SFG1790 V1

KYRGYZ REPUBLIC

COMMUNITY DEVELOPMENT AND INVESTMENT AGENCY

URBAN DEVELOPMENT PROJECT

ENVIRONMENTAL MANAGEMENT PLAN

January 2016

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1. INTRODUCTION

The Urban Development Project (UDP) supported by the International Development Association (IDA) and the Kyrgyz Republic aims to improve the quality of municipal services and pilot energy efficiency and seismic resilience retrofits of urban infrastructure in participating towns. This will be achieved through mobilizing financial resources, to (i) improve the quality of municipal services such as water supply, solid waste management, and street lighting; (ii) pilot energy efficiency and seismic resilience retrofits of existing social infrastructure such as schools; and (iii) strengthen the capacity of SAACCS in urban planning as well as the capacity of participating towns to deliver local services.

More specifically, the Project seeks to improve water supply in Sulukta and Kerben towns; energy efficiency and seismic resistance of priority schools and kindergartens in Balykchi and Toktogul towns; as well as the operation of the street lighting and solid waste collection in participating towns.

An Environmental Management Framework (EMF) was prepared for the project and was disclosed in the Kyrgyz Republic (ARIS website) and the World Bank Infoshop on November 2 and November 5, 2015 respectively. The EMF was subsequently updated to reflect social and gender issues and re-disclosed on December 2, 2015. The ESMF covers procedures and mechanisms that will be triggered by the Project to comply with the World Bank Policy 4.01 Environmental Assessment1, legislation and normative and legal acts of the Kyrgyz Republic governing preparation and implementation of environmental protection requirements.

The present Environmental Management Plan (EMP) outlines environmental impacts and mitigation measures related to the rehabilitation of school buildings. It may be updated during the preparation of detail designs for the rehabilitation of the buildings and will be included in the bidding and contractual documentation for both construction and supervision of the works.

2. SCHOOLS AND KINDERGARDENS

Four schools and two kindergardens have been identified in Baluckchy and Toktogul based on selection criteria that included (i) municipal ownership of the building; (ii) structural soundness of the building; (iii) absence of plans for closure, downsizing, or privatization of the facility.; (iv) high social benefits and demonstration effect as reflected by the number of beneficiaries; (v) high energy savings potential using total energy consumption as a proxy; and (vi) priority for the town to ensure ownership, suitability for promotion activities, and operational sustainability.

All buildings follow the standard design for such facilities in the Kyrgyz Republic. More information on location and characteristics of each building is presented in Annex 1.

3. SCOPE OF WORKS AND IDENTIFICATION OF ASSOCIATED ENVIRONMENTAL IMPACTS

Activities to be supported under UDP for school rehabilitation include: (i) insulation of walls and roofs, (ii) improvements and replacement of windows and exterior doors, (iii) heating system upgrades (renewal of heat piping, upgrade/replacement of electrical boilers, installation of heat pumps), (iv) indoor lighting systems, (v) application of reinforced concrete "skin" at selected locations of the building walls. The project will not involve other reconstruction activities. The project will not include expansion beyond the existing footprint onto additional land surfaces. The works will not include demolition or removal of any buildings, and shall be carried out in full compliance with the local legislation requirements and in line with the World Bank Operational Policy OP 4.01 on Environmental Assessment.

[1] Annex C OP/BP 4.01. January 1999

After survey of the implementation site, environmental sensitivity and the project scale, the following can be stated: (i) UDP will not be implemented in proximity to environmentally critical areas (lagoon/wetland areas, forests and etc) and will not impact them. The Project will not have irreversible impacts and will not impact vulnerable ethnic minorities or cultural heritage sites. The Project is of limited scale, associated with small/moderate environmental risks that can be easily mitigated during its implementation.

The activities planned under the Project can have certain both positive and negative environmental and social impacts, as the project will improve socially important urban infrastructure and services.

