Republic of Tajikistan

Rural Water Supply and Sanitation Project

Grant №: D 4310-TJ of the International Development Association

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR VAKHSH INTERDISTRICT WATER SUPPLY SYSTEM FOR THE «RECONSTRUCTION WATER TREATMENT FACILITIES»

Developed by the Consortium:
LLC «Nakukor», Tajikistan
AquaMundo GmbH of Zwingenberg, Germany
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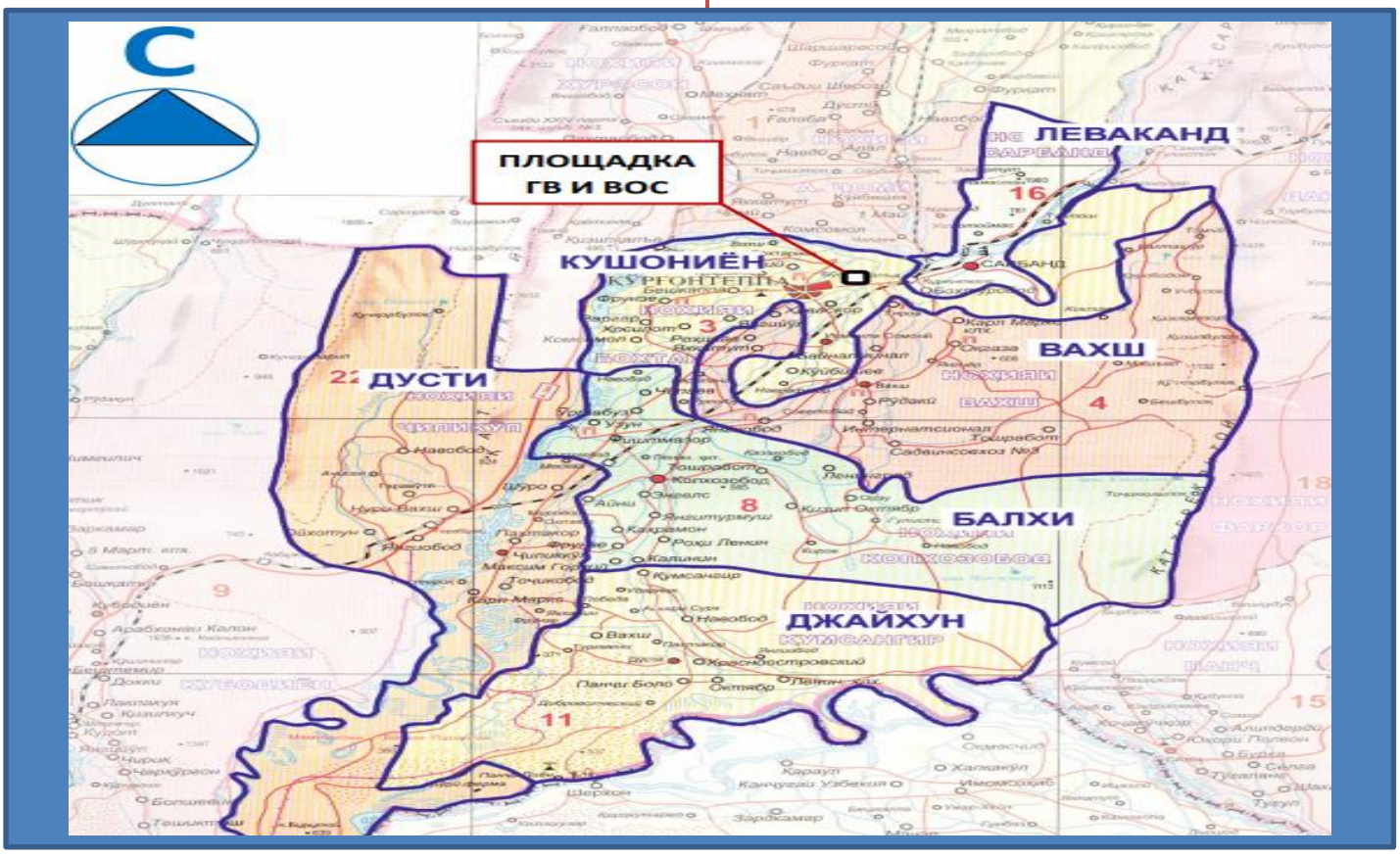

Dushanbe – September 2021

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	Consortium: LLC «Nakukor», Tajikistan AquaMundo GmbH of Zwingenberg, Germany,
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Contents

LIST OF ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-containing material
ARAP	Abbreviated Resettlement Action Plan
CHCE	Complex of housing and communal enterprises
CBO	Community Based Organization
CFCs	Chlorofluorocarbons
CO	Carbon monoxide
CSO	Civil Society Organization
DALY	Disability Adjusted Life Years
WDO	Water drinking organization
EA	Environmental Assessment
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and social Management Framework
ESMP	Environmental and Social Management Plan
GBAO	Gorno -Badakhshan Autonomous Region
GRT	Government of the Republic Tajikistan
GRC	Grievance Redress Commission
GRS	Grievance Redress System
HH	Household
OH&S	Occupational Health and Safety
KMK	The State Unitary Enterprise «Khojagii Manziliu Kommunali»
MEWR	Ministry of Energy and Water Resources
MOHSP	Ministry of Health and Social Protection
M&E	Monitoring and Evaluation
NGO	Non- Governmental Organization
NOx	Nitrogen Oxide
NRW	Non-revenue Water
O&M	Operation & Maintenance
IH&S	Industrial Hygiene and Safety
PAP	Project Affected Person

