

KYRGYZ REPUBLIC

THE WORLD BANK

Ministry of Emergency Situations of the Kyrgyz Republic

Project “Enhancing Resilience to Disaster Risks in Kyrgyzstan”

(ERIK Project)

Component 2: Improving the security and functionality of school assessment

Environmental and Social Management Plan (ESMP)

for the Aryp Sydykbekov school in Toktogul village, Ak-Suu district, Issyk-Kul
region

(new construction)

Bishkek, 2023

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List of abbreviations

ACM	Asbestos containing materials
WB	The World Bank
BoQ	Bill of Quantities
HS	Hygiene standards
FL	Fuels and lubricants
KR	Kyrgyz Republic

IDA	International Development Agency
GM	Grievance mechanism
NLA	Normative legal acts
NSC KR	National Statistical Committee of the Kyrgyz Republic
EIA	Environmental impact assessment
LG	Local governments
SPNA	Specially protected natural area
FDESM	Framework Document on Environmental and Social Management
MPC	Maximum Permissible Concentration
GKR	Government of the Kyrgyz Republic
DGKR	Decree of the Government of the Kyrgyz Republic
SL	soil layer
ES	Environmental and social management plan
SPZ	Sanitary protection zone
SANPIN	Sanitary rules and regulations
MSW	Municipal solid waste
FS	Feasibility study
DED	Design and estimate documentation

Annotation

This Environmental and Social Management Plan (ESMP) is being developed for the Aryp Sydykbekov School to manage social and environmental risks and impacts during the construction works of the school and is developed in accordance with the World Bank's Social and Environmental Policy on Safeguard Measures.

The ESMP is intended to be mandatory:

- safety specialists of the PIU/school committee/technical supervision/school administration to monitor the implementation of environmental and social safety measures during construction works by the contractor;
- contractor for construction during construction and installation works;
- school administration during school operation.

The ESMP provides background information on the current state of the school and the environment, an environmental and social management plan that identifies the main risks / impacts on them and provides for measures to mitigate them, as well as a plan for monitoring the implementation of this plan.

1. Introduction

The goal of the Enhancing Resilience in Kyrgyzstan (ERIK) Project is to support the Government in strengthening its capacity to respond to natural disasters, providing a safer and better learning environment for children and reducing the adverse financial impact of natural disasters on the Government budget and the population.

The ERIK Project consists of the following components:

- 1) Strengthening disaster preparedness and response systems.
- 2) Improving the safety and functionality of school infrastructure.
- 3) Strengthening financial protection.
- 4) Project management, monitoring and evaluation.
- 5) Unforeseen emergency response costs (UERC).

Component 2, "Improving the Safety and Functionality of School Infrastructure," aims to improve the safety of school infrastructure through the implementation of the State Program on Safe Schools. The Ministry of Education and Science of the Kyrgyz Republic and the State Agency for Architecture, Construction, Housing and Communal Services under the Cabinet of Ministers of the Kyrgyz Republic are responsible government agencies responsible for the implementation of Component 2.

This objective will be achieved through: (i) new construction and/or reconstruction of school buildings to reduce seismic risk of selected educational institutions; (ii) improvement of energy efficiency and functionality, and learning conditions in selected educational institutions; and (iii) establishment of an information system for systematic management of assets and infrastructure and monitoring program implementation. Under this component, 30 schools were selected across the country (additional funding), one of which is the Aryp Sydykbekov school located in Toktogul village, Ak-Suu district, Issyk-Kul region.

In the Aryp Sydykbekov school, according to the results of the feasibility study conducted by the consultant for feasibility study, design and supervision (EAAS LLC), it is planned to build a new school on the existing land plot, which is free of buildings.

In accordance with the Agreement between the Kyrgyz Republic and the International Development Association on the financing of the project "Enhancing resilience in Kyrgyzstan", ratified by the Law of the Kyrgyz Republic on January 29, 2019, the project is implemented under the condition of implementation of safety measures in accordance with the recommendations and requirements detailed in the Environmental and Social Management Framework (ESMF) and the Resettlement Policy Framework (RPF).

The environmental and social risks of the project mainly arise during the implementation of Component 2, therefore this section has been prepared based on the ESMF and RPF developed in March 2018 for the ERIK project to ensure environmental and social sustainability throughout the project cycle, and to provide technical guidance and procedures to Project Implementation Unit (PIU) engineers and consultants for:

- (i) identification of potential environmental and social impacts and risks of sub-projects implemented under ERIK project;
- (ii) development of environmental and social mitigation plans and their inclusion in the Bill of Materials (BoM) of subproject tender documents to minimize environmental and social impacts;

(iii) identification of monitoring requirements to ensure implementation of mitigation and minimization of environmental and social impacts;

(iv) identification and assessment of social risks to preserve health and safety of local communities during new school construction/reconstruction, mitigation of project impacts on vulnerable populations in cases of forced relocation, deterioration of welfare due to loss of production assets and other sources of income, establishment of gender equality, and activities aimed at increasing resilience of school infrastructure to natural hazards, including mitigation of impacts on labor, labor influx issues, sexual exploitation and abuse and sexual harassment (SEA/SH).

The Environmental and Social Management Plan (ESMP) is developed to ensure environmental and social sustainability throughout the implementation of Component 2, each stage of its implementation requires the implementation of certain measures in accordance with the environmental legislation of the Kyrgyz Republic and the safeguard policies of the World Bank.

This Environmental and Social Management Plan (ESMP) describes the environmental and social impacts and mitigation measures associated with the construction of the new A. Sydykbekov School.

2. Geographical description and population

The Aryp Sydykbekov School is located in Toktogul village, Ak-Suu district, Issyk-Kul region, Kyrgyz Republic.

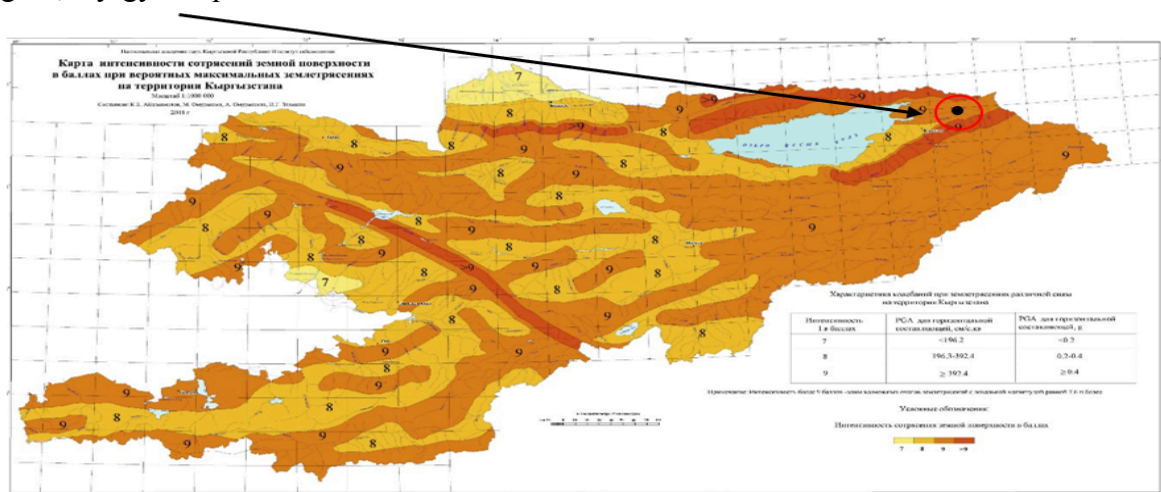


Figure 1 - Location of Toktogul village, Ak-Suu district, Issyk-Kul region

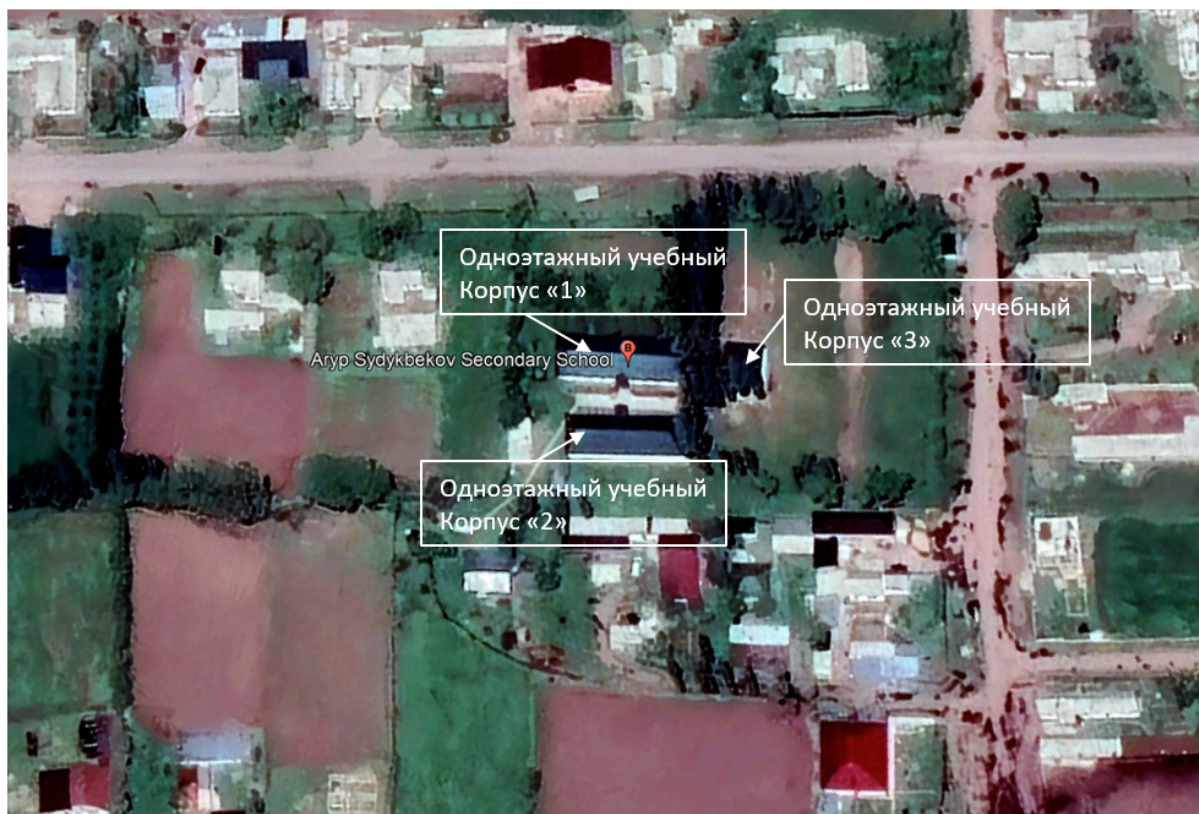


Figure 2. Location scheme of the buildings of the Aryp Sydykbekov school in Toktogul village, Ak-Suu district, Issyk-Kul region

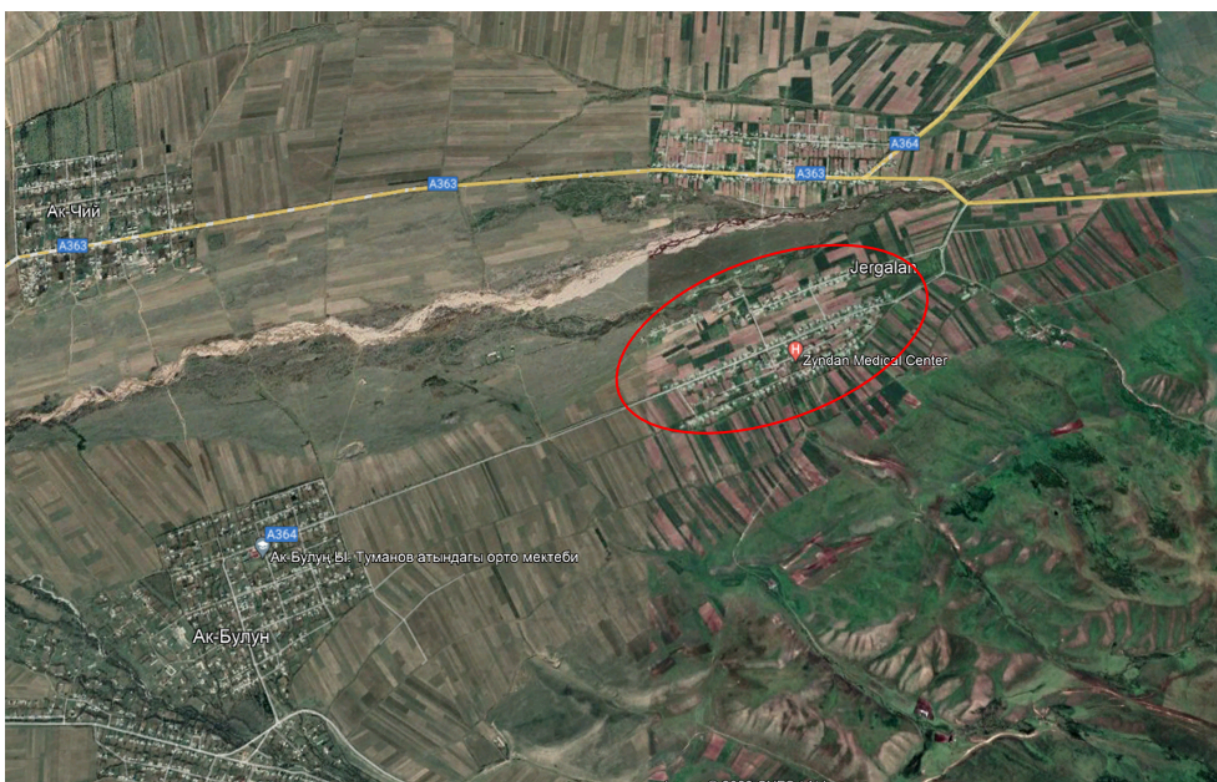


Fig.3 - Situation diagram (satellite imagery). Location of Toktogul village, Ak-Suu district, Issyk-Kul region



Fig.4 - Situation diagram. Bird's eye view. Location of the considered school buildings in Toktogul village, Ak-Suu district, Issyk-Kul region

The project site is located in Toktogul village, Zhanalieva Street 36, Ak-Suu district, Issyk-Kul region.

Administratively it belongs to the territory of Ak-Bulun aйл district.

From the office of Ak-Bulun aйл district the site is located at a distance of 8.0 km.

Distance from the site to the district centre of Teplokluchenka village - 45 km, to the regional centre of Karakol - 50 km.

The nearest railway station is located in Balykchy at a distance of 300 km.

According to SNiP KR 23-02-00 the investigated area belongs to II climatic region. IIB climatic sub-area and dry zone by degree of humidity.

Geomorphologically the site is located on the surface of the III-overflow terrace of the Zhyrgalan River. The general slope of the surface is to the west, towards the lake. The site is subject to insignificant changes during land development.