The positive impacts include improved energy efficiency of existing schools and kindergartens in Balykchi and Toktogul, which will contribute to saving heat and electricity; decreasing the greenhouse effect. The potential negative environmental issues associated with the small/medium scale activities for local communities will be limited to temporary nuisances resulting from construction activities, and may include: (i) increased pollution due to construction waste; (ii) generation of dust, noise, and vibration due to the movement of construction vehicles and machinery; (iii) associated risks due to improper disposal of construction waste and asbestos, or minor operational or accidental spills of fuel and lubricants from the construction machinery; (iv) improper reinstatement of construction sites upon completion of works. All these potential environmental impacts are readily identifiable, small in scale, and minimal in impact and can be effectively prevented, minimized, or mitigated by including into the work contracts specific measures to be taken by contractors under close supervision of compliance by ARIS. Use of construction materials that are hazardous to human health (e.g., asbestos,) will not be permitted. Old mercury bulbs will be collected by a specialized company and recycled/disposed of according to hazardous waste handling standards. Where such contractors may not be present in the Kyrgyz Republic, provisions will be made to attract contractors from the sub-region.

4. ENVIRONMENTAL LEGISLATION

The main normative documents governing the environmental protection activities are:

The Constitution of the Kyrgyz Republic 2010 is the foundation for the whole normative and legal framework. It stipulates the right of all citizens for an environment favorable for human's life and health and compensation for damage caused to health or property by nature management activities;

The Law "On Environmental Protection"[2] is basis for comprehensive regulation of public relations in the sphere of interaction between the society and the nature. It sets basic principles of environmental protection and stipulates legal authorities for creating environmental quality, marking special protected territories, promulgation of rules and procedures for natural resources management, setting the environmental monitoring and oversight system, and reinforcing the emergency response procedures.

The law prohibits financing and implementation of projects involving the use of natural resources without obtaining the positive opinion of the state environmental expert review.

Law on Environmental Expertise[3] ensures compliance of economic and other activities with environmental requirements. This Law is applied to projects that may have environmental impact, including feasibility studies as well as projects for construction, reconstruction, development, re-equipment, other projects that may have environmental impact, regardless of their estimate cost and title or ownership type.

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

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

The law obliges the project initiator to submit necessary documentation related to the project and its environmental impact to the state environmental expertise. The Expert Commission of the State Agency on Environment Protection and Forestry is responsible for review of the submitted documentation.

Positive decision of the State Environmental Expertise is required to trigger financing or implementation of the project. Negative opinion will ban implementation of the project.

One of the main opportunities for citizen's participation and their associations in decision making on environmental protection and rational nature management is public environmental expertise. Two types of environmental review are implemented in the Kyrgyz Republic: State Environmental Expertise and Public Environmental Expertise.

The Law of KR "On General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic"[4] sets general requirements on ensuring ecological safety during design and operation of economic and other activities involving production, storage, transportation and utilization of products.

Based on the Law the risk categories for each subproject will be determined to fix arrangements for EIA.

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

The legislative acts listed above set forth the following key tasks on environment protection relevant to the UDP.

- Obligatory State Environmental Review (expertise);
- Natural resources management standards;
- Protection of atmospheric air, land and water from pollution and exhaustion;
- Improvement of environmental monitoring system;
- Norms of maximum safe levels of noise, vibration and other hazardous physical impacts.

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

5. MITIGATION PLAN

Environmental and Social Elements	Impacts	Proposed mitigation measures[5]	Institutional responsibility for mitigation	Cost of mitigation activities[6]
Construction period				
Physical Environment				
Noise	Equipment and delivery vehicles used during retrofitting activities would generate noise. Temporary increases in noise levels along truck delivery routes would also occur.	To ensure the use of noise control techniques on noisy equipment such as use of machines equipped with appropriate mufflers also located appropriately Operating times limited to normal working hours to be determined with due sensitivity to the citizens private life. Application of vibrator equipment compliant with standards and vibration- and noise- protection equipment. During operations, covers of engines and generators, air compressors and other driving mechanisms should be closed; equipment should be located at the maximum distance from residential premises. Noise during construction works should be limited in time.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item	Site Supervising Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.
Air Quality	Dust emissions during retrofitting activities would be minor and temporary.	Dust prevention measures and good house keeping practices such as water spraying to prevent dust and use of curtains and screening of the construction area. Use of masks, work gloves and clothes by workers. All vehicles delivering dusty construction materials to the site or removing debris will be enclosed and covered to prevent release of dust. Limitation of the speed of vehicles and selection of relevant transportation routes for minimization of impact on the receptors sensitive to dust.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.	Site Supervising Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.

