. All small amounts of waste were taken by the contractors to the AO landfills.

64. During implementation of civil works, wastes are generated in small quantities. Wastes are mainly paper cement bags, paper packaging materials, etc.

65. All the SSEMPs of subprojects have an asbestos management plan in case of chance finding details the actions when finding asbestos materials, extraction, storage, transportation and disposal; the plan also describes implementation responsibilities.

4.5.1 Current Period

66. During construction, contractors clean up construction sites and dispose of wastes in a timely manner. Due to the small volume, construction debris and household wastes generated were not taken into account and are difficult to account for.

4.5.2 Cumulative Waste Generation

67. During construction, at construction sites, as contractors have taken measures to minimize wastes.

4.6 Health and Safety

4.6.1 Worker Safety and Health

68. During the reporting period, no accidents or serious incidents occurred with the working personnel. The contractor's foremen and masters at the site, who are responsible for labor protection and safety, regularly conducted safety briefings.

69. Workers have been provided with special clothing and PPE (see Photo 36).

Photo 36: Workers have been provided with special clothing and personal protective equipment (PPE) (Chaek Subproject, Status in June 2025)

70. Medical kits are available in the field offices of foremen at construction sites of each contractor (see Photo 37).

Photo 37: Medical First Aid Kit (Isakeev Subproject, Status in June 2025)

71. Earthen trenches are reinforced with supports/protective shields against soil collapse (see Photo 38).

Photo 38: Trenches are reinforced with supports/protective shields (Chaek Subproject, Status in June 2025)

72. By the Program Safeguards Officer also trainings were conducted for workers on compliance with safety precautions during construction work (see Photos 39–40).

Photos 39–40: Training for workers (Zherge-Tal and Chaek Subprojects, Status in June 2025)

4.6.2 Community Health and Safety

73. During the reporting period, there were no accidents or incidents at construction sites that resulted in problems which resulted or could have resulted in population health and safety.

74. The contractor complies with all health and safety requirements. Water intake and reservoir sites are completely fenced to restrict access by unauthorized persons and animals (see Photo 41).

Photo 41: Posts have been installed to fence off the water intake area (Aral Subproject, Status in June 2025)

75. During construction and installation works, reflective signs were installed (see Photo 42).

Photo 42: Reflective signs were installed (Kochkor Village, Status in June 2025)

4.7 Trainings

76. The Program Safeguards Specialist developed a presentation/training module in the state (Kyrgyz) language on the topic “Occupational Health and Safety and Readiness to Emergency Situations”, which was presented to Technical Supervision Engineers (TSEs) and representatives of contractors on 20–24 May this year in Baetovo, Chaek, and Kochkor Villages (see photos 43 and 44).

Список участников на тренинге
по теме "Охрана труда и готовность к чрезвычайным ситуациям»

№	ФИО инженеров по техническому надзору	Село, где проводится СМР по строительству СВС	Дата	Подпись
1.	Бейшембиев Джолочу	Кочкор	24.05.25	
2.	Алымбери у. Шайлообек	Кочкор	24.05.25	
3.	Джаманкулов Нургазы	Кара-Too	24.05.25	
4.	Асанбаев Абасбек	Молдо-Кылыч, Исакеев	24.05.25	
5.	Кашкаров Замирбек	Чаек	23.05.2025	
6.	Сарыказанов Эдилбек Бейшенанович	Беш-Терек	23.05.2025	
7.	Мурзакматов Тойчубек	Арал и Кичи-Арал	23.05.25	
8.	Искендеров Исфанбек Абылович	Лама	23.05.25	
9.	Карасартов Байышбек	Баетово	20.05.25	
10.	Жумабеков Ракат	Баетово	20.05.25	
11.	Мамбетов Асанкадыр Жумалиевич	Кайынды-Булак	20.05.25	
12.	Омуралиев Асанбек	Куланак	20.05.25	
13.	Сурапов Болотбек	Жерге-Тал	20.05.25	
14.	Кудашов Нурланбек	Учкун	20.05.25	
15.	[illegible] Закир мастер участка	с. Исакеев	21.05.25	
16.	Шаев Улукбек нач-к уч.	с. Кочкор	24.05.25	
17.	Карабукаев Нурлан	с. Жерге-Тал	20.05.25	
18.	Акималиев Нурланбек [illegible]	[illegible]	20.05.25	
19.	[illegible] мастер в с. Куланак		20.05.25	
20.	Салиев Равил прораб	в с. Куланак	20.05.25	
21.	Иманғазиев Улук прораб	в с. Чаек	21.05.25	

Photos 43–44: Presentation, as well as a list of TSEs and Contractor representatives participated in the training (Baetovo village, status: 20 May 2025)

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5 FUNCTIONING OF THE SSEMP

5.1 SSEMP Review

77. Environmental safeguards measures are applied in all active subprojects Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal based on approved SSEMPs and Soil Disposal Sub-plan for specific construction sites. The following measures were implemented in the subprojects:

– warning signs and walkways with handrails (see Photos 7, 9–10, 15, 19, 23, 30 and 42);

– in trenches and in reinforced concrete water intake wells temporary stairs for construction and installation works (see Photos 2 and 31);

- banners/information boards of the contractors in the state language, indicating the contact details of the ARIS Central Office, ARIS beneficiary feedback mechanism (BFM) and contractors for the functioning of the GRMs under the Program (see Photos 28, 46–47).

The trenches have been strengthened with protective shields in order to prevent soil collapse (see Photos 28, 46–47).

The excavated soil is temporarily covered with a tarpaulin, and there are no excess soil/materials.

Trenches are strengthened with rigid metal protective shields (see Photos 7, 13, 36 and 38).

Workers use PPE at all times during construction and installation works (see Photos 9–10, 14, 18, 25, 27, 35, 36, 38, 39–40).

The Subproject construction sites are completely fenced to limit access to unauthorized persons, children and animals (see Photos 3, 6, 29 and 41).

The construction site and dirt roads/streets in subprojects are sprayed with water/dust suppression to prevent dust formation (see Photo 45).

Photo 45: Streets in villages are sprayed with water/dust suppression to prevent dust formation (Chaek Village, status: June 2025)

At the same time, other requirements and standards of the SSEMP, environmental safeguards, labor protection and safety provisions are observed during construction and installation works.

78. The requirements set out in the SSEMPs of the subprojects Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal were fulfilled by contractors. No changes to the SSEMPs are required.

5.2 Grievance Redress Mechanism, Beneficiary Feedback Mechanism

79. The contractors' banners indicate the contact details of the ARIS Central Office, the ARIS BFM and contractor organizations for functioning the GRMs under the program. Banners installed at construction sites (see Photo 46–47).


Photos 46–47: Contractors installed banners at construction sites (Zherge-Tal and Chaek Villages, Status in June 2025)

80. GRM has been established in all the program subprojects Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal.

81. According to the requirements set out in the SSEMP complaints and claims received during construction and installation works are considered by the contractor.

    There is a logbook for community feedback and/or grievances in the foreman's field office of the conractor (see Photo 48). No complaints were received during the reporting period.

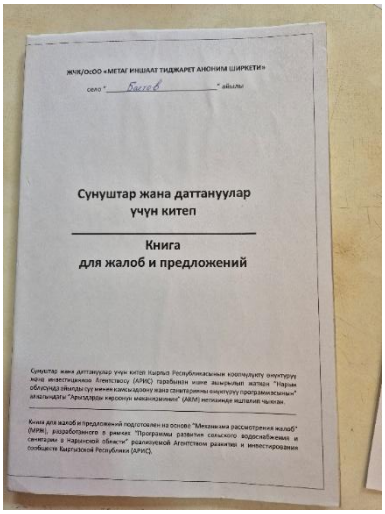

Photo 48: A Logbook for community feedback and/or grievances (Baetov Subproject, Status in July 2025)

82. The ARIS BFM also functions, they are installed on notice boards of AOs, schools and kindergartens (see Photo 49). The ARIS BFM main objective is the process of obtaining prompt and objective information and assessing and considering appeals (applications, proposals, complaints, requests, positive feedback) at all stages of Program implementation, which are received from citizens and/or beneficiaries to further improve their work.

Photo 49: ARIS BFM Banner (Status in June 2025)

83. Strengthen communication with Program beneficiaries and provide channels for feedback, as well as identify and resolve problems, increase transparency and accountability.

84. At all stages of implementation of ARIS projects, program stakeholders can submit appeals on issues of their interest through the ARIS BFM information transmission channels.

ARIS BFM Channels:

- ✓ WhatsApp: + 996 (770) 70-05-22, Ph: + 996 (550) 70-05-22
- ✓ ARIS website: www.aris.kg
- ✓ ARIS online platform: https://kyrgyz-demo-republic-village-covid-19.yrpri.org/group/2831
- ✓ e-mail: bfm@aris.kg
- ✓ Social networks: https://www.facebook.com/kgariskg https://www.youtube.com/channel/UCRapQxzs_z6XEUZlpAcc0_Q
- ✓ Oral or written appeals
- ✓ Letters by hand
- ✓ ARIS reception: #102 Bokonbaev Street, Bishkek City.

