



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
Chelpek subproject

August 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)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 Chelpek 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 united water supply system “Chelpek” consists of three villages: Tash-Kiya, Chelpek and Burma-Suu. The villages do not have a clear territorial boundary and are united into one residential community with a conventional name “Chelpek”.

The villages are located in Ak-Su region of Issyk-Kul oblast 5 km from Kara-Kol city on the complex relief with a great difference in altitude marks. There are 1583 households with total population of 7378 people in the village. The number of cattle is 1918, small cattle - 9317, horses – 915.

The following municipal objects are located in the village: two secondary schools, two medical centers, post office and mosque. At present time not all the municipal objects are connected to the water supply system.

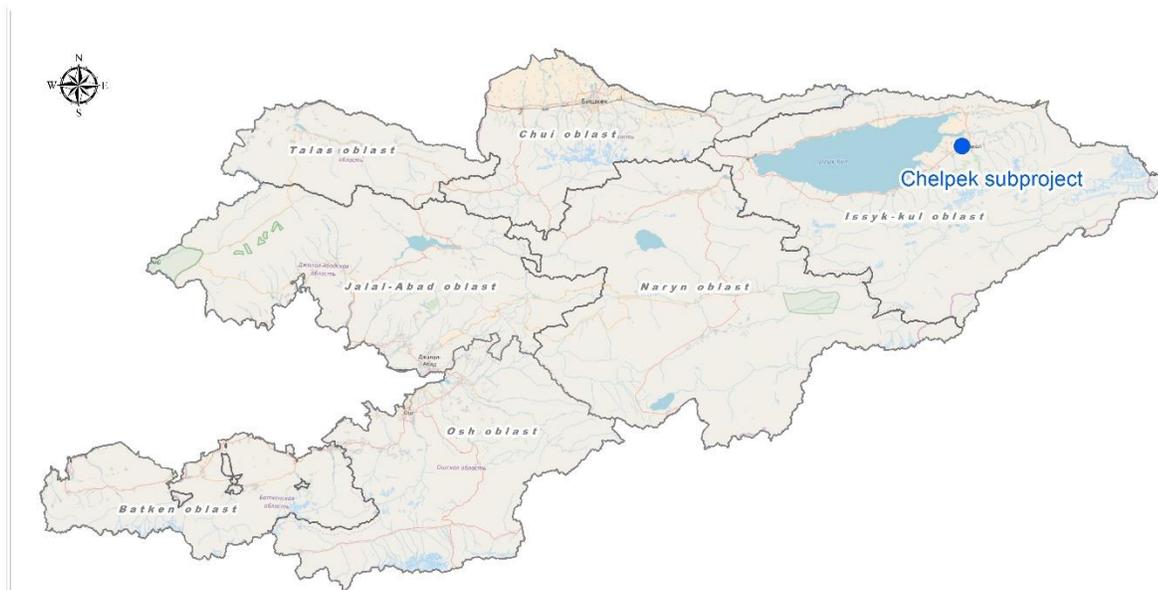
Water at all the municipal objects connected to the water supply system is used only for household needs

According to data of “Kara-Kol” weather station the climatic characteristics of the region are accepted as follows:

<i>Absolute minimum of temperature, t°C</i>	<i>-22°C</i>
<i>Absolute maximum of temperature, t°C</i>	<i>+35°C</i>
<i>Average temperature of the coldest days, t°C</i>	<i>-15,5°C</i>
<i>Average temperature of the coldest period</i>	<i>-12,5°C</i>

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)

<i>Amount of precipitations per year</i>	<i>420 mm</i>
<i>Maximum snow depth</i>	
<i>Absolute average</i>	<i>58 cm</i>
	<i>21 cm</i>
<i>Maximum penetration depth of zero isotherm under natural snow cover</i>	<i>130 cm</i>
<i>Seismicity of the region</i>	<i>9 points</i>



Water supply system

The source of water supply for “Chelpek” and “Burmashu” villages is presented by two underground artesian wells, from where the initial water is supplied through a booster step-up station to the reservoirs site located at the highest mark to the north of the village (this project was implemented in 2014 within the project “Preparation of a detailed design for the water supply system in Chelpek village”).

On the reservoirs site there are:

- Two reservoirs with a volume of 700 m³ (each) designed to store water discharge for two days. The reservoirs are in good state.
- A chlorination plant and a lodge.