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

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

		Equipping the machinery transporting granular materials with removable canvas covers. Supply of cement to construction sites in pre-pack hermetic packages. It is needed to ensure cleanliness of adjacent area, not allowing construction waste to minimize dusting and contamination.		
	Operation of vehicles and machinery	Use of trucks with covered dumpers Optimal use of alternative roads to prevent disturbance to the visitors and residents.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.	Site Supervising Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.
Construction waste	Contamination of adjacent area, soil, water resources	Separation of all types of waste streams, reuse and recycling wherever possible Disposal of wastes that cannot be reused or recycled, transport and disposal of wastes at designated landfill site and in cooperation with the local waste management company; no open burning or illegal disposal of wastes. Hazardous wastes (smaller quantities of paints, oils, etc.) will be stored separately, in accordance with relevant legal requirements, following labeling procedures and will be handed over to the designated and authorized company or agency. All documents on waste removal and disposal should be maintained properly as a proof of appropriate management of waste at the site. In all possible cases, contractor should ensure recycling of materials (except for asbestos). Proper collection and removal of construction waste should be undertaking by a contracted utility. As for domestic waste, installation of collection tanks and timely removal of waste should be arranged by local SES agencies.	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item	Site Supervising Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.

Small amounts of construction hazardous waste	Some construction debris may contain asbestos or mercury-containing light-bulbs that are hazardous to people's health	Removal of materials that contain asbestos will be carried out in line with the local legislation, including construction standards, work safety issues, air borne emissions of hazardous pollutants and disposal of waste and hazardous waste (in the event that there is no local legislation, the Directive 2003/18/EC of the European Parliament will be used, that amends and supplements Directive of the Council 83/477/EEC on worker protection from workplace asbestos exposure risks: threshold values of airborne dust particles is 0.1 fiber/cm3; also use the Good Practice Note: Asbestos: Health Issues at Workplace and Community; World Bank).	Separate sub-contract during works will be required for the removal of mercury bulbs and transportation to a specialized recycling facility that may not be available in country (preliminary investigations indicate it is available in near-by Kazakhstan). Since the quantities will be very small, the cost is not expected to be significant. However, costs are subject to inclusion in BoQ as part of tender documents, as this position is a financial liability of the Contractor.	The contractor needs to train their workers on how to assess presence of asbestos containing materials and to establish a procedure of its safe removal using proper protection equipment, storage without breaking in air-tight containers and management by an authorized agency or company. Site Supervising Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.
Chance findings	Damage and degradation of site structures	In case of chance finds or other significant discoveries during excavation works stop all works and inform relevant authorities prior to proceeding		Contractor and Site Supervising Engineer.
Boiler rehabilitation works (electrical boilers)	Possible local disturbances	Ensure all fire protection measures have been implemented,		Included in the project and is the responsibility of the end user of the building. Site Supervising Engineer is responsible to monitor and supervise the activity. ARIS is responsible for overall oversight.
Setting up of construction site and removal of site upon completion of works	Possible disturbances decommissioning	Plan to decrease disturbance to surroundings and neighbors (including plans to ensure proper traffic management on access roads to site) Fencing off the site or access to site with proper safety signs	Negligible costs Contractor costs	Will be further defined with specifications in the design documents. Site Supervising Engineer is responsible to monitor and supervise the

		After completion of works, site will be restored to previous conditions and all wastes will be cleared in line with the provisions of this EMP, all machinery will also be removed from site.		activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.
Safety of workers and population	Industrial accidents	Local inspections controlling construction works and environmental safety and local population should be properly notified on forthcoming project works. Local communities will be properly notified on works by means of publications and /or notices in mass media and/or bill boards in public places (and at work sites). All permission required by legislation for use of waste landfill, as well as permissions from sanitary inspection etc. in construction and rehabilitation works at this site, have been obtained. All works will be carried out though safe and discipline methods to minimize negative impact from industrial process on population and environment. Individual protective means should meet safety standards (obligatory application of helmets, protective face masks, when needed, protective glasses, safety belts and boots). Sites will be provided with proper information boards and signs informing the workers about the rules and norms of works to be followed.	Contract organizations	ACSD Site Supervising Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. ARIS is responsible for overall oversight.
Operation period				
Proper Operations		Ensure use of environmentally acceptable fuels Regular maintenance Ensure all attests and certificates have been acquired in particular for fire protection and monitoring of emissions/concentrations in air		Operator, Local authorities