PM	Particulate matter
PMU	Project Management Unit
PPE	Personal protective equipment
PCB	Polychlorinated biphenyl
RAP	Resettlement Action Plan
RRF	Resettlement Policy Framework
RT	Republic of Tajikistan
RWSS	Rural Water Supply and Sanitation
RWSSP	Rural Water Supply and Sanitation Project
SCEP	The State Committee on Environmental Protection
SEP	Stakeholder Engagement Plan
SES	Sanitary Epidemiological Control Service
SO_2	Sulphur dioxide
SUE "KMK"	The State Unitary Enterprise «Khojagii Manziliu Kommunali»
TMP	Traffic management plan
TSP	Total suspended particles
WB	World Bank
WEEE	Waste Electrical & Electronic Equipment
WHO	World Health Organization
WSS	Water Supply System
WT	Water treatment
WTP	Water Treatment Plant
WASH	Water, sanitation and hygiene

1. EXECUTIVE SUMMARY

The Rural Water Supply and Sanitation Project, financed by the World Bank, targets improvements in water supply and sanitation services in certain rural locations of Khatlon region, including districts of the Vakhsh Valley that received drinking water from the Vakhsh interdistrict water supply system (Kushonien, Levakant, Vakhsh, J.Balkhi, Dusti and Jayhun). The majority of the population in districts of the Vakhsh Valley does not have access to water supply services, relying on the water from open irrigation canals or low-quality water from the boreholes. All districts of the Vakhsh Valley that were provided with drinking water from the Vakhsh interdistrict water supply system were selected for the investments under the project with at the same time, key infrastructure components, including the Reconstruction of the Head Water Intake (HWI), the Reconstruction of Water treatment facilities (WTF), the construction of an 8.7 km main water pipeline and the Construction of water distribution networks in zones 2A, 2B and 3D were prioritized within the existing financing (for the first phase of investments).

This Environmental and Social Management Plan (ESMP) has been prepared for the for "Reconstruction of Water treatment facilities (WTF)" and examines the specific impacts and measures required to mitigate identified impacts. The ESMP is based on the Environmental Impact Assessment Report (EIA), the findings of site visits, meetings with local stakeholders, public consultations in the target areas and available project designs. The ESMP establishes a critical link between the management and mitigation measures during the construction and operation phases of the project. It provides details of how implementation and effectiveness of the measures shall be monitored and supervised.

The State Unitary Enterprise KMK is the Implementing Agency of the project. A Project Management Unit (PMU) coordinates all project activities, including tender procedures and contract management issues, and is responsible for the project's day to day implementation.

As part of its mandate, the PMU will be responsible for updating the ESMP as necessary according to any changes or updates made to the design after completion of the ESMP. The PMU is also responsible for disclosure of the ESMP, and subsequent required updates. The PMU will be responsible for ensuring that the project complies with relevant laws, standards, and guidelines, including ensuring the designs are approved by the State Expertise of engineering designs.

At the object "Reconstruction of Water treatment facilities (WTF)" construction and restoration work is provided on the territory of the existing object Water treatment facilities of the Vakhsh interdistrict water supply system. The facility is located in the Kushonien district, Bustonkala jamoate, near the airport at picket 46 of the Vakhsh Main Canal (VMC).

In the adjacent territories to the object, as well as in the Kushonien district itself there are no official national/international protected nature reserves or other important areas for biodiversity. Also, there are no objects of cultural and historical heritage in the adjacent territories to the Water treatment facilities (WTF) having cultural value.

The ESMP table outlines specific mitigation measures for management of environmental and social impacts and identifies the responsibilities for implementing and supervising the mitigation measures. The table is arranged into the two main project phases according to when the relevant mitigation measures should be undertaken: construction phase and operation phase.

ESMP will be an integral part of the bidding documents and will be included into the works contract according to the object "Reconstruction of Water treatment facilities (WTF)". In the course of civil works, unexpected impacts may occur or mitigation measures may not be carried out properly. In order to provide

an efficient channel for the local people to voice their concerns, a grievance mechanism has been created, which will operate throughout the entire construction period. The ESMP provides an outline of the mechanism for submitting grievances and their resolution. The mechanism will be clearly explained to affected persons in the initial stages of the project and the company responsible for establishment of the WASH committees and implementation of the GRM at the jamoat level has been hired. The detailed procedures for redress of grievances and the appeals process will be widely publicized among the affected people by the PMU.

2. INTRODUCTION

The Rural Water Supply and Sanitation Project, financed by the World Bank, targets improvements to water supply and sanitation services in certain rural locations of Khatlon region.

This Environmental and Social Management Plan (ESMP) examines the impacts and mitigation for according to the object "Reconstruction of Water treatment facilities (WTF)". No resettlement is foreseen in the area the object "Reconstruction of Water treatment facilities (WTF)".

2.1. Project organizational framework

The State Unitary Enterprise KMK is the Project Implementing Agency. A MIDP Project Management Unit (PMU) will co-ordinate all project activities, including future tendering procedures and contract management issues, and will be in charge of the day-to-day management of the Project.

The PMU is responsible for the implementation of the ESMP. The PMU will be responsible for planning and coordinating resettlement. At the district level the grievance redress mechanism has been established by including respective authorities from relevant stakeholder organizations. The project is also working in parallel to establish WASH committees at the jamoat level to ensure that communities located in the area are well informed about the construction plans, progress and considered mitigation measures at the construction and post-constructions phases, as well as that they are fully informed about the established GRM system for the management of grievances and resettlement.

SUE KMK will be responsible for the operation and maintenance of the water supply systems, through the local Vodokanal or Tojikobdehot branches (hereinafter referred to as the “The Operator”) operating in the project areas.

2.2. Project description

The project provides for the Reconstruction of Water treatment facilities (WTF).

The Water treatment facilities from the they are located in the Kushonien district, Bustonkal jamoate on the left bank of the Northern Branch Canal at a distance of 1.0 km northeast of the Head Water Intake site. The site of water treatment facilities with an area of 10.81 hectares is located at the level of 401.05-402.70.

