



**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**  
**Kyzyl-Tuu subproject (Malovodnoe village)**

**January 2018**

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## 1. INTRODUCTION. DESCRIPTION OF THE PROJECT AREA, WATER SUPPLY SYSTEM.

### Introduction

The objective of Sustainable Rural Water Supply and Sanitation Development Project (SRWSSDP)<sup>1</sup> 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 Assessment<sup>2</sup>, 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 villages 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 Malovodnoye 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 574 households with total population of 2314 people in the village. The number of cattle is 1421, small cattle - 2612, horses – 186, pigs-194. The following municipal objects are located in the village: secondary school; boarding school; First Aid Point (FAP) village club.

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:

<i>Absolute maximum temperature, t °C</i>	<i>+42°C</i>
<i>Design temperature of the coldest five-day period</i>	<i>-23°C</i>
<i>Average temperature of the coldest period</i>	<i>-10,6°C</i>
<i>Average relative air humidity at 15:00: of the coldest month of the year</i>	<i>63%</i>

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<sup>1</sup> 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)

*of the hottest month of the year*

31%

*Annual precipitation*

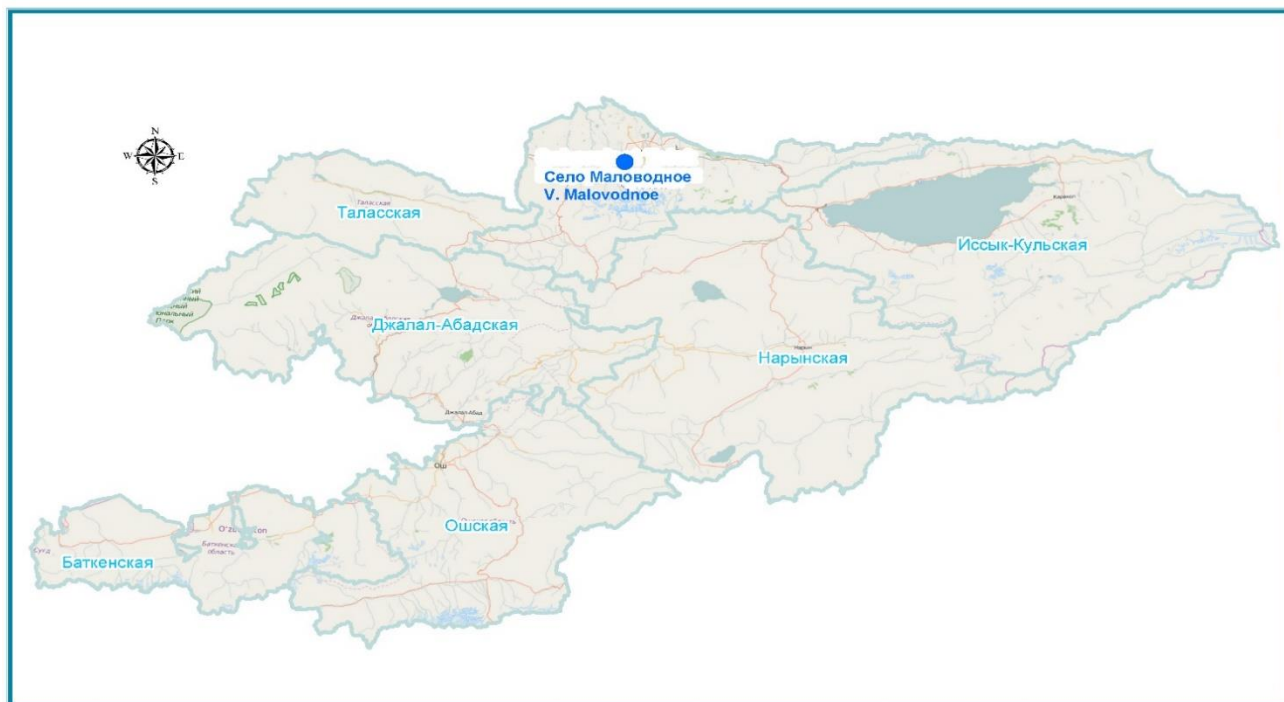
471 mm

*Maximum penetration depth of freezing level in the ground*

100 cm

*Seismicity of the area*

9 points



### **Water supply system**

In 1966, in Malovodnoye village a borehole (depth– 90,9m) was drilled on the water intake site, and another one - in 1971 (depth – 120m). The following facilities are located at the water intake: a reservoir for 100m<sup>3</sup> of water, a lodge, a transformer substation. Water intake is fenced.

