KYRGYZ REPUBLIC

COMMUNITY DEVELOPMENT AND INVESTMENT AGENCY

SUSTAINABLE RURAL WATER SUPPLY AND SANITATION DEVELOPMENT PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Rehabilitation of water supply system

Village Almaluu (Kyzyl-Tuu) subproject

April 2018

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1. INTRODUCTION. DESCRIPTION OF THE PROJECT AREA, WATER SYPPLY SYSTEM.

Introduction

The objective of Sustainable Rural Water Supply and Sanitation Development Project (SRWSSDP)[1] is to improve access and quality of water supply and sanitation services in the Participating Rural Communities; and to strengthen capacity of the Recipient's institutions in the water supply and sanitation sector.

An Environmental and Social Management Framework (ESMF) for the project consistent with Environmental Assessment (OP 4.01) requirements was prepared and found satisfactory by the World Bank. The ESMF public consultations were held on February 11, and June 23, 2016 in Bishkek and February 16, June 24 2016, in Osh –including participants from each target rural community. The final ESMF documents in both Russian and English languages were disclosed in country and on the Bank Infoshop on July 4, 2016 and July 6, 2016 respectively. Each activity to be financed under the project will be reviewed for safeguards risks in line with OP4.01, and must obtain the clearances required by Kyrgyz national regulations.

The ESMF covers procedures and mechanisms that will be triggered by the Project to comply with the World Bank Policy 4.01 Environmental Assessment2, legislation and normative and legal acts of the Kyrgyz Republic governing preparation and implementation of environmental protection requirements.

The present Environmental and Social Management Plan (ESMP) outlines environmental impacts and mitigation measures related to the rehabilitation of water supply investments in Kyzyl-Tuu subproject.

ESMP activities will be included in bidding and contract documents as integral part of both construction and technical supervision phases.

Description of the project area

This subproject considers the vilages Almaluu (Novoye) and Malovodnoye, which belong to Kyzyl-Tuu Ayil Okmotu of Chui oblast. The sources of water supply and the system at the villages are different, independent from each other. Therefore, the ESMP for Almaluu village will be individual.

The subproject villages are located at 25-35 km to the south-west of Bishkek city and at 15 km from the rayon centre, Sokuluk village.

There are 152 households with total population of 569 people in the village. The number of cattle is 131, small cattle - 324, horses – 19. The following municipal objects are located in the village: First Aid Point (FAP).

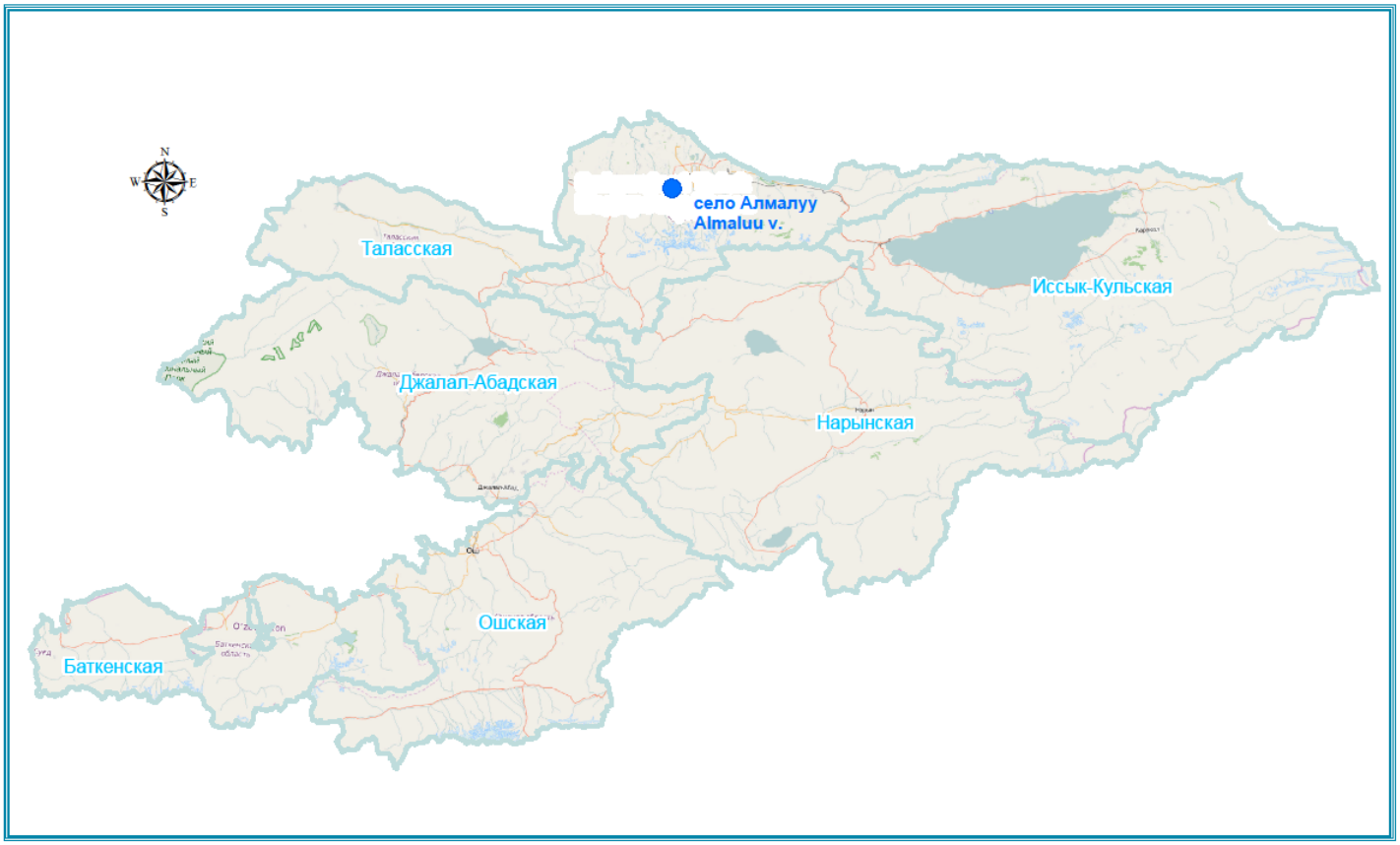
Climate of a foothill part of the Chui Valley is continental. In winter time the territory is under the influence of a high pressure area that promotes establishment of cloudless frosty weather with sharply expressed inversions of temperatures. In the spring and at the beginning of summer, repeatability of the western and northwest invasions which are followed by rapid changes of temperature and rainfalls. The second half of summer is characterized by dry and hot weather.