On the moment of the inspection the chlorination plant was not in operation (a pump did not operate) and water went to consumers without disinfection.

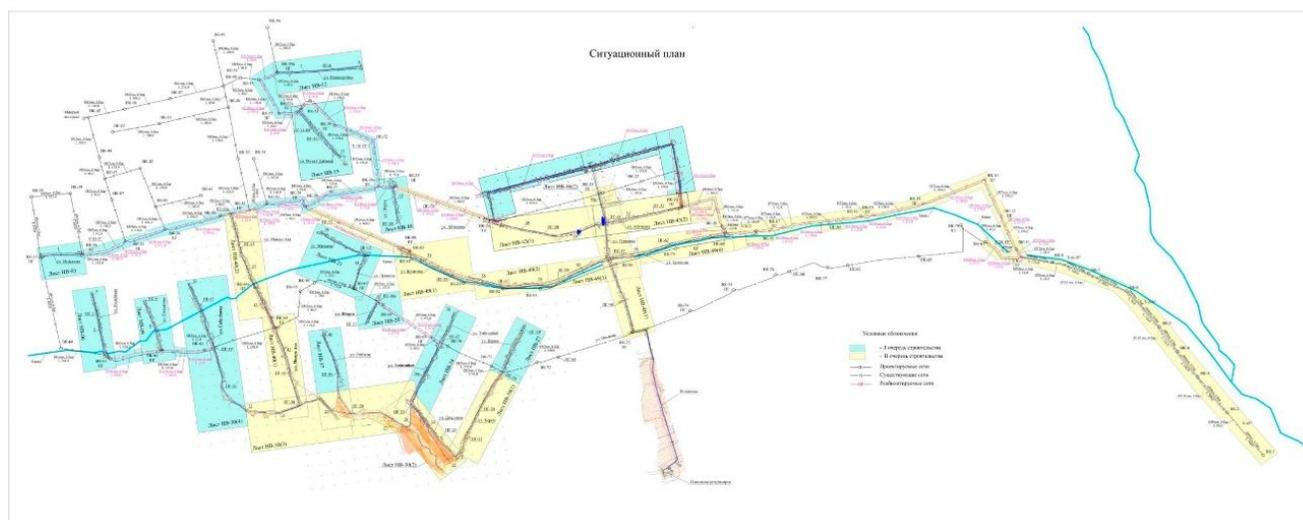
From the reservoirs potable water by two water conduits Ø273x8 mm (constructed in 2014 within the project “Preparation of a detailed design for the water supply system in Chelpek village”) goes to the village distribution network.

The water distribution network of Chelpek village was constructed in 1970. Water was taken by consumers from water columns.

On the moment of the inspection most of the existing distribution water networks of Chelpek village were made of polyethylene pipes Ø63÷90 mm according to the earlier developed project of coaxial laying. Due to the reduced diameter of the existing village network the initial water does not come to all the consumers and people have to use water not meeting the requirements of GOST “Potable water”.

During inspection of that water intake it was revealed that all its objects were in workless conditions, the drain was silty, the reservoir was fully silty. It is not feasible to restore and to rehabilitate this water intake.

Scheme of existing water supply system



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

Planned activities in Chelpek village:

1. Construction of ring network and water pipeline along the streets with total $L=7486$ m.
2. Rehabilitation of water pipelines along the street with total $L = 5497$ m.
3. Rehabilitation of water supply network from WW-32 to WW-35, $L=300$ m.
4. Equipping the existing chlorination plant.

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

Chelpek 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 Chelpek 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 containing materials waste will be collected, transported and finally disposed by applying special protective measures in accordance with the hazardous waste handling standards. See Section 6 for detailed information on disposal of asbestos-containing materials.

Environmental oversight

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

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

SOCIAL RISKS AND IMPACT MITIGATION

Social screening and mitigation

During the social screening, the main risks were identified:

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

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

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

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

Below full information on BFM is provided.

Demographic data. The summative demographic data is as following: target population is 7378 people, including 3731 men and 3647 women. The total number of households is 1583. The main business activities are farming, agriculture. Women in the village are housewives mostly.

Ethnic composition: 81% are Kyrgyz, 17% are Kalmyk, 2%-Russian. 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.

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

The subproject will not impact cultural or national heritage monuments.