85. In its turn, ARIS will provide a response to each appeal in a timely and objective manner in accordance with the ARIS internal regulations and the legislation of the Kyrgyz Republic regulating the procedure for reviewing the citizens' appeals.

5.3 Compliance of the Program with Environmental Safeguards per Loan/Grant Agreements

86. Compliance of the program with environmental safeguards per Loan/Grant Agreements is presented in the following table (see Table 13).

Table 13: Compliance of the Program with Environmental Safeguards per Loan/Grant Agreements

Item No.	Description of Item	Status of Implementation
	Financing Agreement: https://www.adb.org/projects/documents/kgz-52256-001-lna	
	Program Agreement: https://www.adb.org/projects/documents/kgz-52256-001-pra	
10	**Environmental and Social Safeguards Schedule, para 10** DDWSSD and ARIS shall ensure that all Program Actions in the area of environmental and social safeguards are implemented in a timely and efficient manner.	Being complied
11	Para 11 DWSSD and ARIS shall ensure that no construction or rehabilitation works under the Program involve significant adverse environmental impacts that may be classified as category A under the SPS. Prior to commencing any construction or rehabilitation works under the Program, ARIS shall conduct a screening to ensure that any works that may be classified as category A for environment impacts within the meaning of SPS are excluded from the Program.	Being complied
12	Para 12 DDWSSD and ARIS shall ensure that before any activities are approved for financing under the Program, the following conditions are met relating to limiting asbestos use under the prohibited investment activities provided in Appendix 5 of the SPS: (a) an assessment is conducted on the existing structures that need to be demolished or removed to evaluate the risk of asbestos presence; and (b) a screening of procurement procedures be conducted to ensure that asbestos-containing materials are not used or financed under the Program (except for the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20% as provided under the prohibited investment activities provided in Appendix 5 of the SPS).	Being complied

Item No.	Description of Item	Status of Implementation
	Financing Agreement: https://www.adb.org/projects/documents/kgz-52256-001-lna	
	Program Agreement: https://www.adb.org/projects/documents/kgz-52256-001-pra	
13	Para 13 DDWSSD and ARIS shall ensure that the preparation, design, construction, implementation, operation and decommissioning of all activities under the Program comply with: (i) all applicable laws, regulations and guidelines of the Borrower relating to environment, health and safety; (ii) the Environmental Safeguards; and (iii) all measures and requirements, including monitoring requirements set forth in the Program Action Plan.	Being complied
14	Para 14 DDWSSD and ARIS shall ensure that the preparation, design, construction, implementation, operation and decommissioning of all activities under the Program comply with:(a) all applicable laws and regulations of the Borrower relating to resettlement; (b) Involuntary Resettlement Safeguards; and (c) all measures and requirements, including monitoring requirements set forth in the Program Action Plan.	Being complied
15	Para 15 DDWSSD and ARIS shall ensure that the Program does not involve any indigenous people risks or impacts within the meaning of the SPS. If due to unforeseen circumstances, the Program involves any such impacts, the Borrower shall ensure that the Program complies with (a) all applicable laws and regulations of the Borrower relating to indigenous peoples; (b) Indigenous Peoples Safeguards; and (c) all measures and requirements, including monitoring requirements set forth in the Program Action Plan.	Not applicable / NA

6 GOOD WORK PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

6.1 Good Practice

87. The contractors are continuing to maintain good communication with the local population, which allows them to resolve any problems in a short time.

88. This practice allowed the GRM to work effectively in subprojects. All issues are resolved on site in a working manner. No complaints were registered during the reporting period.

6.2 Opportunities for Improvement

89. Contractors should be more responsible in implementing environmental protection issues. Without constant reminders, they should remove construction debris and household waste in a timely manner, carry out well-coordinated work on dust suppression at construction and installation sites, as well as during the trench excavation, and take a more responsible attitude to safety and health issues for workers and the local population.

90. Recommendations for improving waste management by the contractors:

- to sort out wastes and provide garbage containers;

- to train workers and prohibit throwing away any waste within the construction site and adjacent areas;

- to allocate specially designated area for temporary waste storage where wastes will be stored awaiting transportation to the final processing/disposal site.

- to minimize wastes, i.e., will purchase materials with less packaging, do not order excess materials, and negotiate with suppliers to return excess and unused materials, etc.

91. Recommendations for improving occupational health and safety requirements by the contractors:

– to provide health and safety introductory training to all personnel, as well as specific training for personnel working at the construction sites.

– to provide site workers with all necessary PPE, including safety boots, high visibility vests, safety helmets and hearing protection, at no cost to site workers.

- specific tasks may require other PPE, such as welding masks.
- to provide medical care and emergency assistance, etc.

7 SUMMARY AND RECOMMENDATIONS

7.1 Summary

92. During the reporting period, the contractors adequately carried out the necessary environment protection measures during implementation of civil works.

93. After analyzing the monitoring results, it would be noted that construction and installation works do not have any significant impact on the environment.

94. During the entire construction period, no accident or serious incident occurred at the construction sites of the Subprojects.

95. All wastes have been transported to official AO landfills.

96. During the public consultations on informing and reviewing the SSEMP and design decisions, questions were asked by residents and AO representatives, after discussions specialists gave comprehensive answers to all questions of interest.

97. During the construction and installation work, the SSEMPs for the Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal subprojects were successfully implemented. During the reporting period, no changes were required to the SSEMPs.

98. During the whole construction period, no serious non-conformities occurred under the Lama, Aral (Aral and Kichi-Aral Villages), Chaek (Chaek and Besh-Terek Villages), Kochkor (Kochkor and Kara-Too Villages), Isakeev, Moldo-Kylych, Baetov (Baetovo and Kaiyndy-Bulak Villages), Kulanak (Kulanak and Uchkun Villages), Zherge-Tal Subprojects.

99. Supervisors and foremen of specific sites are responsible for environmental protection, health and safety, who worked in good faith in accordance with the Code of Conduct on environmental, health and labor protection (EHS Code of Conduct) for the contractor’s employees.

100. Superintendents and foremen of specific facilities provided oral instructions to all employees/workers on occupational safety and health on a daily basis.

101. It is planned that the post-construction environmental audit reports for the completed subprojects Ak-Kiya in Naryn District and Zherge-Tal in Ak-Talaa District will be prepared during the semiannual environmental monitoring report for the period July–December 2025.

7.2 Recommendations

102. Contractors need to carry out environmental protection measures in a timely manner and prevent possible negative impacts and consequences in advance.

103. Implementation of supervision and monitoring of civil works will be continued as before and as it has been discussed above.

104. Take care of the environment on an ongoing basis and regularly strive to reduce harmful impacts on the environment.

105. Comply with the environmental protection legislation of the Kyrgyz Republic and comply with the requirements of the ADB's Safeguard Policy Statement and international practice to protect and preserve the natural environment and minimize unavoidable impacts.

ANNEXES

Annex 1. The Conclusion of the State Environmental Expertise on the Zherge-Tal Subproject

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН
ЖАРАТЫЛЫШ РЕСУРСТАРЫ,
ЭКОЛОГИЯ ЖАНА ТЕХНИКАЛЫК
КОЗОМОЛ МИНИСТРЛИГИ

ЫСЫК-КӨЛ-НАРЫН РЕГИОНАЛДЫК
БАШКАРМАЛЫГЫ
722900 Нарын шаары,Ленин к 58/10
Факс(035225-04-47),тел 5-75-76

МИНИСТЕРСТВА ПРИРОДНЫХ
РЕСУРСОВ, ЭКОЛОГИИ И
ТЕХНИЧЕСКОГО НАДЗОРА
КЫРГЫЗСКОЙ РЕСПУБЛИКИ

ИССЫК-КУЛЬ-НАРЫНСКОЕ
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«УТВЕРЖДАЮ»
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регионального управления МПРЭТН
_____Р.Токталиев
«10» 03 2022г

ЗАКЛЮЧЕНИЕ
Государственной экологической экспертизы
на Проект система водоснабжения для подпроекта «Жерге-Тал»
Нарынского района Нарынской области

1.Общие сведения

На рассмотрение Государственной экологической экспертизы Иссык-Куль-Нарынского регионального управления МПРЭТН представлен Проект система водоснабжения для подпроекта «Жерге-Тал» Нарынского района Нарынской области,разработанный ОАО «Проектный институт «Кыргызгипрострой».

Инициатором проекта является: Жерге-Тал а\а

К проекту приложены:

-АГЗ №188 от 26.10.2022г.

1.Общая часть

Согласно проекту по административно-территориальному делению территория объекта относится к Нарынской области, Кыргызской Республики и находится в селе Жерге-Тал, Нарынского района.

Участок работ находится в границах села Жерге-Тал, представляет собой сельский населенный пункт, со средней плотностью застройки, с небольшим количеством подземных и надземных коммуникаций, в основном водопровод и ЛЭП.