The climate characteristics of the construction area are taken from the meteorological station in Bishkek:

Absolute maximum temperature, t ºC	*+42ºC*
Design temperature of the coldest five-day period	*-23ºC*
Average temperature of the coldest period	*-10,6ºC*
Average relative air humidity at 15:00:	
of the coldest month of the year	*63%*
of the hottest month of the year	*31%*

[1] In accordance with the proposal of ARIS and Department of Water Supply and Sanitation (DWSS) the project name was changed from RWSSP-3 (Third Rural water supply and sanitation project) on SRWSSDP (Sustainable Rural Water Supply and Sanitation Development Project)

Annual precipitation	*471 mm*
Maximum penetration depth of freezing level in the ground	*100 cm*
Seismicity of the area	*9 points*



Water supply system

At present, water supply to Almaluu, Kara-Sakal, Belek and Shalta villages is carried out by the underflow water intake of Dzhelamysh river. The water intake is located in the estuary of Dzhelamysh river valley where it flows to the foothill plain. The water intake is made of perforated pipes, placed into the floodplain of Dzhelamysh river to a depth of about 0,5-0,7 m. These pipes collect water from Dzhelamysh river underflow, as well as underground water outcropping at the foot of Dzhelamysh terrace crusp (Dzhelamysh village is located on the terrace), ensuring a sustainable waterflow. At present, the pipes are rusted and clogged, so the water intake works intermittently without any basic water treatment.

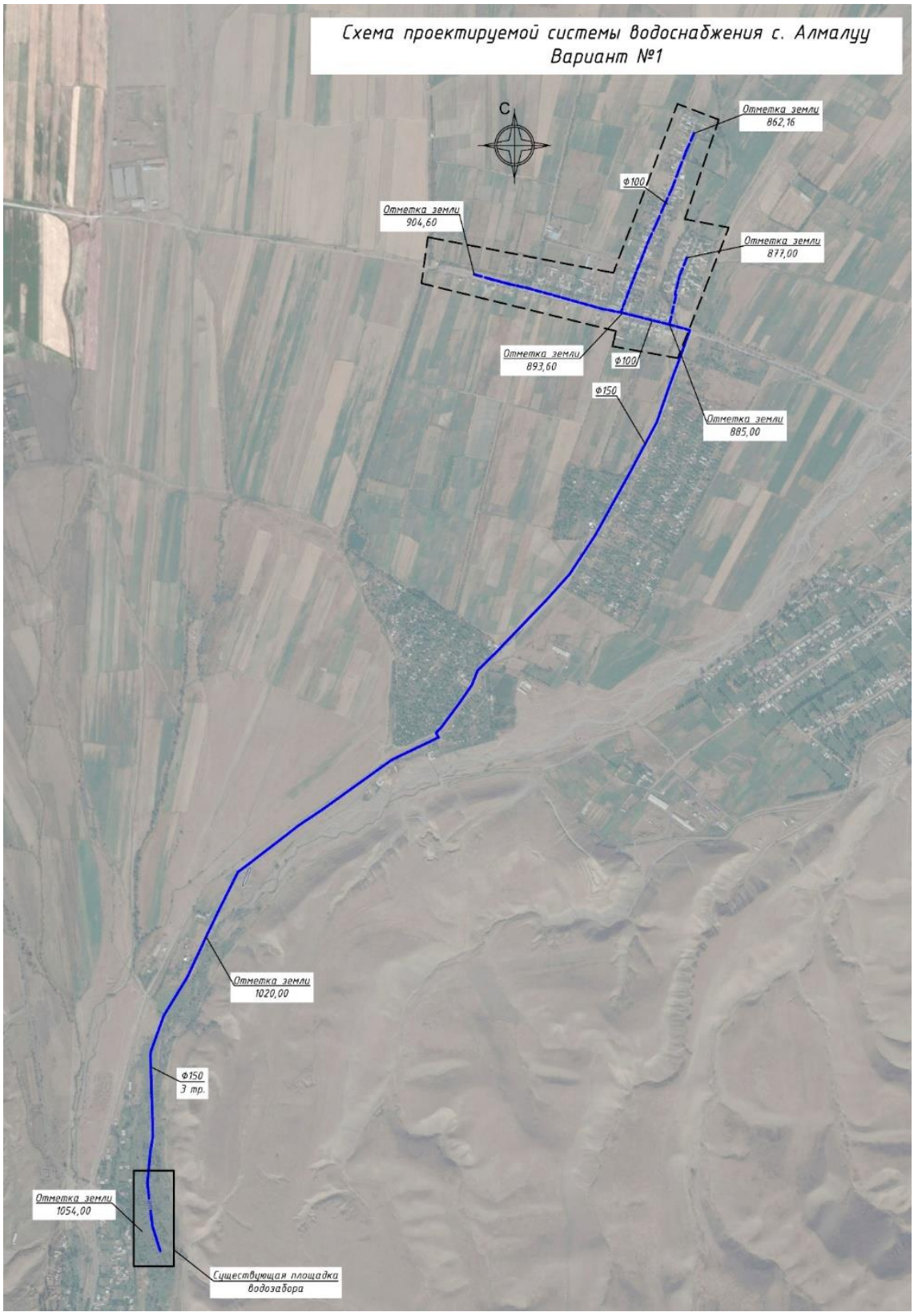
From the head water intake water is delivered by three gravity water mains: one to Kara-Sakal village, the second – to Belek village, the third – to Almaluu (Novoye) and Shalta villages. Water supply network in Almaluu (Novoye) village was built in the early 60s. The network is constructed of 100mm asbestos-cement pipes of total length of 1650 m. The total required (designed) amount of water for Almaluu (Novoye) village – 126, 18 m^3/day.

At present, there are big problems with distribution of water between the villages of Almaluu (Novoye) and Shalta, which is supplied to these villages by the same water pipeline. All water mains are constructed of 150 mm asbestos-cement pipes. According to the data available the lengths of water mains are the following: from water intake to Almaluu (Novoye) village – 3750m. Water mains are in unsatisfactory condition. In the past, chlorination was carried out with chlorine solution on the water intake. At present chlorination building is damaged.

Moreover, the sanitary protection zone of the water intake does not have the required fencing

The network has 19 manholes, many of them are littered with rubbish, flooded with water. Water tapstands and regulating valves do not work. Many yards have private connections[3]. There are no prospects for expanding the water supply network in Almaluu (Novoye) village.

Scheme of planned distribution network of the village



[3] A private connection means unauthorized connection to the water supply network without observing the technical requirements

2. SCOPE OF WORKS AND IDENTIFICATION OF ASSOCIATED ENVIRONMENTAL AND SOCIAL IMPACTS

Planned activities in Almaluu village:

Water supply scheme in Almaluu v. is planned gravity-pressure, without using electric power supply:

1. Water intake: construction of infiltration intake (horizontal drain) with a length of 280 m at the site of water intake and installation of access manholes made from cast reinforced concrete (6 pieces)
2. Installation of inlet chamber for water collection
3. Construction of container-type building for chlorination plant with installation of universal dozing station.
4. Construction of a new water transmission line with a d= 110 and a total length of 4 135 m.
5. Construction of distribution network with the pipes d=110 mm – 1260 m and d=90mm – 599 m.
6. Construction of the water intake territory fences.