6. MONITORING PLAN

Environmental Monitoring Plan

Subproject implementation stage	**What** parameter is subject to monitoring?	**Where** will monitoring of parameter be carried out?	**How** will monitoring of parameter be carried out/type of monitoring equipment	**When** will monitoring of parameter be carried out-frequency	**Monitoring cost**[7] What cost of equipment or expenses of contractor required to conduct monitoring?	**Institutional responsibility for monitoring**	**Date of commencement**
Construction	Noise Air quality Transportation Waste Disposal and handling	At the construction and disposal site At and near the construction site At construction and disposal site At construction	Portable noise meters Portable measuring devises Visual In accordance with the plan and observation.	Continuous Weekly Continuous In accordance with the plan but at least weekly	Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item except the removal of mercury bulbs to	1. Inspection of construction sites is carried out by ARIS to ensure compliance with EMP. 2. State inspectors of Architecture and construction supervision department (ACSD) will	Estimated June 2017

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

	Boiler rehabilitation Decommissioning of construction site Safety of workers	site At construction site At construction site	Measurement devise Visual Visual	Monthly In accordance with the plan Continuous	be done by a sub-contractor and to be included as a separate cost item in teh BoQs	supervise fulfillment of design solutions in construction and installation works or reconstruction of facilities, quality of construction materials, structures, and participate in commissioning of completed construction facilities. 3. State ACSD carrying out state environmental supervision have a right to supervise in established procedure on presentation of official identification papers in compliance with environmental provisions, normative quality, environmental protection activities in project implementation	

7. PUBLIC CONSULTATIONS

MINUTES

Urban Development Project

Public hearings on Environmental Management Plan for rehabilitation works in schools and kindergartens in Balykchy

Date/time: February 1, 2016, 11 a.m.

Place: Balykchy Town

BOUIP Coordinator Mr. Balbak Umetov opened the hearings, welcomed invitees and introduced ARIS staff involved in preparation of the Urban Development Project. He also described the project concept, implementation period, and Project objectives.

Mrs Elena Kutmanova, safeguards specialist, made presentation of social and environmental safeguard measures envisaged as part of the project. She described in detail the environmental safety and social protection measures.

Mr Valery Bormintsev, electrical engineer, made presentation of energy efficiency measures for buildings.

Question: D.K. Bekbashov, Chair of town Kenesh:

When do civil works for subproject start (Aitmatov school, Jakypov school, kindergarten Ak-Tilek) in Balykchy?

Answer by Balbak Umetov:

Currently, the Financing Agreement for the Project is at the stage of signing. Negotiations were held in December between IDA and the Government. Civil works shall start once detailed designs are prepared.

Question: B.K.Algojoeva, Deputy Mayor:

Why do you focus on prohibiting the use of asbestos materials during construction of kindergarten and schools in Balykchy? We used asbestos containing materials in the past.

Answer by Elena Kutmanova:

Asbestos is currently admitted as a cause for many illnesses including cancer and is hazardous when inhaled. Since nowadays the health risks in asbestos area are recognized widely, world healthcare organizations, labor associations, research institutes and some Governments banned commercial use of the asbestos materials.

Question: J.Kalilova, economist, Tazalyk (municipal solid waste utility):

What measures would be taken if asbestos materials are detected during demolition?

Answer by Elena Kutmanova:

If asbestos is detected during all rehabilitation works, such materials/wastes should be demolished and stockpiled properly in an isolated (closed) area for further disposal (burial) (upon consent of local government and environmental officers) in a special designated spoil area.

Question: B.T.Joroeva, senior specialist, Mayor's Office:

What measures will be taken if trees are extracted?

Answer by Elena Kutmanova:

Extraction of trees and shrubs will be conducted strictly upon the need and after permits are obtained considering compensatory planting. Two trees will be planted in compensation of an extracted tree.

Question: N.S.Mambetova, head of Town Eduction Department:

What measures will be taken to improve energy-efficiency and seismic resilience of buildings in our town?

Answer by Valery Bormintsev:

Following measures would be taken to improve energy efficiency: replace windows, heat insulation, replace heating boilers, and install energy efficient lighting. Improvement of seismic resilience will require walls retention by installation of re-bars.