Абсолютные высотные отметки земли колеблются от 2000 м до 2200 м. Гидрография участка представлена рекой Жерге-Тал, протекающей с севера на юг через село. Территория объекта связана с г. Бишкек асфальтовой дорогой и находится на расстоянии около 300 км. Дорожная сеть участка работ представлена в виде асфальтовых, грунтовых и полевых с. Жерге-Тал Расстояние до столицы Кыргызской Республики, г.Бишкек по асфальтированной автомобильной дороге составляет около 300км;

-расстояние до г.Кант составляет 270км;
-расстояние до г.Балыкчы составляет 120км;
-расстояние до г.Нарын составляет 39 -40км.

Нарынская область расположена в юго-восточной части страны на высоте 1500 метров над уровнем моря, более 70% территории занимают горные хребты.

Климат области -континентальный, зима холодная и продолжительная, абсолютно низкая температура доходит до – 45 градусов, лето короткое, прохладное. Средняя январская температура — 15°С. Абсолютный минимум температуры (—50°С) зарегистрирован на территории Ак-Сайской долины. Климатическая характеристика района приводится по данным метеостанции «Нарын».

Растительность участка работ представлена лиственными деревьями высотой около 3-8 метров, в основном фруктовые деревья и тополя, колючими кустарниками и степным травяным покровом.

Животный мир представлен в основном птицами: воробьи, голуби, галки и др.Животный мир представлен небольшим перечнем млекопитающих: летучие мыши, мышевидные грызуны (домовая мышь, серый хомячок, крысы).

Участок строительства находится на территории жилого сектора, что определяет наличие синантропных видов животных.

На территории строительства и прилегающих территориях не было обнаружено нахождение видов, занесенных в Красную книгу Кыргызстана.

В геоморфологическом отношении территория расположения села Жерге-Тал, расположена на поверхности слабонаклонной пролювиально-аллювиальной (paQIII) долины реки Жерге-Тал, которая протекает с севера на юг-юго-запад и разделяет село на два участка. Сток реки Жерге-Тал формируется на южных склонах горы Коргоо. Территория села вытянута с севера на юг, с общим уклоном поверхности в этом же направлении. По реке, весной и осенью, когда выпадают обильные атмосферные осадки в виде дождя и таяния снежного покрова на склонах горы Коргоо, могут проходить потоки, носящие селевой характер.Трассы разводящих сетей водоводов проходят по улицам села.

Участок водозаборных сооружений расположен примерно в 800 метра севернее села.

Условные отметки изменяются от 2000 до 2200 над уровнем моря.

Геолого-литологическое строение по трассам разводящей сети проектируемым по улицам села, участку расположения водозаборных сооружений и резервуаров, представлено пролювиально-аллювиальными верхнечетвертичными (paQIII-IV) пылевато-глинистыми отложениями-суглинками, лессовидными, светло-коричневого цвета, макропористыми, твёрдыми по консистенции, плотными, просадочными. В толще суглинка отмечаются прослои галечника мощностью до 0,2 метра. Вскрытая мощность суглинка, по проектируемым трассам водопровода, составляет от 0,6 до 3,1 метра. Вскрытая мощность галечника составляет от 0,7 до 2.3 метра.

Местами, с поверхности описанные грунты перекрыты почвенно-растительным слоем мощностью до 0,2 метров.

Питание водоносного горизонта происходит за счёт инфильтрации поверхностных вод из реки Жерге-Тал и талых вод, образующихся во время таяния снега и ледников на горной гряде Коргоо. Движение и разгрузка потока грунтовых вод происходит в южном направлении, по направлению стока воды реки.

Сейсмичность района работ составляет 8 баллов.

В соответствии СП. 2.97 «Пособия по проектированию оснований зданий и сооружений (к СНиП 2.02.01-83)» описываемая территория села относится к потенциально не подтопляемой подземными водами.

Согласно проекту проектная документация разработана в соответствии с требованиями СНиП 2.04.02-84* и Техническими условиями «Проектирование сельского водопровода».

Согласно проекту схема водоснабжения села принята принудительно-напорная, с применением электрических источников питания (насосная станция 2го подъема) .

Проектом предлагается следующая технологическая схема водоснабжения с.Жерге-Тал: с водозаборных сооружений исходная воду поступает в напорно-регулирующую емкость (резервуар емк.250м^3), откуда через повысительную насосную станцию она поступает в распределительную сеть села, пройдя цикл обеззараживания в хлораторной.

Проектируемые водозаборные сооружения предназначены для обеспечения питьевой водой жителей с. Жерге-Тал.

Площадь участка - 4620.00 м^2,площадь грав. дороги - 417.20 м^2, автодороги и подъезды – 267,5м^2.

Источник водоснабжения - подземные воды из существующих нисходящих родников.

Проектом предусмотрено строительство каптажных сооружений на площадке водозабора.

На площадке запроектированы следующие сооружения:

- каптаж родника;
- здание сторожки;
- уборная с герметичным выгребом.

Территория имеет зону санитарной охраны, которая ограждена и имеет организованный въезд на территорию через ворота и подъездные пути к проектируемым сооружениям.

Для предупреждения возможного загрязнения проектируемого водопровода хозяйственно-питьевого назначения и в целях обеспечения санитарно-эпидемиологической надежности на площадке резервуаров выполняется зона санитарной охраны. Организация зоны санитарной охраны строгого режима производится в соответствии с целевым использованием подземной воды в системе централизованного питьевого водоснабжения населения села Жерге- Тал .Предусматривается отвод поверхностных вод за пределы территории.

Каптажные устройства (водосборная камера) применяются для захвата подземной воды из родников. Каптаж нисходящих родников осуществляется через обратный фильтр и водоприемные отверстия в стене каптажной камеры. Каптаж нисходящих родников сооружается с водоулавливающими стенками из глинистого плотно утрамбованного грунта, вдоль которых со стороны потока подземных вод устраивается гравийно-дренирующая отсыпка, сопрягающаяся с обратным фильтром каптажа.При рассредоточенном выходе подземных вод на поверхность земли в виде отдельных источников, отстоящих один от другого на расстоянии более 5 м, каптаж их осуществляется раздельно со сбором воды в общую водосборную камеру.

В проекте каптажная камера выполняется из сборных железобетонных колец.

Согласно проекту предусмотрено сторожка .

Площадь застройки 34,3м^2, общая площадь -13,6м^2.

Здание одноэтажное 6,30х2,70х3,19(h), из комплексных конструкций и предназначенное для служебного персонала и осуществления пропускного режима. В здании предусматривается помещение топочной с отдельным входом.

В здании размещены: служебное помещение, пропускная и топочное помещение. Пропускное помещение имеет два входа (вход и выход) с крыльцами и навесом. Топочное помещение имеет отдельный вход с крыльцом и навесом.

Здание сторожки запроектировано на базе металлического контейнера (20 футов) марки HC (High Cube) с внешними размерами 6,058х2,438х2,896(h) м и внутренними размерами 5,898х2,350х2,693(h) м.

Проектом предусмотрено рабочее освещение всех помещений. Аварийное освещение не требуется.

Для обеспечения подъезда к зданиям и сооружениям, проектом предусматривается устройство автодороги с покрытием из гравийно-оптимальной смеси Н=100мм, шириной проезда 4м.

Для электроснабжения площадки водозабора, проектом предусмотрена установка дизельного генератора, расположенного в помещении сторожки в отдельном помещении, с обеспечением дымохода, для отвода выхлопных газов (учтено разделом ЭМ сторожки). Мощность ДГУ - 7кВт, 230В. Объем топливного бака 25л. Для ДГУ-7кВт обеспечить запас топлива, в объеме не менее 25л (объем топливного бака). Топливо для ДГУ хранится в отдельном помещении.

Проектируемые сооружения предназначены для обеспечения питьевой водой жителей с. Жерге-Тал.

Площадь участка =2929,40 м^2,площадь грав. дороги = 365.30 м^2, длина ограды = 225.50 п.м.

Участок существующего резервуара расположен севернее села Жерге-Тал и представляет собой спланированную площадку на которой находится резервуар.

На площадке запроектированы следующие сооружения:
- здание хлораторной;
-здание повысительной насосной станции (для потребителей I зоны водоснабжения) ;
- здание сторожки;
- уборная с герметичным выгребом.

Территория площадки будет максимально возможно огорожена по периметру зоны санитарной охраны. Также запроектирован организованный въезд на территорию через ворота и подъездные пути к проектируемым сооружениям.

Существующий резервуар предназначен для сбора и регулирования подачи воды в водопроводные распределительные сети с. Жерге-Тал.

Требуемый объем резервуара складывается из хранения в нем аварийного и регулирующего объемов воды.

Аварийный объем воды в резервуаре предусматривается из условия обеспечения расхода воды на хозяйственно-питьевые нужды в размере 70% расчетного среднечасового водопотребления в течение времени ликвидации аварии на водоводе.

Существующий железобетонный резервуар питьевой воды V=250м^3 выполнен в монолитном варианте, в соответствии с ТП 901-4-50с. Диаметр резервуара в осях – 10,3м. Высота резервуара от днища до верха несущих конструкций перекрытия – 3,6м.