The estimated period of construction and rehabilitation works is 18 months. The defects liability period is 12 months.

Kyzyl-Tuu subproject will not finance any activity with significant or irreversible environmental impacts, and therefore has triggered OP 4.01 with classification as Environmental Category "B."

Handling of asbestos-containing materials (ACM).

Visits to the Kyzyl-Tuu sub-project site showed that the existing water distribution network is made of asbestos cement (AC) pipes. During water system rehabilitation, existing asbestos cement pipes will not be removed. Every effort will be made to leave the old pipes in the ground. New pipelines will be installed parallel to the existing ones. In the event of removal of asbestos cement pipes asbestos contained materials waste will be collected, transported and finally disposed by applying special protective measures in accordance with the hazardous waste handling standards. See Section 6 for detailed information on disposal of asbestos-containing materials.

Environmental oversight

During activities implementation, safeguard specialist of ARIS will have overall supervision responsibility for ensuring that the measures indicated in the ESMP are being properly performed. Safeguard specialist and engineers of ARIS in collaboration with the local authorities and the Kyrgyz Forestry and Environment Preservation Agency will perform the activity's environmental monitoring during both construction and operation phases.

The subproject will not finance Category-A activities, will not support activities that target natural habitats or protected sites, and will not finance those activities that can cause a significant loss or degradation of any significant natural habitat.

SOCIAL RISKS AND IMPACT MITIGATION

Social screening and mitigation

During the social screening, the main risks were identified:

- possible industrial injuries of the local population and workers;
- community dissatisfaction regarding the suspension of utility services;
- involvement of women in the project;
- problems with connections to the water supply network of the poor;
- potential social resistance to tariff increase
- limited capacities of local authorities
- actual delay in implementation

Section 4 describes social impact minimization measures, institutional responsibility and monitoring.

There are no significant social risks in this subproject. The activities planned under this subproject will have more positive social consequences.

An integral part of the strategy is to inform and take into account the views of communities and persons affected by the project. Thus, one of the main tools to prevent social risks / conflicts is the Beneficiary Feedback Mechanism, through which information is exchanged, is taken into account the views of communities at all stages of the project.
Below full information on BFM is provided.

Demographic data. The summative demographic data is as following: target population is 569 people, including 262 men and 307 women. The total number of households is 152. The main business activities are farming, agriculture. Women in the village are housewives mostly.

Ethnic composition: 98% are Kyrgyz, 2% are Russians. There was no any interethnic conflicts before, we can say that the possibility of interethnic conflicts and other social tensions is unlikely at this project site. Potential conflict factors to be triggered are: perception of or actual delay in implementation; potential social resistance to tariff increase; changes in water consumption behavior and practice; limited capacities of local self-governments. These issues will be mitigated through a proper information sharing, availability of Beneficiary Feedback Mechanism (BFM) and greater engagement of women in project activities.

In addition to information-provision, ARIS will collaborate with the Ayil Okmotu and the local community organizations dispute resolution set-ups such as court of aksakals overseen by the AO.

The subproject will not impact cultural or national heritage monuments.

Involuntary Resettlement. Land allotment and resettlement issues are covered by the World Bank OP 4.12 Involuntary Resettlement. As for involuntary resettlement, no significant impacts that could require land allotment, economic displacement or physical resettlement have been identified.
Resettlement policy framework (RPF) was prepared for the project. The RPF public consultations were held on including participants from each target rural community. The RPF provides guidance on the preparation of resettlement action plans (RAPs) during project implementation. The final document is published on ARIS site http://www.aris.kg/ru/proekty_aris/realizuemye_proekty/proekt_ustoichivogo_razvitija_selskogo_vodosnabzhenija_i_sanitarii/politika_pereselenija

The Resettlement Policy Framework (RPF) provides guidelines for development of appropriate mitigation measures, including compensations for mitigation and reparation of the damages due to impacts of land acquisition and resettlement, caused by future project activities.

RPFs are applicable to all RWSSDP sub-projects, which may have impacts in the form of:

- Resettlement or loss of shelter;
- Loss of assets or access to them;
- Loss of income sources or means of subsistence, regardless of the fact, whether people affected by the project impact (PAPs) are forced to resettle.

In case of allotment of land, relocation or damage to the assets of the population, a Resettlement Action Plan will be prepared guided by the RPF. Section 3.2 of RPF describes eligibility criteria and right to compensation.

INSTITUTIONAL RESPONSIBILITY

№	Responsible Party	Activities
1	Ministry of Finance	In case of lack of replacement land, the Ministry of Finances will pay compensation for land and assets of PAPs as stipulated in the RAP.
2	Municipalities of subprojects	Inform of stakeholders. Fulfill the provisions of agreement. Render of assistance during public consultations. Grievance redress in the course of RPF/RAP implementation.
3	Safeguards Specialist/Consultant	• Consultations with PAPs • Identification of PAPs, examination of documents of entitlement and list of affected assets • Preparation of RPF and RAPs allowing for the fact that all expenses for acquisition of land and resettlement will be included in the budgets of the Ministry of Finance • Disclosure of information about RPF and RAP • Implementation of RPF and RAP • Conduction of socio-economic survey of PAP • Monitoring • Submission of information about RPF and RAP to the World Bank • Grievance Management
4	Grievance Redress Mechanism (Beneficiary Feedback Mechanism (BFM))	Obtaining prompt, objective information, evaluating and reviewing appeals (applications, proposals, complaints, requests, positive feedbacks)

No trees owned by the municipality will be cut down until all necessary permits obtained. In the event of cutting municipal trees, there will be compensation in the form of seedlings (the amount for compensation is in the BoQ). The contractor will give seedlings to AO, and they will be planted in the places where the AO points out.

In the event of cutting private trees, the RAP will be prepared according to OP 4.12. If there will be cutting of trees of several owners, it will be possible to prepare a single RAP for subproject. As for the impacts on

private properties, no private land will be affected because all water transmission and distribution lines will be installed on municipal land.
Conclusion: some private trees will definitely need to be cut; private lands will not be affected.

Grievance Redress Mechanism (Beneficiary Feedback Mechanism (BFM))
ARIS use an information system for management of appeals, including complaints of citizens – Beneficiary Feedback Mechanism (BFM).