A distinctive feature of the climate is continentality, characterised by large annual and daily amplitudes of air temperature fluctuations.

The study area is characterised by a large number of hours of sunshine - 2660 hours per year.

Toktogul (Kyrgyz: Toktogul) is a village in Ak-Suu District, Issyk-Kul Region, Kyrgyz Republic. It is part of Ak-Bulun aйл district. The former name of the village was "Zyndan village". Zyndan village council in Toktogul. Ak-Suu District is an administrative unit located in the east of Issyk-Kul Region of the Kyrgyz Republic. The administrative centre is Ak-Suu village (near the city of Karakol). There are 68900 people living in Aksui district. The district was established on 13 April 1973. Ak-Suu District includes 14 aйл (rural) districts, 48 aйлs (villages). Ak-Suu district is not only the easternmost territorial unit of Issyk-Kul region, but also of the whole Kyrgyz Republic. It is located in the most mountainous part of the republic and borders Kazakhstan to the north and China to the south. Ak-Suu district lies

within the Central Tien Shan, where the Ala-Too and Kokshal-Too ranges rise. The local population is engaged in subsistence farming (vegetable farming, animal husbandry, beekeeping) and traditional crafts. There are thermal springs in Ak-Suu district (Zhyrlagana and Ak-Suu) and sanatoria have been established. In order to improve the situation in the industrial sector of the district, certain works are carried out to attract investments into the economy of the region. Today the economy of Ak-Suu district is based on agriculture, the leading branches of which are cattle breeding and farming. Among the mineral resources of the Issyk-Kul region the main place is occupied by gold (Kumtor deposit), and also in other districts of the region limestone, iron ore. According to the National Statistical Committee. For 2021 in Ak-Suu district investments in fixed capital totalled 311.3 million soms. The natural population growth, formed under the influence of changes in birth and death rates, has a significant impact on the change in population size. A special indicator of the demographic situation is the life expectancy of the population at birth. The increase in mortality rate causes a decrease in life expectancy. Over the last five years, the average life expectancy has been increasing from 68.4 years in 2017 to 69.3 years in 2021. Estimated life expectancy for men in 2021 is 64.6 years (64.1 years in 2017) and for women 74.7 years (73.7 years in 2017). The average life expectancy of men and women depends on the mortality rates of the sexes. For the last 5 years, the mortality rate of males exceeded that of females, due to this, the female sex dominates the total population, it is 2.24 per cent higher. In recent years, there has been a decline in the number of diseases with first-time diagnosis. The demographic situation as a whole and the change in the total population is significantly influenced by migration. This rate has been gradually increasing over the last 5 years. The number of those who left for non-CIS countries in 2020 increased by 1.72 per cent, and in comparison with 2020. - increased by 1.75 times. Along with the increase in the activity of emigration processes, the intra-region migration of the population has also increased. The main flow of internal migrants is directed to areas with greater opportunities for labour application: 239 people arrived in Issyk-Kul district. The average salary in Ak-Suu district in 2021 was 13141 soms. The number of unemployed - 514 people. The average monthly salary of employees of enterprises, organisations and institutions by form of ownership was not equal. Thus, in the state form of ownership the salary in 2017 was 11387 soms, and in 2021 - 13151 soms, i.e. increased by 1.15 times, also the growth of salary was recorded at the enterprises of municipal form of ownership - by 1.37 times.

3. Physical and geographical characterisation and geology

Hydrographic network: Irrigation system of local importance.

Groundwater level: During the survey period (March 2023), the excavations up to 10.0 m deep, groundwater was uncovered at a depth of 5.5 - 6.0 m from the ground surface.

According to p.2.97 of the "Manual for Designing the Foundations of Buildings and Structures" (to SNiP 2.02.01-83), the site of the projected construction belongs to the potentially waterlogged groundwater.

Seismicity: in accordance with SNiP-20-02-2009 (change №1 to SNiP KR 20-02-2009 from 2 - April 2012 № 27) seismicity is equal to 8 points.

In accordance with Table 6.1. SN-KR 20-02-2018, within the 10-metre thickness of the lithological section of the site prevail soils belonging to type IB of soil conditions on seismic properties. The calculated acceleration for these ground conditions at the site will be: $(agR) = 330 \text{ cm/c}^2$.

Geomorphology, relief: the construction site is located on the surface of the III supra-flood terrace of the Zhyrgalan River. The relief is flat with a general slope of the surface to the west, towards the lake. The site is subject to insignificant changes during land development.

Geological and lithological structure: the geological and lithological structure of the site consists of deluvial-proluvial deposits of Upper Quaternary-modern age (dpQIII-IV).

From a depth of 5.5 - 6.0 metres they are wet, water-saturated. The clastic material is of medium pelletisation. Petrographic composition is provided mainly by granodiorites, sandstones, limestones.

Detailed lithological structure of the site is shown on lithological columns and engineering-geological section.

Physical and mechanical properties of soils:

Based on the analysis of field and laboratory data, three (3) engineering geological elements (EGE) have been identified at the site):

EGE-1. soil and vegetation layer with a thickness of 0.20 - 0.30 m and partly with bulk soil with a thickness from 0.2 to 1.10 m.

EGE-2. The clay is sagging, with rare inclusion of gravel.

Clay thickness varies from 1.0 to 1.5 m.

(physical and mechanical properties are given in Table 1)

EGE-3. Pebble soil with sandy loamy aggregate, medium density, dark grey colour, with boulder inclusions up to 20%.

The thickness of the pebble soil is more than 10 metres.

The granulometric composition of the pebble soil is as follows:

Boulders - 15 - 20 %;

Pebbles - 30 - 35 %;

Gravel - 15 - 20 %;

Sand - 15 - 20 %;

Clay particles - 10-12%.

The normative and design values of gravel soil density (P), specific cohesion (C), angle of internal friction (G) and modulus of deformation (E) are recommended to be adopted:

$P_i=2.14\text{t/m}^3$

$C_i=30\text{kPa}(0,3\text{kgf/cm}^2)$, $C_i=18\text{kPa}(0,18\text{kgf/cm}^2)$, $C_i=22\text{kPa}(0,22\text{kgf/cm}^2)$.

$G_i=38$, $G_i=31$, $G_i=33$.

$E_i=74,0\text{MPa}$ (740 kgf/cm²), apx

Conditional design resistance should be taken for pebble soil - 6.0 kgf/cm², for clay - 2.5 kgf/cm². (SNiP-2.02.01-83).

Average filtration coefficient of 20-100 m/day. (according to literature data).

Corrosive activity of soils, according to GOST 9.602-89 all soils composing the site are slightly saline and not aggressive towards concrete. Corrosive activity of coarse clastic soils in relation to carbon steel depending on UES is low (archive data).

Groups of soils on difficulty of manual development, according to SNiP IV-5-82, it is recommended to accept the following: for loams - II, pebble soils - IV (p.24b).

There are no geological processes and phenomena having a negative impact on the conditions of construction and operation of buildings and structures (mudflows, landslides,

liquefaction, faults and tectonic disturbances, etc.). It is recommended to provide for the foundation planting on natural gravel soil.

If excavations on the site encounter bulk soils or septic tanks, they should be removed to natural composition soils.

To improve the geological environment it is necessary to provide for the creation of an artificial soil layer, landscaping of the territory, amelioration of the territory by means of an improved ditch network, concreting of the ground surface should be minimal.

It is necessary to provide measures for water collection and drainage outside the site during precipitation.

4. Climatic conditions

By seasons the climate of Karakol city is characterised by:

Winter: The coldest month is January, the average multiyear air temperature of which is -7.10C. Absolute min. reaches -30.0C. Snow cover is stable. Snowstorms are possible.

Spring: In spring the frequency of east and west winds increases, which bring a lot of moisture. The maximum number of days with precipitation is 16. Frosts are often observed in spring. Spring precipitation is 28 % of the annual total.

Summer: The average daily temperature varies from + 16.30 C to 18.80 C. The amount of precipitation is 150 mm. The average monthly relative humidity is 61-64 %.

Autumn: The average monthly temperature varies from -1.10 C to 12.30 C. The amount of precipitation is 97 mm. Precipitation is 97 mm. The first frosts begin on 31 August.

(abs. mark 1716m)

Peculiarities of the station site location: the station is situated in the Tien-Shan mountains in the eastern part of the Issyk-Kul depression, on the north-eastern outskirts of the city of Karakol.

Observation period: since 1943.

Climatic data in the construction area are as follows:

Outdoor air temperature, °C

- Average annual air temperature, °C {6,2}
- Absolute minimum air temperature, °C - (-22)
- Absolute maximum air temperature, °C - (35)
- Estimated temperature of the coldest five-day period °C - (-13)
- Average monthly relative humidity at 15 h,
- of the coldest month of the year % - 63
- The hottest month of the year % - 45
- Amount of precipitation for the year, mm - 340
- Wind speed at a height of 10 m above the ground surface, m/s - 29.
- Normative depth of penetration of zero isotherm under natural snow cover 132 cm.

In the diurnal section, the wind direction changes as follows: northeasterly winds prevail in the night, morning and daytime hours and easterly winds in the evening.

Repeatability of wind direction and doldrums.

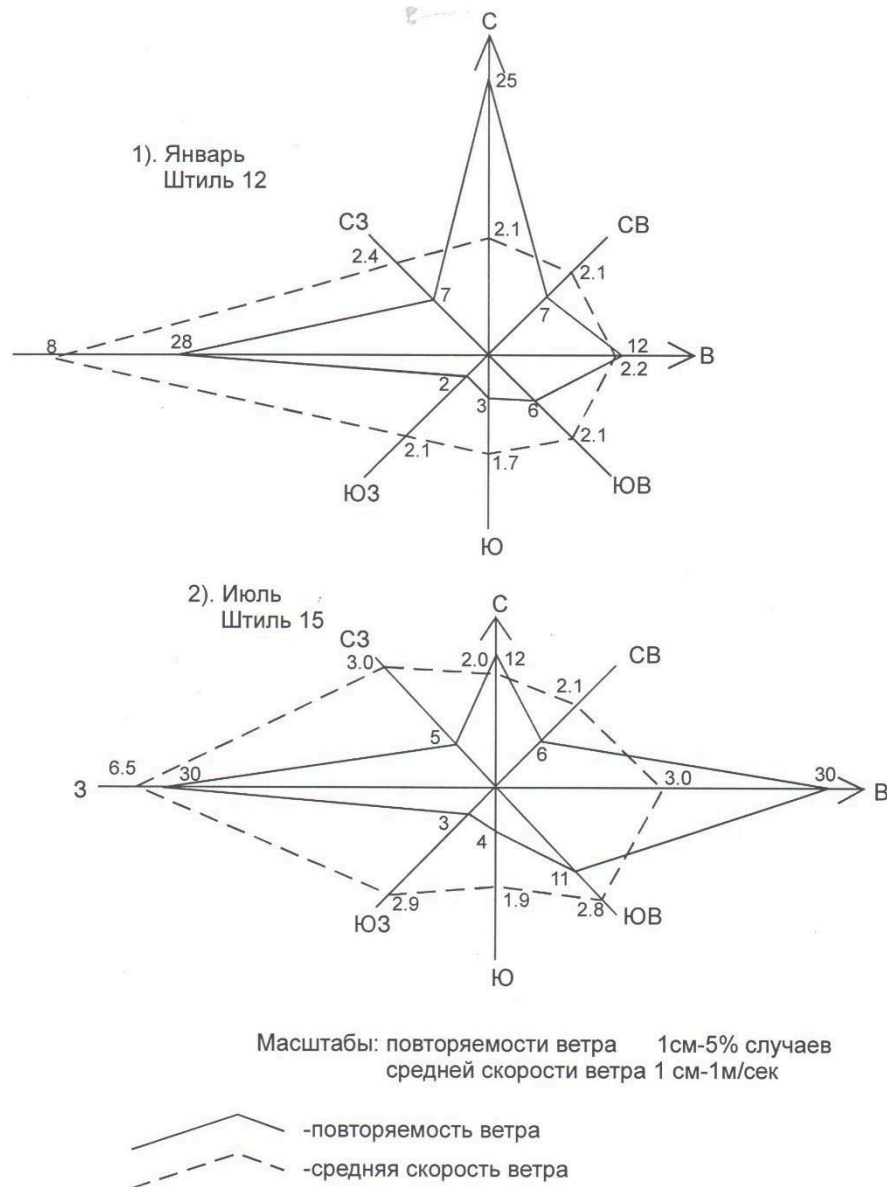
month	N	NE	E	SE	S	SW	W	NW	Calm
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I	1	13	38	16	21	6	4	1	55
II	3	12	37	14	17	7	6	4	55
III	9	16	32	5	7	8	12	11	48
IV	4	12	26	4	6	10	21	17	37
V	5	16	20	4	8	11	22	14	32
VI	6	11	19	5	12	12	20	15	34
VII	6	11	19	6	11	11	22	14	39
VIII	6	10	20	6	13	10	19	16	41
IX	5	8	23	6	15	10	16	17	37
X	4	7	20	7	20	11	15	16	34
XI	4	16	31	6	18	8	9	8	44
XII	1	15	33	15	20	8	4	4	55
Год	5	12	26	8	14	9	15	11	43

Wind recurrence and average wind speed in m/s by direction for the months of January and July are reflected in the wind roses.

The prevailing wind direction in the annual course is east, west.

The wind rose is as follows.



5. Environmental conditions

5.1. Atmospheric air

Stock materials were used to conduct an environmental survey of the school territory, as well as the territory immediately adjacent to the study site, and to assess the existing state of the natural environment prior to the construction of the school.

The site for school design and construction is located in a densely populated area in Toktogul village, Ak-Suu district, Issyk-Kul region.

There are no industrial facilities in Toktogul village, which could pollute the atmospheric air with their emissions, therefore, the existing state of the environment at this site can be considered natural, and the content of pollutants in the components of the natural environment - background.

5.2. Water resources

The construction site is located on the surface of the III-overflow terrace of the Zhyrgalan River. The relief is flat with a general slope of the surface to the west, towards the lake. The site is subject to insignificant changes during land development.

During the survey period (March 2023), the groundwater level at the new construction site was established at a depth of 7.0 m from the ground surface. According to clause 2.97 of the "Manual for Design of Foundations of Buildings and Structures" (to SNiP 2.02.01-83), the site of the projected construction belongs to the potentially non-floodable groundwater.

5.3. Flora

The following types of cultivated plant species grow on the adjacent property of the existing school:

rose, daisy, nasturtium, marigolds, meadow geranium, hybrid clover, annual grasses, perennial dahlia, petunia, velvets, zinnia, asters, grapes.

Weeds and wild plants: plantain, nettle, creeper, dandelion, creeping wheatgrass, creeping clover, turf sedge.

Grasses: meadow timothy, meadow foxtail, mouse pea, hedgehog, meadow chyna, lapwort, cuff, meadow bluegrass, awnless brome, acrid buttercup, sporewort, bristlewort

Of trees: Poplar, thuja, willow, birch, maple, rowan, apple, apricot, hazel, pine, spruce, aspen.

