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

Alekseevka subproject

November 2017

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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 Alekseevka 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

The sub-project "Alekseevka" comprises the Alekseevka village of the Jaiyl Aiyl Okmotu (AO) of the Jaiyl Rayon of the Chui Oblast. The village is located 3km north to the Karabalta City. There are 1916 households with total population of 7318 people in the village. The number of cattle is 1429, small cattle - 2154, horses – 142, pigs-241.

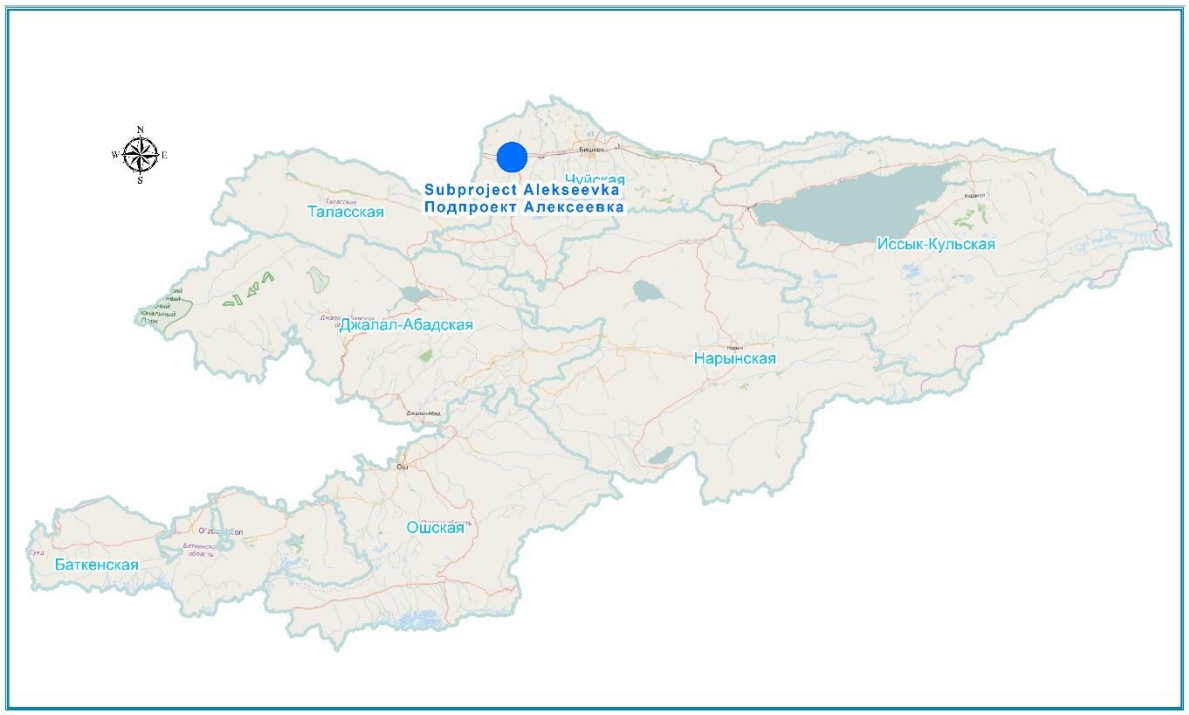
The following municipal objects are located in the village: secondary school of the village; kindergarten; library; village club; health center of Family Group Practitioners; administrative premises of the AO; the Rayon Water Management Department of the Jaiyl Rayon; madrasah.

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.

Absolute minimum of temperature	-39ºC
Absolute maximum of temperature	+42ºC
Average temperature of the hottest month	+29.5ºC
Specified temperature of the coldest five-day period	-23ºC
Average temperature of the coldest period	-11ºC
Duration of the period with daily average temperature ≥8ºC	166 days

[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)

Average relative air humidity at 1pm:	
of the coldest month of year	74%
of the hottest month of year	33%
Annual precipitation	419mm
Weight of the snow cover on 1m^2 of the surface of the earth	*14 kgf/m^2*
Wind speed on 10m height above the surface of the earth	20mps
Maximum depth of penetration of zero isotherm under natural snow	105cm
Seismicity of the Rayon	8.5points.