The main objective of the beneficiary feedback mechanism is the process of obtaining prompt, objective information, evaluating and reviewing appeals (applications, proposals, complaints, requests, positive feedbacks), at all stages of CSP implementation that come from citizens / beneficiaries to further improve their work. Strengthen communication with project beneficiaries and provide channels for feedback, and identify and address problems, increasing transparency and accountability.

Dissemination of BFM:
• presentation of information by the BFM specialists to local authorities, AO, deputies of the local kenesh;
• presentation of information at public hearings, trainings conducted by ARIS staff, the BFM team conducts an entire information campaign in the communities;
• banners of BFM are placed on social facilities (schools, kindergardens, FAP);
• there are banners in district administrative buildings;
• there is BFM section on the official site.

All appeals and complaints from citizens received under the SRWSSDP deliversdelivers to the corporate system for further processing and follow-up.

Channels for submitting an appeal.

1.Hotline (calls are received around the clock, the conversation will be recorded); 2. WhatsApp (instant messaging system for mobile devices with voice and video support); 3. Social networks (Facebook); 4. E-mail address: bfm@aris.kg. 5. ARIS website: www.aris.kg 6. Verbal or written appeals received during the on-site working meetings; 7. Incoming correspondence via courier to ARIS reception; 8. Incoming correspondence by e-mail.	1. Appeals are recorded in the log of BFM incoming correspondence and are considered if the following information is present: • Full Name; • address of registration and residence or telephone number; • content of the appeal; • other reference information. 1.1 In case if the appeals were received in the absence of any of the above data, it is recorded in the log of incoming correspondence of the BFM and the sender is notified, and the results of the appeal will be published in the media at the local level, on the ARIS website or made public at the session of the AK. 2. Appeals are entered into the BFM configuration in the 1C system for analysis and monitoring. 3. Appeals may be submitted anonymously. Confidentiality shall be insured in all cases, even if the applicant is known, in order to avoid conflicts of interested parties.

Receiving an appeal. When receiving an appeal, the following is determined:
- Type of appeal
- Category of appeal

- Persons responsible for review and execution of appeal.
- Deadline for appeal resolving.
- Agreed actions

After the type of treatment is determined, the BFM specialist registers details regarding the treatment in the incoming correspondence journal, and then in the BFM configuration of the 1C system.

The applicant will receive a notification in which the BFM specialist will inform by phone or through other BFM channels:

- Full Name of the executor (project officer) to whom the appeal was forwarded;
- Deadline for execution (minimum 10 days, maximum 30 days from the registration date);
- The deadline and actions are determined in accordance with the ARIS instructions for handling appeals.

Notification. Notification will be registered in the outgoing correspondence log. BFM specialist will assist the applicant at all stages of considering his appeal and ensure that his appeal is properly handled.

In case if the citizen / beneficiary is not satisfied with the decision resulting from the consideration of the appeal, he / she has the right to appeal claim. Appeal claim is considered by the special ARIS Review Committee on consideration of appeals. ARIS Executive Director will form the Review Committee for consideration of appeals from project managers and heads of departments, who will conduct hearings of appeal claims. The Appeals Review Committee will consist of 15-17 persons, of which 2 are BFM members and 2 are persons independent from the project implementation units and the Government of the Kyrgyz Republic.

After review of the appeal, the citizen / beneficiary unsatisfied with the solution received, has the right to appeal the decision in a judicial procedure.

3. ENVIRONMENTAL LEGISLATION

The main normative documents governing the environmental protection activities under Kyzyl-Tuu subproject are[4]:

- **The Constitution of the Kyrgyz Republic 2010**
- **The Law "On Environmental Protection"[5]**
- **Law on Environmental Expertise[6]**
- **The Law of KR "On General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic"[7]**
- **The Law of KR "On Water"[8]**
- **The Law of the KR "On Interstate Use of Water Bodies, Water Resources and Water Management Facilities in the Kyrgyz Republic"**

Over laws and normative acts on environmental protection can be found at http://www.nature.gov.kg/lawbase/index.htm.

[4] The documents below are described in the main ESMF document for the Sustainable Rural Water Supply and Sanitation Development Project.

[5] Dated June 16, 1999 #53 (with amendments and additions dated February 4, 2002 #22; June 11, 2003 # 101; August 11, 2004 # 113; August 6, 2005 # 124; April 27, 2009 # 131).

[6] Dated June 16, 1999 # 54 (with amendments and additions dated June 11, 2003 # 102; February 26, 2007 # 21)

[7] Dated May 8, 2009 # 151 (with amendments and additions dated March 6, 2012 # 19)

[8] Dated January 14, 1994 # 1423- XII

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT/MITIGATION PLAN

Environmental and Social Elements	**Impacts and risks**	Proposed mitigation measures[9]	Institutional responsibility for mitigation (Cost of mitigation activities)[10]	Monitoring
Construction period				
Physical Environment				
Noise	***During the construction phase,*** sources of temporary noise will be the engines of construction and road equipment. Noise levels can also increase temporarily along the materials supply routes.	The use of noise protection measures should be provided, and the equipment will be equipped with a silencer. Application of vibrator equipment compliant with standards and vibration- and noise-protection equipment. Equipment will work from 08.00 a.m. to 06.00 p.m. only, no operations will be carried out during night hours. During operations, covers of engines and generators, air compressors and other driving mechanisms should be closed; equipment should be located at the maximum distance from residential premises. Noise levels during the construction phase, considering that day-time operations only are planned, will not exceed the existing sanitary standards on maximum and equivalent noise levels. There will be no sources of noise *during the operational phase*.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item	Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.
Pollution Soil and water pollution	Pollution of soil and water by the product (sediment) of water treatment or during leakage detection; pollution of	Use proper agreed placement sites only. Basic proper construction norms and standards applied during the construction period	Criteria / specifications to be incorporated into bidding and contract documents.	Field technical supervision engineer of ARIS is responsible to monitor and supervise the

[9] Activities requiring financial expenses are to be included in BoQ.

[10] Cost of mitigation activities is defined by a contractor in relevant items in bidding documents.

	water with oil products from machinery use The following types of work will be carried out during the construction phase: - earthworks: cut and fill, backfill, levelling; - construction equipment operation; - solid waste generation;	Daily checks of machinery of leaking of oil; ban to wash machinery at construction site. Topsoil removal for further use during restoration works Landscaping in accordance with the project.	It is not considered as a separate cost item	activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.
Air Quality (dust generation)	Dust emissions during retrofitting activities would be minor and temporary. Air pollutant emissions are expected from: - motor vehicles; - electric arc welding; - levelling.	Dust prevention measures and good housekeeping practices such as water spraying to prevent dust and use of curtains and screening of the construction area. Use of masks, work gloves and clothes by workers. All vehicles delivering dusty construction materials to the site or removing debris will be enclosed and covered to prevent release of dust. Limitation of the speed of vehicles and selection of relevant transportation routes for minimization of impact on the receptors sensitive to dust. Equipping the machinery transporting granular materials with removable canvas covers. Supply of cement to construction sites in pre-pack hermetic packages. The equipment will be used in certain operations only and will not be present at the construction site all the time. Operation of vehicles with defective fuel system exceeding the norms of toxicity of exhausted gases is not allowed. Burning of construction and domestic waste at working area is prohibited.	Criteria / specifications to be incorporated into bidding and contract documents. Irrigation of dirt roads with water (wet dust suppression of in-site roads and sites) is considered as a separate cost item in bill of quantities.	Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.