Проектом предусматривается перечень демонтажных и ремонтно-восстановительных работ:
- очистка днища резервуара от грязи, мусора, ила;
- промывка внутренних поверхностей резервуара водой;
-пробивка (высверливание) новых отверстий под технологические трубопроводы;
- установка сальников;
- ремонт поврежденных участков резервуара;
- проведение испытания резервуара на герметичность.

Согласно проекту предусмотрено хлораторная.

В здании хлораторной предусматривается обеззараживание воды гипохлоритом кальция. Доза хлора принята 1 мг/л. Производительность установки по активному хлору составляет 1,78 кг/сутки. Хлорная вода из хлораторной подается в существующий напорно-регулирующий резервуар, где происходит контакт воды с хлором.

Хлораторная установка размещается в металлическом утепленном контейнере размером 12х2,35м и высотой 2,5 м.

В состав хлораторной входят:
- Техническое помещение;
- Лаборантская ;
- Склад хлора;
- Колодец-выгреб.

Производительность хлорной установки рассчитана на обеззараживание суточного расхода воды составляющего 561,37 $м^3$/сут.

Хлорный раствор от хлораторной подается в существующий резервуар емкостью 1000$м^3$, куда вода поступает от проектируемого водозабора (родник). Обеззараживание воды предусматривается хлорной известью.

Суточный расход хлорной извести составляет 1,87 кг/сут (исходя из суточного расхода воды, подлежащего обеззараживанию 561,37 $м^3$, расчетной дозы активного хлора 1,0 г/$м^3$, процентного содержания активного хлора в хлорной извести 30%). Расчетный объем однопроцентного раствора хлорной извести составляет 187 л/сут. Данный раствор в течение суток подается в резервуар.

Хлорный бак устанавливается на подставке на высоте 1,20 м, обеспечивающей самотечное поступление хлорного раствора в бак DTS 200.

Хлорный бак для растворения хлорной извести дополнительно оборудуется вентиляционным воздуховодом. Бак закрывается крышкой.

Для хранения хлорной извести предусмотрен склад. В складе предусмотрен комплект противопожарных средств.

При работе с хлорной известью необходимо строго соблюдать правила по технике безопасности.

В техническом помещении хлораторной размещается основное технологическое оборудование состоящее из: хлорный бак устанавливается на подставке на высоте 1,20 м , обеспечивающей самотечное поступление хлорного раствора в бак DTS 200.

Хлорный бак оборудуется электромешалкой и патрубками с вентилями.

В хлорном баке общей емкостью 100 л производится затирка, определенного количества гипохлорита кальция 3,5 кг (хлорной извести) с водой до концентрации раствора 5-7%.При работе с хлорной известью необходимо строго соблюдать правила по технике безопасности.

Выгружать и загружать хлорную известь, перемешивать раствор, обслуживающий персонал обязан в противогазе, защитной санитарной одежде при включенной принудительной вентиляции.

В хлораторной размещаются шкаф для хранения противогазов, спецодежды и аптечка для оказания экстренной помощи.

Здание хлораторной запроектировано на базе металлического контейнера .

Согласно проекту для хранения хлорной извести предусмотрен склад. В складе предусмотрен комплект противопожарных средств. При работе с хлорной известью необходимо строго соблюдать правила по технике безопасности. Выгружать и загружать хлорную известь, перемешивать раствор, обслуживающий персонал обязан в противогазе, защитной санитарной одежде при включенной принудительной вентиляции.

В хлораторной размещаются шкаф для хранения противогазов, спецодежды и аптечка для оказания экстренной помощи.

Площадь застройки. 64,70 $м^2$, общая площадь. 26,80 $м^2$, строительный объем 90,20 $м^3$.

Источником снабжения здания водой, необходимой на технологические и хозяйственно-питьевые нужды хлораторной, являются реконструируемые водозаборные сооружения.

Проектируемый водовод предназначен для транспортировки питьевой воды от площадки водозабора до площадки существующего резервуара емк. 250 м^3.

В связи со сложным рельефом местности села Жерге-Тал, и проведенного гидравлического расчета запроектирована двухзонная система водоснабжения:

I зона - согласно технологической схемы исходная вода, от существующего резервуара емкостью 250 м3, по самостоятельному водоводу, запроектированному через повысительную насосную станцию 2-го подъема, расположенную на площадке резервуара, поступает в распределительную сеть верхней части села Жерге-Тал. Система запроектирована хозяйственно-питьевой.

II зона - согласно технологической схемы исходная вода по самотечно-напорному водоводу поступает в распределительную сеть нижней части села Жерге-Тал. Система водопровода запроектирована хозяйственно-питьевая;

В здании запроектирована система производственной и хозяйственно-бытовой канализации.

Для подключения частных подворий в проектируемых водопроводных колодцах предусматриваются гребёнки, располагаемые на несколько подворий, в каждом колодце, с установкой на них запорной арматуры . Подключение частных домов выполняется за счет средств хозяев домовладений по согласованию с председателем СООПВ.

Отвод стоков производственной канализации осуществляется в проектируемый герметичный колодец-выгреб. Отвод условно чистых стоков от раковины запроектирован в фильтрующий колодец.

Все бытовые отходы складируются в специально отведенных местах с последующим вывозом в специализированные места согласованные с МСУ.

При работе котельной отсутствуют значимые загрязнения почвы.

Проектируемый водовод предназначен для транспортировки питьевой воды от площадки водозабора до площадки резервуара.

Согласно проекту, в период строительства основным источником воздействия на окружающую среду оказывают строительно-монтажные работы:

• Автотранспорт работающий в процессе строительства. При строительстве будут использоваться: бульдозеры (1 шт), экскаваторы (1 шт), автокран (1 шт), а также грузовая машина (1 шт) для перевозки строительного материала. Автотранспорт будет использоваться при рытье траншей для прокладки инженерных коммуникаций.

• Землянные работы. Землянные работы представляют собой рытье траншей под систему канализации и инженерных коммуникаций. По возможности для сокращения пылеобразования будет использоваться ручной труд и применяться обеспыливание.

• Сварочные работы. Сварочные работы в основном предвидится при строительстве зданий на площадке водозабора и при прокладке распределительной сети. При сварочных работах будут использоваться электроды Э42 А.
• Лакокрасочные работы. При лакокрасочных работах проводимых при отделке зданий используются грунтовка ГФ 021, эмаль ПФ 115.

Согласно проекту предусмотрено мероприятия необходимые для предотвращения отрицательного влияния строительной и транспортной техники:
-при транспортировке сыпучих грузов за пределы строительной площадки кузова автомашин предусматривается накрывать специальными тентами;
-максимальное использование существующих проездов для движения техники;
-максимальное использование электроинструментов и оборудования взамен механизмов, работающих на жидком топливе;
-применение только технически исправных машин и механизмов, исключающих подтеки нефтепродуктов;
-исключение сброса в поверхностный сток нефтепродуктов за счёт организации заправки автотранспорта ГСМ за пределами водоохраной зоны на стационарных АЗС и дорожной техники с использованием передвижных АЗС с поддонами для сбора переливов (проливов);

Согласно проекту мероприятия для предотвращения отрицательного влияния объекты социально-бытовой и производственной инфраструктуры строительства.
-установить биотуалеты для рабочих;
-обеспечить места хранения твердых отходов;
-поддержание в чистоте площадки строительства и прилегающей территории, подъездов и внутренних проездов при прокладке автотяги за счет санитарной уборки и использования передвижных мусоросборных контейнеров;
-спуск бытовых стоков должен отсутствовать, сбор в герметические емкости;
-установить временные сооружения на спланированной площадке;
-спланировать площадки для складирования строительных материалов и конструкций;
-производство работ строго в отведенной строй генпланом зоне, огороженной специальным забором;
-упорядоченная транспортировка и складирование сыпучих и жидких материалов;
-сбор использованных обтирочных материалов (ветоши) в специальной закрывающейся водонепроницаемой таре при технике и утилизация совместно с отходами ТБО;
-перепланировка участка трассы строительства не должна производиться;
-на питьевые нужды используется бутилированная вода
При бурении скважин производятся следующие мероприятия:
1. В местах бурения не предусматривается строительство складов ГСМ, т.к. бурение будет проводиться буровой установкой, которая укомплектованы

передвижными средствами снабжения ГСМ. Кроме того, в непосредственной близости от населенного пункта имеются автозаправочные станции и не требуется устройство их в пределах площадки бурения скважины.

2. Все материалы и запас глины для приготовления бурового раствора после завершения бурения полностью будут вывозиться с территории буровой площадки с последующей зачисткой площадей их хранения на по согласованию с МСУ.

3. Шлам, отработанный водно-глинистый раствор и сточные воды собираются в металлические мерники для последующего вывоза их и захоронения в бессточных стационарных ловушках. Производственные отходы собираются в металлические контейнеры для вывоза их с буровой площадки и захоронения в стационарной ловушке.