Shrubs: rosehip, lilac, yellow acacia, black rowan (aronia), snowberry.

As a result of the analysis of available data it was established that there are no plants of rare categories on the territory of the projected school.

5.4. Fauna

The world of birds is represented by:

Larks, golden-crowned skylark, pink starling, raptors - steppe eagles, kestrels, harriers. Intensive economic development and hunting led to a significant reduction in the number of quails, strepets, bustards, but even now they are not so rare. Rodents - gophers, voles and other pests of agricultural crops are found in the fields.

Among the grasses there are lizards, snakes crawling. Once there were turtles, but now they are rare.

Mammals: hedgehog, rodents.

Birds: Crow, sparrow, jackdaw, bullfinch, whistler, tit, wagtail, magpie, pigeon, starlings.

Amphibians: frogs, toads.

Worms: earthworm.

Insects: Ant, fly, mosquito, butterflies (wren, lemon, peacock's eye), dragonfly, beetle, grasshopper, ladybug, bee, wasp, bumblebee, May beetle, soldier bug, green bug, ants.

Also the following domestic animals are bred and kept in the village: Horses, cows, sheep, goats, chickens, dogs and cats.

As a result of the analysis of the available data it was determined that there are no animals of rare categories on the territory of the projected school.

6. Information on the existing school

The school named after Aryp Sydykbekov is located in Toktogul village, Ak-Suu district, Issyk-Kul region, Kyrgyz Republic.

The existing secondary school buildings are one-storey, without a basement, consists of three separately standing buildings, rectangular in plan:

- 1) Buildings 1 (Administrative offices and classrooms)
- 2) Building 2 (Auditorium and classrooms)
- 3) Building 3 (Canteen and classrooms)
- 4) Boiler House
- 5) Warehouse
- 6) And there is also a washroom for 4 points (2 points for boys, 2 points for girls).

The buildings are located separately from each other:

Built in 1969,1978,1985.

The total area of the school site is 1.1 hectares (there is a State Act on the right to use the land plot). The design capacity is 120 pupil places.

As of 15.04.2023, the school has 308 students, 148 girls and 160 boys, 26 teachers (24 of them with higher education, 2 with specialised secondary education) and 10 administrative and technical staff. There are 7 excellent teachers and 4 teachers of retirement age working in the school.

Education at the school is conducted in Kyrgyz language. According to the project, there are 4 classrooms and 1 method room and 1 principal's office in the educational building 1.

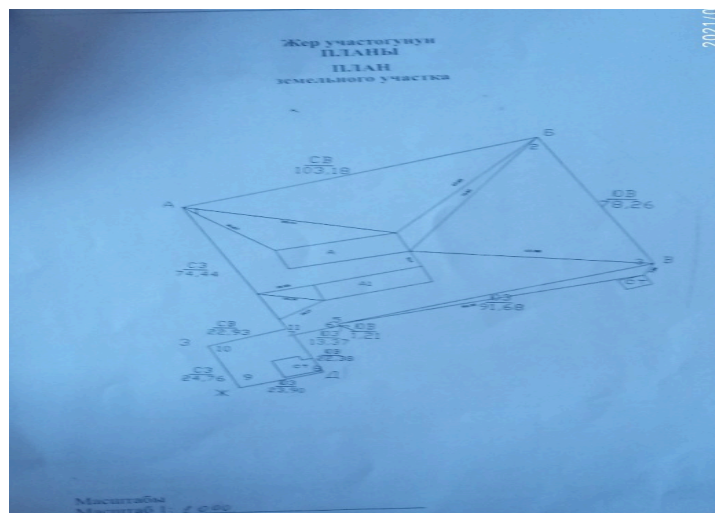


Fig. 5 Site plan diagram according to the State Act



Fig. 6 - Situation diagram (satellite imagery). Location of the school buildings under consideration in Toktogul village



Fig. 7 - View of educational building 1



Fig.8 - View of enclosure 2



Fig.9 - View of enclosure 3





Fig. 10, 11 and 12 - Electric boiler plant



Figure 13 - The building serves as a warehouse, book depository, table tennis room and coach's office.

Accessibility

During the inspection of the school building, it was found that there are ramps for access for people with disabilities in Buildings No. 1 and No. 2, but they are not made according to the standards, there are no handrails.

Facade

The school's existing windows are plastic, double-glazed, outdated and in poor condition. The rubber seals are worn out, resulting in draughts and increased heat loss. Existing doors have worn or damaged parts, sashes, handles and hinges, resulting in doors that do not open well and do not close tightly. Also some doors are deformed, have uneven indentation from the frame and uneven surfaces.

Roof

The roof of the building of buildings No. 1 and No. 2 is a four-pitched hipped roof, building No. 3 is a two-pitched roof with a metal corrugated sheeting covering. The attic floor of buildings No. 1 and No. 2 consists of reinforced concrete hollow core slabs 220 mm thick and 100-120 mm thick expanded clay insulation. The attic floor of Building No. 3 consists of wooden trusses, cross-section of wooden elements 50x150 mm, glass wool insulation 50 mm thick. The area of the attic floor and characteristics are given in the table. The calculated heat transfer coefficient at the current state of the attic floor is $U = 1.1 \text{ W/m}^2 \cdot \text{K}$, which exceeds the maximum permissible value of $U = 0.2 \text{ W/m}^2 \cdot \text{K}$, established by the Law on Energy Efficiency of Buildings for pitched roofs ($<45^\circ\text{C}$).

Covering floors and ceilings

The building foundation is strip, concrete, there is damage due to moisture penetration, lack of drainage. The floor in classrooms and corridors is wooden, in satisfactory condition, there are unevenness and damage.

Heating

Heating of the building is electric, educational buildings - 3 buildings, heated by concrete electric convection heaters with average power of 1-1.2 kW in corridors (no temperature control devices), and electric convectors with temperature control devices in classrooms. The heating system does not have a central control panel, which allows switching the heating on and off.

The operation of the heating system is controlled manually by cabinet in accordance with the approved internal schedule. The temperature in the premises is regulated by adjusting heating devices in accordance with the requirements of the climatic season and limits of electricity consumption.

The premises of the school building are not heated to 30 per cent, therefore, additional electric heaters of convective type are used in a number of premises, as well as in classrooms during the winter period. In total, according to the administration, there are 5 heaters with an installed capacity of 1.5 kW each. When used, they may result in additional electricity consumption of up to 21,120 kWh/year during the heating period. The heating system of buildings does not comply with the general norms and rules of temperature regime in general education organisations.



Fig. 14, 15, 16 - Electric convectors



Fig.17, 18, 19 - Concrete electric convectors in corridors



Fig. 20, 21 - Additional electric heaters

Ventilation system

The natural ventilation system of the building is not functioning. The premises are ventilated in the warm season by opening windows (in winter the windows are glued with improvised materials due to their unsatisfactory condition), as well as by opening internal doors to the corridors. Ventilation shafts and ducts are not provided, the external walls and internal partitions of the school are constructed by the ashar method of clay and no ventilation shafts and ducts have been installed. The humidity in the filled classrooms ranges from 55 to 63 per cent, while sanitary norms require a maximum humidity of 50 per cent with an air exchange rate of 20 m³ per hour per person.

There is a local ventot pump in the kitchen, installed above the heating equipment to perform air exchange in the kitchen, namely removal of combustion products and excessive heat, as well as fresh air supply to hot shops and other production facilities.

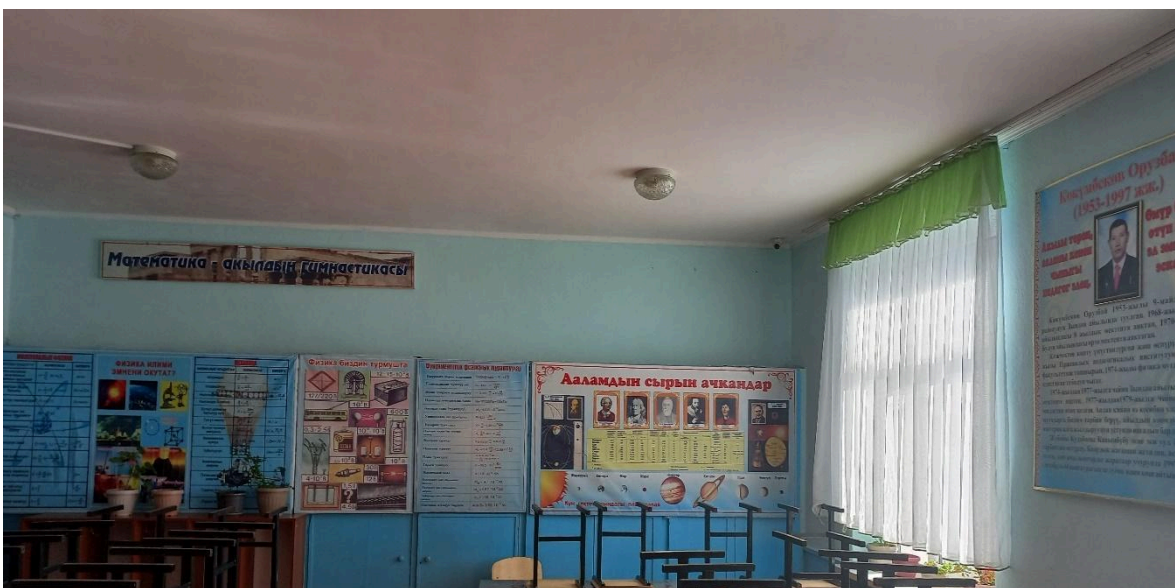


Figure 22 - No ventilation in classrooms



Fig.23, 24 - Local ventilation exhaust pump in the kitchen

Water supply

Water supply is connected to the rural water supply system. Water in the school is used only for canteen needs. There is no water supply in the school building. There is also no water supply in the backyard latrine.

Water supply

Sanitary hot water supply in the school is available only in the canteen. It is provided by Ariston model electric water heaters of low capacity (1.5 kW). The annual consumption is about 1,856 kWh.

The water heater is located in the kitchen, and provides hot water for the kitchen sink and the pupils' hand washing basins in the canteen. During meal times, the installed number of washbasins is insufficient and needs to be increased.

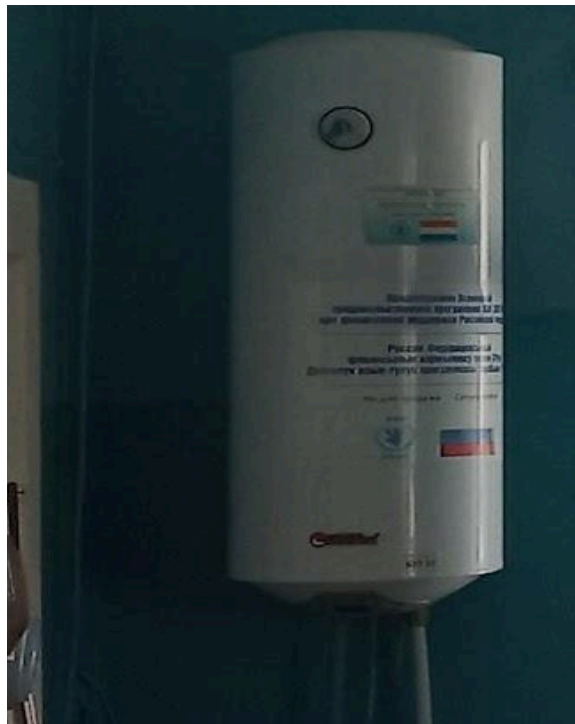


Fig.25 - Individual sanitisation of hot water

Sewerage system

There is no sewerage system in the school building, as there are no internal sanitary facilities. A small septic tank is provided for wastewater from the canteen. There is no central sewerage system in the area where the school is located. On the south side of the school building there is a toilet for 4 points (2 points for boys, 2 points for girls).



Fig. 26 - Overhead latrine

Electricity supply

Electricity supply to the school is connected to the existing Transformer Substation 100/10/0.4 located outside the school territory with voltage 0.4 kV. On the territory of the school, the external electrical networks are overhead, which does not comply with the PUE.

There are also overhead power lines on the territory of the projected school.



Installation of lighting

The internal lighting of the building is in poor condition, 80 per cent of the lighting fixtures are incandescent bulbs of 100W. Due to the lack of budget, repair of the lighting and power supply system is carried out in parts and poorly. All wiring and electrical equipment of the school is installed without compliance with norms and standards.

Fire detection and alarm systems

The school has no fire alarm and notification systems, and there are no emergency notification systems or emergency lighting in the school.

7. Information about the new land plot

The construction of the new school will be on a different territory located near the existing school. The total area of the land plot is 11012.21 m² according to the State Act. Placement and size of the school land plot is designed in accordance with standard for construction of KR 30=01 and the set of rules on planning and development of territories of rural settlements in the Kyrgyz Republic. The areas of the main zones of the school land plots will be taken according to the design indicators for 1 class in accordance with Annex (E) SNiP of KR 31-08:2022. The following zones are designed on the land plot: physical culture and sports, educational and experimental, recreational and economic. The sports and fitness zone includes a circular running track with a length of over 250 metres, a basketball and volleyball court, a football court, and a sports playground. The primary military training zone is combined with a sports ground. The physical culture and sports zone is located behind a strip of greenery, a ball and projectile throwing area at a distance of more than 25 metres from the windows of the building. The utility zone provides a separate entrance and is located on the side of the production premises of the canteen. The waste collection area is located at a distance of more than 25 m from the entrance to the food processing area and from the windows of classrooms. The area of greenery is more than 40% of the total area. A fence is provided along the perimeter of the land plot with a height of not less than 1.2 m. Accesses for fire engines to the buildings are provided, as well as the possibility of a diversion around the building. In the area of the main entrance there is a paved area for gathering of students and organising school-wide events.

Seismic hazard

In accordance with SNiP-20-02-2009 (Amendment No. 1 to SNiP of KR 20-02-2009 dated 2-April 2012, No. 27) seismicity is equal to 8 points.

In accordance with Table 6.1. SC-KR 20-02-2018, within the 10-metre thickness of the lithological section of the site, soils belonging to type IB of soil conditions on seismic properties prevail. The calculated acceleration for these ground conditions at the site will be: $(agR) = 330 \text{ cm/s}^2$.

The following major types of work are planned as part of the new construction:

1. Earthworks (excavation, construction site layout);
2. Construction and installation works (building foundation structures);
3. Backfilling of soil with layer-by-layer compaction. 3;

4. Transport of construction materials to the object.
 5. Construction and installation works (erection of building walls, finishing works, arrangement of flooring and coverings, sanitary units, installation of door and window units, etc.);
 6. Roofing of the building;
 7. Laying of external and internal engineering systems (sewerage, water supply, electricity, etc.);
 8. Planning of the school site (arrangement of infrastructure, including a sports ground, recreation area);
 9. Fencing of the school;
 10. Removal of construction waste.
 11. Dismantling works (dismantling of the old school building);
- Duration of construction and installation works is expected to be 12 months.