		It is needed to ensure cleanliness of adjacent area, not allowing construction waste to minimize dusting and contamination. All emissions will be temporary and short in duration. It should be noted that construction of facilities will not be simultaneous, but will be carried out consecutively on a step-by-step basis—one facility after another. Therefore, air pollutant emissions during the construction phase will not exceed the existing standards. No pollutant emissions will take place ***during the operational phase***.		
	Use of calcium hypochlorite (bleach powder).	During construction, no chlorine will be used, so the impact is ruled out. During the operational phase, there can be an impact on people who will work with chlorine directly (in the work area). INSTRUCTION *On Purchase, Sale, Storage, Accounting and Transportation of Highly Toxic Substances,* approved by Resolution #513 of the Government of the Kyrgyz Republic of September 21, 1999	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.	
Water resources	Types of impacts: carry-over of solids with river water at worksites, accidental spills of petroleum products from operating equipment, waste generation (domestic solid waste).	***During the construction phase***, surface waters of the Dzhelamysh River will be impacted by earthworks (laying drainage systems). To prevent surface runoff from entering the water intake structures, the tops of wells will be lifted. 1.0 m above the natural ground level, with the construction of protective embankments and impervious surfaces. Working areas with machinery, cement mixers, and fuel tanks are located beyond water protection zones.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.	Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.

		Permits from local authorities are required to carry out operations in the buffer (protection) zone of the Dzhelamysh River. **During the construction phase, no wastewater will be discharged to the water stream.** Wastewater will be discharged to a watertight cesspit. When full, the cesspit will be emptied by a sewage truck and transported directly to municipal wastewater treatment plants in the town of Bishkek for disposal. **During the operational phase**, there will no impacts on surface water sources.		
Construction waste	Contamination of adjacent area, soil, water resources	Separation of all types of waste streams, reuse and recycling wherever possible Disposal of wastes that cannot be reused or recycled, transport and disposal of wastes at designated landfill site and in cooperation with the local waste management company; no open burning Mineral waste from construction and dismantling works should be separated from common waste and organic, liquid and chemical waste through sorting and keeping in special containers. All documents on waste removal and disposal should be maintained properly as a proof of appropriate management of waste at the site. As for domestic waste, installation of collection tanks and timely removal of waste should be arranged by local SES agencies.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item	Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.
Construction hazardous waste	Some construction debris may contain asbestos	Detailed impact mitigation measures are discussed in Section 6.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item Contractor shall develop site-specific measures	The contractor needs to train their workers on how to assess presence of asbestos containing materials and to establish a procedure of its safe removal using proper protection equipment, storage without breaking in air-tight containers

			where requirements to ACM and asbestos waste will be contained.	and management by an authorized agency or company. Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.
Chance findings	Damage and degradation of site structures	In case of chance finds or other significant discoveries during excavation works stop all construction works and inform relevant authorities prior to proceeding		Contractor and Site Supervision Engineer.
Setting up of construction site and removal of site upon completion of works	Possible disturbances decommissioning	Plan to decrease disturbance to surroundings and neighbors (including plans to ensure proper traffic management on access roads to site) Fencing off the site or access to site with proper safety signs After completion of works, site will be restored to previous conditions and all wastes will be cleared in line with the provisions of this ESMP, all machinery will also be removed from site.	Negligible costs Contractor costs	Will be further defined with specifications in the design documents Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.
Tree and shrub removal during pipeline installation	Trees and shrubs will be cut down or trimmed along the pipeline routes only after all necessary permits from local environmental agencies are obtained, in coordination		Costs are included in EBOQ (Environmental Bill of Quantities)	Contractor

	with local authorities and with due regard to compensatory planting. All permits will be obtained before the start of construction. In the event of cutting municipal trees, there will be compensation in the form of seedlings (the amount for compensation is in the BoQ).The contractor will give seedlings to AO, and they will be planted in the places where the AO points out. In the event of cutting private trees, the RAP will be prepared according to OP 4.12. If there will be cutting of trees of several owners, it will be possible to prepare a single RAP for subproject.			
Topsoil removal	Topsoil removal, transportation, stockpiling and storage at designated location for further use in rehabilitation of disturbed lands.		Costs are included in EBOQ (Environmental Bill of Quantities)	Contractor
General issues	Regular inspections Trainings for staff (workers), safety trainings, other trainings WB safeguards trainings for local authorities, contractors and communities will be continued under SRWSSDP.			Contractor Local authorities and communities (AO, CDWUU) ARIS
Social aspect				
Safety of workers and population	Industrial accidents	Local inspections controlling construction works and environmental safety and local population should be properly notified on forthcoming project works. Local communities will be properly notified on works by means of publications and /or notices in mass media and/or bill boards in public places (and at work sites). All permission required by legislation for use of waste landfill, as well as permissions from sanitary inspection etc. in construction and rehabilitation works at this site, have been obtained. All works will be carried out though safe and discipline methods to minimize negative impact from industrial process on population and environment. Individual protective means should meet safety standards (obligatory application of helmets,	Contract organizations	ACSD Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks. Representative of contractor is responsible to execute the mitigation measure. Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.

		protective face masks, when needed, protective glasses, safety belts and boots). Sites will be provided with proper information boards and signs informing the workers about the rules and norms of works to be followed.		
Aesthetics and landscape	Landscape alterations	Use of landscaping methods; minimization (where possible) of major excavations (deep cuts, high fills)	Contractor	Проектный институт ARIS
Land Acquisition and Involuntary Resettlement	Demolition of buildings, resettlement in connection with land withdrawal for construction	Use of procedures outlined in World Bank's OP 4.12 Involuntary Resettlement	The overall coordination of the project will be provided by ARIS which will oversee all resettlement planning and coordinate all issues relating to the compensation. ARIS will collaborate closely with the local self-government bodies: aiyl okmotu and raion state administration bodies. ARIS is responsible for preparation of RAP. The Ministry of Finances will pay compensation for land and assets of PAPs as stipulated in the RAP.	ARIS
Human communities	Suspension of utility services	Timely notification of communities about planned cutoffs; rapid restoration of utility services	Contractor	
	Gender	Equal participation and representation of women throughout the project implementation	Local government bodies ARIS	ARIS