4. Весь бумажный и деревянный материалы - мешкотара и упаковки, а также полимерные и пластиковые материалы вывозятся с территории буровой на специально отведенные в районе санкционированные мусорные свалки. После вывоза бурового оборудования, извлечения трубопроводов, кабелей, заземления и мелкого материала, производится полная планировка и рекультивация буровой площадки.

5. Все буровое оборудование, шламовые амбары, ГСМ и дополнительное оборудование располагать только на территории земельного отвода.

Процесс бурения скважины будет проводиться в строгом соответствии с нормативными документами КР.

При эксплуатации водозабора имеется биотуалет, шлам образующийся при бурении собирается в герметичную емкость с последующим вывозом и утилизацией.

Согласно Закону Кыргызской Республики «Общий технический регламент по обеспечению экологической безопасности в Кыргызской Республике» от 8.05.2009 №151 категория опасности работ на водозаборе по сбросам сточных вод II.

В процессе проведения работ по строительству водозабора предусматриваются выбросы загрязняющих веществ в атмосферный воздух от земляных, буровых работ и работе строительной техники.

Земляные работы включают в себя выемочно-погрузочные, автотранспортные, планировочные работы. При производстве земляных работ на участках линейных сооружений складирование грунта производится на месте производства работ (на бровке траншей).

От стационарных источников выбросов при . производстве строительных работ в атмосферный воздух будут выделятся: пыль породного материала (неорганическая пыль), оксиды железа, марганца, азота, углерода, кремния, винилхлорид, уайт спирит, бенз(а)пирен.

С отработанными газами двигателей строительного и автотранспортного оборудования будут выделятся: оксид углерода, оксиды азота, твердые частицы (сажа), диоксид серы, углеводороды.

При выполнении всех вышеуказанных мероприятий влияние объекта в период строительства минимальное. Загрязнения сточными водами отсутствует (имеется биотуалет).

Все отходы образующиеся при строительстве системы водоснабжения будут складироваться на площадке строительства с последующим вывозом на свалку согласно договору с МСУ.

Место заложения буровых скважин будет привязываться к существующим дорогам, которые в достаточном количестве покрывают площадь работ. В связи с этим строительство дорог (подъездных путей) при производстве буровых работ настоящим проектом не предусматривается.

В местах бурения не предусматривается строительство складов ГСМ, т.к. бурение будет проводиться буровой установкой, которая укомплектованы передвижными средствами снабжения ГСМ. Кроме того, в непосредственной близости имеются автозаправочные станции и не требуется устройство их в пределах площадки бурения скважины.

Производственные отходы собираются в металлические контейнеры для вывоза их с буровой площадки и захоронения в стационарной ловушке.

Буровые работы на территории водозабора ориентированы на минимальное воздействие на окружающую среду.

На территории строительства и прилегающих территориях не было обнаружено нахождение видов, занесенных в Красную книгу Кыргызстана.

Для минимизации вредного воздействия строительные работы будут производится только в дневное время, строительная техника используется только в исправном состоянии. Исключается розлив и заправка ГСМ. Строительные работы производятся исключительно в пределах строительной площадки.

Вырубка деревьев не предвидится. Выемка и складирование плодородно-растительного слоя (ПРС) предусматривается в месте по согласованию с МСУ в соответствии со всеми требованиями направленными на сохранение ПРС.

При эксплуатации водозабора имеется надворный туалет. Сточные воды от туалеты вывозятся на ближайшие очистные сооружения ассенизационными машинами. Согласно Закону Кыргызской Республики «Общий технический регламент по обеспечению экологической безопасности в Кыргызской Республике» от 8.058.2009 №151 категория опасности водозабора по сбросам сточных вод II.

Выемка и складирование плодородно-растительного слоя (ПРС) предусматривается в месте по согласованию с МСУ в соответствии со всеми требованиями направленными на сохранение ПРС.

Зона санитарной охраны (ЗСО) источника водоснабжения состоит из трех поясов: первого - строгого режима, второго и третьего - режимов ограничений.

Граница первого пояса ЗСО устанавливается от крайних скважин на расстоянии не менее 30 м от водозабора при использовании защищенных подземных вод.

Согласно проекту предусмотрено Раздел Охраны окружающей среды.

Проектная документация разработана в соответствии с требованиями НИП 2. 04.02-84 и Техническими условиями «Проектирование сельского водопровода».

При эксплуатации водозабора имеется надворный туалет. Сточные воды от туалеты вывозятся на ближайшие очистные сооружения ассенизационными машинами.

При эксплуатации системы водоснабжения отсутствует загрязнение атмосферного воздуха.

При эксплуатации водозабора образуются следующие отходы:

•отходы от уборки территории -5 класс опасности

•отходы от персонала (ТБО) -5 класс опасности

Все бытовые отходы складируются в специально отведенных местах с последующим вывозом в специализированные места согласованные с МСУ .

Согласно Закону Кыргызской Республики «Общий технический регламент по обеспечению экологической безопасности в Кыргызской Республике» от 8.058.2009 №151, категория опасности по образованию отходов равна III.В соответствии с Законом КР «Общий технический регламент по обеспечению экологической безопасности в Кыргызской Республике» (2012 г.) категория опасности для всех видов работ при строительстве водозабора:

• Категория опасности по выбросам - III категория

• Категория опасности по сбросам - II категория

• Категория опасности по отходам- II категория

Согласно проекту общий выброс загрязняющих веществ в атмосферный воздух от стационарных источников (неорганическая пыль, сварочный аэрозоль, оксиды марганца, оксиды железа, фтористый водород, Уайт спирт) составит 2,6096 т/год. С отработанными газами двигателей строительного и автотранспортного оборудования будут выделятся: оксид углерода, оксиды азота, твердые частицы (сажа), диоксид серы, углеводороды массой 2,313 т/год. При проведении строительных работ воздействие на поверхностные воды отсутствует. В результате строительной деятельности образуются отходы 3, 4 и 5 класса опасности массой 10,2021 т/время строительства. Производственные и токсичные отходы отсутствуют.

Нарушенных земель, подлежащих рекультивации, не имеется. Анализ почвы проводить нецелесообразно, так как большая часть территории отведена под строительные объекты.

Источников инфра - и ультразвуковых колебаний, и ионизирующего излучения нет.

Исходя из материалов и проведенных расчетов, можно сделать вывод, что строительство не окажет значительного воздействия на окружающую среду.

При строительных работах предусмотреть сохранение и отдельное складирование плодородного слоя почвы из земляных работах.

В строительных работах применять инертных материалов и камней из лицензионно-согласованных карьеров.

Для твердо-бытовых и других отходов предусмотреть специальные ямы с вывозом в ближайшие санкционированные свалки.

Не допускать загрязнения поверхностных, подземных вод и сносу зеленых насаждений без разрешений.

По окончанию строительных работ рекультивировать использованные земельные участки согласно экологическим требованиям.

При оценки значимости воздействия объекта строительства на окружающую среду основыванной на определении показателей пространственного масштаба воздействия, временного масштаба воздействия и значимости изменений, проектируемый объект, характеризует воздействие, как воздействие низкой значимости (в пределах 1-8 баллов)

Строительные работы проводит с соблюдением требований согласно Законами по охране окружающей среды.

3.Вывод.

Рассмотрев представленные материалы, Государственная экологическая экспертиза Иссык-Куль-Нарынского регионального управления МПРЭТН выносит положительное заключение на Проект система водоснабжения для подпроекта «Жерге-Тал» Нарынского района Нарынской области,разработанный ОАО «Проектный институт «Кыргызгипрострой».

Инициатором проекта является: Жерге-Тал а\а

При этом необходимо Жерге-Тал а\а:

-перед началом работ уведомить Иссык-Куль-Нарынское региональное управление МПРЭТН;

-при строительстве и эксплуатации объекта соблюдать требования Законов по охране окружающей среды;

-после окончания строительных работ предоставить исходные данные для нормативных плат за загрязнение окружающей среды и своевременно оплатить.

В случае невыполнения заключения Государственной экологической экспертизы и проведения работ не по проектным решениям ,заключение автоматически теряет силу.

Председатель экспертной комиссии, заведующий отделом Государственной экологической экспертизы: **Н.Миназарова**

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Главный специалист отдела ГЭЭ: **К.Арстанбекова**

Главный специалист отдела ГЭЭ: **Т.Акималиев**

The Conclusion of the State Environmental Expertise on the Zherge-Tal Subproject (The English version)

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН ЖАРАТЫЛЫШ РЕСУРСТАРЫ, ЭКОЛОГИЯ ЖАНА ТЕХНИКАЛЫК КОЗОМОЛ МИНИСТРЛИГИ

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MINISTRY OF NATURAL RESOURCES, ECOLOGY AND ENGINEERING SUPERVISION OF THE KYRGYZ REPUBLIC

ISSYK-KUL-NARYN REGIONAL DEPARTMENT
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«APPROVED BY»

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_____R. Toktaliev

March 10, 2023. #01-10/5

CONCLUSION
of the State Environmental Expertise
for Zherge-Tal Subproject Water Supply System
Naryn District, Naryn Region

I. General Information.

The Design of Water Supply System in Zherge-Tal subproject, Naryn District, Naryn Region, developed by Kyrgyzgiprostroy OJSC Design Institute is under review by the State Ecological Expert Examination of the Issyk-Kul-Naryn regional Department of the Ministry of Natural Resources, Ecology and Engineering Supervision (MNREES).