Water supply system

Nowadays, the Alekseevka village has a centralized/piped water supply system. The water supply system in the village was built in the early 1970th. . It is known that the water supply has been constructed in a number of stages. At the time of the study, the source of the water supply were two boreholes from three existing , 150m in depth each borehole, drilled in 1988, 1998 and located within the water intake site.

In winter time, the pumps are operated 24 hours a day. In summer, the boreholes are operated 18 hours during daylight time and for night the pumps are switched off. Due to the lack of irrigation water in the summer, the lower part of the village (below the Bishkek-Chaldybar highway) normally takes water for irrigation from the water supply network. Water treatment is not carried out. Metering of water on the intake site and at consumers is not maintained.

Currently, the condition of the water intake does not comply with the requirements of SNiP 2.04.02-84*: the area of the sanitary protection zone in fact is not fenced; the boreholes are freely accessible; on-borehole facilities (chamber/premises) above the header of boreholes are absent. North and in 100m downstream to the water intake site (and wellfield) there the village's cemetery is located.

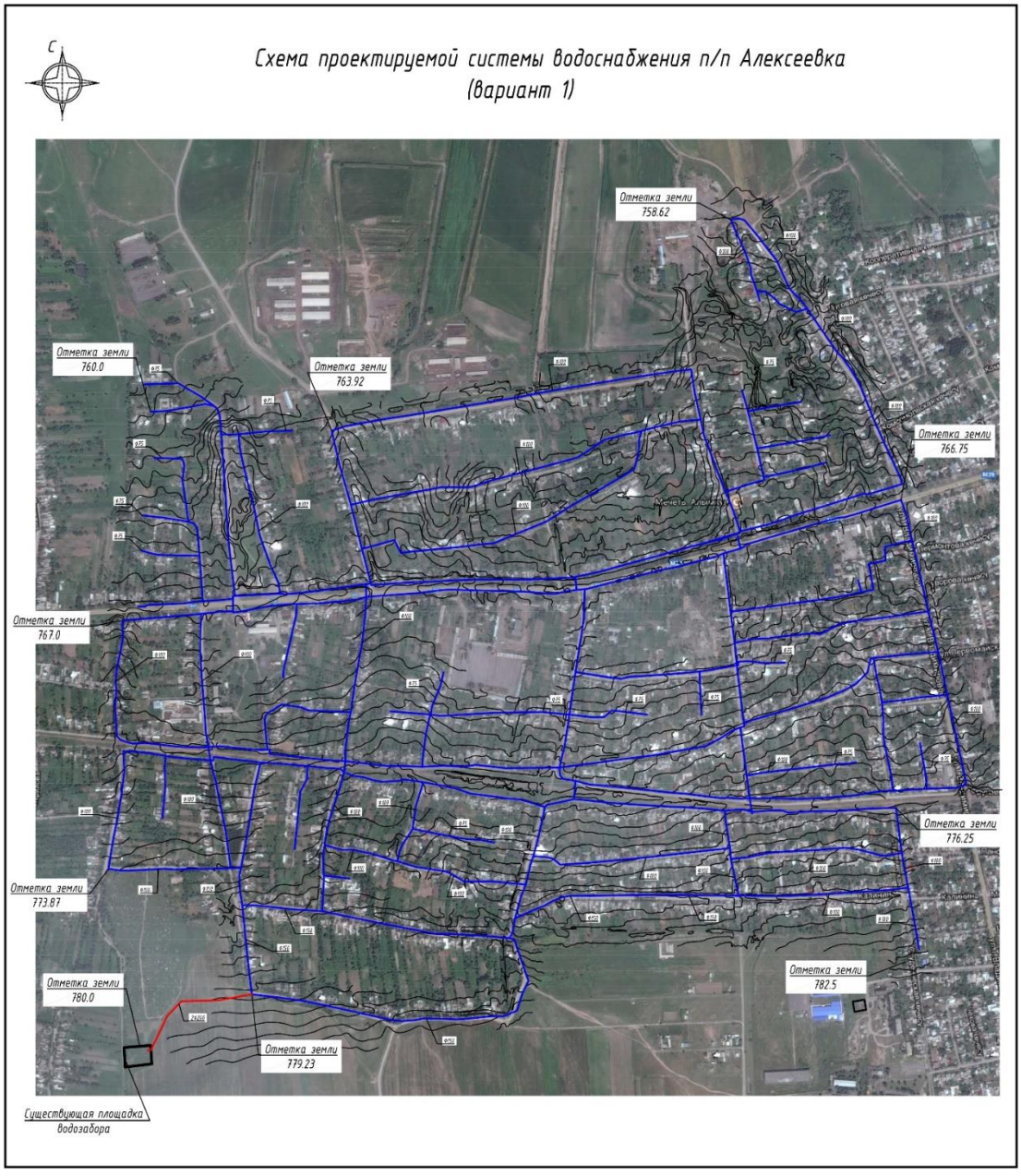
At the time of the survey, in addition to its own boreholes, the Alekseevka village is fed from the water supply system of the Kara-Balta City – it additionally takes 4,800-5,800m^3 water per month (or some 160-193m^3 a day according to water meter) from the Kara-Balta Vodokanal.