RESOLUTION:

Environmental Management Plan developed for subprojects in Balykchy (rehabilitation/reconstruction of Aitmatov school, Jakypov school and kindergarten Ak-Tilek) to be deemed acceptable for implementation.

S.Shamshudinov,

Chair (Mayor of Balykchy)

S.Mukambetov,

Secretary (senior specialist at Mayor's Office)

ПРОТОКОЛ

Общественных слушаний по обсуждению Плана управления окружающей средой при проведении ремонтно-восстановительных работ школ и детских садов в г.Балыкчы

Проекта городского развития (ПГР)

Место и время проведения: *г.Балыкчы*

01 февраля 2016 г. в 11:00 час.

Уметов Б.У. – координатор ПГИБО открыл слушания, поприветствовав приглашенных и представил сотрудников АРИС, участвовавших в подготовке ПГР. Рассказал о концепции, сроках реализации, целях и задачах проекта.

Кутманова Е. – специалист по мерам безопасности, представила презентацию о мерах социально-экологической безопасности, предусмотренных в проекте. Подробно рассказала об экологической безопасности, социальных мерах защиты.

Борминцев В. – инженер – электрик, представил презентацию по повышению энергоэффективности зданий и сооружений.

Вопрос: Бекбашов Д.К.- председатель городского Кенеша

Когда начнутся строительные работы по подпроектам (школа им. Ч.Айтматова, школа им. Жакыпова, детский садик «Ак-Тилек») в г. Балыкчы.

Каковы сроки?

Ответ: Уметов Б.

В настоящее время проект находится на стадии подписания финансового соглашения. В декабре прошли переговоры между МАР и ПКР. Строительные работы начнутся после завершения подготовки проектно-сметной документации.

Вопрос: Алгожоева Б.К.-вице-мэр г. Балыкчы

Почему Вы так акцентируете внимание на запрете использования асбестосодержащих материалов при строительстве детского сада и школ в г. Балыкчы. Ведь раньше мы использовали асбест.

Ответ: Кутманова Е.

В настоящее время асбест признан причиной многих заболеваний и рака и считается опасным для здоровья при вдыхании. Поскольку сейчас широко признается риск для здоровья при нахождении в зоне распространения асбеста, мировые организации по здравоохранению и объединения трудящихся, исследовательские институты и правительства некоторых стран ввели запрет на его коммерческое применение.

Вопрос: Калилова Ж.-экономист МП «Тазалык»

А если при разборе обнаружат асбестосодерщащие материала, какие меры будут применяться.

Ответ: Кутманова Е.

При наличии асбеста в ходе всех реабилитационных работ, асбестосодержащие материалы и отходы должны разбираться и складироваться соответствующим образом в изолированном (закрытом) месте и с последующим захоронением (по согласию местной администрации и инспекторов окружающей среды) в специально отведенном отвале.

Вопрос: Жороева Б.Т-главный специалист мэрии г.Балыкчы.

Если будут вырубаться деревья, какие меры будут применены.

Ответ: Кутманова Е.

Вырубка деревьев и кустарников будет проводиться строго по необходимости только и после получения разрешительных документов с учетом компенсационного озеленения. За одно вырубленное дерево будет посажено 2.

Вопрос: Мамбетова Н.С.-заведующий гороно

Какие меры будут применены по повышению энергоэффективности и сесйсмостойкости зданий в нашем городе.

Ответ: Борминцев В.

Для повышения энергоэффективности будут применять следующие меры: замена окон, утепление, замена отопительных котлов, а также установка энергоэффективного освещения. А для повышения сейсмотойкости- усиление стен путем армирования

РЕШИЛИ:

Считать ПУОСС, разработанный для подпроектов г. Балыкчы (реабилитации/реконструкции школы им. Ч.Айтматова, школы им. Жакыпова, детского садика «Ак-Тилек»), приемлемым к реализации.

Одобрить проект и приступить к реализации.

Председатель (мэр г.Балыкчы): **Шамшудинов С.**

Секретарь(главный специалист мэрии г.Балыкчы): **Мукамбетов С.**

List of participants of public consultations

СПИСОК

участников общественных слушаний по обсуждению Плана управления окружающей средой при проведении ремонтно-восстановительных работ школ и детских садов в г. Балыкчы

Проект городского развития (ПГР)

г. Балыкчы 1 февраля 2016 г.