Involuntary Resettlement. Land allotment and resettlement issues are covered by the World Bank OP 4.12 Involuntary Resettlement. As for involuntary resettlement, no significant impacts that could require land allotment, economic displacement or physical resettlement have been identified.

Resettlement policy framework (RPF) was prepared for the project. The RPF public consultations were held on including participants from each target rural community. The RPF provides guidance on the preparation of resettlement action plans (RAPs) during project implementation. The final document is published on ARIS site http://www.aris.kg/ru/proekty_aris/realizuemye_proekty/proekt_ustoichivogo_razvitiya_selskogo_vodosp_abzhenija_i_sanitarii/politika_pereselenija

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

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

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

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

INSTITUTIONAL RESPONSIBILITY

№	Responsible Party	Activities
1	Ministry of Finance	In case of lack of replacement land, the Ministry of Finances will pay compensation for land and assets of PAPs as stipulated in the RAP.
2	Municipalities of subprojects	<p>Inform of stakeholders.</p> <p>Fulfill the provisions of agreement.</p> <p>Render of assistance during public consultations.</p> <p>Grievance redress in the course of RPF/RAP implementation.</p>
3	Safeguards Specialist/Consultant	<ul style="list-style-type: none"> • Consultations with PAPs • Identification of PAPs, examination of documents of entitlement and list of affected assets • Preparation of RPF and RAPs allowing for the fact that all expenses for acquisition of land and resettlement will be included in the budgets of the Ministry of Finance • Disclosure of information about RPF and RAP • Implementation of RPF and RAP • Conduction of socio-economic survey of PAP • Monitoring • Submission of information about RPF and RAP to the World Bank • Grievance Management
4	Grievance Redress Mechanism (Beneficiary Feedback Mechanism (BFM))	Obtaining prompt, objective information, evaluating and reviewing appeals (applications, proposals, complaints, requests, positive feedbacks)

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

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

private properties, no private land will be affected because all water transmission and distribution lines will be installed on municipal land.

Conclusion: some private trees will definitely need to be cut; private lands will not be affected.

Grievance Redress Mechanism (Beneficiary Feedback Mechanism (BFM))

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

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

Dissemination of BFM:

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

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

Channels for submitting an appeal.

<ol style="list-style-type: none"> 1. Hotline (calls are received around the clock, the conversation will be recorded); 2. WhatsApp (instant messaging system for mobile devices with voice and video support); 3. Social networks (Facebook); 4. E-mail address: bfm@aris.kg. 5. ARIS website: www.aris.kg 6. Verbal or written appeals received during the on-site working meetings; 7. Incoming correspondence via courier to ARIS reception; 8. Incoming correspondence by e-mail. 	<ol style="list-style-type: none"> 1. Appeals are recorded in the log of BFM incoming correspondence and are considered if the following information is present: <ul style="list-style-type: none"> • Full Name; • address of registration and residence or telephone number; • content of the appeal; • other reference information. 1.1 In case if the appeals were received in the absence of any of the above data, it is recorded in the log of incoming correspondence of the BFM and the sender is notified, and the results of the appeal will be published in the media at the local level, on the ARIS website or made public at the session of the AK. 2. Appeals are entered into the BFM configuration in the IC system for analysis and monitoring. 3. Appeals may be submitted anonymously. Confidentiality shall be insured in all cases, even if the applicant is known, in order to avoid conflicts of interested parties.
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Receiving an appeal. When receiving an appeal, the following is determined:

- Type of appeal
- Category of appeal

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

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

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

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

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

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

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

3 ENVIRONMENTAL LEGISLATION

The main normative documents governing the environmental protection activities under Chelpek subproject are³:

- **The Constitution of the Kyrgyz Republic 2010**
- **The Law “On Environmental Protection”⁴**
- **Law on Environmental Expertise⁵**
- **The Law of KR “On General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic”⁶**
- **The Law of KR “On Water”⁷**
- **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>.

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

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	<p><i>During the construction phase</i>, 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>
Soil pollution	Pollution of soil by using of machinery (straits combustible lubricants), residual material.	Use proper agreed placement sites only. Basic proper construction norms and standards applied during the construction period	Criteria / specifications to be incorporated into bidding and contract documents.	Field technical supervision engineer of ARIS is responsible to monitor and supervise the

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.