Currently, 70% of population of the village has access to the piped water where 97% of them have in-house connections and only remaining 3% take water from tap-stands/stand-pipes. Several streets in the northern (lower) part of the village do not have access to water after the abandoning of the two #2887 (MTM) and #1675 (MTF No.2) boreholes.

The water distribution network is made of polyethylene, asbestos-cement and steel electric-welded pipes. The water supply network in the southern part of the village is in a satisfactory condition, in the northern part of the village, below the Chaldybir-Bishkek highway, the condition of the water supply network is unsatisfactory. The total length of water supply network is 37 km, where about 1.0 km of it was built out of plastic pipes in 2015.

According to available information on the network there are numerous damages, manholes are flooded with water. Locking and regulating valves and tap-stands/stand-pipes in the manholes have become unusable.

Scheme of planned distribution network of the village



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

Planned activities:

1. Rehabilitation of 3 existing boreholes through cleaning it by sand pumper, airlift washing, replacement of the existing submersible pump for a new energy efficient one (with efficiency not less than 76,2%, Q=85.8 l/s, H=52m and N=18,9 kW).
2. The wellheads will be equipped with backflow valves that prevent from flowing of water between boreholes as well as the impact of the hydraulic shock on the pump equipment as a result of the pump shutdown.
3. Construction of chlorination building with installation of equipment for chlorination.
4. Construction of pressure-regulating tanks (2 tanks), 500m^3 capacity each.
5. Construction of the second lift pumping station The maximum productivity of the unit in the mode of domestic and drinking water supply (two operating pumps) is 144 m^3/h; with the head of 16.0m; with the power consumption of 13.2 kW; and the overall efficiency of 47.3%.
6. Onsite pipework using PE 100 Ø 75, 110, 160 mm pipes; pressure is 6,3 bar, total length is 34 247m.

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

Alekseevka 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 Alekseevka 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 aspects

Demographic data. The summative demographic data is as following: target population is 7318 people, including 3777 men and 3541 women.The total number of households is 1916. The main business activities are farming, agriculture. Women in the village are housewives mostly.

Ethnic composition: 51% are Kyrgyz, 23% are Russians, and other nationalities are 26%. 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 trigger factors 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 private trees, RAP (in accordance with RPF) will be prepared and implemented before the start of construction.

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 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 <u>all</u> project-funded activities.

3. ENVIRONMENTAL LEGISLATION

The main normative documents governing the environmental protection activities under Alekseevka subproject are[3]:

- **The Constitution of the Kyrgyz Republic 2010**
- **The Law "On Environmental Protection"[4]**
- **Law on Environmental Expertise[5]**
- **The Law of KR "On General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic"[6]**
- **The Law of KR "On Water"[7]**

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

[4] 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).

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

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

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

- **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. ENVIRONMENTAL AND SOCIAL MANAGEMENT/MITIGATION PLAN

Environmental and Social Elements	Impacts and risks	Proposed mitigation measures[8]	Institutional responsibility for mitigation (Cost of mitigation activities)[9]	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 is not provided, 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 08.00 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. So, 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 water with oil products from	Use proper agreed placement sites only. Basic proper construction norms and standards applied during the construction period Daily checks of machinery of leaking of oil; ban to wash machinery at construction site.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a	Field technical supervision engineer of ARIS is responsible to monitor and supervise the activities, including monitoring of potential environmental risks.