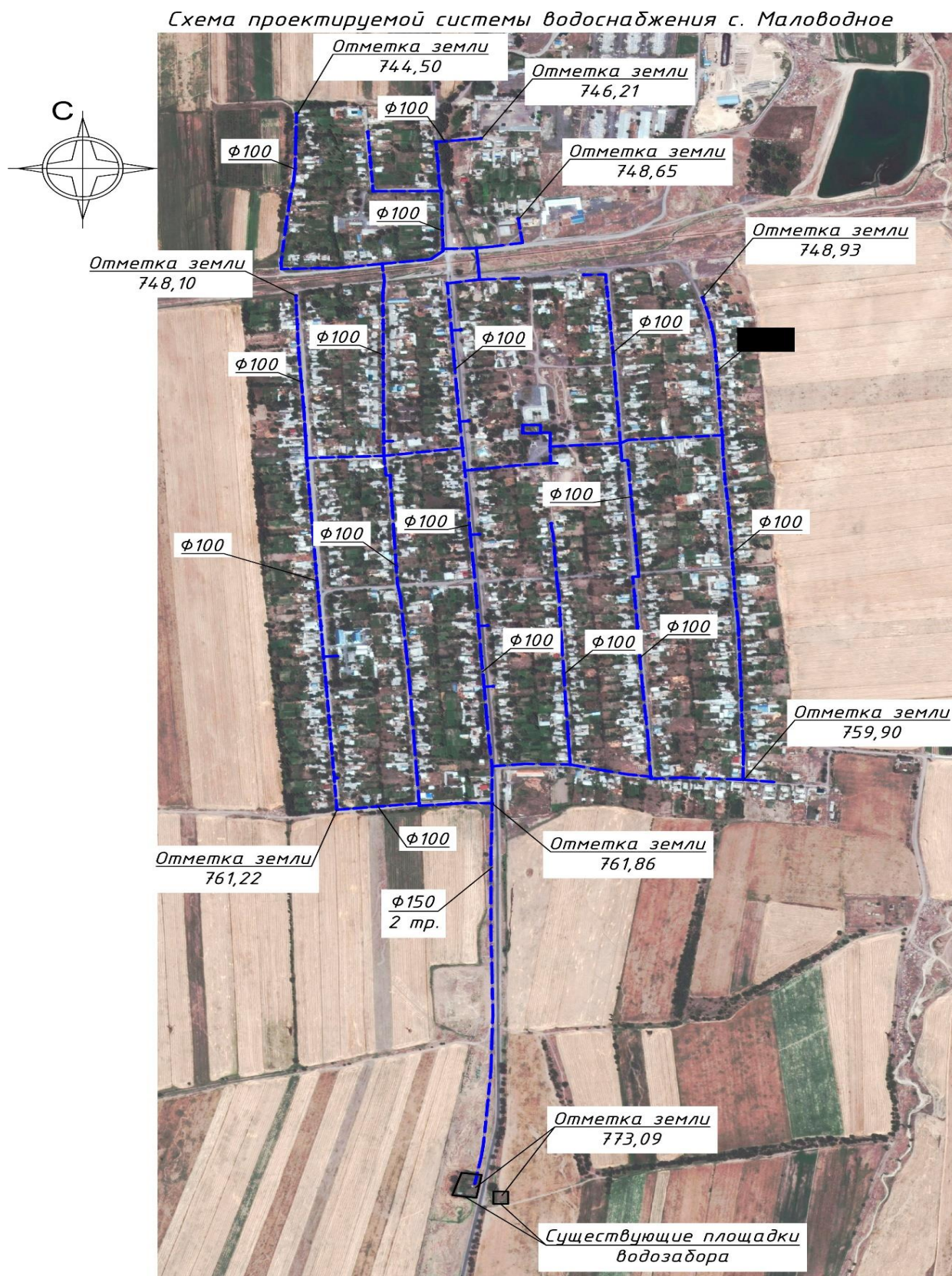
At present, reservoir is not included into the work process, the water is fed by deep-water pumps directly to three water mains that transport it to the upper part of Malovodnoye village located up to the railway.

Below the railway there is a water intake with two boreholes. The second borehole 2 was drilled in 1991 to replace the first, previously used for water supply of the cattle complex. According to preliminary information the second borehole is equipped with pump ЭЦВ8-25, which operates all day round delivering water to the lower part of Malovodnoye village (below the railway).