The initiator of the design is: Zherge-Tal AO.

Attached to the project:

- Architectural and Urban Planning Opinion #188 dated October 26, 2022

II. General Part.

According to the design, according to the administrative-territorial division, the territory of the facility belongs to the Naryn province, the Kyrgyz Republic and is located in Zherge-Tal village, Naryn district.

The work site is located within the boundaries of Zherge-Tal village, a rural settlement with an average building density, with a small number of underground and overhead utilities, mainly water supply and power transmission lines.

Absolute elevation of the land ranging from 2000 m to 2200 m. The hydrography of the site is represented by the Zherge-Tal River, flowing from north to south through the village.

The territory of the facility is connected to Bishkek by an asphalt road and is located at a distance of about 300 km. The road network of the work site is represented by asphalt, dirt and field roads of Zherge -Tal village.

The distance to the capital of the Kyrgyz Republic, Bishkek, by asphalt road is about 300 km;

- the distance to Kant is 270 km;
- the distance to Balykchy is 120 km;
- the distance to Naryn is 39–40 km.

Naryn province is located in the south-eastern part of the country at an altitude of 1,500 meters above sea level, more than 70% of the territory is occupied by mountain ranges.

The climate of the province is continental, winters are cold and long, the absolute lowest temperature reaches -45 degrees C, summers are short and cool. The average January temperature is -15° C. The absolute minimum temperature (-50° C) is recorded in the Ak-Sai Valley. The climatic characteristics of the district are given according to the data of the Naryn meteorological station.

The vegetation of the work area is represented by deciduous trees about 3–8 meters high, mainly fruit trees and poplars, thorny bushes and steppe grass cover.

The fauna is represented mainly by birds: sparrows, pigeons, jackdaws, etc. The fauna is represented by a small list of mammals: bats, mouse-like rodents (house mouse, gray hamster, rats).

The construction site is located within the residential sector, which determines the presence of synanthropic animal species.

No species listed in the Red Book of Kyrgyzstan were found in the construction site or adjacent territories.

In geomorphological terms, the territory of Zherge-Tal village is located on the surface of a low-inclined proluvial-alluvial (pa QIII) valley of the Zherge-Tal River, which flows from north to south-southwest and divides the village into two sections. The Zherge-Tal River runoff is formed on the southern slopes of Mount Korgou. The territory of the village is extended from north to south, with a general slope of the surface in the same direction. Along the river, in spring and autumn, when there is heavy precipitation in the form of rain and melting of snow cover on the slopes of Mount Korgou, flows of a mudflow nature can pass. The routes of the distribution networks of water conduits pass along the streets of the village.

Site: water intake facilities are located approximately 800 meters north of the village.

Conventional elevations vary from 2,000 to 2,200 m above sea level.

The geological and lithological structure along the distribution network routes designed along the village streets, the area of the water intake structures and water tanks, is represented by proluvial-alluvial Upper Quaternary (pa QIII-IV) silty-clayey deposits - loams, loess-like, light brown in color, macroporous, hard in consistency, dense, subsidence. In the thickness of the loam, there are gravel layers up to 0.2 meters thick. The exposed thickness of the loam, along the designed water supply routes, is from 0.6 to 3.1 meters. The exposed thickness of the gravel is from 0.7 to 2.3 meters.

In some places, on the surface the described soils are covered by a soil-vegetation layer up to 0.2 meters thick.

The aquifer is fed by infiltration of surface waters from the Zherge-Tal River and meltwater formed during the melting of snow and glaciers on the Korgou mountain range. The movement and discharge of groundwater flows occurs in a southern direction, in the direction of the river's water flow.

The seismicity of the work area is 8 points.

In accordance with SP. 2.97 “Guidelines for the design of foundations of buildings and structures (to SNiP 2.02.01-83)”, the described territory of the village is considered to be potentially not flooded by groundwater.

According to the design, the design documentation was developed in accordance with the requirements of SNiP 2.04.02-84* and the Technical specifications “Design of a Rural Water Supply System”.

The water supply scheme for the village is forced-pressure, using electric power sources (second elevation pump station).
The design envisages the following technological scheme for water supply to Zherge-Tal village: from the water intake structures, the initial water flows to a pressure-regulating tank (a water tank with a capacity of 250 m^3), from where it flows to the village distribution network through an elevation pumping station, having undergone a disinfection cycle in a chlorination station.
The designed water intake structures are intended to provide drinking water to residents of Zherge-Tal village.
Plot area - 4620.00 m^2, gravel road area - 417.20 m^2, highways and access roads - 267.5 m^2.
The source of water supply is underground water from existing descending springs.
The design envisages the construction of water intake structures at the water intake site.
The following structures are designed for the site:
- spring catchment;
- gatehouse building;
- toilet with a sealed cesspool.

The territory has a sanitary protection zone, which is fenced and has an organized entry to the territory through the gates and access roads to the designed structures.
To prevent possible contamination of the designed water supply system for domestic and drinking purposes and to ensure sanitary and epidemiological reliability, a sanitary protection zone is created at the water tank site. The organization of a strict sanitary protection zone is carried out in accordance with the intended use of groundwater in the centralized drinking water supply system for the population of Zherge-Tal village. The drainage of surface water outside the territory is envisaged.
Catchment devices (water collection chamber) are used to capture underground water from springs. Catchment of descending springs is carried out through a reverse filter and water intake openings in the wall of the catchment chamber. Catchment of descending springs is constructed with water-catching walls made of clayey, tightly compacted soil, along which, on the side of the groundwater flow, a gravel-drainage backfill is arranged, which is connected with the reverse filter of the catchment. When groundwater exits to the surface of the earth in a dispersed manner in the form of individual sources, located more than 5 m from each other, they are caught separately with the water collected in a common catchment chamber.
In the design, the intake chamber is made of precast reinforced concrete rings.
According to the design, a guardhouse is envisaged.
The building area is 34.3 m^2, the total area is 13.6 m^2.
A single-story building 6.30x2.70x3.19 (h), made of complex structures and intended for service personnel and access control. The building envisages a boiler room with a separate entrance.
The building houses: a utility room, a checkpoint, and a boiler room. The checkpoint has two entrances (entrance and exit) with porches and a canopy. The boiler room has a separate entrance with a porch and a canopy. The gatehouse building is designed on the basis of a metal container (20 feet) of the NS (High Cube) brand with external dimensions of 6.058x2.438x2.896 (h) m and internal dimensions of 5.898x2.350x2.693 (h) m.
The design envisages working lighting of all rooms. Emergency lighting is not required.
To provide access to buildings and structures, the design envisages the construction of a road with a surface made of an optimal gravel mixture of H = 100 mm, with a driveway width of 4 m.
To supply electricity to the water intake site, the design envisages the installation of a diesel generator located in the gatehouse in a separate room, with a chimney for the removal of exhaust gases (taken into account in the section EM gatehouse). Power of the diesel generator - 7 kW, 230 V.
The volume of the fuel tank is 25 liters. For diesel generator -7 kW, provide a fuel reserve of at least 25 liters (fuel tank volume). Fuel for diesel generator is stored in a separate room. The designed structures are intended to provide drinking water to residents of Zherge-Tal village.

Site area = 2,929.40 m^2, gravel road area = 365.30 m^2, fence length - 225.50 linear meters. The site of the existing water tank is located north of Zherge-Tal village and is a planned site on which the water tank is located.
The following structures are designed for the site:
- chlorination building;
- elevation pumping station building (for consumers of water supply zone 1);
- gatehouse building;
- toilet with a sealed cesspool.

The site area will be fenced as much as possible along the perimeter of the sanitary protection zone. An organized entrance to the territory through the gate and access roads to the designed structures is also designed.
The existing water tank is designed to collect and regulate the supply of water to the water distribution networks of Zherge-Tal village.
The required volume of the water tank consists of storing emergency and regulating volumes of water in it.
The emergency volume of water in the water tank is envisaged on the condition of ensuring water consumption for household and drinking needs in the amount of 70% of the estimated average hourly water consumption during the time of liquidation of the accident on the water main.
The existing reinforced concrete drinking water tank V=250 M³ is made in a cast-in-situ version, in accordance with TP 901-4-50s. The diameter of the water tank within the axes is 10.3 m. The height of the water tank from the bottom to the top of the supporting floor structures is 3.6 m.
The design envisages a list of dismantling and repair and restoration works:
- cleaning the bottom of the tank from dirt, debris, sludge;
- washing the internal surfaces of the tank with water;
- perforating (drilling) new holes for process pipelines;
- installing seals;
- repairing damaged sections of the tank;
- testing the tank for leaks.