	<p>The following types of work will be carried out during the construction phase:</p> <ul style="list-style-type: none"> - earthworks: cut and fill, backfill, levelling; - construction equipment operation; - solid waste generation; 	<p>Daily checks of machinery of leaking of oil; ban to wash machinery at construction site.</p> <p>Topsoil removal for further use during restoration works</p> <p>Landscaping in accordance with the project.</p>	<p>It is not considered as a separate cost item</p>	<p>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>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"> - motor vehicles; - electric arc welding; - levelling. 	<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>		
	Use of calcium hypochlorite (bleach powder).	<p>During construction, no chlorine will be used, so the impact is ruled out.</p> <p>During the operational phase, there can be an impact on people who will work with chlorine directly (in the work area).</p> <p><i>INSTRUCTION On Purchase, Sale, Storage, Accounting and Transportation of Highly Toxic Substances</i>, approved by Resolution #513 of the Government of the Kyrgyz Republic of September 21, 1999</p>	<p>Criteria / specifications to be incorporated into bidding and contract documents.</p> <p>It is not considered as a separate cost item.</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)	Contractor	Проектный институт ARIS
Land Acquisition and Involuntary Resettlement	Demolition of buildings, resettlement in connection with land withdrawal for construction	Use of procedures outlined in World Bank's OP 4.12 Involuntary Resettlement	<p>The overall coordination of the project will be provided by ARIS which will oversee all resettlement planning and coordinate all issues relating to the compensation. ARIS will collaborate closely with the local self-government bodies: aiyl okmotu and raion state administration bodies.</p>	ARIS

			<p>ARIS is responsible for preparation of RAP.</p> <p>The Ministry of Finances will pay compensation for land and assets of PAPs as stipulated in the RAP.</p>	
Human communities	Suspension of utility services	Timely notification of communities about planned cutoffs; rapid restoration of utility services	Contractor	
	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>	<p>Local government bodies</p> <p>ARIS</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.	<p>Ayil Okmotu (AO)</p> <p>Municipal enterprise on water supply/ CDWUU under ARIs support</p>	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.	<p>Ayil Okmotu (AO)</p> <p>Municipal enterprise on water supply/ CDWUU under ARIs support</p>	ARIS
	Limited capacities of local authorities	The project allows for a range of capacity building activities and technical assistance to local authorities.	ARIS (under Component 3)	ARIS
	Actual delay in implementation	Delays in the implementation of construction work can cause some discontent. In such cases, explanatory work will be conducted with local communities.	<p>Ayil Okmotu (AO)</p> <p>Contractor</p> <p>ARIS</p>	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		<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>	<p>Operator of CDWUU, Local authorities (representative of AO)</p>
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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 cost¹⁰ 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 taking 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 devices	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 SUPERVISION AND REPORTING

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

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

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

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

8 PUBLIC CONSULTATIONS

The ESMP public consultations were held on July 26, 2018 in Chelpek 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 28 people, 8 of them women, that is, 30%.

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 public hearings to discuss Environmental and Social Management Plan
for rehabilitation of water supply system in Chelpek sub-project
under Sustainable Rural Water Supply and Sanitation Development Project (SRWSSDP).

Venue and date: Chelpek v.
July 26, 2018 r. at 15:00

Zhyrgalov E. S. – Head of Chelpek aiyl okmotu opened the hearings after welcoming the participants, and introduced ARIS staff taking part in the project preparation.

Korchubay u. E. – project engineer provided brief information on the project and engineering solutions.

Kerimbekova M. – safeguard specialist presented social and environmental safety measures provided in the project. She provided detailed information on environmental safety, social protection measures. Developed Environmental and Social Management Plan was presented.

Population received full information on Beneficiary Feedback Mechanism (BFM). Beneficiary Feedback Mechanism (BFM) is a process of receiving immediate and objective information, evaluation and review of requests (applications, proposals, complaints, inquiries, positive feedbacks) related to ARIS projects.

Kerimbekova M.: To date Detailed Design and Estimates were developed including “Environmental protection” (EP) section which received positive state ecologic conclusion. Also Environmental and Social Management Plan on reduction of adverse impact was developed in accordance with the World Bank requirements.

Question 1: Does the project provide water treatment?

Answer 1: No, as per the previous project.

Question 2: How the water supply networks is designed?

Answer 2: Water supply network is ring to ensure appropriate water pressure.

Question 3: Does the project provide gravity flowing water supply?