Thus, for today the village network is practically divided into 2 parts, each with its own underground source of water supply. The water supply network of Malovodnoye village was built in the late 1960s. The network is made of asbestos-cement pipes with diameters 150mm and 100mm. Total length of the network is 10300 m. The network is equipped with 52 manholes.

In general, the water supply network is in an unsatisfactory condition, all the wells are littered with garbage, many of them do not have slabs and hatches. Many parts of the network have become unusable. There is not a single working tap-stand (stand-pipe) in the village, regulating valves in the manholes are in unsatisfactory condition. Almost all yards in the village have private connections. There are no prospects for expanding the water supply network in Malovodnoye village.





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

### **Planned activities:**

1. Rehabilitation of 2 existing boreholes (1 – working, 1 – standby) through cleaning it by sand pumper, airlift washing, replacement of the existing submersible pump for a new energy efficient one with  $Q=68$  l/s,  $H=45$ m and with efficiency not less than 71%.
2. To adjust the speed of a pump shaft, the pump is equipped with an external frequency converter
3. Installation of disinfection system-UV treatment
4. Construction of a water transmission line using PE 100 Ø 150 mm pipes; pressure is 6 bar, length is 915 m
5. Onsite pipework using PE 100 Ø 110, 90 mm pipes; pressure is 6 bar, total length is 10 960 m.

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 Malovodnoye village 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 aspects**

*Demographic data.* The summative demographic data is as following: target population is 2314 people, including 1186 men and 1128 women. The total number of households is 574. The main business activities are farming, agriculture. Women in the village are housewives mostly (about 80%).

Ethnic composition: Kyrgyz-1382, Russians-430, Uighurs-283, Karachai-136 other nationalities-83. 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.

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. 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.

Section 4 describes social impact minimization measures.

### **Grievance redress mechanisms.**

ARIS will use corporate system for managing grievances and appeals from citizens. Guidelines (Regulations) developed to set procedures for managing grievances and appeals, delineate responsibilities between ARIS officials and specify follow-up measures. This Guideline covers all programs and projects implemented by ARIS, and all ARIS' staff and consultants without exception are to adhere by the requirements of this Guideline.

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

People can use Beneficiary Feedback Mechanism (BFM) to submit complaints, suggestions and recommendations concerning the ARIS and project related activities in writing or orally, meanwhile ARIS and its staff are obliged to accept and register these in accordance with the provisions of this Guideline.

Beneficiary Feedback Mechanism will be available for project stakeholders to submit questions, comments, suggestions and/or complaints, or provide any form of feedback on all project-funded activities.

### **3. ENVIRONMENTAL LEGISLATION**

The main normative documents governing the environmental protection activities under Kyzyl-Tuu subproject are<sup>3</sup>:

- **The Constitution of the Kyrgyz Republic 2010**
- **The Law “On Environmental Protection”<sup>4</sup>**
- **Law on Environmental Expertise<sup>5</sup>**
- **The Law of KR “On General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic”<sup>6</sup>**
- **The Law of KR “On Water”**
- **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>.

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<sup>3</sup> The documents below are described in the main ESMF document for the Sustainable Rural Water Supply and Sanitation Development Project.

<sup>4</sup> 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).

<sup>5</sup> Dated June 16, 1999 # 54 (with amendments and additions dated June 11, 2003 # 102; February 26, 2007 # 21)

<sup>6</sup> Dated May 8, 2009 # 151 (with amendments and additions dated March 6, 2012 # 19)



#### 4. ENVIRONMENTAL AND SOCIAL MANAGEMENT/MITIGATION PLAN

Environmental and Social Elements	Impacts and risks	Proposed mitigation measures <sup>7</sup>	Institutional responsibility for mitigation (Cost of mitigation activities) <sup>8</sup>	Monitoring
Construction period				
<b>Physical Environment</b>				
Noise	<p><b><i>During the construction phase</i></b>, sources of temporary noise will be the engines of construction and road equipment.</p> <p>Noise levels can also increase temporarily along the materials supply routes.</p>	<p>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.</p> <p>Equipment will work from 08.00 a.m. to 06.00 p.m. only, no operations will be carried out during night hours.</p> <p>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.</p> <p>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.</p> <p>There will be no sources of noise <i>during the operational phase</i>.</p>	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p> <p>It is not considered as a separate cost item</p>	<p>Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks.</p> <p>Representative of contractor is responsible to execute the mitigation measure.</p> <p>Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.</p>
Pollution Soil and water pollution	Pollution of soil and water by the product (sediment) of water treatment or during leakage detection; pollution of	<p>Use proper agreed placement sites only.</p> <p>Basic proper construction norms and standards applied during the construction period</p> <p>Daily checks of machinery of leaking of oil; ban to wash machinery at construction site.</p>	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p>	<p>Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks.</p>

<sup>7</sup> Activities requiring financial expenses are to be included in BoQ.