№ п/п	Ф.И.О. участника	Подпись
1.	Айтшалиев С.А. ТОС № 10.	
2	Сыдыкова С.Т. Асс. „Тынч-Азия"	
3	Бердалиев К. МП „Газалай"	
4	Уткенова Н.Г. Д/с № 8 „Ак-Тилек"	
5	Асанова К.Ж. СШ №5 им. Ч. Айтматова	
6.	Шамыркамова А.А. сш №8 им. К. Жантошева	
7	Камилова М. - экон-т МП „Мазалык"	
8	Тилембаева А - спец. Архитектура	
9.	Бекбашов Д.К. - председатель Горкенеш	
10.	Алтонаева Б.К. - вице мэр	
11	Мукамбетов С.Д. гл. спец мэрии г. Балыкчы	
12.	Нурова Б.Т. гл. спец мэрии г. Балыкчы	
13	Абдрахманов З. и.о. нач. УНС г. Балыкчы	
14	Момбаев Т.А. мастер по отоплению школ д/к	
15	Мамбетов Н.С. зав. гороо	
16	Мусабаева Д.С. директор ЦСМ депутат	
17	Уметов Б. - координатор ПГР	
18	Борщиков В - АРИС	
19	Кутманова Е. - АРИС	
20	Керимбекова М. - АРИС	


01/02/2016

8. SUPERVISION AND REPORTING

The supervision engineer must be on site at all times. ARIS visits construction sites at least once a month in order to supervise fulfillment of EMP during subproject implementation. More visits may be required if any issues are identified. If there are topical environmental issues, ARIS should continue its supervision during facility operation.

Site visit report should be submitted after monitoring is performed. In the event of non-compliance with environmental protection measures, a statement specifying the remedial period for contractor should be drawn up.

«Environmental protection» section, including health & safety at construction site will be included in regular progress reports prepared by technical supervision engineers. The section should contain compressed information and briefly describe monitoring activities as well as any arising issues and the ways to address them.

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

ANNEX 1: Schools and Kindergardens

1. School № 5 “Aitmatova”, Balykchy City

Photo:	
Address:	Balykchy City, 721900, Kulakunova Street, 12
Number of Stories:	2- and 3-story building blocks
Inside Gross Area (m^2)[1]:	3852
Site Description:	The facility is located on flat terrain, and there is an open access area to the building on all sides of the school property.
Construction Date:	1975
Structural System:	Loadbearing masonry walls (both for gravity and lateral loads)
Design Information and Drawings:	Standard design No. 2c-02-26c from 1964 by Kyrgyz Giprostroi Some architectural plans available in Technical Passport
Building Configuration and Dimensions:	H-shaped plan; consists of 3 rectangular-shaped building blocks separated by construction joints. Plan dimensions vary. Two longer blocks have approximate dimensions 70 m x 13 m (length x width) and a connector block is approximately 35 m x 13 m.
Foundations:	Continuous reinforced concrete strip footing
Walls:	Unreinforced brick masonry walls Wall thickness: exterior 510 mm, interior 380 mm
Floors:	Precast reinforced concrete slabs
Roof:	Pitched roof with timber rafters and galvanized steel sheet roofing; precast reinforced concrete slabs beneath the roof

Notes: 1 - Sum of all floor areas within a building according to the Technical Passport 2 - Source: Technical Passport (these notes apply to all facilities)

2. School №8 “Jakypova”, Balykchy City

Photo:	
Address:	Balykchy City, 722300, Frunze Street, 72
Number of Stories:	1-story building
Inside Gross Area (m^2)[1]:	1045
Site Description:	The facility is located on flat terrain, and there is an open access area to the building on all sides of the school property.
Construction Date:	1953
Structural System:	Loadbearing masonry walls (both for gravity and lateral loads)
Design Information and Drawings:	Not available Some architectural plans available in the Technical Passport
Building Configuration and Dimensions:	U-shaped plan Approximate lengths: 39.0, 63.6 m, and 23.0 m; approximate width 11 m
Foundations:	Continuous masonry/concrete footing
Walls:	Unreinforced brick masonry walls Wall thickness: exterior 510 mm, interior 380 mm
Floors:	Not applicable
Roof:	Pitched roof with timber rafters and asbestos sheet roofing