Answer 3: No, the project designed water supply ring main. Water supply sources were determined and constructed by the previous projects. The project provides:

1. Construction of ring water supply networks and water main along the street with a length of L=7486 m.
2. Rehabilitation of water mains along the streets with total length of L=5497 m.
3. Rehabilitation of water supply network from WC-32 to WC-35 L=300 m.
4. Equipping the existing chlorination room

Question 4: Will the pressure be sufficient?

Answer 4: When designed a hydraulic calculation was made, pressure in water pipes complies with all SNIIP requirements

Question 5: Who will conduct bids?

Answer 5: Bids for selection of contracting company will be conducted by ARIS according to all requirements.

Question 6: Are any type of works planned in winter?

Answer 6: Yes, construction and assembly works will be performed in winter. During severe cold works will be suspended for a certain period of time but it will not impact on general construction timeline.

Question 7: How much time will the construction period take?

Answer 7: Construction will take 12 months

Question 8: Will the contractors hire representatives of local population?

Answer 8: Contractors to be attracted for construction works are recommended to hire necessary work force as far as possible at the local level. In case of appropriate qualification, the contracting company may hire local people.

Workers hired out of the community where the construction is performed shall observe code of conduct.

Question 9: Will the trees be cut? If yes, how many trees will be cut?

Answer 9: Water supply project always include tree or shrub cutting as the pipelines are laid along the street with vegetation. Municipal trees will be cut only with aiyl okmotu permission and approval of local environmental specialists. Now we are not able to tell the exact number of trees to be cut but I can assure you that according to the design massive cutting is not planned. It is going to be a small number.

Question 10: Will the cut trees be replaced by new ones?

Answer 10: The project allocated funds for restoration of cut trees, i.e. contracting company will replace one cut tree by 2 nursery trees to be delivered to Aiyl Okmotu. These nursery trees will be planted in places determined by AO.

Question 11: You mentioned that you work according to the international standards which means that you are not going to comply with the national legislation?

Answer 11: Yes, we comply with the Bank's standards but at the same time we shall comply with all requirements of Kyrgyz legislation as our sub-projects are implemented in Kyrgyzstan and the design was approved by the state technical and ecologic expertise which is an obligatory requirement of Kyrgyz legislation.

AO head: Thank you for the provided information. AO has already received Environmental and Social Management Plan, we studied and discussed it on general weekly meeting. We do not have any comments to the document.

Taking the opportunity, I would like to express my gratitude to the World Bank and ARIS, the project covers our village for the second time. From our part we would like to assure you of our utmost support and assistance to the project.

THE DECISION TAKEN:

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

ESMP was approved by the residents the subproject area.

The head of Chelpek aiyl okmotu

Zhyrgalov E. S

Safeguards Specialist:

Meerim Kerimbekova

Secretary:

ПРОТОКОЛ

Общественных слушаний по обсуждению

Плана управления окружающей и социальной средой при реабилитации системы водоснабжения в подпроекте Чельпек рамках
Проекта устойчивого развития сельского водоснабжения и санитарии (СУРСВС).

Место и время проведения: с. Чельпек
26 июля 2018 г. в 15:00 часов

Жыргалин Э. Ш – глава аймак өкмөтү Чельпек открыл слушания, поприветствовал приглашенных и представил сотрудников АРИС, участвовавших в подготовке проекта.

Корчубай у.Э.- инженер проекта, дал краткую информацию о проекте и принятых технических решениях.

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.

Керимбекова М.: на данный момент разработана Проектно-сметная документация, в состав которой входит раздел «Охрана окружающей среды (ООС), который получил положительное государственное экологическое заключение. Также был разработан План управления окружающей и социальной средой по снижению на нее воздействия, согласно требований Всемирного Банка.

Вопрос 1: Предусматривает ли проект обеззараживание воды?

Ответ 1: Нет, так как в предыдущем проекте было предусмотрено

Вопрос 2: Как и каким образом будет проходить водопроводная сеть?

Ответ 2: Водопроводная сеть будет кольцевая, в целях обеспечения соответствующего давления воды.

Вопрос 3: Предусматривает ли проект самотечную подачу воды?