8. Measures for improving seismic safety and energy efficiency of the school

8.1. Improving the earthquake resistance of the school

When designing and constructing a new school, various measures are used to help improve the building's earthquake resistance:

1. Monolithic reinforced concrete frame is used with stiffening diaphragms. This method has high seismic resistance because the reinforced concrete frame provides strength and stability to the building and the stiffer diaphragms improve its ability to resist seismic vibrations.
2. Buildings are divided into independent dynamic blocks up to 42 metres long. This reduces the negative impact of seismic forces on the structure, providing additional protection and safety for students and school staff in the event of an earthquake.
3. Reinforced concrete columns are used in conjunction with stiffening diaphragms, which strengthens the structure and ensures effective distribution of seismic loads throughout the building.
4. high strength concrete belonging to class B25 is used. This material has improved mechanical characteristics, which enhances the seismic resistance of the building and increases its resistance to earthquake damage.
5. Construction and installation works are introduced for the construction of non-bearing elements of the building, such as partitions, canopies, roofing and finishing works. This reduces the mass of the building and makes it more flexible in response to seismic forces, which plays an important role in maintaining its integrity and safety during earthquakes.

All of these measures ensure that the new school is designed and built with the seismic activity of the region in mind, providing a safe and sustainable learning and development environment for all its occupants.

8.2. Improving the energy efficiency of the school

Luminaires will be selected in accordance with international standards, natural and artificial lighting and Kyrgyz norms and regulations (environmental, energy, permitting, safety and others) must be applied for the project. During the preparation of draft applications, lighting calculations for all areas will be made.

Energy efficiency measures

1. thermal insulation of building walls
2. thermal insulation of roofs

3. Installation of windows/doors with double-glazed windows/doors with PVC frame
4. Installation of heating system
5. Installation of lighting fittings

Types of finishing materials

Room name	Floor finish	Ceiling finish	Wall finish
School classroom	Commercial linoleum	Ceiling paint	Water-based paint + Synthetic paint
Laboratory	Stoneware/Linoleum	Ceiling paint	Water-based paint + Synthetic paint
Administrative rooms	Commercial linoleum	Ceiling paint	Waterproof Gypsum Board
Library	Laminate flooring	Ceiling paint	Waterproof Gypsum Board
Sports hall	PVC flooring	Ceiling paint	Waterproof Gypsum Board
Dining room	Tile	Waterproof Gypsum Board	Waterproof Gypsum Board
Kitchen	Ceramic Tile	Waterproof Gypsum Board	Porcelain Tile
Corridor	Ceramic Tile	Stone wool tiles	Waterproof Gypsum Board
Staircase	Ceramic Tile	Waterproof Gypsum Board	Waterproof Gypsum Board
Storage area	Tile	Waterproof Gypsum Board	Waterproof Gypsum Board

9. Environmental impact and mitigation measures

Potential foreseeable environmental issues associated with small/medium sized community events will be limited to temporary inconvenience resulting from construction activities and may also include:

- (I) rising pollution due to construction waste;
- (II) generation of dust, noise and vibration due to the movement of construction machines and mechanisms;
- (III) associated risks due to improper disposal of construction waste and asbestos, or minor operational or accidental spills of fuels and lubricants from construction equipment;
- (IV) inadequate restoration of construction sites after completion of works.

All of these potential environmental impacts are easily identifiable, local in location, small in scope, and minimal in impact, and can be effectively prevented, minimized, or mitigated by including in labor contracts specific measures to be taken by contractors under close supervision by the PIU specialists through monthly and technical supervision by the PIU. The use of building materials is regulated by the Technical Regulations "Safety of buildings and structures", approved by the Law of the Kyrgyz Republic on June 27, 2011 No. 57. The use of asbestos is prohibited by WB policy.

An ESMP (Table 1) and an Environmental Monitoring Plan (Table 2) have been developed to mitigate the impact during the construction period.

Environmental and social mitigation works are the responsibility of the Contractor at its own expense, except for those stipulated in the BoQ of the Detailed Design and taken into account when submitting the bidding documents.

During the implementation of the activities, the PIU will have overall responsibility for ensuring that the measures specified in the ESMP are properly implemented. In addition, state control and monitoring will be carried out by the relevant regional department of the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic, in case they receive applications / complaints about environmental violations.

9.1. Impact of the project on climate change

Improving the energy efficiency of the building will be associated with the insulation of the premises during construction, will reduce the loss of thermal energy; reduce the greenhouse effect. No additional greenhouse gas emissions from fuel combustion are expected during the life of the building. As an additional mitigation measure, it is necessary to provide for the planting of green spaces in the area around the school.

9.2 Construction and household waste management

During the construction of the school, in particular during the dismantling works, construction waste is generated, which will be collected and removed to the places agreed with the local self-government bodies (LSG) and local environmental protection authorities. Small (pulverized and plaster waste) will be collected in bags, large ones will be stored in a designated place until the moment of removal.

The main solid waste during the dismantling of the old school building will be a mixture of construction waste (wood, broken brick, scrap metal, slate, concrete, glass, plastic, plastics, clay, etc.).

Another source of pollution may be the waste products of workers during construction work on the construction site. Generated household waste and consumer waste will be stored in containers and, as it accumulates, will be taken to the MSW landfill of the settlement.

Hazardous waste management

During construction work, hazardous waste containing asbestos may be generated. Asbestos-cement wastes and materials may be in the form of slate covering the roof of the building, as well as possibly asbestos-cement pipes or parts thereof. The dismantling of an old building generates asbestos-containing waste, which requires compliance with safety regulations and safe disposal.

Asbestos risk.

Asbestos is a naturally occurring fibrous material that was widely used in buildings and other infrastructure in the 20th century due to its strength and resistance to fire and heat. Asbestos is commonly used in corrugated roofing sheets and asbestos cement pipes.

All types of asbestos fibers pose a risk to human health. As a general rule, greater risk arises when working directly with asbestos or when ACM failure occurs, such as broken edges of asbestos-cement pipes or broken roofing sheets. Therefore, certain precautions are required.

9.2.1 Asbestos waste management

The most likely risk in the project is possible during the extraction and transportation of waste slate roofing and possibly asbestos-cement pipes or parts thereof, which will be transferred by the Contractor for their further disposal. Personnel who will be involved in the disposal of ACM will be at risk of exposure to asbestos.

The World Bank Guidelines for the Management of Asbestos and Asbestos-Containing Materials (ACM) state that the repair or removal and disposal of ACM should only be carried out by specially trained personnel.

The requirements of the legislation of the Kyrgyz Republic on the handling of ACM are mandatory for all types of work related to the release of asbestos-containing dust, and apply to:

- use and application of asbestos-containing products and materials for technical needs;
- new construction, expansion, reconstruction, technical re-equipment, repair, conservation and demolition of buildings built using asbestos-containing materials;
- transportation and storage of asbestos, asbestos-containing materials and products;
- production and use of construction and road materials based on by-products formed during the extraction and enrichment of asbestos-containing raw materials;
- technological processes of loading, unloading, laying ballast and other works performed on asbestos-containing ballast during repair, current maintenance, construction of railway tracks (second tracks or new railway lines), conditions for its storage and transportation.

Compliance with the requirements of these rules is mandatory for legal entities, individuals and citizens engaged in:

- construction, reconstruction, technical re-equipment, as well as repair, conservation and demolition of buildings, structures, installations, railways and roads and other special purpose structures using asbestos-containing materials.
- provide medical services to workers exposed to asbestos and ACM due to their occupation.

Safety requirements for working with asbestos and ACM

When asbestos is present at the project site, it must be clearly labeled as a hazardous material. AFM should not be cut or disturbed as this will generate dust. During reconstruction, all workers must avoid crushing/damaging waste containing asbestos, store such waste in designated areas within the construction site, and dispose of it properly in a designated area or landfill site.

If asbestos-containing wastes are to be temporarily stored on site, they must be properly contained in sealed containers and labeled as hazardous material accordingly. Precautions must be taken to prevent any unauthorized removal of such waste from the site.

All ACM should be handled and disposed of only by qualified and experienced personnel. Personnel must wear appropriate personal protective equipment (masks, protective gloves and overalls). When handling asbestos waste, workers must wear special protective clothing, gloves and respirators. Before removing (if necessary) asbestos from the site, it should be treated with a wetting agent to minimize the release of asbestos dust. Removed asbestos should never be reused.

In the area of work, it is prohibited to find people who are not directly related to the performance of work.

- All workers in the production and use of asbestos should be made aware of the health hazards of asbestos.
- All workers must be provided with personal protective equipment: respirators, helmets, goggles, safety shoes.
- When loading and unloading ACM, do not allow the use of hooks and other sharp devices, so as not to destroy them.
- Do not allow ACM to be dropped from any height during roof dismantling and loading and unloading operations.
- In case of destruction of the ACM during the work, it is necessary to moisten the generated waste in order to prevent the formation of dust.
- Collect fine asbestos-cement waste in a container and store closed until removed from the construction site.
- Transportation of asbestos-cement materials to the place of their disposal or storage in vehicles should be carried out, excluding their fall and damage;
- In the event of a fall and destruction of the ACM along the way to the place of disposal or storage, it is necessary to clear the area from parts and take it to the place of disposal or storage.
- After unloading at the landfill, asbestos-containing waste must be covered with a layer of earth at least 2 m above.

10. Social impact

The construction of the new school will be on a new territory, which is located in the centre, along the road next to residential houses. The land where the new school will be built belongs to Ak-Bulun aiyyl okmotu, i.e. the land is municipal.

The territory allocated for the construction of the new school according to the State Act on the right to use the land plot is 11012,21 m². The state act on the right of perpetual use was issued on 03.10.2023. The new plot allocated for the construction of the school is not occupied by households, free of any buildings and objects.

After inclusion of the A. Sydykbekov School into the project, it became necessary to increase the design capacity from 150 to 225 pupil places by official order of the Presidential Office of the Kyrgyz Republic, which necessitated the expansion of the existing school site. In this regard, the PIU conducted a field visit to conduct a repeated social assessment for the identification of PAPs in accordance with the WB Operational Policy OP.4.12. "Involuntary Resettlement". A public discussion on the issue was held with stakeholders and it was found out that the area could be expanded at the expense of private land of 0.12 ha owned by J. Baigozhoev. Consultation with PAP with J. Baigozhoev was held, where the latter was informed about environmental and social policies of the World Bank, operational policy OP.4.12 "Involuntary Resettlement" and rights to possible compensation for PAP, J. Baigozhoev expressed his refusal to use the land plot and compensation in connection with equal exchange of the land plot with the municipality. Re-screening reports were reviewed and approved by the WB team, in particular it was agreed that there is no need to prepare a RAP for this site.

Also, during the preparation of the feasibility study for the school, the consultant on feasibility study and DED was consulted with this PAP, where they also expressed repeated refusal of any assistance and wish to start construction of the school.

For the period of construction of the school building, the existing buildings will be functioning until the end of construction works. Until the construction of the school is completed, students of the A. Sydykbekov Secondary School will continue to attend the school A. Sydykbekov will continue to study in the old buildings 1 and 2. Upon completion, students will be transferred to the new building and the old building will be dismantled. Therefore, there is no need to prepare a Temporary Pupil Relocation Plan during the construction period.

The project will have a positive impact on the social environment, as the construction of new school buildings will increase the safety of the children's institution and create more comfortable conditions for children to stay in the institution in terms of sanitation and hygiene, as well as increasing the heat resistance of the building.

Positive impacts include improving the energy efficiency of the existing school, reducing the loss of heat and electricity, improving the infrastructure of the school, which will create a comfortable environment for teachers and students. In general, the positive social impact will include improved learning environments in the school.

In addition, it is expected that there will be no significant potential adverse environmental and social impacts, and any of their manifestations can be effectively prevented or minimized through the application of appropriate preventive measures and / or mitigation measures. In order to prevent, prevent and address risks, temporary inconvenience to project affected persons (PAPs) will be subject to mitigation measures.

The construction activities at this school are expected to cause the following social risks and impacts:

- a break in the provision of social services (utility networks, interruption of education during construction work);
- blocking of roads during construction works, if necessary;
- risks associated with working conditions - for example, inadequate conditions for workers in the workplace (drinking water, sewerage, housing, working conditions, etc.);
- weak use of the existing GRM project by the complainants or their lack of information about the GRM system;
- lack of knowledge of their rights on the part of construction workers;
- the problem of child and forced labor, in case of ignoring the requirements of the Labor Code of the Kyrgyz Republic and the relevant paragraphs of this ESMP;
- risk of sexual exploitation and sexual harassment (SEA/SH);
- lack of sufficient information among the population about the project, about construction works, work schedules of the construction contractor, etc.;
- poor awareness of stakeholders and employees about social risks and mitigation measures;
- gender risks that exclude the rights of women and children;

All of the above social risks and impacts, with associated mitigation measures, are summarized in Table 1 Environmental and Social Management Plan.

For the project site, School Order No. 177 dated 23 May 2023 establishes a school committee to monitor the construction works in order to involve school users (parents and teachers) in the process of improving the functionality of the school infrastructure and to

make recommendations for reconstruction. The school committee consists of 7 members, of which 4 are women, 3 are men.

The main functions of the school committee are:

- Joint development of temporary relocation plans ensuring minimal disruption to the educational process for students and their families during the construction period;
- Joint assessment of the needs of schools and prioritization of the functionality of school building improvements;
- Monitoring the process of construction/modernization of school buildings;
- Advise other school management structures on O&M planning to ensure investment sustainability at project completion;
- Raising awareness of the need to reduce the seismic vulnerability of the school facility in order to improve the safety of children.

Of great importance in the successful implementation of the project is the full and accessible disclosure of information among stakeholders, in accordance with the WB Policy 10+1 “Information Disclosure”.

A Communication Strategy has been developed for the project, one of the goals of which is to prevent conflict situations during repair and construction work. The PIU will carry out explanatory work on this project site.

All possible impacts and mitigation measures during the construction and operation periods are shown in Table 1 Environmental and Social Management Plan (ESMP).

Table 1. Environmental and social management plan

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN
Improving seismic safety, energy efficiency during the construction of a new school No. 65 named after. B. Abdrasheva

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
1. Environment				
Period of construction				
Noise and vibration	During the period of dismantling of buildings and carrying out construction work, the sources of intermittent noise are the working mechanisms (engines) of construction and road equipment. There may also be a temporary increase in noise levels along the routes for the removal of construction waste to appropriate locations and the supply of construction	1) The use of vibration devices that meet established standards, as well as vibration and noise protection devices, protective acoustic devices (noise isolation, fences, protective covers, etc.). 2) The use of construction equipment with less noise generation. 3) During work, the covers of the engines of generators, air compressors and other drive mechanisms must be closed;	1) The contractor is responsible for the implementation of measures to reduce the impact on the environment. 2) Inspection of construction sites will be carried out by the PIU specialists, a technical supervision engineer engaged by the PIU, as well as the school committee.	The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of mitigation measures. The school committee will monitor the construction process. The PIU is responsible for overall monitoring.