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

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

	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;	Topsoil removal Landscaping in accordance with the project.	separate cost item	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;	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. It is needed to ensure cleanliness of adjacent area,	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.

		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***.		
Water resources	Borehole rehabilitation works	During the construction period, there will no impacts on surface water sources. 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 Kara-Balta for disposal. Refuse from excavations beside groundwater occurrence. Working areas with machinery, cement mixers, and fuel tanks are located beyond water protection zones. During the operational phase, there will be no impact on surface waters. Water for drinking water supply will be taken from the existing network.	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 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	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

		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.		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 where requirements to ACM and asbestos waste will be contained.	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. 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 works and inform relevant authorities prior to proceeding		Contractor and Site Supervision Engineer.
Setting up of construction site and removal of site	Possible disturbances decommissioning	Plan to decrease disturbance to surroundings and neighbors (including plans to ensure proper traffic	Negligible costs	Will be further defined with specifications in the design

upon completion of works		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.	Contractor costs	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 with local authorities and with due regard to compensatory planting. All permits will be obtained before the start of construction.		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 mass media and/or bill boards in public places (and at work sites). All permission required by legislation for use of	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.

		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, 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.		Safeguard specialist and infrastructure engineer of ARIS are responsible for overall oversight.
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	Equal participation and representation of women throughout the project implementation 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.		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		ARIS

		subproject.		
	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'.				
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**[10] 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			

[10] 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. PUBLIC CONSULTATIONS

The ESMP public consultations were held on November 30, 2017 in Alekseevka village. Heads of AO, staff of CDWUU, headmen, elderlies, deputies of aiyl kenesh and local population took part in public hearings. The total number of participants was 34 people, 16 of them women, that is, 47%. It was observed very active participation of retired women.

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
Public hearings on the discussion
of Environmental and social management plan for the rehabilitation
of the water supply system in Alekseevka subproject under
Sustainable development of rural water supply and sanitation project (SDRWSP)

Venue and time: Alekseevka village
November 30, 2017, 11:00 a.m.

Mamatov Z.D. - the head of AO Jaiyl opened the hearing, greeted the invited guests and introduced the ARIS staff who participated in preparation of the project.
Kerimbekova M.- safeguard specialist, made a presentation on social and environmental safety measures, provided for in the project. She spoke in detail about environmental safety and social protection measures. A developed Environmental and Social Management Plan was presented.
The population was provided with complete information about the Feedback Mechanism (FBM). The feedback mechanism (FBM) is a process of obtaining operational, objective information, evaluation and review of appeals (statements, proposals, complaints, requests, positive feedbacks) related to ARIS projects.

Question 1: Will new wells be drilled?
Answer 1: According to the developed project, rehabilitation of 3 existing wells is planned.

Question 2: What types of work are envisaged in the project?
Answer 2: According to the project, the following types of work are envisaged: rehabilitation of 3 wells, construction of reservoirs, laying of water conduits and distribution networks within the village.

Question 3: When will the construction work begin?
Answer 3: Construction work is planned to begin in the spring (March) 2018 after completion of tender procedures and selection of contractors. Until then, the Aiyl Okmotu needed to get all the necessary documents.

Question 4: At whose expense will the meters be purchased?
Answer 4: ARIS buys 70% of the meters that the contractor establishes, 30% are purchased by the residents.

Question 5: 7. During construction, the population will stay without water?
Answer 5: During construction, the existing rural water supply system will operate in the same regime, after completion of construction works and disinfection activities, the population will receive water from the new water supply system.

Question 6: In cases of cutting down trees, the contracted organization will take away the cut down trees?
Answer 6: When cutting down municipal trees, all cut down trees will be given to AOs, as they are on their balance sheet. Trees that are on the municipality balance will be cut only if there are appropriate permits. The project covers the costs of compensatory landscaping, the seedlings will be transferred to AO, then they will be planted in those places indicated by AO.

Question 7: Is it possible to install water standpipes?
Answer 7: The installation of street water standpipes is not provided. Households should be connected only through wells, where taps with meters are provided for each household.