		No less than 30% of meeting/hearing participants will be women. Under the project, it will be suggested to communities that village water committees should be established, with no less than 30% of women included as committee members.		
	Poverty	A subsidy strategy will be developed under the project to connect low-income households to water systems. This strategy will be introduced under each subproject.	Ayil Okmotu (AO) Municipal enterprise on water supply/ CDWUU under ARIs support	ARIS
	Potential social resistance to tariff increase	Social mobilization, awareness raising (welfare activities, community consultations, development and implementation of outreach campaigns). Tariffs will be developed with due regard to the views of communities gathered during public consultations.	Ayil Okmotu (AO) Municipal enterprise on water supply/ CDWUU under ARIs support	ARIS
	Limited capacities of local authorities	The project allows for a range of capacity building activities and technical assistance to local authorities.	ARIS (under Component 3)	ARIS
	Actual delay in implementation	Delays in the implementation of construction work can cause some discontent. In such cases, explanatory work will be conducted with local communities.	Ayil Okmotu (AO) Contractor ARIS	ARIS
Sourcing of labor and implications of any potential labor influx will be closely monitored by the safeguards consultant and ARIS. Civil works contractors will be advised to recruit necessary labor, where feasible, locally. Labor recruited from outside the community where civil works will be done will abide by a 'code of conduct'.				
Operation period				
Proper Operations		Ensure use of environmentally acceptable fuels Regular technical maintenance Ensure all attests and certificates have been acquired in particular for fire protection and monitoring of emissions/concentrations in air Ensure proper, efficient use of water resource, and avoid water losses, leakages and abusive consumptions – install, operate and periodically verify the water meters for each water user.		Operator of CDWUU, Local authorities (rrepresentative of AO)

5. MONITORING PLAN

Environmental Monitoring Plan

What parameter is subject to monitoring?	**Where** will monitoring of parameter be carried out?	**How** will monitoring of parameter be carried out/type of monitoring equipment	**When** will monitoring of parameter be carried out- frequency	**Monitoring cost**[11] What cost of equipment or expenses of contractor required to conduct monitoring?	**Institutional responsibility for monitoring**	**Date of commencement**
Noise from vehicles and equipment	At the construction and disposal site	Portable noise meters	Continuous	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost items)	1. Inspection of construction sites is carried out by ARIS to ensure compliance with ESMP. 2. State inspectors of Architecture and construction supervision department (ACSD) will supervise fulfillment of design solutions in construction and installation works or reconstruction of facilities, quality of construction materials, structures, and participate in commissioning of completed construction facilities. 3. State ACSD carrying out state environmental supervision have a right to supervise in established procedure on presentation of official identification papers in compliance with environmental provisions, normative quality, environmental protection activities in project implementation. NGO, local authorities (AO, CDWUU), CDWUU operator	After takin over of site possession by contractor .
Soil and water pollution	At construction site	Visual	Continuous			
Air (dust generation)	At and near the construction site	Portable measuring devises	Weekly			
Transport (parking in designated areas, car washing)	At and near the construction site	Visual	Continuous			

[11] Activities requiring financial expenses are to be included in BoQ.

Construction waste (waste storage and disposal)	At construction site	In accordance with the plan and observation	In accordance with the plan but at least weekly			
Decommissioning of construction site	At construction site	Visual	In accordance with the plan			
Safety of workers	At construction site	Visual	Continuous			

6. COLLECTION, STORAGE, TRANSPORTATION AND DISPOSAL OF ASBESTOS-CONTAINING WASTES.

Removal of materials that contain asbestos will be carried out in line with the local legislation, including construction standards, work safety issues, air borne emissions of hazardous pollutants and disposal of waste and hazardous waste (in the event that there is no local legislation, the Directive 2003/18/EC of the European Parliament will be used, that amends and supplements Directive of the Council 83/477/EEC on worker protection from workplace asbestos exposure risks: threshold values of airborne dust particles is 0.1 fiber/cm3; also use the Good Practice Note: Asbestos: Health Issues at Workplace and Community; World Bank). Asbestos materials shall be subject to immediate final disposal/burial under special conditions.

According to Order #885 of the Government of the Kyrgyz Republic *On Hazardous Waste Management in the Kyrgyz Republic* of December 28, 2015, asbestos-containing wastes should be disposed as follows.

The hazardous waste management process (waste lifecycle) consists of the following phases: generation, accumulation (collection, temporary storage, stockpiling), transportation, neutralization, recycling, reuse of recycled products, and disposal.

When asbestos is present at a project site, it should be clearly labeled as a hazardous material. Asbestos-containing materials should not be subject to cutting or breaking as this will result in dust generation. In reconstruction, all workers should avoid crushing/damaging asbestos-containing waste, stockpile such waste at designated locations within the construction site and dispose of it properly afterwards to a special location or landfill.

When asbestos-containing waste is subject to temporary on-site storage, they should be properly contained in leak-tight containers and labeled appropriately as a hazardous material. Safety precautions should be taken to prevent any unauthorized removal of such waste from the site.

Collection and temporary storage of waste

Asbestos waste generation should be minimized by using efficient technologies.

All asbestos-containing materials should be handled and disposed by qualified and experienced personnel only. The personnel should wear appropriate protective equipment (safety masks, gloves and overalls).

The amount of waste stored at the designated site must not be greater than permitted by the standards.

Industrial waste collection sites and access ways must not be blocked up.

When handling asbestos waste, the workers should necessarily wear special protective clothing, gloves and respirators. Prior to removing (if required) asbestos from the site, it should be treated with a wetting agent to minimize asbestos dust emission. Removed asbestos should never be reused.

Keeping foreign items, individual or working clothes, or personal protection equipment, or having meals at waste collection sites is not allowed.

During handling operations, workers must comply with applicable handling requirements and general safety rules. All operations should be carried out mechanically, using labor-saving lifting and transport equipment.

Hazardous wastes should be transported to the landfills by properly equipped vehicles, either own or of a specialized third party carrier. The transport vehicles should be constructed and used in a manner that prevents potential incidents, losses and environmental pollution both on the way to the landfill and when transferring waste from one vehicle to another. All activities that involve loading, transportation and unloading of waste at main and auxiliary sites should be mechanized and use leak-tight equipment. Opening hazardous waste containers during transportation is prohibited.

Solid and dusty wastes should be transported in special containers or containers fitted with gripping devices for unloading by truck cranes. Transporting unpacked asbestos in open trucks or on flat wagons is not allowed.

Using hooks and other sharp tools in handling operations is not allowed.

No one except the driver and staff members authorized to escort the waste off site is allowed to be in vehicles transporting hazardous waste. The drivers of vehicles that will transport asbestos waste must be trained in safe transport requirements.