¹ The cost of mitigation measures included in the estimated part of the design estimate (beautification, landscaping, etc.) will be determined in the BOP during the preparation of the Working Draft. The implementation of mitigation measures that require certain costs, but not included in the estimated part of the design and estimate documentation (provision of PPE, devices, etc.) is provided by the contractor at his own expense.

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	materials and raw materials to the construction site.	<p>4) Machinery and equipment should be located at the maximum possible distance from residential buildings.</p> <p>5) Carrying out organizational measures (selection of the operating mode, limitation of working hours, etc.). Noise during construction work should be limited in time. Equipment that causes noise and vibration should only work from 8.00 to 20.00 hours; noisy and vibrational work is not allowed at night.</p> <p>6) When working on machines and mechanisms in places where the intensity of noise and vibration exceeds sanitary standards, along with taking measures to reduce them, workers should be given individual protective equipment (mittens, shoes, anti-noise from vibration-damping materials.</p> <p>7) When performing mechanized work, vibration levels must be</p>	3) State control is carried out by the authorized body for environmental protection, in case of complaints about environmental violations.	

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		observed. To reduce the level of vibration, the equipment is installed in separate rooms on vibration-insulating foundations using shock absorbers made of steel springs and rubber gaskets. For individual protection against vibration exposure, shoes with thick rubber soles or felt soles, vibration-damping gloves, rubber mats and other means are used.		
Soil pollution	During the construction period, soil resources are affected by the following types of work: - dismantling works (formation of construction and hazardous waste); - earthworks: (dredging, embankments, soil dumping, excavation, site planning, laying of external engineering systems);	1) It is necessary to provide for the preservation of the soil and vegetation layer by removing the existing soil and vegetation layer before the start of earthworks and storing it separately in cavaliers for the purpose of using it for reclamation and landscaping of the school territory. 2) The use of only a designated area for construction, storage of waste and building materials, as well as placement of equipment.		The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of mitigation measures. The school committee will monitor the construction process. The PIU is responsible for overall monitoring.

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	<ul style="list-style-type: none"> - operation of construction equipment and vehicles (spill/leakage of oil products); - vital activity of workers (formation of household waste). 	<p>3) The movement of road transport strictly on existing roads and designated areas.</p> <p>4) Compliance with basic good building codes and standards applied during construction.</p> <p>5) Prohibition of vehicle washing at the construction site.</p> <p>6) Repair of equipment and vehicles only in specialized organizations.</p> <p>7) Carrying out daily checks of equipment for oil leaks.</p> <p>8) Improvement of the territory in accordance with the project.</p> <p>9) Proper collection and timely removal of waste generated during the construction process.</p> <p>10) In the case of temporary use of land by construction organizations for the placement of construction equipment and camps, upon completion of construction work, reclamation of disturbed lands must be carried out.</p>		

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>The complex of works on technical reclamation of temporarily occupied lands for the period of construction provides for the following activities:</p> <ul style="list-style-type: none"> - release of the recultivated surface from waste, machinery and industrial structures; -layout of the surface, application of the soil-vegetative layer. 		
Atmospheric air	<p>Significant dust generation will occur during the dismantling of the building.</p> <p>During the construction of buildings, the generation of dust will be negligible.</p> <p>Emissions of pollutants into the atmosphere are also expected:</p> <ul style="list-style-type: none"> - from vehicles -when planning the subgrade; -when using electric welding; - during excavation and loading operations; - in stone and concrete works; 	<ol style="list-style-type: none"> 1) An effective method for dust suppression is hydro-irrigation of work areas. 2) Preliminary moistening of excavated rocks with water during excavation and loading, earthworks. 3) Irrigation of dirt roads with water during the dry period of summer. 4) Dust prevention through the use of covering materials (tarpaulins and tarpaulins) for bulk materials in temporary storage areas, as well as during their transportation by road. <p>Delivery of cement to construction</p>	<ol style="list-style-type: none"> 1) The contractor is responsible for the implementation of measures to reduce the impact on the environment. 2) Inspection of construction sites will be carried out by the PIU specialists, a technical supervision engineer engaged by the PIU, as well as the school committee. 	<p>The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of mitigation measures.</p> <p>The school committee will monitor the construction process.</p> <p>The PIU is responsible for overall monitoring.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	<p>- when carrying out finishing works.</p>	<p>sites is carried out only in packaged sealed bags.</p> <p>5) Temporary fencing of the construction site in order to prevent the spread of bulk materials outside the construction site.</p> <p>6) Use of masks, gloves and overalls.</p> <p>7) Limit vehicle speeds and select suitable transport routes to minimize impact.</p> <p>8) It is forbidden to burn any waste at the construction site.</p> <p>9) The operation of vehicles with serviceable internal combustion engines. It is not allowed to operate vehicles with a defective fuel system that exceeds the exhaust gas toxicity standards.</p> <p>10) Maintaining the cleanliness of the surrounding area, preventing construction debris from entering the construction site to minimize dust and pollution.</p>	<p>3) State control is carried out by the authorized body for environmental protection, in case of receipt of complaints about environmental violations.</p>	

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>11) The use of high-quality fuel, the use of modern vehicles with improved environmental performance in terms of emissions of fuel combustion products into the atmosphere, the provision of high-quality maintenance and control of vehicles.</p> <p>12) In the case of organizing a boiler room, it is necessary to install dust and gas treatment plants. Provide for a closed coal storage in order to prevent coal dust from blowing into the atmospheric air.</p>		
Water resources	<p>Due to the absence of water bodies (rivers, springs, lakes, reservoirs, glaciers, etc.) at the construction site or in the immediate vicinity of the site, no direct impact on water resources is expected.</p> <p>Possible impacts on groundwater:</p>	<p>1) Elimination of pollution of the underground horizon.</p> <p>2) Prohibition of earthworks near groundwater sources (some schools have drinking water wells).</p> <p>3) Elimination of contamination of wellheads, strict compliance with the requirements of the sanitary protection zone (SPZ) of wells.</p>	<p>1) The contractor is responsible for the implementation of measures to reduce the impact on the environment.</p> <p>2) Inspection of construction sites will be carried out by the PIU specialists, a technical</p>	<p>The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of mitigation measures.</p> <p>The school committee will monitor the construction process.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	<ul style="list-style-type: none"> - as a result of leakage of oil products during the operation of vehicles and equipment; - in case of conservation of the outdoor toilet without emptying; - from the release of construction and hazardous waste, chemicals and the discharge of polluted untreated water onto the terrain, etc. 	<p>4) Work areas with machines, concrete mixers and fuel tanks should be located outside the ZSO.</p> <p>5) Avoid spills/leaks of oil products into the ground, in case of unintentional spills, it is necessary to remove the contaminated soil and take it to the appropriate places.</p> <p>6) Timely cleaning of territories from oil products in order to prevent their entry into local watercourses and groundwater along with precipitation.</p> <p>7) Cleaning the cesspool of the outdoor toilet from liquid waste and exporting them to municipal wastewater treatment plants according to the Export Act. Disinfection of the cesspool and backfilling with soil in accordance with building codes;</p> <p>8) Improvement of the territory of the outdoor toilet and planting green</p>	<p>supervision engineer engaged by the PIU, as well as the school committee.</p> <p>3) State control is carried out by the authorized body for environmental protection, in case of receipt of complaints about environmental violations.</p>	<p>The PIU is responsible for overall monitoring.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>spaces in its place, in case of its liquidation.</p> <p>9) Construction work must be carried out strictly within the allotted boundaries.</p> <p>10) Elimination of discharge into water bodies and on the relief of economic, household and other untreated effluents.</p>		
Waste generation	<p>During the dismantling of an existing building and the construction of a new one, construction, asbestos-containing, as well as municipal solid waste are generated in the course of the life of workers. Some construction waste may contain asbestos</p> <p>Waste generation leads to pollution and clogging of the construction site and the surrounding area, resulting in</p>	<p>1) Prior to commencement of work, it is necessary to determine the methods of collection and disposal of waste, as well as the location of the main types of waste generated during demolition and construction activities.</p> <p>2) Mineral waste from construction and demolition activities should be separated from general debris and organic, liquid and chemical waste by on-site waste sorting, after which these wastes should be placed in appropriate containers and packages.</p>	<p>1) The contractor is responsible for the implementation of measures to reduce the impact on the environment.</p> <p>2) Inspection of construction sites will be carried out by the PIU specialists, a technical supervision engineer engaged by the PIU, as well as the school committee.</p>	<p>The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of mitigation measures.</p> <p>The school committee will monitor the construction process.</p> <p>The PIU is responsible for overall monitoring.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	pollution of soil, water resources and atmospheric air.	<p>3) All waste collection and disposal records and documentation must be properly maintained as evidence of proper site waste management as designed.</p> <p>4) Whenever possible, appropriate applicable and persistent materials should be recycled (with the exception of asbestos and mercury).</p> <p>5) Ensure proper collection and disposal of construction waste in specialized places under the contract.</p> <p>6) Provide for the proper collection and timely removal of garbage to places agreed with local authorities, environmental protection and sanitary and epidemiological supervision.</p> <p>7) Hazardous waste such as asbestos are handled according to the instructions given in the Hazardous Waste Management section.</p>	<p>3) State control is carried out by the authorized body for environmental protection, in case of receipt of complaints about environmental violations.</p>	

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures.¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
Flora and fauna	<p>During the demolition and construction works, there may be damage to existing trees and shrubs, or it may be necessary to cut or cut them down.</p> <p>There are no lands of specially protected natural areas, forest fund on construction sites and in the immediate vicinity. Possible close proximity to agricultural land.</p>	<p>1) To preserve as much as possible the green spaces available on the territory of schools.</p> <p>2) After completion of works, carry out landscaping of the school territory.</p> <p>3) Forced felling of trees and shrubs, pruning should be carried out only after obtaining permits from the territorial environmental authorities in agreement with the LSG.</p> <p>4) Burning of vegetation, illegal hunting of animals, catching fish are prohibited.</p> <p>5) Compliance with fire safety requirements and carrying out fire prevention measures in the areas provided for use.</p> <p>6) Periodically carry out hydro- and dust suppression at the construction site and irrigation of used roads during dry times.</p>	<p>1) The contractor is responsible for reducing the impact on the environment.</p> <p>2) Inspection of construction sites will be carried out by the PIU specialists, a technical supervision engineer engaged by the PIU, as well as the school committee.</p> <p>3) State control is carried out by the authorized body for environmental protection, in case of receipt of complaints about environmental violations.</p>	<p>The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of mitigation measures.</p> <p>The school committee will monitor the construction process.</p> <p>The PIU is responsible for overall monitoring.</p>
Historical and cultural objects	On the territory of the school there are no monuments of history and culture associated with historical events in the life of the people, the development of society and the state, works of material and spiritual creativity of historical, scientific, artistic or other value.			

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
Operation period				
Soil	The impact on the soil will be possible from students through damage to the soil and vegetation layer, the release of municipal solid waste and the discharge of polluted water.	1) Lawn fencing. 2) Elimination of pollution, emissions of municipal solid waste and discharges of polluted waters onto the soil. 3) Installation of prohibitory signs "Do not walk on the lawns."	Administration of the school	Administration of the school
Water resources	Impact on groundwater is possible in the absence of effective wastewater treatment and the discharge of untreated water onto the terrain.	1) Proper control over the operation and efficiency of local treatment facilities. 2) Periodic monitoring of the efficiency of treatment facilities. 3) Obtain a permit for water use in accordance with the requirements of the legislation of the Kyrgyz Republic; 4) Timely cleaning of the outdoor toilet, which will be used when necessary.	Administration of the school	Administration of the school
Atmospheric air	The source of atmospheric air pollution is a working boiler house.	1) Proper control over the operation and efficiency of gas cleaning units of boiler houses (CCP).	Administration of the school	Administration of the school

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	In the case of a boiler house operating in schools, the impact will be from pollutant emissions in the absence of flue gas treatment.	2) Periodic monitoring of CCGT efficiency. 3) Obtain permission to release pollutants into the air.		
Flora and fauna	Forced felling or uprooting of trees and shrubs	1) Regular watering and maintenance of existing green spaces. 2) Planting new trees, if necessary. 3) Care of the school grounds.	Administration of the school	Administration of the school
2. Social environment				
Period of construction				
Prevention of Sexual Exploitation and Violence and Sexual Harassment (SEA/HA)	For the period of construction and repair work, the contractor will arrive at the project site with its qualified specialists. It is necessary to take measures to avoid conflict situations (fights, quarrels) between arrived workers and the local population. In addition, pay special attention to the relationship of	1) In order to improve the social level of the local population, as well as to eliminate possible conflict / violence between the contractor's employees and the local population, the contractor must hire workers from the local population, that is, ensure the employment of at least 50% of the local population with priority on socially vulnerable families .	Contractor	School committee Administration of the school Technical supervision PIU Security Specialists.

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	newly arrived workers with the female part of the local population.	<p>2) Women should be involved in simple types of repair and construction work (cooking, washing dishes, finishing work, etc.).</p> <p>3) Exclude direct contact of workers with local residents.</p> <p>4) Ensure that the Contractor's Code of Conduct is signed and adhered to.</p> <p>5) Conduct training on the Code of Conduct, raising their awareness of the consequences of sexual harassment through trainings.</p> <p>6) Drivers involved in maintenance and construction work must sign a separate written commitment guaranteeing the exclusion of local passengers (especially women).</p>		
Aesthetics and Landscape	The disturbance of the landscape may be due to the accumulation of construction waste in the surrounding area of the school used during construction.	Upon completion of the work, reclamation work will be carried out on the territory adjacent to the school, in case of its temporary use.	1) The contractor is responsible for the implementation of measures to reduce the impact on the environment.	The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
			<p>2) Inspection of construction sites will be carried out by the PIU specialists, a technical supervision engineer engaged by the PIU, as well as the school committee.</p> <p>3) State control is carried out by the authorized body for environmental protection, in case of receipt of complaints about environmental violations.</p>	<p>environmental and social mitigation measures.</p> <p>The school committee will monitor the construction process.</p> <p>The PIU is responsible for overall monitoring.</p>
Risk to the health and safety of the local population during the construction process	<p>During construction work, noise and vibration, dust emission, disruption of the functioning of existing communications will have an impact.</p> <p>An increase in the movement of heavy vehicles transporting building materials, equipment,</p>	<p>1) Ensure safety by installing construction site fencing, signs and information boards.</p> <p>2) 2) Prevent access of unauthorized persons to the construction site.</p> <p>3) Timely awareness of the population about the upcoming temporary outages of electricity,</p>	<p>1) The contractor is responsible for the implementation of measures to reduce the impact on the environment and social environment.</p> <p>2) Inspection of construction sites will be carried out by the PIU</p>	<p>The Field Supervision Engineer will carry out daily general supervision of construction activities, including monitoring the implementation of environmental and social mitigation measures.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	<p>increasing the risk of traffic accidents and injuries among workers and the local population, inconvenience on inter-farm roads.</p>	<p>water supply, etc. Quick restoration of communications.</p> <p>3) 4) Information boards will be installed near the construction sites to inform the local population about the activities of the project.</p> <p>5) Conducting work only during daylight hours.</p> <p>6) Compliance with safety regulations for the transportation of materials, regulation of the movement of equipment for the smooth and safe internal movement of the local population.</p> <p>7) Ensuring appropriate traffic management on access roads to the site, for the purpose of which a plan for the movement of vehicles / vehicles on the construction site will be prepared.</p> <p>8) Installation of information boards and safety signs;</p> <p>9) Standards of conduct for workers should be established and enforced,</p>	<p>specialists, a technical supervision engineer engaged by the PIU, as well as the school committee.</p>	<p>The school committee will monitor the construction process.</p> <p>The PIU is responsible for overall monitoring.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>including in the context of any risks associated with gender-based violence.</p> <p>10) Compliance with the requirements of sanitary norms and rules (SanPiN).</p> <p>11) Performance of works on hydro- and dust suppression.</p> <p>12) Organization of parking of equipment at a safe distance from adjacent houses.</p> <p>13) Due to the location of pupils in the old school building, the contractor shall prepare a Safety Plan for students, which will contain the following measures, but not limited to:</p> <ul style="list-style-type: none"> - limit noise- and dust-generating activities during the teaching process in the school. - organise the access of construction equipment as far away as possible from the old building. 		