Насосная станция (снаружи)

РЧВ 2х6000м^3

Здание песчаных фильтров

Насосная станция (изнутри)

Здание реагентного хозяйства

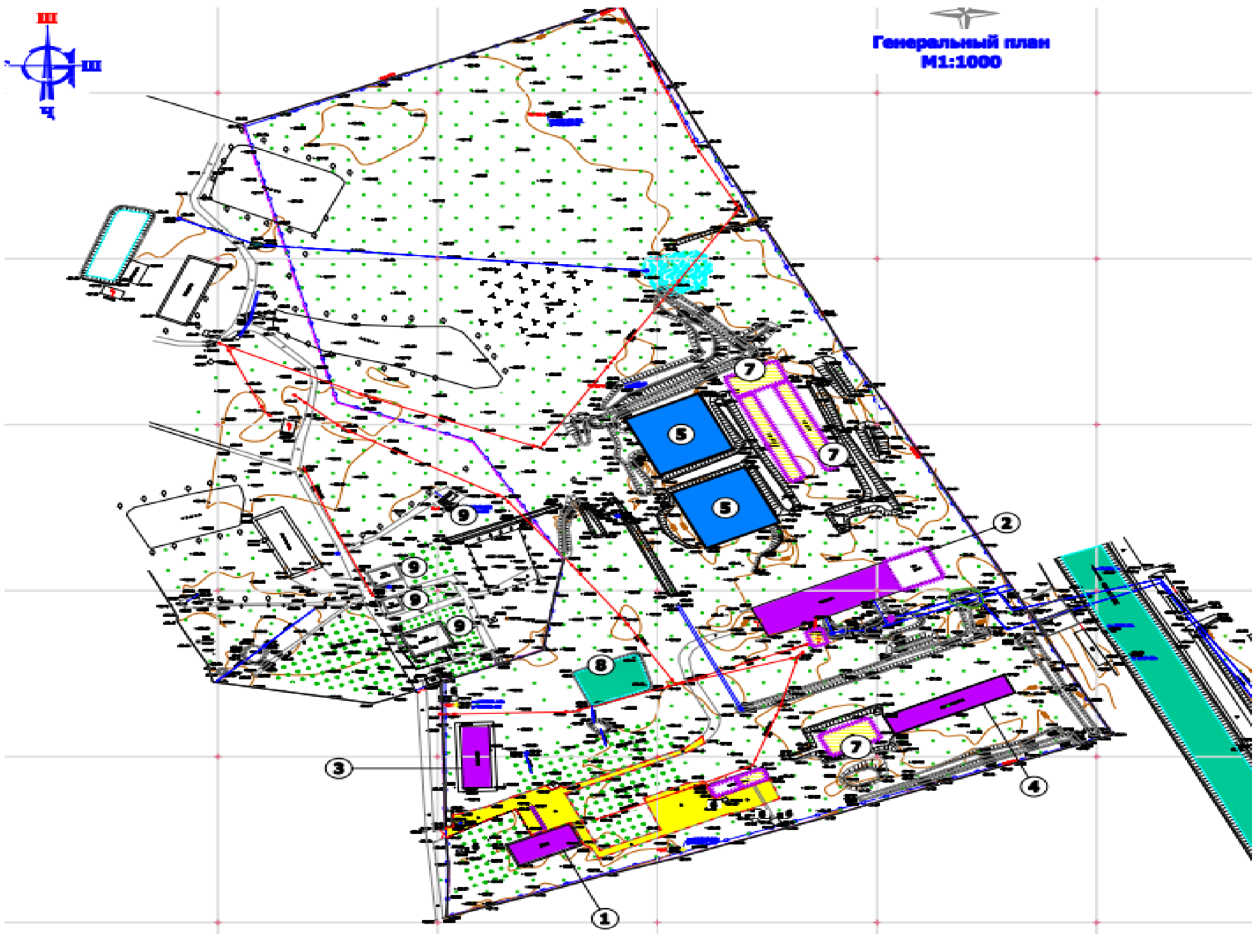
Гараж

Котельная

Административно-быт. корпус

Площадка ВОС


Кызылсу
Vakhsh
Кызылсу
Кызылсу
Кызылсу
Мактаби Президенти
РЕКА ВАХШ
С
ПЛОЩАДКА ВОДОЗАБОРА Г. БОХТАР
ПЛОЩАДКА ВОДОПРОВОДНЫХ ОЧИСТНЫХ СООРУЖЕНИЙ
ВОДОВОД DN 1400мм
Dushanbe International Airport
Аэропорт
КАНАЛ «СЕВЕРНАЯ ВЕТВЬ»
ПЛОЩАДКА ГОЛОВНОГО ВОДОЗАБОРА
ВОДОВОД DN 1400мм К ПОТРЕБИТЕЛЯМ
Мечеть Бофарвари
ВАХШСКИЙ МАГИСТРАЛЬНЫЙ КАНАЛ
Мечеть Орзу
ДОРОГА БОХТАР - ЛЕВАКАНД
0 200 400 600 800 1000м



Экспликация зданий и сооружений

Условные обозначения	Наименование	Ед. изм.	Кол-во	Примечание
1	2	3	4	5
	Здания и сооружения подлежащие сносу и демонтажу	м²	[illegible]	Демонтируемые/ сносимые
	Разбор существующего покрытия	м²	[illegible]	
	Глухое ограждение	пм	[illegible]	

Экспликация зданий и сооружений

№п/п	Наименование	Ед. изм.	Кол-во	Примечание
1	2	3	4	5
1	АБК (административно-бытовой корпус)	м²	414,10	Реконструкция
2	Насосная ТП	м²	1 104,00	
3	Гараж	м²	555,71	
4	Склады	м²	841,00	
5	Резервуары 6000м³	м²	2 700	Существующие
6	Существующие здания и сооружения смежной территории	м²	35,40	
7	Здания и сооружения подлежащие сносу и демонтажу	м²	1550,30	Демонтируемые/ сносимые
8	Пруд	м²	815	Засыпка грунтом
9	Существующие здания и сооружения прилегающей территории			Существующие