All operations in connection with loading, transport, unloading and disposal of waste must be mechanized. The waste must be transported in a way to prevent transportation losses and environmental impacts.

Disposal of asbestos waste

Asbestos waste must be disposed to landfills for municipal solid waste or unrecycled industrial solid waste.

7. SUPERVISION AND REPORTING

Field technical supervision engineer must be at the site at all times. In addition, safeguard specialist or infrastructure engineer of ARIS visits construction sites at least once a month in order to supervise fulfillment of ESMP during subproject implementation. More visits may be required if any issues are identified. If there are topical environmental issues, ARIS should continue its supervision during facility operation.

After site monitoring visit report of safeguard specialist should be submitted by coordinator of project In the event of non-compliance with environmental protection measures, a statement specifying the remedial period for contractor should be drawn up.

«Environmental protection» section will be included in regular Progress Reports prepared by field technical supervision engineer and delivered to ARIS. The section should contain compressed information and briefly describe monitoring activities as well as any arising issues and the ways to address them.

The final responsibility for the implementation of the ESMP remains with the Project Implementation Unit (ARIS), as per the World Bank environmental safeguards, the bidding and contractual documentation will allow for the responsibility of implementing specific mitigation measures to be transferred to the contractor from the PIU.

8. PUBLIC CONSULTATIONS

MINUTES
of
Public hearings to discuss Environmental and Social Management Plan during the rehabilitation of water supply system in Almaluu (Novoye) Kyzyl-Tuu sub-project of Sustainable Rural Water Supply and Sanitation Development Project (SRWSSDP)

Date and venue: Almaluu v. (Novoye)
April 20, 2018

Kerimbekova M. – Safeguards Specialist in her opening statements greeted the participants and introduced ARIS specialists that participated in the project preparation.
Further she made a presentation on social and environmental safety measures provided for the project. She provided detailed information on environmental safety and social protection measures. Environmental and Social Management Plan was presented. The presentation covered the main points of the developed document, objectives, tasks and implementation mechanisms.

The population was provided with full information on Beneficiaries Feedback Mechanism (BFM). This mechanism is a process of receiving prompt, objective information, evaluation and review of appeals (applications, proposals, complaints, positive feedback) related to ARIS projects.
The participants of consultations further discussed contents of the sub-project, expresses their opinion. The following questions were asked:

Question 1: When will the construction of the facility start?
Answer 1: The construction will begin in first half of July 2018.

Question 2: You said that from the head water intake water is delivered by gravity water main to Almaluu v. We have a street Kalinin. This street is located at the top, will the water reach there? Or will it be necessary to put the pump on?
Answer 2: According to the hydraulic calculation, the water will reach all the streets, including Kalinin Street.

Question 3: You mentioned that 70% of the meters will be purchased at the expense of the project, while the remaining 30% will be purchased by the population itself. How much does it cost 1 water meter?
Answer 3: The price of one water meter varies from 1500 to 2500 soms.

Question 4: Where will the water meter be installed?
Answer 4: The water meter will be installed in the manhole.

Question 5: At whose expense will the household connections be made?
Answer 5: Household connections will be made at the expense of the households.

Question 6: Thus, the population will have to lay the pipes from manhole to their houses at their own costs. What it the cost for these works
Answer 6: The prices for materials are floating. During the construction works specialists under Component 3 will conduct a number of activities on tariff setting and household connections,

Question 7: What will be the tariff for water?
Answer 7: **The** tariff will be calculated, the local self-government bodies will calculate and set the tariff using a methodology they will be trained on; this issue will also be discussed with the aiyl kenesh.

Question 8: How will we pay for water, to whom /where should we pay money?
Answer 8: The Municipal Water Supply Enterprise will be established Under AO, it will be responsible for the collection of water charges. The bill will be issued.

Question 9: Will there be an opportunity for local people to be hired by the Contractor that will built water supply system?
Answer 9: Civil works contractors will be advised to recruit necessary labor, where feasible, locally. Labor recruited from outside the community where civil works will be done will abide by a 'code of conduct'.

Question 10: Will all social facilities be connected to the water supply?
Answer 10: In accordance with the design, all social facilities will be connected to water system.

Question 11: Who will pay for connecting social facilities?
Answer 11: Connections of social facilities will be made at the expense of project.

Question 12: Which pipes will be laid? What material?
Answer 12: According to the project the pipes will be polyethylene.

Question 13: What is the guarantee period of the system?
Answer 13: The guarantee period provided by the construction contractor is 1 year. According to the standards the design and estimate documentation is developed for 20 years.

Question 14: Who will supervise safeguard measures during the works?
Answer 14: Inspection of construction sites is carried out by ARIS to ensure compliance with ESMP. State inspectors of Architecture and construction supervision department (ACSD) will supervise fulfillment of design solutions in construction and installation works or reconstruction of facilities, quality of construction materials, structures, and participate in commissioning of completed

construction facilities. State ACSD carrying out state environmental supervision have a right to supervise in established procedure on presentation of official identification papers in compliance with environmental provisions, normative quality, and environmental protection activities in project implementation

Question 15: If roads are damaged during construction, who will rehabilitate them?
Answer 15: In case of road damage during the construction of the system, they will be rehabilitated at the expense of the project.

Question 16: In case of any damage of watersupply system in the future who will rehabilitate it and at whose expenses.
Answer 16: The Municipal Water Supply Enterprise under AO will take the responsibility.

THE DECISION TAKEN:

Participants of the public hearing supported the subproject for rehabilitation of water supply system in Almaluu village (Kyzyl-Tuu subproject) and acknowledged it as a vital one to ensure the uninterrupted supply of clean drinking water to the residents of Almaluu village.
ESMP was approved by the residents the subproject area.

The head of Kyzyl-Tuu aiyl okmotu **Nurmambetov Z.**

Safeguards Specialist: **Meerim Kerimbekova**

ПРОТОКОЛ
Общественных слушаний по обсуждению
Плана управления окружающей и социальной средой при реабилитации системы водоснабжения в селе Алмалуу (Новое) подпроекта Кызыл-Туу в рамках Проекта устойчивого развития сельского водоснабжения и санитарии (ПУРСВС).

Место и время проведения: с. Алмалуу (Новое)
20 апреля 2018 г.

Керимбскова М.– специалист по мерам безопасности, открыла слушания, поприветствовав приглашенных и представила сотрудников АРИС, участвовавших в подготовке проекта.
Далее представила презентацию о мерах социально-экологической безопасности, предусмотренных в проекте. Подробно рассказала об экологической безопасности, социальных мерах защиты. Был представлен разработанный План управления окружающей и социальной средой. В презентации подробно были освещены основные моменты разработанного документа, цели, задачи, механизмы реализации.
Населению была представлена полная информация о Механизме обратной связи (МОС). Механизм обратной связи (МОС) является процессом получения оперативной, объективной информации, оценки и рассмотрения обращений (заявлений, предложений, жалоб, запросов, позитивных отзывов), связанных с проектами АРИС.
Далее, участники консультаций активно обсуждали содержание подпроекта открыто высказывали свои мнения. Были заданы следующие вопросы

Вопрос 1: Когда начнутся строительные работы?
Ответ 1: Строительство начнется примерно в середине июля 2018.