<sup>8</sup> Cost of mitigation activities is defined by a contractor in relevant items in bidding documents.



	<p>water with oil products from machinery use</p> <p>The following types of work will be carried out during the construction phase:</p> <ul style="list-style-type: none"> <li>- earthworks: cut and fill, backfill, levelling;</li> <li>- construction equipment operation;</li> <li>- solid waste generation;</li> </ul>	<p>Topsoil removal</p> <p>Landscaping in accordance with the project.</p>	<p>It is not considered as a separate cost item</p>	<p>Representative of contractor is responsible to execute the mitigation measure.</p> <p>Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.</p>
<p>Air Quality (dust generation)</p>	<p>Dust emissions during retrofitting activities would be minor and temporary. Air pollutant emissions are expected from:</p> <ul style="list-style-type: none"> <li>- motor vehicles;</li> <li>- electric arc welding;</li> </ul>	<p>Dust prevention measures and good housekeeping practices such as water spraying to prevent dust and use of curtains and screening of the construction area.</p> <p>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.</p> <p>Limitation of the speed of vehicles and selection of relevant transportation routes for minimization of impact on the receptors sensitive to dust.</p> <p>Equipping the machinery transporting granular materials with removable canvas covers. Supply of cement to construction sites in pre-pack hermetic packages.</p> <p>The equipment will be used in certain operations only and will not be present at the construction site all the time.</p> <p>Operation of vehicles with defective fuel system exceeding the norms of toxicity of exhausted gases is not allowed.</p> <p>Burning of construction and domestic waste at working area is prohibited.</p>	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p> <p>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.</p>	<p>Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks.</p> <p>Representative of contractor is responsible to execute the mitigation measure.</p> <p>Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.</p>

		<p>It is needed to ensure cleanliness of adjacent area, not allowing construction waste to minimize dusting and contamination.</p> <p>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.</p> <p>Therefore, air pollutant emissions during the construction phase will not exceed the existing standards.</p> <p>No pollutant emissions will take place <i>during the operational phase</i>.</p>		
Water resources	Borehole rehabilitation works	<p>During the construction period, there will no impacts on surface water sources.</p> <p>Refuse from excavations beside groundwater occurrence.</p> <p>Working areas with machinery, cement mixers, and fuel tanks are located beyond water protection zones.</p> <p>During the operational phase, there will be no impact on surface waters.</p> <p>Water for drinking water supply will be taken from the existing network.</p>	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p> <p>It is not considered as a separate cost item.</p>	<p>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.</p> <p>Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.</p>
Construction waste	Contamination of adjacent area, soil, water resources	<p>Separation of all types of waste streams, reuse and recycling wherever possible</p> <p>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</p> <p>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.</p>	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p> <p>It is not considered as a separate cost item</p>	<p>Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks.</p> <p>Representative of contractor is responsible to execute the mitigation measure.</p> <p>Safeguard specialist and infrastructure engineer of ARIS</p>

		<p>All documents on waste removal and disposal should be maintained properly as a proof of appropriate management of waste at the site.</p> <p>As for domestic waste, installation of collection tanks and timely removal of waste should be arranged by local SES agencies.</p>		are responsible for overall oversight.
Construction hazardous waste	Some construction debris may contain asbestos	Detailed impact mitigation measures are discussed in Section 6.	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p> <p>It is not considered as a separate cost item</p> <p>Contractor shall develop site-specific measures where requirements to ACM and asbestos waste will be contained.</p>	<p>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 and management by an authorized agency or company.</p> <p>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.</p> <p>Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.</p>
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	<p>Plan to decrease disturbance to surroundings and neighbors (including plans to ensure proper traffic management on access roads to site)</p> <p>Fencing off the site or access to site with proper safety signs</p>	<p>Negligible costs</p> <p>Contractor costs</p>	<p>Will be further defined with specifications in the design documents</p> <p>Field technical supervision engineer of ARIS is responsible</p>

		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.		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 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.		Costs are included in EBOQ (Environmental Bill of Quantities)	Contractor
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	Contract organizations	ACSD  Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks.