Условные обозначения

- Реконструируемые здания и сооружения
- Существующие здания и сооружения
- Граница территории участка
- Здания и сооружения подлежащие сносу и демонтажу
- Глухое ограждение
- Существующие резервуары

At the site of Water Treatment facilities (WTF), the previously provided purification scheme is maintained and the following buildings and structures (technological) are designed for the full-fledged purification of the standing water:

- Fast sand filters;
- Boiler room;
- Administrative and household building;
- Main pumping station
- Clean water tanks 2 x 6000 m3;
- Sewage pumping station (SPS);
- On-site technological communications

- Fast sand filters

Filtration units are open tanks in which the purified water passes through filtration means consisting of quartz sand. The filters are arranged in two rows and are separated by a gallery for hydraulic installations. Filter management and backwash of filters is provided semi-automatic. The source water is piped into the internal pipe water distribution system. The turbidity of water is measured in the water supply pipeline and the water outlet after filtration. Two V-shaped channels are provided for uniform distribution of water on the filter surface for the supply of source water.

- Clean water tanks

The project provides for the restoration of the existing two reservoirs. Tanks W = 6000 m3 x 2 pcs are designed for storage of drinking and fire-fighting water and regulation of uneven water consumption. The tanks are equipped with supply, discharge, overflow and discharge pipelines, ventilation columns (with simplified filter absorbers), manholes, internal plumbing, partitions, level monitoring and alarm devices. Emptying of tanks is provided in a nearby ditch or channel.

- Pumping station

The pumping station is designed to supply water to fast sand filters, supply water to the population (common water conduit), supply water to water supply zones 3a and 3b, supply water to water supply zone 1, supply water for flushing filters with water, supply air for flushing filters, supply water for the own needs of the VOS and GW sites, supply water to the hydraulic elevators of the sand trap. The operation of water pumps for flushing filters and blowers are controlled from the filter building.

- Administrative and household building

The administrative and household building provides:

* a laboratory, which is designed for complete quality control of the prepared water for drinking purposes.

* workshop for the repair of small equipment, which provides for the repair of valves, valves, valves and valves with a diameter of up to 200 mm, pressure gauges, electrical equipment weighing up to 100 kg and other similar equipment.

* a control room that will maintain communication with the control structures of the VOS, the Head water intake, pressure-regulating tank sites, pumping station sites and a team for the maintenance of water pipelines and water distribution networks.

- Chambers for valves and latches

Chambers are provided in the nodes where valves and valves are installed on pipelines. They are made of monolithic reinforced concrete of rectangular shape and of precast reinforced concrete elements of circular cross-section, with a hatch on the ceiling.

- Pipelines

Technological pipelines of communications between structures are made of polyethylene pipes provided for drinking water supply according to GOST 18599-2001 and steel pipes according to GOST 10704-91 with internal anticorrosive insulation.

- Sewage pumping station

Fecal CNS is designed for pumping domestic wastewater. Pumping of waste water is provided in a gravity sewer according to the technical conditions.

- Chambers with flow meters

Ultrasonic flowmeters are provided in 3 designed flowmeters chambers, on pipelines DN 1400 mm supplying water from the GW and diverting water from the VOS and on the pipeline DN300mm supplying water to the water supply zone 3a and 3b.

The Water treatment facilities (WTF) is provided to provide a drinking water supply system that takes into account the drinking and economic needs of the population of the project area without taking into account the needs of fire extinguishing, watering of plantings, watering of livestock, and the needs of industry.

The water consumption rate per inhabitant is 95 liters/day. The calculations take into account the unaccounted water consumption in the amount of 20%. The coefficients of hourly unevenness and coefficients for calculating the maximum expenses during the hours of maximum water intake were adopted according to the GNiP RT 40-06-2007 and the ISS THU 40.01-2008.

№№	Район	Население на 2018 год	Прирост населения 2,3% (средняя в год). За 12 лет.	Прирост населения 2,3% (средняя в год). За 27 лет.	Население на 2030 год	Население на 2045 год
1	Кушонён	225 279,00	1,28	1,62	287 456,00	365 177,26
2	Вахш	188 160,00	1,28	1,62	240 092,16	305 007,36
3	Балхи	186 700,00	1,28	1,62	238 229,20	302 640,70
4	Леваканд	29 806,00	1,28	1,62	38 032,46	48 315,53
5	Дусти	106 241,00	1,28	1,62	135 563,52	172 216,66
6	Джайхун	127 978,00	1,28	1,62	163 299,93	207 452,34
		864 164,00			**1 102 673,26**	**1 400 809,84**

№№	Район	Норма водопотребления, л/сут на человека с учетом непредвиденных расходов 10% (95+9,5)	Расчетный расход воды в м³/сутки (средний)		Расчетный расход воды в м³/сутки (максимальный)		Расчетный расход воды в м3/ч (средний)		Коэффициент часовой неравномерности водопотребления		Расчетный расход воды в м3/ч (максимальный)	
			на 2030 год	на 2045 год	на 2030 год	на 2045 год	на 2030 год	на 2045 год	на 2030 год	на 2045 год	на 2030 год	на 2045 год
1	Кушонён	104,5	30039,15	38161,02	36046,98	45793,23	1501,96	1908,05	1,28	1,26	1928,51	2404,14
2	Вахш	104,5	25089,63	31873,27	30107,56	38247,92	1254,48	1593,66	1,29	1,25	1618,28	1988,89
3	Балхи	104,5	24894,95	31625,95	29873,94	37951,14	1244,75	1581,30	1,29	1,25	1605,72	1973,46
4	Леваканд	104,5	3974,39	5048,97	4769,27	6058,77	198,72	252,45	1,42	1,38	281,39	348,38
5	Дусти	104,5	14166,39	17996,64	16999,66	21595,97	708,32	899,83	1,32	1,30	934,98	1171,58
6	Джайхун	104,5	17064,84	21678,77	20477,81	26014,52	853,24	1083,94	1,30	1,29	1111,95	1398,28
			115229,36	**146384,63**	**138275,23**	**175661,55**	**5761,47**	**7319,23**	**1,20**	**1,20**	**6913,76**	**8783,08**

2.3. Scope of the ESMP

The ESMP examines the specific impacts and mitigation required for those impacts for the proposed construction works in the object "Reconstruction of Water treatment facilities (WTF)" during the construction and operation phases of the proposed water supply schemes. The ESMP also examines certain institutional aspects and needs for the successful implementation of the ESMP.