Question 8: What will be the tariff for water?
Answer 8: The tariff will be calculated individually for each subproject taking into account all expenses and will be approved by the local kenesh.

Question 9: Here you have presented us this ESMP document, which provides for all activities on environmental and social safety of the project. And who will monitor this?
Answer 9: The technical supervision engineer will be permanently on site and carry out general supervision of the construction site, including monitoring of potential environmental and social risks. The safeguard specialist and the infrastructure engineer of ARIS are responsible for the overall supervision, that is, we will monitor the entire process.

Question 10: Are there any examples of successful use of yard connections in the Kyrgyz Republic?
Answer 10: In Corumdu village in Issyk-Kul oblast, was implemented such a project and the population was connected through meters to the water supply system, which allowed to reduce losses in the water supply system and reduce water consumption. Currently, the CDWUU has laid a water pipeline to connect the neighboring village.

Question 11: How will the quality of work and materials be monitored?
Answer 11: All used pipes are tested in the laboratory of Gosstroy KR, in addition, besides, all laid pipes undergo mandatory hydraulic testing with a coefficient of 1.5. at the construction sites before acceptance of the work performed. All tests are activated by the technical supervision engineers from ARIS and Aiyl Okmotu.

Question 12: What are the obligations of villagers, who will receive water for this project, should they collect money for co-financing?
Answer 12: Co-financing of villagers is not required, but connection to the system will be at your own expense, that is, from the water well to your home / yard.

Question 13: As you know, our village is located along the highway of republican significance. Will there be problems, difficulties with transport routes, will the number of accidents increase?

Answer 13: Thank you, you touched upon a very important aspect, given the location of your village. For safety and health of the personnel and population, the following activities will be carried out: provision of crossings and alternative access roads, development of a traffic management plan, provision of appropriate transport management on access roads to construction sites, installation of warning and prohibitory road signs in hazardous locations,

Question 14: How was our village in the list of your project?
Answer 14: The list of villages was provided by DDWSD under Gosstroi KR, ARIS is an implementing agency that supports the local self-government to fulfill the task of providing the population with drinking water.

Question 15: Is the conservation of the fertile soil layer taken into account in the project?
Answer 15: Yes, these activities are provided. Removal of the soil and vegetable layer, transportation and packing it in cavaliers for storage in specially-designated places with subsequent use for the restoration of disturbed lands.

Question 16: Are all social facilities connected to the water supply system?
Answer 16: According to the developed design, all social facilities will be connected to the water supply system.

Question 17: Is there any risk of depletion of groundwater resources?
Answer 17: The water intake plant design, takes into account not only the actual water needs, but a promising possibility of using groundwater for household needs is also compalsory. The water content of this territory is sufficient given the perspective growth. Fears about the depletion of groundwater reserves are vain.

Question 18: How can I apply to the FBM?
Answer 18: You can contact via: helpline (call can be made around the clock, the conversation will be recorded); WhatsApp (instant messaging system for mobile devices with voice and video support); social networks (Facebook, Odnoklassniki); ARIS website: www.aris.kg; Oral or written appeals received during field working meetings; individual special mail delivery to ARIS reception; incoming messages by e-mail.

Question 19: Can we apply with any questions?
Answer 19: Yes, you can send any questions regarding the project through FBM. All complaints and wishes can be sent through these communication channels.

THE DECISION TAKEN:

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

ESMP was approved by the residents the subproject area.

The head of Jayil aiyl okmotu **Mamaev Z.**

Safeguards Specialist: **Meerim Kerimbekova**

Secretary:

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

Место и время проведения: с. Алексеевка
30 ноября 2017 г. в 11:00 часов

Мамаев З.Д. – глава аыйл окмоту Жайыл открыл слушания, поприветствовав 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). Механизм обратной связи (МОС) является процессом получения оперативной, объективной информации, оценки и рассмотрения обращений (заявлений, предложений, жалоб, запросов, позитивных отзывов), связанных с проектами АРИС.

Вопрос 1: Будут ли пробурены новые скважины?
Ответ 1: По разработанному проекту планируется реабилитация 3-х существующих скважин.