Вопрос 2: Вы сказали, что от головного водозабора вода самотеком отводится водоводом в село. У нас в селе есть улица Калинина. Эта улицу расположена вверху, будет ли туда доходить вода? Или надо будет ставить насос?
Ответ 2: Согласно гидравлического расчета вода будет доходить до всех улиц, включая улицу Калинина.

Вопрос 3: Вы упомянули, что 70 % счетчиков будет закуплено за счет проекта, а остальные 30% будет закупать само население. Сколько стоит примерно 1 счетчик?
Ответ 3: Цена одного счетчика варьируется от 1500 до 2500 сом.

Вопрос 4: Где будет располагаться счетчик?
Ответ 4: Счетчик будет располагаться в колодце.

Вопрос 5: За чей счет будут домовые подключения?
Ответ 5: Домовые подключения будут за счет населения.

Вопрос 6: Значит протягивать трубу от колодца до дома будет само население и за свой счет. А сколько стоит провести подомое подключение от колодца?
Ответ 6: Цены на материалы в настоящее время колеблются. Во время строительства специалистами по Компоненту 3 будет проведен ряд мероприятий по тарифообразованию и подключению домохозяйств.

Вопрос 7: Какова будет цена за воду, каков тариф?
Ответ 7: Тариф будет рассчитываться, органы местного самоуправления будут рассчитывать и устанавливать тариф по методике, по которой будет проводиться обучение, это будет также обсуждаться с айыльным кенешем.

Вопрос 8: Как мы будем платить за воду, куда сдавать деньги?
Ответ 8: При АО будет создано Муниципальное предприятие по водоснабжению, оно будет отвечать за сбор оплаты воды. Будет приходить квитанция на оплату.

Вопрос 9: Возможен ли найм на работу местных жителей подрядной организацией, которая будет строить систему водоснабжения?

Ответ 9: Подрядчикам, привлекаемым для осуществления общестроительных работ, будет рекомендовано набирать необходимую рабочую силу, по мере возможности, на местном уровне. Рабочие, нанятые за пределами сообщества, где будут осуществляться строительные работы, должны соблюдать Нормы поведения

Вопрос 10: Все ли социальные объекты будут подключены к системе водоснабжения?
Ответ 10: Согласно разработанному проекту все социальные объекты будут подключены к системе водоснабжения.

Вопрос 11: За чей счет будет подключение социальных объектов?
Ответ 11: подключение социальных объектов будет за счет проекта.

Вопрос 12: Какие трубы будут проложены? Из какого материала?
Ответ 12: Согласно проекта трубы будут прокладываться полиэтиленовые.

Вопрос 13: Каков гарантийный период системы водоснабжения?
Ответ 13: Гарантийный срок, который дает строительная подрядная организации составляет 1 год. Согласно нормативов, ПСД разрабатывается на 20 лет.

Вопрос 14: Кто будет контролировать меры безопасности во время строительства?
Ответ 14: Инспекция строительной площадки осуществляется со стороны АРИС для обеспечения соответствия с ПУОСС. Государственные инспекторы Департамента архитектурно-строительного надзора (ДАСН) будут проводить надзор за выполнением проектных решений в ходе строительных и установочных работ либо в ходе реконструкции объектов, за качеством строительных материалов, сооружений. Они будут участвовать при сдаче в эксплуатацию завершенных объектов строительства. ДАСН, осуществляющий государственный экологический надзор, имеет право на надзор в установленном порядке после предоставления соответствующих идентификационных документов согласно экологическим положениям, нормативам, мероприятиям по охране окружающей среды в ходе реализации проекта.

Вопрос 15: Если будут разрушены дороги во время строительства кто будет их восстанавливать?
Ответ 15: В случае разрушения автодорог при строительстве системы, они будут восстановлены за счет проекта.

Вопрос 16: В дальнейшем, в случае каких либо поломок системы водоснабжения кто будет проводить ремонт и за чьи деньги?
Ответ 16: За это будет отвечать МПВ при АО.

РЕШИЛИ:

Участники общественных слушаний поддержали проект «Реабилитация системы водоснабжения в селе Алмалуу», как жизненно важный для бесперебойного обеспечения чистой питьевой водой жителей айыл окмоту.
ПУООС был одобрен жителями подпроекта.

Глава аыйл окмоту Кызыл-Туу

Специалист по мерам безопасности: **Керимбекова М.**

Секретарь:

СПИСОК

участников общественных слушаний по обсуждению
Плана управления окружающей и социальной средой (ПУОСС)
при реабилитации системы водоснабжения в селе Алмалуу

с.Алмалуу 20 апреля 2018г.

№ п/п	Ф.И.О. участника	Организация/Должность	Подпись
1	[illegible]	Глава Кызыл-Булу а/о	[signature]
2	[illegible]	педагог	[signature]
3	Тагаева К.		[signature]
4	Саидиеева А.	педо. пенсионер	[signature]
5	[illegible]	-"-	[signature]
6	Кадырова [illegible]	-"- -"-	[signature]
7	[illegible]	д/х	[signature]
8	[illegible]	д/х	[signature]
9	Касымова Рахима	пенсионер	[signature]
10	Джубоев Улан	—	[signature]
11	Мамасеитов [illegible]	—	[signature]
12	[illegible]	фермер	[signature]
13	[illegible]	[illegible]	[signature]
14	[illegible]	—	[signature]
15	Абдумомунов А	[illegible]	[signature]
16	Исраилов А		[signature]
21	Эрмекбоев А	[illegible]	[signature]
22	Усенов Нурбек	к/х	[signature]
23	Касымалиев Б	к/х	[signature]
24	Атакулова А	д/х	[signature]
25	Коксомоева М	д/х	[signature]
26	Абдыкеева А	д/х	[signature]
27	Боризинов С	к/х	[signature]
28	Алматова Д	д/х	[signature]
29	Кулубаев И	к/х	[signature]
30	Кабылова	пенсионер	[signature]
31	Умарова О.М.	д/х	[signature]
32	Жаныкулова Г.	д/х	[signature]

СПИСОК

участников общественных слушаний по обсуждению Плана управления окружающей и социальной средой (ПУОСС) при реабилитации системы водоспабжении в селе Алмалуу

с.Алмалуу **20 апреля 2018г.**

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35	Ануешин Ю.В.	0550686618	