A chlorination plant is envisaged according to the design.
The chlorination plant building envisages water disinfection with calcium hypochlorite. The chlorine dose is taken as 1 mg/l. The capacity of the plant for active chlorine is 1.78 kg/day. Chlorine water from the chlorination plant is fed to the existing pressure-regulating tank, where water comes into contact with chlorine.
The chlorination unit is placed in a metal insulated container measuring 12x2.3 5 m and 2.5 m high.
The chlorination unit includes:
- Technical room;
- Laboratory;
- Chlorine warehouse;
- Cesspool.

The capacity of the chlorine unit is calculated for disinfection of daily water consumption of 561.37 m^3/day.
The chlorine solution from the chlorination unit is fed into an existing water tank with a capacity of 1000 m^3, where water comes from the designed water intake (spring). Water disinfection is provided by bleaching powder.

The daily consumption of bleaching powder is 1.87 kg/day (based on the daily water consumption to be disinfected of 561.37 m^3, the calculated dose of active chlorine of 1.0 g/m^3, the percentage of active chlorine in bleaching powder of 30%). The calculated volume of a one-percent bleaching

powder solution is 187 l/day. This solution is fed into the water tank during the day. The chlorine tank is installed on a stand at a height of 1.20 m, ensuring gravity flow of the chlorine solution into the DTS 200 tank.
The chlorine tank for dissolving bleaching powder is additionally equipped with a ventilation air duct. The tank is closed with a lid.
A warehouse is envisaged for storing bleaching powder. The warehouse is equipped with a set of fire-fighting equipment.
When working with bleaching powder, it is necessary to strictly observe safety regulations.
The main process equipment is located in the technical room of the chlorination room, consisting of the chlorine tank is installed on a stand at a height of 1.20 m, ensuring gravity flow of the chlorine solution into the DTS 200 tank.
The chlorine tank is equipped with an electric mixer and pipes with valves. In a chlorine tank with a total capacity of 100 l, a certain amount of calcium hypochlorite 3.5 kg (bleaching powder) is mixed with water to a solution concentration of 5-7%. When working with bleaching powder, it is necessary to strictly observe safety regulations.
When unloading and loading bleaching powder, mixing the solution, the service personnel must wear a gas mask, protective sanitary clothing with the forced ventilation turned on.
The chlorination room contains a cabinet for storing gas masks, special clothing and a first aid kit for emergency assistance.
The chlorination room building is designed on the basis of a metal container,
According to the design, a warehouse is envisaged for storing bleaching powder. The warehouse is equipped with a set of fire-fighting equipment. When working with bleaching powder, it is necessary to strictly observe safety regulations. When unloading and loading bleaching powder, mixing the solution, the service personnel must wear a gas mask, protective sanitary clothing with the forced ventilation turned on.
The chlorination room contains a cabinet for storing gas masks, special clothing and a first aid kit for emergency assistance.
The building area is 64.70 m^2, total area. 26.80 m^2, construction volume 90.20 m^3.
The source of water supply for the building, necessary for technological and domestic and drinking needs of the chlorination plant, are the reconstructed water intake structures.
The designed water pipeline is intended for transportation of drinking water from the water intake site to the site of the existing water tank with a capacity of 250 m^3.
Due to the complex terrain of Zherge-Tal village, and the hydraulic calculation carried out, a two-zone water supply system was designed:
Zone I - according to the process diagram, the source water, from the existing water tank with a capacity of 250 m^3, through an independent water pipeline designed through a 2nd elevation pumping station located on the water tank site, flows to the distribution network of the upper part of Zherge-Tal village. The system is designed for domestic and drinking purposes.
Zone II - according to the process diagram, the source water through a gravity-pressure water pipeline flows to the distribution network of the lower part of the Zherge-Tal village. The water supply system is designed for domestic and drinking purposes;
The building is designed with a system of industrial and domestic sewage.
For connecting private farmsteads, combs are envisaged in the designed water supply wells, located for several farmsteads, in each well, with the installation of shut-off valves on them.
The connection of single-family houses is carried out at the expense of the owners of households in agreement with the chairman of the Rural Community-based Drinking Water Users Union.
The discharge of industrial sewage is carried out into the designed sealed cesspool. The discharge of conditionally clean wastewater from the sink is designed into a filter well.
All household waste is stored in specially designated places with subsequent removal to specialized places agreed with the local government.
There is no significant soil contamination during the operation of the boiler house.

The designed water pipeline is intended for transporting drinking water from the water intake site to the water tank site.

According to the design, during the construction period, the main source of environmental impact is construction and installation work:

• Motor vehicles operating during the construction process. The following will be used during construction: bulldozers (1 unit), excavators (1 unit), a truck crane (1 unit), and a truck (1 unit) for transporting construction materials. Motor vehicles will be used for digging trenches for laying utility lines.

• Earthworks. Earthworks involve digging trenches for the sewerage system and utility lines. Manual labor and dust control will be used whenever possible to reduce dust formation.

• Welding works. Welding works are mainly foreseen during the construction of buildings on water intake site and during the installation of the distribution network. Electrodes E42 A will be used during welding works.

- Painting works. When painting works are carried out during finishing of buildings, primer GF 021, enamel PF 115 are used.

The design envisaged measures necessary to prevent the negative impact of construction and transport equipment:

- when transporting bulk cargo outside the construction site, the bodies of vehicles shall be covered with special awnings;
- maximum use of existing driveways for the movement of equipment;
- maximum use of power tools and equipment instead of mechanisms operating on liquid fuel;
- use of only technically sound machines and mechanisms that eliminate leaks of petroleum products;
- elimination of discharge of petroleum products into surface runoff by organizing refueling of vehicles with petroleum products outside the water protection zone at stationary petrol stations and road equipment using mobile petrol stations with trays for collecting overflows (spills);

According to the design, measures to prevent negative impact on social, domestic and industrial infrastructure facilities are being built.

- install bio-toilets for workers;
- provide storage areas for solid waste;
- maintain cleanliness of the construction site and adjacent territory, entrances and internal driveways during the laying of the highway by means of sanitary cleaning and the use of mobile waste collection containers;
- there should be no discharge of domestic wastewater, collection in sealed containers;
- install temporary structures on the planned site;
- plan sites for storing construction materials and structures;
- perform work strictly in the area allocated by the construction master plan, fenced by the special fence;
- orderly transportation and storage of bulk and liquid materials;
- collect used wiping materials (rags) in special sealed waterproof containers near the equipment and dispose of them together with solid waste;
- redevelopment of the construction route section should not be carried out;
- bottled water is used for drinking purposes.

When drilling wells, the following activities are carried out:

1. No fuel and lubricants depots are planned at the drilling sites, since drilling will be carried out by a drilling rig equipped with mobile fuel and lubricants supply vehicles. In addition, there are petrol stations in the immediate vicinity of the settlement and there is no need to install them within the well drilling site.
2. All materials and clay reserves for preparing drilling mud upon completion of drilling will be completely removed from the territory of the drilling site, followed by cleaning of the areas where they are stored, in agreement with the local government.

3. Sludge, treated water-clay solution and waste water are collected in metal metering tanks for subsequent removal and disposal in fixed non-drainable traps. Industrial waste is collected in metal containers for removal from the drilling site and disposal in a fixed trap.
4. All paper and wood materials - sacks and packaging, as well as polymer and plastic materials are removed from the drilling site to specially designated authorized landfills in the area. Following the drilling equipment is removed, pipelines, cables, grounding and small material are extracted, a complete planning and reclamation of the drilling site is carried out.
5. All drilling equipment, sludge pits, fuels and lubricants and additional equipment must be located only on the territory of the land allotment.

The process of drilling the well will be carried out in strict accordance with the regulatory documents of the Kyrgyz Republic.

During the operation of the water intake, there is a bio-toilet, the sludge formed during drilling is collected in a sealed container with subsequent removal and disposal.

According to the Law of the Kyrgyz Republic "General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic" dated 08.05.2009 #151, the hazard category of work at the water intake for wastewater discharges is Category II.

During the work on construction of the water intake, emissions of pollutants into the atmosphere from excavation, drilling work and the operation of construction equipment are envisaged.

Excavation work includes excavation and loading, motor transport, planning work. During excavation work on sections of linear structures, soil is stored at the site of work (on the edge of the trenches).

Stationary sources of emissions during construction work will release into the atmosphere: rock dust (inorganic dust), iron oxides, manganese, nitrogen, carbon, silicon, vinyl chloride, white spirit, benz(a)pyrene.

With the exhaust gases of engines of construction and motor transport equipment will be released: carbon monoxide, nitrogen oxides, solid particles (soot), sulfur dioxide, hydrocarbons.

When all the above activities are carried out, the impact of the facility during the construction period is minimal. There is no wastewater pollution (there is a bio-toilet).

All waste generated during the construction of the water supply system will be stored at the construction site and then removed to a landfill in accordance with the agreement with the local government.

The location of the boreholes will be tied to existing roads that cover the work area in sufficient quantities. In this regard, the construction of roads (access roads) during drilling operations is not envisaged by this project.