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<ul style="list-style-type: none"> - reinforce the security of the construction site to prevent pupils from entering the construction site. - Install surveillance cameras in places where pupils may enter the construction site. - organise monthly information events for school administrators and pupils. <p>14) Promptly notify any incident or accident related or having an impact on the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public, or workers, including without limitation any Project-related fatalities, serious accidents, significant pollution, community unrest caused by the Project or allegations of gender-based violence.</p> <p>Provide sufficient detail regarding the incident or accident, indicating</p>		

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>immediate measures taken to address it, and include information provided by any contractor and supervising entity, as appropriate. Notification should be made immediately but no later than 48 hours after taking notice of the incident or accident.</p> <p>The contractor shall notify the PIU directly or through the supervision engineer, and accordingly, the PIU shall inform the World Bank/ Association.</p> <p>Failing to notify the World Bank/ Association will result in non-compliance with the ESMP and the contract.</p>		
Resettlement and/or land acquisition	Impact is not expected as the school area is not occupied by households and is free from any developments and commercial activities. WB Operational Policy OP 4.12 “Involuntary Resettlement” does not apply.			
Conflicts/complaints and other appeals	The emergence of conflict situations in the course of construction work and economic, social,	<p>1) carrying out explanatory work at the project site.</p> <p>2) development of infographic materials for the school, reflecting</p>	Complaints and proposals within the competence of the Aiyl Okmotu should be sent to the Aiyl Okmotu.	World Bank

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	environmental and other issues among the population.	<p>the entire list of planned activities, in order to avoid conflicting expectations. For example, roof replacement, floor covering replacement, window replacement, wall reinforcement, etc.;</p> <p>3) development of infographic materials reflecting the structure of control over the implementation of the project, as well as contacts where you can contact with questions, complaints, suggestions;</p> <p>4) development of information materials reflecting the timing of the project;</p> <p>5) prompt placement of materials on the project page in social networks;</p> <p>6) monitoring social networks and identifying publications and complaints from the population regarding activities under</p>	<p>Complaints and proposals related to the implementation of activities for the construction and reconstruction of schools are considered by the PIU. The following types of grievances by citizens/beneficiaries may be considered under Component 2 of the Project, among others:</p> <ul style="list-style-type: none"> • The process of construction work has a negative impact on the livelihoods of the population; • During the implementation of the Project, the ecological state of the zone was disturbed; 	

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>component 2 of the ERIK project. prompt response to them.</p> <p>7) Provision by the Grievance Redress Mechanism of the project, in accordance with paragraph 11 of this ESMP, and proposals for prompt response to all types of complaints and their effective management, i.e. keeping records of appeals and taking appropriate measures to resolve them.</p> <p>8) If, after receiving a response from the PIU, the complaint received under Component 2 is not satisfied, the Project uses the Conflict Resolution Commission (CRC). The CSC is formed as needed, and consists of an odd number of members (not less than 5 people), including women representing local governments, school committees, the local community and the PIU. The CRC is created by the Aiyl</p>	<ul style="list-style-type: none"> • Violation of the equality of men and women (gender issues) related to the activities of the project; • The condition of vulnerable people (disabled people, single women, families with many children) was not taken into account by the project; • During the implementation of the Project, women and teenagers are involved in forced labor; • Compensation is not paid in accordance with the alienated property valuation plan, etc.; • Any other complaints / claims or recommendations related 	

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		<p>Okmotu at the request of the beneficiary and the PIU in the Project area. Decisions made by the commission and agreed between all parties are issued in the form of an order of the participating Aiyl Okmotu.</p> <p>If the beneficiary has any objections to the decision of the CRC, the case can be referred by the injured party to the court.</p>	to the implementation of the Project.	
		<p>1) The Contractor appoints one of its employees as a contact person who is responsible for communication with the local population, as well as for receiving inquiries/complaints from the local population.</p> <p>2) 2) The PIU to provide the Grievance Redressal Mechanism to stakeholders and will communicate the information to them (posting of information on grievance channels).</p> <p>3) The contractor is obliged to consult with PIU and local</p>	Contractor	<p>School committee Administration of the school PIU LSG</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		communities to resolve conflict situations between workers and the local population. 4) Inform the nearby population about the repair schedules. 5) Restrict construction work at night.		
Operation period				
Population safety	Completion of construction will have a positive impact, as seismic safety and improved learning conditions are created for the school-age population and teachers working in schools.			
3. Occupational health and safety				
Period before construction				
Accident prevention	During the preparatory work, construction sites / camps (canteen and accommodation for workers, storage warehouse for equipment, necessary equipment and inventory) will be organized in agreement with local authorities. In this case, there may be industrial accidents and	Any construction work is preceded by a preparatory stage for the organization of the working area, which includes the following activities: 1) Fencing of the territory where construction works are supposed. Organization of drainage. Transfer of communications. Arrangement of temporary access roads. Wiring of temporary utilities (electricity, water supply, etc.).	The contractor is responsible for the implementation of safety regulations and the creation of safe working and living conditions.	The PIU is responsible for overall monitoring.

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	<p>injuries that can cause the following factors:</p> <ul style="list-style-type: none"> - Malfunction or improper use of construction equipment, machines and mechanisms. - Violation of the rules for fencing hazardous working areas, or malfunction of protective devices. - Violation of the principles of warehousing building materials. -Mistakes in the design of temporary ladders and bridges for the passage of people and vehicles. -Lack of sufficient space in work areas and aisles. - Poor organization of staff. - Lack of alarm. - Violation of key principles of occupational safety (for example, training in labor protection). 	<ul style="list-style-type: none"> 2) Cleaning work. 3) Breakdown of the territory. 4) Delivery of inventory. 5) Construction of temporary structures (change houses, office buildings, etc.). 6) Organization of places for storage of building materials. 7) Arrangement of crane tracks, etc. 		

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
Period of construction				
Labor protection of workers, safety measures, fire safety	<p>During construction work, the following risks may occur:</p> <ul style="list-style-type: none"> - poor working conditions that pose a danger to the workers themselves; - Lack of adequate food and drinking water; - poor sanitation and hygiene (absence and remoteness of sanitary facilities); - poor housing that does not meet sanitary standards and rules; - workload and poor wages or late payment; - non-compliance with the employment contract; - prohibition of the use of the GRM; - lack of knowledge of employees of their rights and obligations; 	<ol style="list-style-type: none"> 1) Compliance with the safety of workers at the construction site. 2) Provide personal protective equipment, overalls with appropriate safety standards. 3) Create safe work and elementary living conditions for workers: <ul style="list-style-type: none"> - drinking water during working hours; - portable bio-toilets during the work of a team of more than 8 people, if necessary; - first aid kits for each construction site for first aid - anti-noise headphones, ear plugs; - timely payment of labor according to the contract; 4) Compliance with the requirements of the labor legislation of the Kyrgyz Republic. 5) Compliance with fire safety rules. 6) Use of serviceable tools and equipment. 	<ol style="list-style-type: none"> 1) The contractor is responsible for the implementation of safety regulations and the creation of safe working and living conditions. 2) Inspection of construction sites will be carried out by the PIU specialists. 3) State control is carried out by the Service for Control and Supervision of Labor Legislation under the Ministry of Labour, Social Security and Migration of the Kyrgyz Republic. 4) Fire Supervision Service under the Ministry of Emergency Situations of the Kyrgyz Republic. 	<p>The technical supervision engineer carries out constant supervision of compliance with health and safety.</p> <p>The PIU carries out monthly monitoring.</p>

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
	<p>- Forced child labor and involvement of women and children in hard work; And also in the course of work, industrial injuries of workers and the occurrence of fires are possible.</p>	<p>7) Compliance with approved labor protection instructions. Conducting employee training. 8) The sites must be equipped with appropriate information stands and signs informing workers about the rules and regulations of work. 9) Compliance with safety regulations for construction activities, prevention of accidents and work-related injuries. 10) Conducting trainings for personnel (workers), safety briefing.</p>		
Operation period				
Accident prevention, fire safety	During the operation of schools, in case of non-compliance with safety regulations, accidents, fires or injuries to students and school employees may occur.	<p>1) Strict observance of safety regulations. 2) Ensuring fire safety. 3) Installation of fire shields in accordance with the rules and regulations. 4) Ensuring the safety of protective structures, if any, on the territory of schools.</p>	<p>1) The school administration is responsible for ensuring the implementation of safety regulations, creating a safe learning environment for students. 2) State control on labor protection is carried out by the Service for Control</p>	The school administration carries out constant monitoring.

Ecological and social elements	Possible impacts and risks	Necessary environmental mitigation measures. Cost of measures. ¹	Necessary institutional responsibility for mitigation measures	Necessary monitoring of the construction process
		5) The constant availability of first aid kits.	and Supervision of Labor Legislation under the Ministry of Labour, Social Security and Migration of the Kyrgyz Republic. 4) State Control of Fire Safety - Fire Supervision Service under the Ministry of Emergency Situations of the Kyrgyz Republic.	

Table 2. Plan of ecological monitoring

Environmental and social monitoring plan during construction

What parameter is to be monitored?	Where will the monitoring take place?	How will monitoring be carried out?	When? (measurement frequency)	Monitoring cost (cost of equipment or amount of contractor's expenses required for monitoring)	Institutional responsibility for monitoring	Period of monitoring
1. Environment						
Noise from transport, mechanisms	At the construction site	organoleptically inspection	Constantly	Not required	Building company	From the beginning and to the end of construction
Atmospheric air (dusting)	At the construction site and adjacent territory	visual inspection	Weekly	Not required	Building company	From the beginning and to the end of construction
The soil	At the construction site	visual inspection	Always and when needed	Not required	Building company	From the beginning and to the end of construction
Water resources	At the adjacent territory	visual inspection	Constantly	Not required	Building company	From the beginning and to the end of construction
Flora and fauna (biota) and natural environment (range)	At the construction site	visual inspection	Constantly	Not required	Building company	From the beginning and to the end of construction
Waste (waste disposal and storage)	At the construction site	According to plan and review	As planned, but at least weekly	Cost must be calculated in BoQ	Building company	From the beginning and to the end of construction
2. Social environment						

What parameter is to be monitored?	Where will the monitoring take place?	How will monitoring be carried out?	When? (measurement frequency)	Monitoring cost (cost of equipment or amount of contractor's expenses required for monitoring)	Institutional responsibility for monitoring	Period of monitoring
Community safety	At the construction site	Documented by informing the public about the work, if necessary	As necessary, turn off water supply, electricity and other communications	Not required	Building company	From the beginning and to the end of construction
The number of hired labor force involved at the local level, with the definition of the number of women involved.	At the construction site	documented and visual	1 time in six months	Not required	PIU	From the beginning and to the end of construction
Consideration and resolution of complaints submitted by interested parties.	At the construction site	documented and visual	As complaints come in	Not required	PIU	From the beginning and to the end of construction
Determination of the quantitative composition of the project beneficiaries, with the determination of the number of women involved	At the construction site	documented and visual	1 time in six months	Not required	PIU	From the beginning and to the end of construction
3. Occupational health and safety						

What parameter is to be monitored?	Where will the monitoring take place?	How will monitoring be carried out?	When? (measurement frequency)	Monitoring cost (cost of equipment or amount of contractor's expenses required for monitoring)	Institutional responsibility for monitoring	Period of monitoring
Worker safety	At the construction site	Documented and visual (keeping a journal for organizing briefings, filling out checklists, for monitoring compliance with safety regulations, the availability and use of PPE, fire safety equipment).	Constantly	Not required	Building company	From the beginning and to the end of construction

11. Legislative support

In the field of environmental protection. The fundamental principles of managing natural resources and the environment in order to ensure favorable conditions for human life, determining responsibility and compensation for harm caused, are laid down in the Constitution of the Kyrgyz Republic (Article 48). Kyrgyzstan has developed a legal framework that ensures the current management of natural resources and the environment and regulates the legal relationship between users of nature and the state. The current legislation regulates the protection and use of all types of resources: land, water, air, biodiversity, mineral resources.

Legislation provides procedures and mechanisms for managing them, such as: basic norms and rules for the use of resources, including norms and rules for charging fees for nature use and environmental pollution, environmental monitoring, impact assessment, environmental standards, environmental expertise, environmental control, etc.

The main laws governing nature management, environmental protection and the need for EIA in the Kyrgyz Republic include:

- (i) Law of the Kyrgyz Republic “On Environmental Protection” (1999);
- (ii) Law of the Kyrgyz Republic “On Ecological Expertise” (1999);
- (iii) Law of the Kyrgyz Republic “General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic” (2009);
- (iv) Law of the Kyrgyz Republic Technical Regulations "On the safety of drinking water" (2011);
- (v) Law of the Kyrgyz Republic “On Production and Consumption Wastes” (2001);
- (vi) Law of the Kyrgyz Republic “On Sustainable Development of Ecological and Economic System “Issyk-Kul” (2004);
- (vii) Law of the Kyrgyz Republic “On Biosphere Territories in the Kyrgyz Republic” (1999)
- (viii) Resolution No. 623 of September 25, 1998 on the establishment of the Issyk-Kul Biosphere Territory;
- (ix) Sanitary and Epidemiological Rules and Regulations “Sanitary and Epidemiological Requirements for the Conditions and Organization of Education in General Educational Institutions”, approved by the Government Regulation No. 201 of April 11, 2016;
- (x) Sanitary and epidemiological rules and regulations "Sanitary and epidemiological requirements for the device, content and organization of the working hours in preschool and educational organizations", approved by the Government of the Kyrgyz Republic No. 201 of April 11, 2016.
- (xi) Other laws governing the protection and use of natural resources.