The ESMP is based on the ESIA, the findings of site visits, meetings with local stakeholders, and available project information and detailed designs. The ESMP also reflects on the results of the social and environmental screening completed upon finalization of the design documents and public consultations.

In the development of the ESMP, relevant World Bank policies, WBG Environmental, Health and Safety

(EHS) Guidelines, national legislation as well as international requirements, specifically World Health Organization Guidelines on drinking water quality were taken into consideration.

The relevant minutes of public consultations completed in the area are attached to this ESMP.

3. LEGISLATION

3.1. National legislation

The following Tajik legislation defines a legal framework applicable to project activities:

Legislation
Constitution of the Republic of Tajikistan adopted on November 6, 1994 and amended by referendum on September 26, 1999 and June 22, 2003
Civil Code of the Republic of Tajikistan Part I: adopted: June 1999. Last amendment in 2006.
Water Code, 2020
Law "On Drinking Water Supply and Wastewater" #1633, July 19, 2019
CODE OF HEALTH OF THE REPUBLIC OF TAJIKISTAN
Law of the Republic of Tajikistan "On the licensing system"
Law of the Republic of Tajikistan "On the Association of Water Users" (2020)
Rules for the use of municipal water supply and sewerage systems in the Republic of Tajikistan, April 30, 2011, No. 234
The order of state control and supervision of drinking water supply dated December 31, 2011, No. 679
The procedure for keeping records in the field of drinking water supply from December 31, 2011, No. 680
Government Decree of July 31, 2001 No. 357 OGUP "Housing and Communal Services"
SANITARY RULES AND STANDARDS Sanitary protection zones of sources water supply and water pipelines for household and drinking purposes (SanPiN 2.1.5.006-07) dated 28.02. 2007 No. 75
SANITARY RULES AND STANDARDS for drinking water. Hygienic requirements for water quality for centralized drinking water supply systems. Quality control.

Air emissions

Legislation
Law "On the protection of atmospheric air" No. 915 dated December 28, 2012
Law "On ensuring the environmental safety of road transport", 08, 2015, No. 1214.

Solid waste management. Soil protection.

Legislation
Law “On Production and Consumption Wastes”, 25.07.2005, No. 109;
Government Decree of June 2, 2011 No. 279 "Procedure, conditions and methods of collection, use, disinfection, transportation, storage of industrial and domestic waste disposal in the Republic of Tajikistan"
Law "On Plant Protection" dated April 16, 2012 No. 817
Law "On soil protection" dated October 16, 2009 No. 555

Environmental management

Legislation
Law "On Environmental Protection" No. 760 dated 2.08.2011
Law "On Environmental Expertise" dated April 16, 2012 No. 818
Law on Environmental Impact Assessment of July 18, 2017, No. 1448
Law "On Environmental Audit", No. 785 of December 26, 2011;
Law "On Environmental Monitoring" dated March 25, 2011 No. 707
Law "On Environmental Information", No. 279, 12.01.2011

Law "On Environmental Education of the Population" dated December 29, 2010 No. 673
The procedure for organizing and conducting an environmental impact assessment, approved by the Government Decree of August 1, 2014 No. 509
The procedure for the appointment of a mandatory environmental audit, adopted by Government Decree No. 789 dated December 31, 2014
The procedure for organizing the Unified State System of Environmental Monitoring of the Republic of Tajikistan dated December 31, 2014 No. 791
Government Decree of June 3, 2013, No. 253 "On the list of objects and types of activities for which the development of materials on environmental impact assessment is mandatory"
Government Decree of December 3, 2012 No. 697 "On the Procedure for Conducting State Environmental Expertise"

Land Ownership, Resettlement, Land Use Planning

Legislation
Civil Code
Land Code
Government Decree of December 30, 2011 No. 641 Procedure for compensation for losses to land users or users of other registered rights related to land and losses associated with the withdrawal of land from circulation
Law of the RT "On appraisal activities" dated July 28, 2006 No. 196

Water tariffs

Legislation
Law "On Natural Monopolies" December 13, 1997 No. 525, amendment of May 12, 2001 No. 5
Regulation "On the Antimonopoly Service". May 3, 2010, No. 227
Regulation “On determining the cost of products (works, services) at enterprises and organizations of the Republic of Tajikistan. Approved on May 12, 1999, No. 210, revised on December 12, 2002 No. 487
Instructions for the calculation, approval and implementation of tariffs and cost estimates for products (works, services) of natural monopoly entities. May 28, 2007, No. 10

Labor, health and safety management

Legislation
Labor Code of 23 July 2016, No. 1329
Health Code

Complaints

Legislation
Law "On Appeals of Individuals and Legal Entities" dated June 23, 2016 No. 1339
Civil Procedure Code of the Republic of Tajikistan dated January 5, 2008

Permits required for accomplishing the works planned for at the object "Reconstruction of Water treatment facilities (WTF)":

- Land certificates for construction of water supply systems or expansion of the area required for the WS systems
- Positive Conclusion of the State Expertise of architectural, urban planning and construction design documentation;
- Opinion of the State Ecological Expertise;
- Construction permit to be issued by the local authority
- License for drilling of wells and constructions works (to be possessed by the contractor)
- Special water use permit (to be issued by the State Environmental Committee as per the approved design documents)

- Certification of drinking water quality (continuous process by Sanitary Epidemiology Service at the local level)
- Limits for wastewater discharges (volume) and their content established by the State Environmental Committee

3.2. World Bank's Safeguard Policies and their relevance to the project

The Project triggers the World Bank's safeguard policies OP 4.01 Environmental Assessment, OP 4.12 Involuntary Resettlement, and OP/BP 7.50 Projects on International Waterways. According to OP 4.01, Rural Water Supply and Sanitation Project is classified as environmental Category B. "Reconstruction of Water treatment facilities (WTF)" also qualify for Category B. The present ESMP is prepared following the World Bank's safeguard policies. The WBG Environmental, Health and Safety (EHS) Guidelines also apply and are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). More specifically, EHS Guidelines on Water and Sanitation apply to works.