3. Kindergarten №8, “Ak-Tilek”, Balykchy City

Photo:	
Address:	Balykchy City, Gagarina Street, 56
Number of Stories:	2- story building blocks
Inside Gross Area (m^2)[1]:	1228
Site Description:	The facility is located on flat terrain, and there is an open access area to the building on all sides of the school property.
Construction Date:	1981
Structural System:	Loadbearing masonry walls (both for gravity and lateral loads)
Design Information and Drawings:	Standard design No. 214-2-4s/75 from 1975 by Kyrgyz Giprostroi Some architectural plans available in the Technical Passport
Building Configuration and Dimensions:	H-shaped plan; consists of 3 rectangular-shaped building blocks separated by construction joints. Plan dimensions vary. Two longer blocks have approximate dimensions 35 m x 9 m (length x width) and a connector block is approximately 15 m x 3.5 m.
Foundations:	Continuous reinforced concrete strip footing
Walls:	Unreinforced brick masonry walls Wall thickness: exterior 510 mm, interior 380 mm
Floors:	Precast reinforced concrete slabs
Roof:	Pitched roof with timber rafters and asbestos sheet roofing; precast reinforced concrete slabs beneath the roof

4. School №1 “Toktogula”, Toktogul City

Photo:	
Address:	Toktogul City, Chernotkach Street, 15
Number of Stories:	2- and 3-story building blocks
Inside Gross Area (m^2)[1]:	4482
Site Description:	The facility is located on flat terrain, and there is an open access area to the building on all sides of the school property.
Construction Date:	1975
Structural System:	Loadbearing masonry walls (both for gravity and lateral loads)
Design Information and Drawings:	Standard design - not specified Some architectural plans available in the Technical Passport
Building Configuration and Dimensions:	H-shaped plan; consists of 3 rectangular-shaped building blocks separated by construction joints. Plan dimensions vary. Two longer blocks have approximate dimensions 70 m x 13 m (length x width) and a connector block is approximately 30 m x 13 m.
Foundations:	Continuous reinforced concrete strip footing
Walls:	Unreinforced brick masonry walls Wall thickness: exterior 510 mm, interior 380 mm
Floors:	Precast reinforced concrete slabs
Roof:	Pitched roof with timber rafters and asbestos sheet roofing; precast reinforced concrete slabs beneath the roof

5. School №2 “Bokombaeva”, Toktogul City

Photo:	
Address:	Toktogul City, Dadieva Street, 1
Number of Stories:	2- and 3-story building blocks
Inside Gross Area (m^2)[1]:	4482
Site Description:	The facility is located on flat terrain, and there is an open access area to the building on all sides of the school property.
Construction Date:	1972
Structural System:	Loadbearing masonry walls (both for gravity and lateral loads)
Design Information and Drawings:	Standard design - not specified Some architectural plans available in the Technical Passport
Building Configuration and Dimensions:	H-shaped plan; consists of 3 rectangular-shaped building blocks separated by construction joints. Plan dimensions vary. Two longer blocks have approximate dimensions 70 m x 13 m (length x width) and a connector block is approximately 30 m x 13 m.
Foundations:	Continuous reinforced concrete strip footing
Walls:	Unreinforced brick masonry walls Wall thickness: exterior 510 mm, interior 380 mm
Floors:	Precast reinforced concrete slabs
Roof:	Pitched roof with timber rafters and asbestos sheet roofing; precast reinforced concrete slabs beneath the roof

6. Kindergarten №2 “Archa-Beshik”, Toktogul City

Photo:	
Address:	Toktogul City, Chernotkach Street, 11
Number of Stories:	2-story building blocks
Inside Gross Area (m^2)[1]:	1236
Site Description:	The facility is located on flat terrain, and there is an open access area to the building on all sides of the school property.
Construction Date:	1973
Structural System:	Loadbearing masonry walls (both for gravity and lateral loads)
Design Information and Drawings:	Not available Some architectural plans available in the Technical Passport
Building Configuration and Dimensions:	U-shaped plan; approximate block lengths: 36.0 m, 52.0 m, and 36.0 m - and 12.0 m width
Foundations:	Continuous masonry/concrete footing
Walls:	Unreinforced brick masonry walls Wall thickness: exterior 380 mm
Floors:	Not applicable
Roof:	Pitched roof with timber rafters and asbestos sheet roofing