Framework laws establish the need to develop by-law normative legal acts. Environmental quality standards are approved by departmental orders registered with the Ministry of Justice of the Kyrgyz Republic. By the Law “On Normative Legal Acts” (2009), legal acts that have an approval status below the PPKR ceased to be valid.² Until now, they have no legal force and are recommended for use. Ministries, state committees, administrative departments, other executive authorities and local self-government bodies have the right to issue only advisory acts in the field of technical regulation.³

² Article 36 Law No. 241 of July 20, 2009 “On Normative Legal Acts”;

³ Article 3 Law of the Kyrgyz Republic “On Technical Regulation” No. 67 of May 22, 2004;

The norms and standards for environmental quality establish quantitative indicators of the quality of surface and ground waters, atmospheric air, land resources and noise levels in settlements and in the working area, as well as sampling and measurement procedures.

The Kyrgyz Republic is a party to 13 international environmental conventions and 3 protocols. The Law on Environmental Protection guarantees the application of international agreements.

Adopted in the Kyrgyz Republic in 2007 in order to implement the UN Framework Convention on Climate Change (2000), the Law "On State Regulation and Policy in the Field of Emission and Absorption of Greenhouse Gases" defines the fundamentals of state regulation, the procedure for activities, the rights, duties and responsibilities of state bodies, local authorities, individuals and legal entities in the field of emission and absorption of greenhouse gases in the territory of the Kyrgyz Republic.

The Law "On Environmental Protection" is a framework law and establishes the basic principles of environmental protection, including the need to conduct an Environmental Impact Assessment before the start of the project. It also contains brief basic descriptions of the main regulated aspects that form the basis for the development of new legal instruments in certain areas of environmental protection.

The Law on Ecological Expertise regulates in detail the procedures for conducting environmental expertise and EIA and covers both current and new programs, plans and legislation in the field of environmental protection. Its tasks include preventing negative impacts on human health and the environment resulting from economic or other activities and ensuring that such activities comply with the environmental requirements of the country.

The Law "General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic" defines the main provisions of technical regulation in the field of environmental safety and establishes general requirements for ensuring environmental safety in the design and implementation of activities at economic and other facilities for production, storage, transportation and disposal processes products. The requirements of this technical regulation are valid on the territory of the Kyrgyz Republic in relation to the processes of production, storage, transportation and disposal of products and are mandatory for all legal entities and individuals involved in these processes.

The Law "On Public Health" is aimed at improving the health of the population through increasing access to public health services, promoting issues of protecting and strengthening the health of society as a whole. According to the Law "On Public Health", drinking water must be safe and comply with the technical regulations of the Kyrgyz Republic, approved in the manner prescribed by the legislation of the Kyrgyz Republic regulatory legal acts approved in the manner prescribed by the legislation of the Kyrgyz Republic.⁴

Law of Technical Regulations "On the safety of drinking water", adopted in accordance with the Law of the Kyrgyz Republic "On the Fundamentals of Technical Regulation in the Kyrgyz Republic", is a Technical Regulation and establishes mandatory requirements for application and implementation of requirements for objects of technical regulation. The objectives of the Technical Regulation "On the safety of drinking water" are:

- protecting the health and life of people from the harmful effects of pollutants contained in water intended for human consumption;

⁴ Article 10 of the Law on Public Health No. 248 of July 24, 2009

- prevention of actions that mislead consumers when using drinking water.

This Technical Regulation applies to drinking water intended to meet the needs of the population, and regulates the principles, responsibilities, procedures and organizational measures to ensure the safety of drinking water. This Technical Regulation applies to legal entities and individuals engaged in economic activities (industrial, agricultural and other enterprises), operating water supply systems.

The Law "On the Sustainable Development of the Issyk-Kul Ecological and Economic System" is aimed at regulating relations related to the conservation, use and development of the Issyk-Kul Ecological and Economic System.

The Law "On Biospheric Territories in the Kyrgyz Republic" defines the legal basis for the creation and operation of biospheric territories in the Kyrgyz Republic. Taking into account the relevance of the environmental component in the strategy of sustainable human development, as well as in order to attract foreign investment in promising and environmentally oriented sectors of the economy and the service sector of the Issyk-Kul region, the Government of the Kyrgyz Republic dated September 25, 1998 No. ".

Sanitary and epidemiological requirements for the conditions and organization of training in general education institutions, approved by the Government Regulation No. 201 of April 11, 2016, are aimed at protecting the health of students in general education institutions. Sanitary rules apply to general educational organizations being designed, operating, under construction and reconstructed, regardless of their type and form of ownership, implementing programs of primary general, basic general and secondary (complete) general education.

Sanitary and epidemiological rules and regulations "Sanitary and epidemiological requirements for the device, content and organization of the mode of operation in preschool educational organizations" are aimed at protecting the health of children in the implementation of activities for their upbringing, training, development and rehabilitation in preschool educational organizations, regardless of their type, organizational and legal forms and forms of ownership.

Requirements of the legislation of the Kyrgyz Republic on hazardous waste management. According to the Decree of the Government of the Kyrgyz Republic No. 885 dated December 28, 2015 on the approval of the "Procedure for handling hazardous waste in the territory of the Kyrgyz Republic", asbestos-containing and mercury-containing waste must be disposed of in accordance with environmental safety requirements.

The Technical Regulation "Safety of buildings and structures", adopted by the Law of the Kyrgyz Republic on June 27, 2011 No. 57, establishes the necessary requirements for the design (including engineering surveys), construction, operation, overhaul, reconstruction, re-profiling, dismantling and demolition of buildings and structures;

2) establishes requirements for systems of engineering equipment of buildings and structures;

3) determine the procedure and procedure for assessing the compliance of buildings and structures with the basic safety requirements.

This Technical Regulation applies to residential and public buildings and structures, buildings and structures of industrial enterprises, water, agriculture and municipal enterprises, transport and communication facilities, energy, hydraulic and irrigation facilities being built on the territory of the Kyrgyz Republic.

In the field of labor protection and safety. The legislation of the Kyrgyz Republic

regulating labor protection is based on the Constitution of the Kyrgyz Republic and includes the Labor Code, the law “On labor protection” and other regulatory legal acts of the Kyrgyz Republic.

In terms of conditions and professional work, the Constitution of the Kyrgyz Republic provides each citizen with:

- The right to safe work. The use of child and forced labor is prohibited (Article 23);
- The right to rest. Everyone has the right to rest. This right is ensured through the establishment of maximum working hours, the provision of paid annual leave and weekly days off, as well as the provision of other conditions provided for in the legislation (Article 44);
- The right to health care. Everyone has the right to medical care (Article 47);
- The right to social protection. Citizens are guaranteed social security in old age, in case of illness and disability, loss of a breadwinner in cases and in the manner prescribed by law (Article 53).

The Labor Code of the Kyrgyz Republic (No. 106 dated August 4, 2004) is the main legal document that regulates all issues related to labor relations in the Kyrgyz Republic. The Code regulates labor and other relations directly related to labor, ensures the protection of the rights and freedoms of all participants in labor relations and establishes minimum guarantees of rights and freedoms in the sphere of labor. Article 4 of this code prohibits discrimination and guarantees all citizens equal rights to work; discrimination in labor relations is prohibited. It is prohibited to establish any distinction, refuse admission or provide any advantages that may lead to a violation of equal opportunities in the world of work, based on nationality, race, gender, language, religion, political opinion, social status, property status.

Salary and deductions

Contracts and collective agreements establish the form and amount of compensation for work performed. The monthly salary of an employee who has worked during this period the norm of working hours and fulfilled labor norms (labor duties) cannot be lower than the minimum wage established by law. The minimum wage does not include additional payments and allowances, bonuses and other incentive payments, as well as payments for work in conditions that deviate from normal, for work in special climatic conditions and in territories exposed to radioactive contamination, other compensation and social payments (Article 54).

Wages are paid at least once a month (Article 157). In addition, employers must compensate for work-related damage to the health or property of an employee, and in the event of the death of an employee, his family receives compensation. Deductions for specific reasons are allowed, but their amount cannot exceed 50 percent of the salary due to the employee (Article 161).

Work time

The standard work week consists of 40 hours. For persons under the age of 18, it is allowed to establish reduced working hours. The number of hours per day and days per week is determined in the contract between the employer and the employee (Article 90). Persons under 14 years of age are not allowed to work that is harmful to health and does not violate the learning process in accordance with Article 18 of the Labor Code of the Kyrgyz Republic.

Article 114 Engagement of employees to work on weekends and non-working holidays is carried out with their written consent in the following cases:

- to prevent a production accident, catastrophe, eliminate the consequences of a production accident, catastrophe or natural disaster; to prevent accidents, destruction or damage to property;
- to perform unforeseen work, on the urgent implementation of which the normal work of the organization as a whole or its individual divisions depends in the future.
- on non-working holidays, work is allowed, the suspension of which is impossible due to production and technical conditions (continuously operating organizations), work caused by the need to serve the population, as well as urgent repair and loading and unloading work.

Rest time (breaks)

The types of rest time are (Article 109 of the Labor Code of the Kyrgyz Republic):

- breaks during the working day (shift);
- daily (between shifts) rest;
- days off (weekly uninterrupted rest);
- non-working holidays;
- vacation.

During the working day, the employee must be given a break for rest and food. The time and duration of the break is determined by the internal regulations, shift schedule or individual labor contract or collective agreement between the employer and the employee (Article 110 of the Labor Code).

Overtime work

Work outside the normal working hours can be carried out both at the initiative of the employee (part-time job) and at the initiative of the employer (overtime work) (Article 98). Overtime work is paid for the first 2 hours of work at least one and a half times, for subsequent hours - at least twice the amount. Specific amounts of payment for overtime work may be determined by a collective agreement or an employment contract. At the request of the employee, overtime work, instead of increased pay, may be compensated by providing additional rest time, but not less than the time worked overtime. Part-time work outside the normal working hours is paid according to the time worked or output (Article 174).

Labor disputes

Labor disputes are considered “unsettled disagreements between the employer and the employee on the application of legislation and other regulatory acts of the Kyrgyz Republic on labor, as well as working conditions provided for in the employment contract and collective agreement (Article 356).

Individual labor disputes are considered by labor dispute commissions, the authorized state body in the field of supervision and control over compliance with labor laws and courts. The employee, at his choice, may apply for the resolution of a labor dispute to a labor dispute commission or an authorized state body in the field of supervision and control over compliance with labor legislation, or directly to the court. In cases where a labor dispute commission has not been established in an organization, a labor dispute is subject to

consideration directly by the authorized state body in the field of supervision and control over compliance with labor legislation or in court (Article 412).

Complaints

The Law on the Procedure for Considering Citizens' Appeals (dated May 4, 2007) contains legal provisions regarding established information channels through which citizens can submit complaints, requests and appeals. Article 8 establishes a time frame for consideration of applications - 15 days from the date of receipt for applications that do not require additional study or investigation, and 30 days from the date of receipt for applications that require additional investigation.

Occupational safety and health.

The right to safety and health at work is established by the Constitution of the Kyrgyz Republic. In accordance with Article 42 of the Constitution of the Kyrgyz Republic, citizens of the Kyrgyz Republic have the right to freedom of labor, to dispose of their abilities for work, to choose a profession and occupation, protection and working conditions that meet safety and hygiene requirements, as well as the right to receive wages not lower than the established living wage law.

The section on occupational safety and health (OHS) is also contained in the Labor Code of the Kyrgyz Republic, which was adopted on July 1, 2004. It establishes the obligations of the employer in terms of ensuring labor safety, provides for state regulation in the field of labor safety, and prescribes the obligations of the employee himself in terms of OSH. The employee is guaranteed labor safety, training and instruction, sanitary conditions, sanitary and household and medical and preventive services. The Code covers the creation and operation of labor protection services; investigation and recording of accidents at work and occupational diseases; payment of allowances and compensations for special working conditions.

On August 1, 2003, the Law of the Kyrgyz Republic “On labor protection” was adopted, which regulates relations between employers and employees, and is aimed at creating working conditions that ensure the protection of life and health of employees at the workplace. The law establishes the main directions of state policy in the field of labor protection and the principles of state management of labor protection. On the one hand, it provides access for employees of state bodies responsible for labor protection and social insurance, and representatives of public monitoring to check working conditions and labor safety measures in organizations and investigate accidents at work and occupational diseases.

On the other hand, employees are required to undergo initial (upon employment) and further periodic medical examinations, training and periodic safety briefings (Article 12. Labor Code of the Kyrgyz Republic), as well as participate in medical and recreational activities offered by a medical institution, if they paid by the employer (Article 16. of Labor Code of the Kyrgyz Republic).

The Ministry of Labor and Social Development has the primary responsibility for overseeing occupational health and safety. Key relevant legislation includes the 2003 Labor Protection Law of the Kyrgyz Republic, the 2004 Labor Code of the Kyrgyz Republic, and separate regulations. The country joined the International Labor Organization (ILO) on March 31, 1992. A review conducted by the ILO in 2008 found that the Occupational Safety Law of the Kyrgyz Republic is in line with international norms and standards.

The main regulatory legal acts: the Law of the Kyrgyz Republic "On labor protection" of 2003, the Labor Code of the Kyrgyz Republic of 2004 and other normative acts. The country joined the International Labor Organization (ILO) on March 31, 1992. A review conducted by the ILO in 2008 found that the Occupational Safety Law of the Kyrgyz Republic is in line with international norms and standards.

12. Grievance Redress Mechanism (GRM)

The Grievance Redress Mechanism (hereinafter referred to as the GRM) is a process of obtaining prompt, objective information, evaluation, consideration, satisfaction and evaluation of appeals (applications, proposals, complaints, requests, positive feedback) related to the implementation of the Project.

During the reconstruction process, residents living in the selected project areas (schools) will have a direct negative impact from the Project activities, and social, environmental and other issues may arise during the reconstruction or construction of the selected schools. The GRM provides flexibility and accessibility in using the channels below for citizens/beneficiaries who wish to submit other appeals (suggestions and feedback) in addition to complaints related to the Project. Work with such appeals of citizens/beneficiaries is carried out by the Project Implementation Unit (PIU) in the same manner as in the case of complaints.

The process of registering and handling complaints related to project activities.