4. BASELINE CONDITIONS

4.1. Environmental background

Kushonien district is part of the Khatlon region, the area of the district is 1101.4 km2.

The district is located in the valley of the Vakhsh River, bordered by Jami district in the north, Levakant and Vakhsh districts in the east, and Khuroson district in the west.
Soils of gray-earth type, sometimes saline. In the floodplain meadow-swampy. The average temperature in January is 1°C, 3°C, July 31°C. The average duration of the frost-free period is 224-242 days. There are irrigation systems (Vakhsh canal, etc.). On irrigated lands — crops of long-fiber cotton. Gardening (peaches, pomegranates, persimmons, figs).

There are no officially national/international protected nature reserves or other important areas for biodiversity in the project areas of the Kushonien district.

The lands of the Kushonien region are located within the historical region of Bactria.

4.2. Cultural heritage

The project site also includes a variety of historical monuments and places of cultural value, which are objects of conservation. Stakeholders in the Kushonien district (Jamoat officials, Hukumat Kushonien,) advised on cultural heritage at the project sites, including: a) engineering communications must be laid with the mandatory observance of sanitary protection zones (at least 20 meters from the fencing of CH sites), b) allow monitoring the progress of work near the CH sites (if necessary). The main cultural resources that have been identified in the available literature have also been verified with the participation of local stakeholders.

According to the data provided by the Ministry of Culture of the Republic of Tajikistan, 7 objects of historical and cultural heritage in the Kushonien district are subject to preservation.

According to the detailed engineering design, which was coordinated with all relevant regional branch structures and services, the implementation of the Project will not affect the objects of historical and cultural heritage.

5. ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

5.1. Potential negative environmental and social impacts

Social and environmental screening for the object "Reconstruction of Water treatment facilities (WTF)" was carried out and and key potential impacts and risks have been identified for settlements outside the facility. Relevant protocols are attached to this ESMP.

A summary of the main potential impacts is provided below. Impacts, and associated mitigation, are covered more fully in the ESMP mitigation table below.

Construction period:

✓ Air pollution – emissions, odor, dust, noise and vibrations

✓ Damaging vegetation and gardens affected due to clearance for construction of infrastructure

✓ Wasting natural resources

✓ Soil disturbance and erosion during earth works

✓ Waste/Hazardous waste generation and ACM (Asbestos Containing Material) generation

✓ Soil, water/groundwater pollution

✓ Temporary disruption in water supplies and wastewater discharge

✓ Drinking water quality deterioration in existing water supply systems during works

✓ Traffic disturbance and accidents

✓ Dissatisfaction in local community: project sites, activities, labor influx, under representation of women's views, management of complaints

✓ Negative impact on health of workers

✓ Increased risks of accidents of workers/residents

✓ Damage of property

Operational period:

✓ Exploitation of water sources leading to irreversible damage to ecosystems;

✓ Insufficient water quality/quantity

✓ Customer wastewater discharge, including increased gray wastewater discharge due to construction/rehabilitation of water supply system

✓ Wasting water caused by leakages from the network/excessive use of water by customers

✓ Wasting natural resources

✓ Generation of waste

✓ Air pollution – emissions, odor from water treatment facilities and wastewater facilities, ozone layer

depleting, noise

✓ Soil, water/groundwater pollution

✓ Unwillingness to pay for water supply services, illegal connections

✓ Conflicts with local community due to the use of land and water resources

✓ Increased incidents of hygiene and sanitation related diseases, water related diseases

✓ Health risk for customers/workers/operators

✓ Damage of property

✓ Inadequate premises for administration and operation staff and equipment

Resettlement risks. According to the Detailed engineering design, тhere is no need for land acquisition as the new constructions will be completed within the territories of existing water infrastructure facilities, тhere is no need for develop of the Resettlement Action Plans (RAPs) / Abbreviated RAPs.

Labor Risks. There is risk of negative social and environmental impacts or their exacerbation due to the temporary project induced labor influx. Work requires the involvement of a sufficient number of specialists and workers. The Construction Contractor may need to source the required labor force from outside of the local area if there is insufficient workforce/ skilled workforce available in the local area. Possible potential negative impacts have been identified and mitigation measures have been developed, as detailed in the table below:

- Tensions and conflicts between workers and the local community due to different cultural backgrounds and different standards of behavior.
- Tensions and conflicts due to economic reasons - if the local population is not offered employment opportunities, or if there are price hikes due to increased demand.
- Impacts from workers' camps (inadequate waste disposal, inappropriate wastewater discharges)
- Increased burden on public services (water, electricity)

Some impacts may become fully known only once a Contractor is appointed and decides on sourcing the required labor force. It is therefore important to develop site-specific measures before the contractor starts work, and update them as necessary to reflect project developments.

Workers will require adequate safe sanitation and accommodation, fair working practices and wages in compliance with Tajik labor laws. In addition, Health & Safety of both workers and the local community must be ensured. Adequate mitigation relating to workforce management will be required. Identified potential mitigation measures are described in the mitigation table.