		<p>mass media and/or bill boards in public places (and at work sites).</p> <p>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.</p> <p>All works will be carried out through safe and discipline methods to minimize negative impact from industrial process on population and environment.</p> <p>Individual protective means should meet safety standards (obligatory application of helmets, protective face masks, when needed, protective glasses, safety belts and boots).</p> <p>Sites will be provided with proper information boards and signs informing the workers about the rules and norms of works to be followed.</p>		<p>Representative of contractor is responsible to execute the mitigation measure.</p> <p>Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.</p>
Aesthetics and landscape	Landscape alterations	Use of landscaping methods; minimization (where possible) of major excavations (deep cuts, high fills)		
Human communities	Demolition of buildings, resettlement in connection with land withdrawal for construction	Use of procedures outlined in World Bank's OP 4.12 Involuntary Resettlement		
	Suspension of utility services	Timely notification of communities about planned cutoffs; rapid restoration of utility services		
	Gender	<p>Equal participation and representation of women throughout the project implementation</p> <p>No less than 30% of meeting/hearing participants will be women.</p> <p>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.</p>		ARIS



	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.		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.		ARIS
	Limited capacities of local authorities	The project allows for a range of capacity building activities and technical assistance to local authorities.		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'.				
<b>Operation period</b>				
Proper Operations		<p>Ensure use of environmentally acceptable fuels</p> <p>Regular technical maintenance</p> <p>Ensure all attests and certificates have been acquired in particular for fire protection and monitoring of emissions/concentrations in air</p> <p>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.</p>		Operator of CDWUU, Local authorities (representative of AO)

## 5. MONITORING PLAN

### Environmental Monitoring Plan

<b>What</b> parameter is subject to monitoring?	<b>Where</b> will monitoring of parameter be carried out?	<b>How</b> will monitoring of parameter be carried out/type of monitoring equipment	<b>When</b> will monitoring of parameter be carried out- frequency	<b>Monitoring cost<sup>9</sup></b> What cost of equipment or expenses of contractor required to conduct monitoring?	<b>Institutional responsibility for monitoring</b>	<b>Date of commencement</b>
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 taken 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			

<sup>9</sup> 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/cm<sup>3</sup>; 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 will visit 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 critical environmental issues, ARIS should continue its supervision during facility operation.

After the site monitoring visit a short safeguards implementation report of safeguard specialist should be submitted to the project's coordinator. 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**

ESMP public consultations were held on December 13, 2017 in Malovodnoye village. Heads of AO, staff of CDWUU, headmen, elderlies, deputies of aiyi kenesh and local population took part in public hearings. The total number of participants was 55 people, 20 of them women, that is, 36%.

The interested parties and the population were provided with information on the technical part of the upcoming subproject, as well the information on the possible social and environmental impacts of the planned construction / rehabilitation of the water supply system.

Information on Beneficiaries Feedback Mechanism was disseminated to all beneficiaries of subproject. ARIS provided information on the scope of Beneficiaries Feedback Mechanism, eligibility criteria for submission of the appeals, procedure of appeal submission (where, when and how), deadlines of response, as well as the privacy principle and the right to submit anonymous appeals.



**Minutes**  
**of the public hearings on discussion of Environmental and Social Management Plan**  
**for rehabilitation of water supply system in Malovodnoye village**  
**Sustainable Rural Water Supply and Sanitation Development Project (SRWSSDP)**

**Venue and date:** Malovodnoe village  
December 13<sup>th</sup>, 2017, 10:00 a.m.

**Nurmambetov Z.O** – head of Kyzyl Tuu Ayil Okmotu opened the meeting and welcomed the invitees and introduced ARIS staff participated in project preparation.

**Kerimbekova M.** – safeguard specialist, made a presentation on social and economic safety measures provided in the project. She narrated a detailed information on environmental safety and social security measures. The developed Environmental and Social Management Plan was presented.

The people were provided with complete information on Beneficiary Feedback Mechanism (Grievance Redress Mechanism).

**Question 1:** Are there any construction works being performed in any village at the present time?

**Answer 1:** Yes, the construction works under this project are performed in 2 subprojects in Chui Oblast – Sultan and Kurama subprojects, in 2 subprojects in Osh Oblast – Kyrgyz-Ata, Togotoi, in total the construction is performed in 4 subprojects.

**Question 2:** In case some small private shop or kiosk is situated on the water supply line, and it is required to tear it down, are there any compensations paid in this case?