Вопрос 2: Какие виды работ предусмотрены в проекте?
Ответ 2: Согласно проекту, предусмотрены следующие виды работ: реабилитация 3-х скважин, строительство резервуаров, прокладка водоводов и распределяющих сетей внутри села.

Вопрос 3: Когда начнутся строительные работы?
Ответ 3: Строительные работы планируются начать с весны (март) 2018 года после завершения тендерных процедур и отбора подрядных организаций. До этого времени Айыл Окмоту необходимо получить все необходимые документы.

Вопрос 4: За чей счет будут закупаться приборы учета воды?
Ответ 4: АРИС закупает 70% счетчиков которые устанавливает подрядная организация, 30% закупают жители.

Вопрос 5: Во время строительства население останется без воды?
Ответ 5: Во время строительства существующая система водоснабжения села будет работать в том же режиме, после завершения строительных работ и выполнения мероприятий по дезинфекции население получит воду из новой системы водоснабжения.

Вопрос 6: В случаях вырубки деревьев, вырубленные деревья будет увозить подрядная организация?
Ответ 6: При вырубке муниципальных деревьев, все вырубленные деревья будут отданы АО, так как они находятся на их балансе. Вырубка деревьев, находящихся на балансе муниципалитета будет происходить только при наличии соответствующих разрешений. В проекте заложены расходы на компенсационное озеленение, саженцы будут переданы АО, далее они будут высажены в тех местах где укажет АО.

Вопрос 7: Предусмотрена ли установка водоразборных колонок?
Ответ 7: Установка уличных водоразборных колонок не предусмотрена. Домохозяйства должны подключатся только через колодцы, где предусмотрены отводы для каждого домохозяйства со счетчиком.

Вопрос 8: Какой будет тариф за воду?
Ответ 8: Тариф будет рассчитываться индивидуально для каждого подпроекта с учетом всех расходов и будет утверждаться местным кенешом.

Вопрос 9: Вот вы предетавили нам данный документ ПУОСС, в котором предусмотрены все мероприятия по экологической и социальной безопасности проекта. А кто будет следить за всем эти?
Ответ 9: Инженер по техническому надзору будет постоянно находится на месте и осуществлять общий надзор за строительной площадкой, включая мониторинг потенциальных экологических и социальных рисков. Специалист по мерам безопасности и инженер по инфраструктуре АРИС несут ответственность за всеобщий надзор, то есть мы будем контролировать весь процесс.

Вопрос 10: Есть ли примеры удачного применения дворовых подключений в КР?
Ответ 10: В с. Корумду Иссык-Кульской области в свое время был реализован проект и население было подключено через счетчики к системе водоснабжения, что позволило сократить потери в системе водоснабжения и снизить водопотребление. В настоящее время СООПВВ села своими силами проложило водовод для подключения соседнего села.

Вопрос 11: Как будет отслеживаться качество работ и применяемых материалов?
Ответ 11: Все используемые трубы проходят испытание в лаборатории Госстроя КР, кроме того на строительных участках до приемки выполненных работ все уложенные трубы проходят обязательное гидравлическое испытание с коэффициентом 1.5. Все испытания актируются со стороны инженеров по техническому надзору со стороны АРИС и Айыл Окмоту.

Вопрос 12: Чем обязаны жители, которые получат воду по этому проекту, должны ли собирать деньги на софинансирование?
Ответ 12: Со стороны жителей софинансирование не требуется, по подключение к системе будет за свой счет, то есть от водоразборного колодца до своего дома/двора.

Вопрос 13: Как вы знаете наше село находится вдоль автомагистрали республиканского значения. Не будет ли проблем, трудностей с транспортными путями, не увеличится ли количество ДТП?
Ответ 13: Спасибо, вы затронули очень важный аспект, учитывая местоположение вашего села. Для безопасности и здоровья персонала и населения будут проводиться следующие мероприятия: обеспечение переходов и альтернативных подъездных дорог, разработка плана управления транспортным движением, обеспечение соответствующего управления транспортом на подъездных дорогах к строительным площадкам, установка предупреждающих и запрещающих дорожных знаков в опасных местах.

Вопрос 14: Как наше село оказалось в списке вашего проекта?
Ответ 14: Список сел предоставил ДРПВВ при Госстрое КР. АРИС это реализующее агентство, которое помогает местному самоуправлению выполнить задачу по обеспечению населения питьевой водой.