5.2. Potential positive impacts

- ✓ Improved environmental/ H&S awareness across all staff and Improved preparedness for potential uncontrolled environmental emergencies;
- ✓ Optimization of environmental/ H&S management through the formalized system;
- ✓ Monitoring and evaluation of operations with potential/real impact on the environment;
- ✓ Following legal requirements for all activities with the possibility of environmental impact;
- ✓ Improved access to clean water supply for the population;

- ✓ Decreasing risk of water and sanitation borne diseases;
- ✓ Improving access in educational and health facilities;
- ✓ Decreasing the likelihood of conflicts (installing water meters will help to establish actual water consumption and decrease the likelihood of conflicts among neighbors sharing a common water source as well as between clients and the service provider).

5.3. COVID-19 Outbreak Risks and urgent measures

In order to strengthen antiepidemic measures to prevent the spread of coronavirus in the Republic of Tajikistan, the Contractor is recommended to provide preventive and prophylactic measures, including:

- ➢ - all workers involved in the construction works should be provided with protective masks and in case of symptoms similar to viral infection (fever, cough, chills, deterioration of breathing and angina) immediately apply to a medical facility, and also call 511 (Republican Headquarters);
- ➢ - construction sites and work camps must necessarily be provided with antiseptics, handwashing facilities, single-use wipes and detergents, campaign information materials;
- ➢ - All workers involved in construction work must maintain a "social distance" directly at construction sites and work camps;
- ➢ - Contractors must have or hire a medical officer for the duration of construction work;
- ➢ Checking and recording the temperature of employees and other persons who come to the site, or the requirement to keep an independent record of the temperature before or after the appearance at the site.
- ➢ Conduct a daily briefing of employees before starting work, paying particular attention to specific issues related to COVID-19, including cough etiquette, hand hygiene, distance measures, using visual materials and involving employees themselves in the briefing process.
- ➢ During daily training sessions, employees should be reminded to self-report possible symptoms (fever, cough) and inform their supervisor or COVID-19 Coordinator if they develop symptoms or become unwell.
- ➢ Do not allow workers from the infected area or those who have had contact with an infected person to return to the construction site within 14 days or (if this is not possible) ensure that such workers are isolated for 14 days.
- ➢ Do not allow sick workers to enter the site, if necessary, send them to local medical institutions, or require them to be isolated at home for 14 days.

Additional information and other measures to prevent and reduce the impact of COVID-19, including during construction work, can be found at the links below:

WHO Guidance

Advice for public

WHO advice for the public, including on social distancing, respiratory hygiene, self-quarantine, and seeking medical advice, can be consulted on this WHO website: https://www.who.int/emergencies/diseases/novel- coronavirus-2019/advice-for-public

Technical guidance

Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected, issued on 19 March 2020

Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, issued on 18 March 2020

Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response, issued on 16 March 2020

Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19), issued on 19 March 2020

Operational considerations for case management of COVID-19 in health facility and community, issued on 19 March 2020

Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19), issued on 27 February 2020

Getting your workplace ready for COVID-19, issued on 19 March 2020

Water, sanitation, hygiene and waste management for COVID-19, issued on 19 March 2020

Safe management of wastes from health-care activities issued in 2014

Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (COVID-19) outbreak, issued on March 19, 2020

ILO GUIDANCE

ILO Standards and COVID-19 FAQ, issued on March 23, 2020 (provides a compilation of answers to most frequently asked questions related to international labor standards and COVID-19)

MFI GUIDANCE

IDB Invest Guidance for Infrastructure Projects on COVID-19: A Rapid Risk Profile and Decision Framework.

5.4. Environmental and Social Mitigation Measures

The ESMP mitigation table outlines specific mitigation measures for the management of environmental and social impacts and identifies the responsibilities for implementing and supervising the mitigation measures. The table is arranged into the two main project phases according to when the relevant mitigation measures should be undertaken: construction phase and operation phase.

During the construction phase, proposed mitigation measures focus on the water intake sites and include testing the existing wells, , as well as testing of water quality and recommendations for possible water treatment where values exceed limits set by the national standards for drinking water. Attention is also paid to requirements for permits, and mitigation of impacts on the general environment protection of the water intake sites.

Potential adverse impacts, though moderate in scale, are expected particularly during construction. They include contamination due to improper handling and disposal of asbestos and other hazardous waste.

In reliance on the natural increase in water consumption and a proportional increase in wastewater, in terms of gray wastewater managing at the hh level, the recommended measures during the operation phase include the following measures: use of existing flume systems and collectors; the use of traditional drainage wells, which are widely used in rural areas with the organization of wastewater filtration (gravel, sand); the use of energy-efficient bioponds (artificial swamps), followed by the use of areas and substrates of artificial swamps in subsidiary farming; use of the simplest barriers (screens, filters, sedimentation tanks) to separate solid particles of "gray" waste water and simple gravel filters to separate fat; extensive campaigning and educational work on the management of gray wastewater, including the development of appropriate booklets, explanatory leaflets, continuous monitoring by authorized local authorities in the field of sanitation and ecology.

Other mitigation measures to address impacts include development and implementation of a traffic management plan, planning transport routes, traffic signs, covering loose construction materials during transport, developing and implementing a waste management plan, managing waste appropriately,

inspection of wells, adherence of sanitary protection zones.

Detailed projects of the object "Reconstruction of Water treatment facilities (WTF)" have been tested in accordance with regulatory requirements. If physical cultural resources such as archaeological and paleontological remains are discovered during construction works, the Chance Finds described in this ESMP, which will be finalized by the PMU in conjunction with the relevant authorities, will be implemented.

The construction Contractor will also be required to develop and implement various plans such as construction camp management plans, labor influx management plans, site-specific ESMPs, in order to manage environmental and social impacts during the construction. In addition, they will be required to implement relevant measures outlined in this ESMP.

Instruments of informing environmental awareness and resettlement.

Effective and sustainable communication requires full participation and regular, constructive consultations with the persons affected by the project, their communities and potential host communities to share information and make decisions. Stakeholder participation helps to avoid misinterpretations, informs project developers and helps to avoid developing options that people may not like. Such a consultation involves a wide range of stakeholders. Particular attention will be given to women and vulnerable groups.