**Answer 2:** When the project was design, all the resettlement or land allocation risks were considered, in your village as per the Detailed design estimates there are no cases of resettlement expected, such cases were taken into account during the design development stage. However, if such cases appear during the construction process, we will make an effort to adjust the design. In case the adjustment is impossible, the Resettlement Action Plan will be developed and the compensation will be paid to an individual impacted by the project.

**Question 3:** I have a garden situated by the road. Will it be impacted by the project? And what kind of trees will be cut down?

**Answer 3:** according to the project no private gardens will be affected, the municipal trees situated along the road might be cut down. Cutting of trees, bushes and pollarding will be performed strictly on the routing way after receiving permission documents from environmental controlling authorities in agreement with local self-government (LSG) considering the compensatory greening. Permission documents must be received before the construction works begin.

**Question 4:** To avoid water freezing in the stand pipe of the courtyard water pumping well we open the tap and hence the water is constantly running. If we install water meters, the water charges will be high due to discharges. How to solve this problem?

**Answer 4:** Some households do not have a chance to be individually connected and they install the courtyard water pumping wells. This issue was considered, and the technical conditions for household connection to water supply system were developed. Here we have the scheme for connection and courtyard well installation with detailed description. Inside the courtyard well the drain valves are envisaged, they are designed to drain the water from stand pipe of the well, thus, freezing can be avoided.

**Question 5:** We water our gardens and yards with drinking water these days. If to install water meters then the water charges will be high. What is to be done, as the charges will be collected for water consumed for watering, it will be very expensive, right?

**Answer 5:** Drinking water is not intended to be used for watering, there is an irrigation system designed for this purpose. Any volume of water discharge will be paid according to approved tariff, using the meter.

**Question 6:** You said that 70% of water meter devices is paid by the project, 30% by population. Who exactly shall pay for these 30%?

**Answer 6:** In different subprojects there are different ways to address this issues, it is determined by AO after preliminary discussion with local community.

**Question 7:** How can we contact with Beneficiary Feedback Mechanism (Grievance redress Mechanism)?

**Answer 7:** by trust line (call 24/7, a call will be recorded); WhatsApp (system of online text messaging service for mobile devices with audio and video communication support); social media (Facebook, Odnoklassniki); ARIS web-site: [www.aris.kg](http://www.aris.kg); oral and written appeals, received during the working meeting on the site; incoming correspondence delivered to ARIS front office; incoming correspondence by e-mail.

**Question 8:** When the construction works will start?

**Answer 8:** It is planned to start construction works in Spring 2018 after completion of tender procedures and contractor organization selection. Until then Ayil Okmoty shall collect all the required documents.

**Question 9:** What will be the tariff for water?

**Answer 9:** Tariff will be calculated individually for each subproject with taking into account all discharges and be approved by local government (kenesh).

**Question 10:** What measures will be taken to minimize the impact on the local population? Are there any measures to minimize the noise and dusting?

**Answer 10:** Within the frameworks of the project there will a strict selection of the contractor organization, the key condition will be the availability of new equipment of Euro-3 standard, also the machinery must be equipped with noise damper, there will be limitations/restriction for performing construction works using heavy equipment during the night time, the works will be performed only in working days, during the standard labor hours. The measures for dust suppression will be the moisturizing of construction area, speed limitation for transport vehicle and selection of suitable transport routes. Solid-domestic wastes will be stored in special containers with closed cover.

**Malovodnoe village citizen:** We understand, that there will be some inconvenience during the construction works, but we fully support the project and glad that there are measures provided for social and environmental safety.

**Kyzyl-Tuu AO head:** We would like to express our appreciation. Thank you for choosing our village for this project, much thanks to donors and ARIS for hard work. From my side, I would like to assure you, that we will give every assistance in project implementation, and provide all permission documents in due time.

#### **THE DECISION TAKEN:**

Participants of the public hearing supported the subproject for rehabilitation of water supply system in Malovodnoye village and acknowledged it as a vital one to ensure the uninterrupted supply of clean drinking water to the residents of Kyzyl-Tuu aiyl okmotu.

ESMP was approved by the residents the subproject area.

**The head of Tolok aiyl okmotu**

**Nurmambetov Z.O**

**Safeguards Specialist:**

**Meerim Kerimbekova**

**ПРОТОКОЛ**  
**Общественных слушаний по обсуждению**  
**Плана управления окружающей и социальной средой при реабилитации системы**  
**водоснабжения в селе Маловодное в рамках**  
**Проекта устойчивого развития сельского водоснабжения и санитарии (ПУРСВС).**

**Место и время проведения:** с. Маловодное  
13 декабря 2017 г. в 10:00 часов

**Нурмамбетов З.О.** – глава айыл окмоту Кызыл-Туу открыл слушания, поприветствовал приглашенных и представил сотрудников АРИС, участвовавших в подготовке проекта.