Вопрос 15: Учтено ли в проекте сохранение плодородного слоя почвы?
Ответ 15: Да, данные мероприятия предусмотрены. Снятие почвенно-растительного слоя, транспортирование и укладка его в кавальеры для хранения в специально-отведенных местах с последующим использованием для восстановления нарушенных земель.

Вопрос 16: Все ли социальные объекты будут подключены к системе водоснабжения?
Ответ 16: Согласно разработанному проекту все социальные объекты будут подключены к системе водоснабжения.

Вопрос 17: Существует ли риск истощения запасов подземных вод?
Ответ 17: При проектировании водозаборного сооружения учитываются не только настоящие потребности в воде, но обязательно предусматривается перспективная возможность использования подземных вод на хозяйственно-бытовые нужды населения. Водность данной территории достаточна с учетом перспективного роста. Опасения об истощения запасов подземных вод напрасны.

Вопрос 18: Как можно обратиться в МОС?
Ответ 18: 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: ww.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 19: В МОС мы можем обращаться с любыми вопросами?
Ответ 19: Да, любые вопросы относительно проекта вы можете направлять через МОС. Все жалобы, пожелания можно направить через данные каналы связи.

РЕШИЛИ:

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

Глава Жайылского АО **Мамаев З.Д.**

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 подпроекте Алексеевка**

с.Алексеевка **30 ноября 2017г.**

№ п/п	Ф.И.О. участника	Организация/Должность	Подпись
1	Нуржамова Э А	Жайил А/о спец по соц защите	[signature]
2	Кеңешбек к Ж.	Жайил А/о инс ВУС	[signature]
3.	Джекшамова Б.Б.	Жайил А/о [illegible]	[signature]
4.	Рахманкулова К.	житель с Алексеевка	[signature]
5	Карапашева А.К	айыл окмоту - [illegible]	[signature]
6.	Мамальникова Л.А.	ж. с/о статист	[signature]
7	Горячева Л Ч	зав Алекс. с. б-ой	[signature]
8	Гайкова А.А	пенсионерка	[signature]
9	Харитонова И И	СООППВ председатель	[signature]
10	Дутпекамов Д.Д.	житель с. Алексеевка	[signature]
11	Мырзабеков Т.С.	житель с. Алексеевка	[signature]
12	Молдалиев Т.О	жит. с. Алексеевка	[signature]
13	Жусупов Б Т.	жит. с. Алексеевка	[signature]
14	Мырзакулов Т.А.	жит с Алексеевка	[signature]
15	Манаев З.Д	глава Жайылского а/о	[signature]
16	Гусланов Султан	Житель. С. Алексеевка	[signature]
17	Кирьянцева В	Житель с Алексеевка	[signature]
18	Смолянская Л. С.	Житель (пенсионер)	Смолянская
19	Максимовская Л. И.	житель (пенсионер)	Мак
20	Земляная Н.В	работник СООППВ	[signature]
21	Байтоноков Б.Н	гл. специалист а/о	[signature]
22.	Абдыраимов О.М.	староста с. Жайыл.	[signature]
23	Мосолыд З.В	м/с.	МЗВ

СПИСОК

участников общественных слушаний по обсуждению
Плана управления окружающей и социальной средой (ПУОСС)
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с.Алексеевка **30 ноября 2017г.**

№ п/п	Ф.И.О. участника	Организация/Должность	Подпись
24	Батбаева Гулнар Им.	жит. молодежная 13	
25	Люмакова О.Г	зав ОГСЭН Ж.р-на	
26	Асаналиев М.М.	гл. инсп. экотехинс	
27	Смаилов К.О	дворник школы	
28	Эралиев Ж.В	депутат сельского кенеша	
29	Абдокулов А	землеустр-ль	
30	Абдуражмонова	житель с-Алексеевка	
31	Токмурзов А	житель с.Алексеевка	
32	Гайдаров Ш.Л.	пред-сбанса	
33	Керимбекова М.Б.	АРИС специалист по мерам безоп.	
34	Аскарбеков С.	инженер АРИС.	

8. 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.