Appeals/complaints can be sent through the following channels

<p>1. Hotline: +996 (312) 323837 (component 2); + 996 (553) 32-83-36 (component 2);</p> <p>2. WhatsApp: + 996 (553) 32-83-36 (component 2); (instant messaging system for mobile devices with support for voice and video communication);</p>	<p>3. Written appeals can be sent to the PIU: Bishkek, st. Manas 101/1, 3rd floor, office 6. Also, written grievances can be placed in grievance boxes set up in schools/aiyl okmotu.</p> <p>4. Oral appeals under Component 2 can be submitted during working meetings at the sites (sites);</p> <p>5. Electronic appeals must be sent to e-mail: erik2.mes.kg@gmail.com</p>
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Based on the results of consideration of the appeal, the PIU decides to take measures to resolve the issues raised and eliminate the identified violations.

The GRM system will assist the applicant at all stages of the consideration of his complaint and ensure that the complaint is handled properly.

Communities and individuals who feel they have been affected by a WB-supported Project may file a complaint with the existing project-level grievance structures or the WB GRM.

The GRM ensures that complaints received are dealt with promptly in order to resolve issues related to the Project. Project-affected communities and individuals may submit their grievances to an independent WB Inspection Panel, which determines whether or not harm has occurred as a result of the World Bank's failure to comply with its policies and procedures. A complaint may be filed at any time after the concern has been brought directly to the attention of the World Bank and the management of the WB has been given the opportunity to respond to it.

For information on how to file a complaint with the WB GRS, please visit the website: <http://www.worldbank.org/GRS>.

For information on how to file a complaint with the WB Inspection Panel, please visit the website: www.inspectionpanel.org.

A complaint can be submitted to the World Bank office in Bishkek through the following channels. A complaint can be sent to the Bank's GRS through the following channels:

By email: grievances@worldbank.org

By fax: +1.202.614.7313

By mail: World Bank, Grievance Redress Service, MSN MC10-1018, 1818 H Street Northwest, Washington, DC 20433, USA.

Through the World Bank Office in the Kyrgyz Republic:

st. Moskovskaya 214, Bishkek, Kyrgyz Republic, email: bishkek_office@worldbank.org; tel. +996 312 625262.

Complaints and suggestions regarding Component 2, which are within the competence of the Aiyl Okmotu, should be directed to the Aiyl Okmotu specialist responsible for assisting in the implementation of Component 2.

Complaints and proposals related to the implementation of activities for the construction and reconstruction of schools are considered by the PIU.

The following types of grievances by citizens/beneficiaries may be considered under Component 2 of the Project, among others:

- The process of construction work has a negative impact on the livelihoods of the population;
- During the implementation of the Project, the ecological state of the zone was disturbed;
- Violation of the equality of men and women (gender issues) related to the activities of the project;
- The condition of vulnerable people (disabled people, single women, families with many children) was not taken into account by the project;
- During the implementation of the Project, women and teenagers are involved in forced labor;
- Compensation is not paid in accordance with the alienated property valuation plan, etc.;
- Any other complaints / claims or recommendations related to the implementation of the Project.

If a complaint is received orally during the meeting, the PIU will respond orally if possible to resolve the complaint immediately. In case of impossibility of immediate resolution, the PIU informs about the deadlines for the elimination of complaints in accordance with the legislation of the Kyrgyz Republic. Oral grievances are also recorded in project site logs and all grievances will be entered into the central GRM spreadsheet at the PIU level for tracking and review.

At the local level, for the period of construction work, the GRM structure for the contractor and the local population is divided into 3 levels:

Level 1: Head of the contractor - full name, phone, e-mail

Level 2. Consultant for technical supervision (Tekhnadzor) - full name, phone, e-mail

Level 3. Specialist in security measures of the PIU under the Ministry of Emergency Situations of the Kyrgyz Republic - full name, phone, WhatsApp; email mail.

If, after receiving a response from the PIU, a complaint under Component 2 is not satisfied, the Project uses the Conflict Resolution Commission (CRC).

The CSC is formed as needed, and consists of an odd number of members (not less than 5 people), including women representing local governments, school committees, the local community and the PIU.

The CRC is created by the Aiyl Okmotu at the request of the beneficiary and the PIU in the Project area. Decisions made by the commission and agreed between all parties are issued in the form of an order of the participating Aiyl Okmotu.

If the beneficiary has any objections to the decision of the CRC, the case can be referred by the injured party to the court.

13. Supervision and reporting

A number of government departments in the Kyrgyz Republic are responsible for environmental management and protection, as well as labor protection and safety. The lead agency is the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic, whose powers include ensuring compliance with the requirements of legislation in the field of environmental protection.

To achieve the goals of the World Bank standards, in the process of construction and installation work on sites, environmental and social safety, as well as labor protection and safety, must be ensured.

At the design stage of the activity, the responsibility and responsible specialists from the side of the consultant for the development of the feasibility study, design estimates and architectural supervision (consultant), the contractor and technical supervision engineers for each construction site, involved by the PIU, should be determined.

Each of these professionals play an important and key role in fulfilling environmental, social, health and safety obligations.

The main responsibilities of key specialists during construction and installation works are described below.

Responsibilities of the Consultant:

- carry out architectural supervision in accordance with the legislation of the Kyrgyz Republic, according to project documentation, including the ESMP;
- provide reports to the PIU on the work done, in case of deviation or inconsistency of the project, immediately inform the PIU and take appropriate measures.

The contracting organization carrying out construction work, represented by the foreman and engineer for labor protection and safety, is obliged to:

- carry out work in strict accordance with the project documentation and ESMP;
- comply with the legislation of the Kyrgyz Republic in the field of environmental protection, labor protection and safety;
- be responsible for the quality of work, provide a monthly report on the work carried out;
- to instruct workers at the proper level at the construction site;
- monitor the implementation of work on safety;
- at the request of the PIU, provide the requested information.

Responsibilities of the Supervisory Engineer:

- must be on the construction site at all times;

- carry out technical supervision for the implementation of construction works and environmental measures specified in the ESMP;
- submit a monthly report to the PIU on the work performed.

Information on the implementation of the environmental management plan should be included in regular progress reports by the field engineer. This section should contain a summary and description of monitoring activities, as well as a description of the problems encountered and methods for their elimination (according to the form provided by the PIU).

Ultimately, the responsibility for the implementation of the ESMP remains with the PIU in accordance with the safeguards of the World Bank.

The PIU Safeguards Specialist plays a key role in meeting the environmental and social sustainability requirements of the project.

The PIU Safety Specialist works in close cooperation with the Project Civil Engineer, Feasibility Study, Design and Architectural Supervision Consultant and Technical Supervision Consultant engaged by the PIU, as well as with the school committees established at each construction site to monitor the construction installation work.

Key Responsibilities of the PIU Security Specialist:

- compliance with the requirements of the World Bank policy and the legislation of the Kyrgyz Republic;
- visit the construction site once a month to monitor the progress of work and compliance with the requirements of the ESMP during the implementation of reconstruction/dismantling and construction of a new building; if any problems arise, additional unscheduled trips should be provided; upon completion of monitoring, reports should be submitted to the director of the PIU.
- exercise supervision and monitoring of control over the implementation of action plans for environmental protection, labor protection and safety, displacement and resettlement, monitoring;
- in case of non-compliance with protective measures, it is necessary to draw up an act indicating the period for eliminating violations for the Contractor.
- conduct training activities on environmental protection, safety;
- provide a project grievance redress mechanism (GRM), consider and provide responses to inquiries and complaints in a timely manner.
- provide monthly, quarterly, semi-annual and annual reports on security measures to the management of the PIU and to the World Bank as required.

14. Information disclosure and public participation

In accordance with the Operational Policy (OP 4.01), the WB has special requirements regarding information disclosure and public consultations. Disclosure of information includes the presentation of information about the project to the general public and the affected population and other interested parties, from the early project cycle and throughout its implementation. Disclosure is intended to facilitate constructive engagement with affected communities and stakeholders throughout the life of the project.

In addition, the Kyrgyz Republic is a member of the United Nations Economic Commission for Europe Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, which also contains provisions to ensure disclosure of project objectives and environmental considerations.

Public hearings in the project site of the school in the village of Toktogul were held on May 18, 2023. The public hearings were attended by 27 persons

At the meeting were:

1. School committee
2. LSG
3. District department of education
4. Persons affected by the project (PAPs)
5. Residents of nearby households/shops
6. Administration and parent committee of other nearby schools
7. Parents/teachers
8. Local keneshes
9. Council of Elders (Aksakals)

At the public hearings, information was provided on the technical solutions of the project and the impact of the project on the environment and social environment, as well as measures that will be taken to prevent and mitigate the impact. The protocol of public hearings is attached.

Materials of public hearings

ПРОТОКОЛ
общественного обсуждения проекта технико-экономического обоснования
(ТЭО)
строительства/реконструкции, в том числе ОВОС и социальных аспектов

Школы им. А. Сыдыкбекова

Дата: 18.05.2023 года

Время: 14.30 ч.

Место: Иссык-Кульская область, Ак-Сууйский район, с. Токтогул

Повестка дня:

1. Ознакомление заинтересованных сторон, в том числе и школьного комитета с проектом ТЭО строительства/реконструкции школы, подготовленного консультантом по подготовке ТЭО и ПСД (ОсОО «ЭААС»), представление краткого обзора предлагаемых технических решений, раздела Оценки воздействия на окружающую среду планируемой деятельности, а также информации о социальных аспектах проектных участков (вопросов временного перемещения учеников во время строительных работ и вынужденного переселения, там где необходимы).
2. Обсуждение представленной информации у заинтересованных сторон, представление исчерпывающих ответов на возникающие вопросы, а также учет общественного мнения.
3. Одобрение проектов ТЭО, раздела ОВОС и социальных вопросов с заинтересованными сторонами и членами школьного комитета.

Цель данной встречи – раскрытие информации о предлагаемых технических решениях консультантом ТЭО и ПСД, одобрение запланированных работ в проектной зоне со стороны заинтересованных сторон.

Докладчики:

- ✓ ОсОО «ЭААС»;
- ✓ Отдел реализации проектов при Министерстве чрезвычайных ситуаций КР (ОРИ при МЧС).

Координатор проекта Э. Биялиев поприветствовал участников встречи, открыл общественное обсуждение, выступил со вступительным словом, ознакомил о целях и задачах данного обсуждения и передал слово представителям компании ОсОО «ЭААС».

Представители компании «ЭААС» поприветствовали всех участников, вкратце ознакомили с опытом компании, рассказали о целях ТЭО и представили презентации:

- Технические решения проекта ТЭО;
- Оценка воздействия на окружающую среду планируемой деятельности;
- Социальные аспекты школы (вопрос временного перемещения учеников и вынужденного переселения).

После презентаций проекта технико-экономического обоснования, социальных аспектов школы, оценки воздействия на окружающую среду планируемой деятельности и предоставления соответствующей информации были заданы ряд вопросов со стороны местного сообщества.

Э. Биялиев дополнительно спросил о согласии обмена земельными участками между муниципалитетом и частным лицом Байгожоевым Д. в целях расширения территории школы.

Байгожоев Д.: еще раз повторюсь, что претензий к обмену земель не имею. Здесь будут учиться дети, внуки моих односельчан.

Местный житель: сколько времени будет длиться строительство новой школы?

Биялиев Э.: планируемое время строительство новой школы будет занимать 12 месяцев.

Следующий вопрос задал местный житель. Он спросил относительно разницы строительных материалов между представленными вариантами школы.

Биялиев Э., Качкынчиев Э. – директор ОсОО «ЭААС»: разницы между строительными материалами как в первом варианте, так и во втором никакой. В обоих предложенных вариантах будут использоваться одни и те же строительные материалы. В данном случае, в ТЭО Вам предложен вариант как наиболее приемлемый, так как более подходит к данному участку и площадь школы будет немного больше.

Очередной вопрос от местного жителя: у нас возникают большие трудности с отоплением. Поэтому хотелось бы узнать - какие конвекторы будут устанавливаться? И будет ли стоять отдельный трансформатор?

Качкынчиев Э. – директор ОсОО «ЭААС»: В зданиях школы будут устанавливаться новые конвекторы с завода. Гарантия на них семь лет. Представители завода уверяют, что их конвекторы будут без проблем работать 40 лет. В школе будет стоять отдельный трансформатор, чтобы не зависел от села.

Учительница школы, а также местный житель задали вопрос относительно здания, который используется как склад, библиотека?

Качкынчиев Э. – директор ОсОО «ЭААС»: в новой школе будет отдельная библиотека. В мастерской по занятиям труда будут пару комнат, можете использовать как склад. А так склада для хранения вышедших из строя оборудования, техники не предусмотрены.

Участники общественного обсуждения поблагодарили Всемирный Банк и ОРП при МЧС КР, а также компанию ОсОО «ЭААС» и согласились с проектными решениями ТЭО и предлагаемыми мероприятиями на их проектных участках, и в целом одобрили представленные проекты ТЭО, в том числе ОВОС и социальных вопросов. Также выразили готовность оказать содействие во время строительных работ и активно взаимодействовать по возникающим вопросам, и встречу решено было завершить.

И по завершению участники данного общественного слушания приняли решение:

1. Одобрить проект ТЭО проекты ТЭО, в том числе ОВОС и социальных вопросов (вопросы временного перемещения учеников во время строительных работ и вынужденного переселения, в случае необходимости).
2. Проинформированы о защитных политиках Всемирного Банка.
3. Объявить дату прекращения помощи – 18.05.2023 г.
4. Оказать поддержку в реализации проекта.

Участники встречи:

Каримбаева Т.Б.	завуч		
ФИО	должность		подпись
Абдрахманов Т.К.	Н.И. Бакеев		
ФИО	должность		подпись
Абдиев А.З.	Н/к депутат		
ФИО	должность		подпись
Мукаббетов Д.Н.	абдин Бакеев		
ФИО	должность		подпись
Кучков К.У.	айым урчуу		
ФИО	должность		подпись
Вичамжан У.И.	Н.К. Тарата		
ФИО	должность		подпись
Байпоязов Ж.	Зобхор		
ФИО	должность		подпись
Асеев Т.В. Ж.	Д/Т		
ФИО	должность		подпись
Сардонбекова И.	муранин		
ФИО	должность		подпись
Исмаилов Н.	муранин		
ФИО	должность		подпись
Умурбаева И.	муранин		
ФИО	должность		подпись
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Список участников
общественного обсуждения проекта технико-экономического обоснования (ТЭО)
строительства/реконструкции, в том числе ОВОС и социальных аспектов









Дата: 18 мая 2023 года

Время: 14.30 ч.

Место: Иссык-Кульская область, Ак-Суйский район, с. Токтогул, СОШ им. А. Сыдыкбекова

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21.	Махмедов Бах	М.К. кол.	0707500957	М.К.
22.	Запорова Ирина	М.К.	0700740698	М.К.
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23.	Тыгузбаев С.	Зеренфул	0500220878	Р.Д
24.	Асанатызов Р.М.	а/к. зеренфул	0700647236	З.Д
25.	Мусыпаев С.А	Мурата	0709528302	З.Д
26.	Маммодиева Н.Ж.	мурата	0500441282	З.Д
27.	Давитов А.С.	Заб.к	0702381010	З.Д
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