**Керимбекова М.** – специалист по мерам безопасности, 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. Населению была представлена полная информация о Механизме обратной связи (МОС).

**Вопрос 1:** На данный момент ваш проект реализует стройку в каких-либо селах?

**Ответ 1:** Да, в рамках данного проекта строительные работы ведутся в 2 подпроектах Чуйской области - подпроект Султан и Курама, в 2 подпроектах Ошской области - Кыргыз-Ата Тоготой, итого в 4 подпроектах ведутся строительные работы.

**Вопрос 2:** В случае если по трассе водопроводной сети будет расположен какой-либо частный магазинчик или павильон, и будет необходимость его снести, в этом случае будут ли выплачены компенсации?

**Ответ 2:** При проектировании были учтены все риски переселения или отвода земли, в вашем селе по Проектно-сметной документации не предполагается какое-то переселение, все подобные моменты были учтены при проектировании. Но если в ходе строительства будут такие случаи, мы постараемся избежать этого путем корректировки проекта. В случае невозможности корректировки будет составляться План действия переселения и будут выплачены компенсации Лицу подвергнутому воздействию проекта.

**Вопрос 3:** У меня есть сад, который расположен около дороги, заденет ли проект мой сад? И Какие деревья будут вырубаться?

**Ответ 3:** Согласно проекта никакие частные сады мы не задеваем, возможна будет вырубка муниципальных деревьев, расположенных вдоль дорог. Вырубку деревьев и кустарников, подрезку крон, проводить строго по пути прокладки трасс только после получения разрешительных документов в территориальных природоохранных органах по согласованию с ОМСУ с учетом компенсационного озеленения. Получение разрешительных документов до начала строительных работ.

**Вопрос 4:** Во избежание замерзания воды в стояках дворовых колонок мы открываем краник и, следовательно, вода течет постоянно. А если установим приборы учета воды оплата за воду будет высокой ввиду расходов воды. Как решить данную проблему?

**Ответ 4:** У некоторых домохозяйств нет возможности провести домовое подключение и устанавливают дворовые колонки. Данный вопрос был учтен, были разработаны технические условия по подключению домохозяйств к системе водоснабжения. Здесь имеется схема подключения и устройства дворового колодца с детальным описанием. Внутри дворового колодца предусмотрены спускные краны, которые предназначены для спуска воды со стояка колонки, таким образом можно избежать замерзания.

**Вопрос 5:** Сейчас мы поливаем свои сады и огороды питьевой водой. Если будут установлены приборы учета воды, и мы будем продолжать поливать, то оплата за воду будет высокой. Как нам быть, ведь оплата будет взиматься и за расход на полив, будет очень дорого?

**Ответ 5:** Питьевая вода не предназначена для полива, для этого существует ирригационная система. Любой расход воды будет оплачиваться согласно утвержденному тарифу по счетчику.

**Вопрос 6:** Вы сказали, что 70% приборов учета воды оплачивает проект, 30% население. Кто именно должен платить эти 30%?

**Ответ 6:** В разных подпроектах разные пути решения, это определяет само АО предварительно обсудив это с местным сообществом.

**Вопрос 7:** Как можно обратиться в МОС?

**Ответ 7:** Вы можете обратиться в МОС через телефон доверия (звонок можно осуществлять круглосуточно, разговор будет записываться); WhatsApp (система мгновенного обмена текстовыми сообщениями для мобильных устройств с поддержкой голосовой и видеосвязи); социальные сети (Фейсбук, Одноклассники); веб-сайт АРИС: [www.aris.kg](http://www.aris.kg), устные или письменные обращения, полученные в ходе рабочих встреч на местах; входящая корреспонденция нарочно в приемную АРИС; входящая корреспонденция по электронной почте.

**Вопрос 8:** Когда начнутся строительные работы?

**Ответ 8:** Строительные работы планируются начать с весны 2018 года после завершения тендерных процедур и отбора подрядных организаций. До этого времени Айыл Окмоту необходимо получить все необходимые документы.

**Вопрос 9:** Какой будет тариф за воду?

**Ответ 9:** Тариф будет рассчитываться индивидуально для каждого подпроекта с учетом всех расходов и будет утверждаться местным кеңешом.