No fuel and lubricant warehouses are envisaged at the drilling sites, since drilling will be carried out by a drilling rig equipped with mobile fuel and lubricant supply vehicles. In addition, there are gas stations in the immediate vicinity and there is no need to install them within the well drilling site.

Industrial waste is collected in metal containers for removal from the drilling site and disposal in a fixed trap.

Drilling operations on the territory of the water intake are aimed at minimal impact on the environment. No species listed in the Red Book of Kyrgyzstan were found on the construction site or in the adjacent areas.

To minimize harmful impacts, construction work will be carried out only during the daytime, and construction equipment will only be used if it is in good condition. Fuel spills and refueling are prohibited. Construction work will be carried out exclusively within the construction site.

Tree felling is not expected. Removal and storage of the fertile-vegetative layer (FVL) is planned in a place agreed upon with the local government in accordance with all requirements aimed at preserving the FVL.

There is an outdoor toilet during operation of the water intake. Wastewater from the toilet is taken to the nearest treatment facilities by sewage trucks. According to the Law of the Kyrgyz Republic "General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic" dated 8.058.2009 #151, the hazard category of the water intake for wastewater discharges is Category II.
The excavation and storage of the fertile-vegetative layer (FVL) are envisaged in a place agreed with the local government in accordance with all requirements aimed at preserving the FVL.
The sanitary protection zone (SPZ) of the water supply source consists of three belts: the first - strict regime, the second and third - restriction regimes.
The boundary of the first SPZ belt is established from the outer wells at a distance of at least 30 m from the water intake when using protected groundwater.
The project envisages an Environmental Protection Section.
The design documentation has been developed in accordance with the requirements of NIP 2. 04.02-84 and the technical specifications "Design of a Rural Water Supply System". When operating the water intake, there is an outdoor toilet. Wastewater from the toilet is taken to the nearest treatment facilities by sewage trucks.
There is no air pollution during operation of the water supply system.
The following waste is generated during operation of the water intake:
• waste from cleaning the territory - hazard class 5
• waste from personnel (MSW) - hazard class 5
All household waste is stored in specially designated places with subsequent removal to specialized places agreed with the local government. According to the Law of the Kyrgyz Republic "General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic" dated 8.058.2009 #151, the hazard category for waste generation is Category III. In accordance with the Law of the Kyrgyz Republic "General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic" (2012), the hazard category for all types of work during the construction of a water intake:
• Emission hazard category - category III
• Discharge hazard category - category II
• Waste hazard category - category II
According to the design, the total emission of pollutants into the atmosphere from stationary sources (inorganic dust, welding aerosol, manganese oxides, iron oxides, hydrogen fluoride, White spirit) will be 2.6096 tons/year. The following will be emitted with the exhaust gases of engines of construction and motor transport equipment: carbon monoxide, nitrogen oxides, solid particles (soot), sulfur dioxide, hydrocarbons weighing 2.313 tons/year. There is no impact on surface waters during construction work. As a result of construction activities, waste of hazard classes 3, 4 and 5 weighing 10.2021 tons/construction time is generated. There is no industrial or toxic waste.
There are no disturbed lands subject to reclamation. It is impractical to conduct a soil analysis, since most of the territory is allocated for construction sites.
There are no sources of infrared and ultrasonic vibrations and ionizing radiation. Based on the materials and the conducted calculations, it can be concluded that the construction will not have a significant environmental impact.
During construction work, envisage the preservation and separate storage of the fertile soil layer from excavation work.
In construction work, use inert materials and stones from licensed and approved quarries.
For solid household and other waste, provide special pits with removal to the nearest authorized landfills.
Do not allow pollution of surface and groundwater and demolition of green spaces without permits.
Upon completion of construction work, reclaim used land plots in accordance with environmental

requirements.
When assessing the importance of the impact of a construction project on environment based on the identification of indicators of the spatial scale of impact, the temporal scale of impact and the significance of changes, the designed facility characterizes the impact as an impact of low importance (within 1-8 points).
Construction work is carried out in compliance with the requirements of the Laws on Environmental Protection.
3. Conclusion.
Having reviewed the submitted materials, the State Environmental Expert Examination of the Issyk-Kul-Naryn Regional Department of the Ministry of Natural Resources, Ecology and Engineering Supervision have issued a positive opinion on Program of the water supply system for the subproject "Zherge-Tal" of the Naryn district of the Naryn province, developed by the OJSC "Project Institute "Kyrgyzgiprostroy".
The initiator of the project is: Zherge-Tal AO.
At the same time, Zherge-Tal AO must:
- notify the Issyk-Kul-Naryn regional department of the Ministry of Natural Resources, Ecology and Engineering Supervision prior to commencement of work;
- comply with the requirements of the Laws on Environmental Protection during construction and operation of the facility;
- provide initial data for regulatory fees for environmental pollution upon completion of construction work and pay in a timely manner.

In case of non-compliance with the State Environmental Expert Examination opinion and implementation of works not in accordance with design solutions, the opinion automatically become void.

Chairman of the Expert Commission,
Head of the Department of
State Environmental Expert Examination: N. Minazarova

Expert Commission members:

SEEE Unit Chief Specialist: K. Arstanbekova

SEEE Unit Chief Specialist T. Akimaliyev

Similar Conclusions of the State Environmental Expertise were obtained for the villages Lama, Aral, Kichi-Aral, Chaek, Besh-Terek, Kochkor, Kara-Too, Isakeev, Moldo-Kylych, Baetov, Kaiyndy-Bulak, Kulanak and Uchkun.

Annex 2: List of Key Documents on Program's Environmental Safeguards as of 30 June 2025

No	Document Title	Prepared by	Date of Disclosure
	Basic Documentation:		
1	PSSA/Program Safeguard Systems Assessment. KGZ – 52256-001: Naryn Rural Water Supply and Sanitation Development Program	ADB, ARIS	July 2019 https://www.adb.org/sites/default/files/project-documents/52256/52256-001-pssa-en_1.pdf
	Reports:		
2	Semiannual Environmental Monitoring Report covering August–December 2020 developed for the Project	ARIS	January 2021 https://www.adb.org/sites/default/files/project-documents/52256/52256-001-emr-en.pdf
3	Semiannual Environmental Monitoring Report covering January–June 2021 developed for the Project	ARIS	July 2021 https://www.adb.org/sites/default/files/project-documents/52256/52256-001-emr-en_1.pdf
4	Semiannual Environmental Monitoring Report covering July–December 2021 developed for the Project	ARIS	January 2022. https://www.adb.org/projects/documents/kgz-52256-001-emr-6
5	Semiannual Environmental Monitoring Report covering January–June 2022 developed for the Project	ARIS	July 2022 https://www.adb.org/sites/default/files/project-documents/52256/52256-001-emr-en_0.pdf
6	Semiannual Environmental Monitoring Report covering July–December 2022 developed for the Project	ARIS	January 2023 https://www.adb.org/sites/default/files/project-documents/52256/52256-001-emr-en_2.pdf
7	Semiannual Environmental Monitoring Report covering January–June 2023 developed for the Project	ARIS	July 2023 https://www.aris.kg/uploads/default/projects/e177a03cecc1871afc61e6bd8f043142.pdf https://www.aris.kg/uploads/default/projects/3f8d1bbaf859649dc70eaf5266ae8d5a.pdf
8	Semiannual Environmental Monitoring Report covering July–December 2023 developed for the Project	ARIS	January 2024 https://www.aris.kg/projects/proektyprogrammy-aris/programma-razvitiya-selskogo-vodosnabzheniya-i-sanitarii-v-narynskoy-oblasti-prsvsno
9	Semiannual Environmental Monitoring Report covering January–June 2024 developed for the Project	ARIS	July 2024 https://www.adb.org/projects/documents/kgz-52256-001-emr-5
10	Semiannual Environmental Monitoring Report covering July–December 2024 developed for the Project	ARIS	https://www.adb.org/projects/documents/kgz-52256-001-emr-7

No	Document Title	Prepared by	Date of Disclosure
11	Semiannual Environmental Monitoring Report covering January–June 2025 developed for the Project	ARIS	Current report
	Other documentations:		
12	SSEMPs for villages (WSS): Zhalgyz-Terek, Orto-Saz, Zhan-Bulak Moldo-Kylych, Kochkor, Isakeev Oruk-Tam, Ak-Kiya,Tosh-Bulak Lama, Aral, Kichi-Aral Kara-Too, Chaek, Zherge-Tal (Ak-Talaa District) Baetovo, Kaindy-Bulak Zherge-Tal (Naryn District), Kulanak, Uchkun, At-Bashy, Ak-Zhar. SSEMPs for villages (Non-network Local treatment facilities): Lama, Isakeev, Chaek (12 pieces multi-stores buildings), Zherge-Tal (Ak-Talaa District)	Contractors	1 September 2022 9 September 2022 1 November 2022 14 November 2022 17 January 2023 3 July 2023 15 January 2024 4 February 2025 29 March 2024
13	Site-Specific Soil Disposal Sub - Plan.	ARIS	12 June 2023