Ответ 3: Нет, проектом предусмотрено выполнить основную кольцевую водопроводную линию. Источники водоснабжения были определены и рассмотрены предыдущими проектами. В общем проекте предусмотрено:

1. Строительство кольцевых сетей и трассы водопровода по улицам общей протяженностью L=7486м.
2. Реабилитация трасс водопровода по улицам общей протяженностью L=5497м.
3. Реабилитация водопроводной сети от ВК-32 до ВК-35 L=300м.
4. Оборудование существующей хлораторной

Вопрос 4: Будет ли хватать давления?

Ответ 4: При проектировании был выполнен гидравлический расчет, давление в трубопроводе отвечает всем требованиям СНиП.

Вопрос 5: Кто будет проводить тендер?

Ответ 5: Тендер на отбор подрядной организации на строительство будет проведен

АРИС, согласно всем требованиям.

Вопрос 6: Будут ли идти работы в зимний период?

Ответ 6: Да, в зимний период будут проходить строительно-монтажные работы. При сильных холодах возможна будет приостановка на определенный период, но на общий срок строительства это не повлияет.

Вопрос 7: Каковы сроки строительства?

Ответ 7: Строительство будет идти 12 месяцев.

Вопрос 8: Будут ли подрядчиками наниматься на работу представители местного населения?

Ответ 8: Подрядчикам, привлекаемым для осуществления общестроительных работ, будет рекомендовано набирать необходимую рабочую силу, по мере возможности, на местном уровне. В случае соответствия квалификации подрядная организация может набирать работников из местного населения.

Рабочие, нанятые за пределами сообщества, где будут осуществляться строительные работы, должны соблюдать Нормы поведения.

Вопрос 9: Будет ли вырубка деревьев? И сколько деревьев будет вырублено?

Ответ 9: В проекте по безопасности всегда есть вырубка деревьев или кустарников, так как трубопроводы проходят по улицам, где высажена растительность. Вырубка мультитипальных деревьев будет проводиться только с разрешения айыл окмоту и с согласованием местных экологов. На данный момент мы не можем точно сказать сколько именно деревьев будет вырублено, но могу сказать, что согласно проекту не планируется массовая вырубка, будет небольшое количество.

Вопрос 10: А на место вырубленных деревьев будут сажать новые?

Ответ 10: В проекте заложены деньги на восстановление вырубленных деревьев, то есть при вырубке 1 дерева подрядная организация выдает 2 саженца айыл окмоту и они будут высажены в том месте, куда укажет АО.

Вопрос 11: Вы сказали, что вы работаете по международным стандартам, значит следовать национальному законодательству вы не будете?

Ответ 11: Да мы следуем стандартам Банка, но в то же время мы должны соблюдать все требования Кыргызского законодательства, так как наши подпроекты реализуются в Кыргызстане и проект прошел государственные технические и экологические экспертизы, что является обязательным требованием Кыргызского законодательства.

Глава АО: Спасибо за предоставленную информацию. АО получали заранее План управления окружающей и социальной средой, мы его изучили и обсудили на общем собрании собрания. У нас нет никаких комментариев к документу.

Пользуясь случаем хотел выразить благодарность Всемирному Банку и АРИС, проект заходит в наше село уже 2 раз. С нашей стороны мы хотели бы сказать, что мы будем всячески поддерживать проект и содействовать.

РЕШИЛИ:

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

Глава айыл окмоту Чельпек

Джыргалов Э.Ш.

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 Чельпек

с.Чельпек

26 июля 2018 г.

№ п/п	Ф.И.О. участника	Организация/Должность	Подпись
1	Муромов Э.М.	Учеб. Центр №1	[Подпись]
2	Зубаев М.А.	деп-т Чельпек А/о	[Подпись]
3	Алишанов Г.К.	Учеб. Ц. №1 Чельпек	[Подпись]
4	Абдраманов Х.М.	Мед. САОПВ	[Подпись]
5	Ожесев Э.О.	Уч. центр №1 Чельпек	[Подпись]
6	Кежесев Ч.К.	Уч. центр №1 Чельпек	[Подпись]
7	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
8	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
9	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
10	Исаев Р.И.	Одобрение в области охраны	[Подпись]
11	Фрунзариев А.М.	Уч. центр №1 Чельпек	[Подпись]
12	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
13	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
14	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
15	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
16	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
17	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
18	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
19	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
20	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
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22	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
23	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
24	Алишанов Г.К.	Уч. центр №1 Чельпек	[Подпись]
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