**Вопрос 10:** Какие меры будут предприняты для минимизации воздействия на местных жителей? Предусмотрены ли меры по минимизации шума и пыли?

**Ответ 10:** В рамках проекта будет строгий отбор подрядных организаций, важнейшим условием будет наличие новой оснащенной техники со стандартом Евро-3, также техника будет оснащена глушителями, будут ограничения строительных работ с помощью тяжелой техники возле жилых районов в ночное время, выполнение работ строго по будним дням, в течение стандартного рабочего времени. Будут применять меры по пылеподавлению путем увлажнения территорий строительства, ограничение скорости движения транспортных средств и выбор подходящих транспортных маршрутов. Твёрдо-бытовые отходы будут храниться в специальных контейнерах с закрытыми крышками.

**Житель села Маловодное:** Мы понимаем, что будут какие-то неудобства во время строительных работ, но мы полностью поддерживаем проект и очень рады что предусмотрены мероприятия по социально-экологической безопасности.

**Глава АО Кызыл-Туу:** Хотим выразить свою благодарность. Спасибо что наше село попало в проект, спасибо за усердную работу донорам, АРИС. Со своей стороны, мы хотим заверить вас, что всячески будем содействовать реализации проекта, вовремя предоставлять все разрешительные документы.

**РЕШИЛИ:**

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

Глава аймак окмоту Кызыл-Туу



Нурмамбетову З. О.

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 Маловодное

с. Маловодное

13 декабря 2017г.






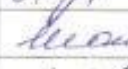









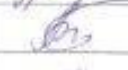








№ п/п	Ф.И.О. участника	Организация/Должность	Подпись
1.	Исхаимо А.	пред. по с/х МР депутат	
2.	Богданов Н. У.	пенсионер	
3.	Солтобаев А.	пенсионер	
4.	Таблетбаев С. Т.	бух. с/х МР с. Новое	
5.	Туркунаев А. Б.	к/х "Азиз" с.с.	
6.	Бизжаев К. М.	к/х "Иман"	
7.	Иргатов К. Р.	к/х "Жанш"	
8.	Забелкина А. Н.	к/х "Мирный"	
9.	Мирнова Т.	к/х "Ремесло"	
10.	Эргашев А.	с/х МР, водит	
11.	Торокулов Т.	пред. с/х МР "Маловодное" с/х МР	
12.	Токоев А.	ул. Итоев	
13.	Орозбаева И.	агроном с. Новое	
14.	Варжава В.	садовник	
15.	Жудашов К. С.	депутат. А.В.	
16.	Сатлыкова А. Н.	ул. Металле	
17.	Подколзин В. Р.	ул. Кирова	
18.	Сагдиев Р. С.	ул. Кирова	
19.	Намсанов Л.	ул. Украинская 6	
20.	Боровиков С. А.	ул. Маловодное	
21.	Иурнебелов Т.	ул. Ленина	
22.	Аманжолов К. А.	ул. Ленина Молодежи Аксусвет	
23.	Султанов И.	ул. Ленина	

# СПИСОК

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

с. Маловодное

13 декабря 2017г.

№ п/п	Ф.И.О. участника	Организация/Должность	Подпись
24	Бабатханова	ул. Новая 5/1	
25	Смурзакан	ул. Бейшенев 3/2	
26	Кудамов А	ул. Ленина 21	
27	Кудрашев А	ул. Прогресса 6/2	
28	Пучиняев А	ул. Украинская 2/6	
29	Бадел	новос 10	
30	Абдылдаев У	ул. Украинск	
31	Асанмуратов Н	онлайн сср	
32	Толмачева	ул. Бейшенев 52	
33	Тамасов Р	ул. Украинская 59	
34	Осмоновалиев Н	ул. Бейшенев 27	
35	Бекмуратова Т	ул. Бейшенев 15	
36	Бадирдинова А	ул. Бейшенев 52	
37	Мисирова А.Р.	ул. Бейшенев 52	
38	Джумагазиев Д	ул. Косово	
39	Джумагазиев Т	ул. Косово	
40	Мамини В.А	ул. Новая 33	
41	Бейшенбаева А.М	ул. Кирова 52	
42	Самата А.А	П.С.С.С. ул. Магистраль	
43	Мамини Т.М	ул. Ленина 52	
44	Тов А.В	ул. Новая 2	
45	Чурбакова А.А	ул. Новая 46	
46	Мамини В.А	ул. Новая 21	
47	Самата Бейшенбаева Д	ул. Кирова	

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