Below is information on how stakeholders will be informed, involved, and consulted at each stage of the project. Althought the steps remain unchanged, the methods and means of communication for information exchange and consultation, as well as the composition of stakeholders and their roles, may vary, which will be clarified for each project location.

The PMU Social Management Group (Consulting Firm / Local NGOs, managed by the PMU Social Management Specialist) with the support of Vodokanal / Tojikobdekhot / Housing and communal services informs representatives communities (respected women mahallas), local authorities (leaders, relevant Departments), relevant local authorities (healthcare and educational institutions, architecture, SES, Committee for Nature Protection, Agency for Land Reclamation and Irrigation), representatives of the non-state sector (NGOs, Community Organizations, Farmers and Farmers Associations, Human Rights advocates,) and other stakeholders involved in water supply and sanitation in the project area. Media may be also invited to the events. Activists from jamoat and Hukumat level will be also invited to participate in the stakeholders workshops organized by the PMU and to report on their experience with the project.

Communication tools may include meetings at the district office or jamoat or at schools. Group discussions with women, family groups, vulnerable groups. Distribution of printed materials in the local language (s). The PMU Social safeguards specialist will take the necessary measures to ensure that all the risks associated with social gatherings are properly mitigated, and report to the WB on the measures taken in these regards..

Information gathering: the social management group of the PMU organizes the collection of documentation and records of meetings and group discussions.

Use of information: the views of stakeholders will be taken into account when developing the project, and to minimize adverse social consequences.

Chance Finding Procedures

If physical cultural resources such as archaeological and paleontological remains are discovered during works, the Construction Contractor will follow the Chance Finds procedure, which will be finalized by the

PMU in conjunction with the Ministry of Culture, and included in the Contractor's contract. The chance finds procedure must be in line with legal requirements in Tajikistan and World Bank policies. The procedure should include the following steps, however a full chance finds procedure must be agreed by the PMU, the Ministry of Culture and other relevant authorities and included in the Contractor's contract:

- ✓ Immediately stop work and report the finds to supervisor;
- ✓ Contractor will take necessary measures to protect findings, and will secure the site and control access. A no-go area will be defined and marked with warning tape/fencing;
- ✓ Inform PMU;
- ✓ Inform the Academy of Science of the Republic of Tajikistan, the Ministry of Culture of the Republic of Tajikistan and relevant local authorities;
- ✓ The site will be inspected by a qualified institution/experts to be appointed by the Academy of Science;
- ✓ Permission to continue works should be obtained from the relevant authorities after the inventory or examination of the remains;
- ✓ No cultural heritage features will be to be removed without permission from the relevant authorities;
- ✓ All chance finds and subsequent results of investigations will be documented (photos, location, notes, results etc.).

The Construction Contractor must include detailed chance finds procedures in the site-specific ESMPs including relevant contact details for authorities to be notified, and ensure that the final chance finds procedure is approved by the relevant authorities.

Grievance Redress Mechanism

The Project has established a grievance redress mechanism so that project-affected individuals can file grievances and that these grievances are addressed during the project. The mechanism will be clearly explained to affected persons in the initial stages of the project. The detailed procedures for redress of grievances and the appeals process will be widely publicized among the affected people. It will have three steps:

First Step – Local (Regional) Grievance Redress Management Commission

Any PAP with a compliant can submit an oral, written or electronic complaint to the Regional Level Grievance Management Commission. Comments received verbally, in writing, or electronically should be recorded on a register/ log and an identification number given to the grievance so it can be tracked to ensure actions are carried out. The urgency of the complaint will be assessed at this stage. Complaints are considered within 30 days, complaints that do not require additional study and research are considered within 15 days from the date of registration. However, Tajik legislation also provides the PAP the right to complain to a higher organization or court of law at any stage.

If the person making the complaint is not satisfied with the resolution proposed by the local committee, or he/she receives no resolution within 15 days (if no additional research is required) or 30 days (if additional study is required) of registering the grievance, according to Tajik law, the person making the grievance has the right to take the grievance to the National Grievance Redress Management Commission (GRMC), other relevant higher authorities, or the court of law.

If the local committee is unable to make a decision on the complaint, the PAP will be informed that the grievance will be passed to the National GRMC. In this case, the PAP should wait for the decision of the National GRMC.

The system for grievances must be appropriately managed to ensure an appropriate level of confidentiality.

Independent district Grievance Commission for the Rural Water Supply and Sanitation Project:

Deputy Chairman of the Khatlon region in charge of construction and housing and communal services - Chairman of the Complaints Commission.
The head of the General Department, Control and reception of complaints of the population of the office of the Chairman of the Khatlon region is the secretary of the Complaints Commission.

Members of the Commission:
* Director of the UE "Obi dekhot" of the Khatlon region;
* Chairman of the Khatlon Region Land Use Committee;
* Head of the Committee for Environmental Protection of Khatlon region;
* Director of the Center for State Sanitary and Epidemiological Control of Khatlon region;
* Head of the Department of Architecture and Urban Planning of Khatlon region;
* Head of the enterprise of electric networks of Khatlon region;
* Head of the Investment and State Property Management Department of Khatlon Region;
* Head of the Department of Social Protection of the population of the Executive Body of state Power of the Khatlon region;
* Representative of a non-governmental organization.

Phone number of the Local Regional Commission: _____

Second Step – National Grievance Management Commission
If the complaint is not resolved by the Local GRMC, the complaint will be taken to the National grievance management commission. Complaints should be considered within 30 days of the original date of registration of the complaint, or 15 days where no additional study and research are necessary.

The National Grievance Redress Management Commission under the State Unitary Enterprise "KMK" includes representatives of the Ministry of Energy and Water Resources of RT, the State Committee on Land Resources Management and Geodesy of the Republic of RT, the Committee on Construction and Architecture under the Government of RT, the State Sanitary and Epidemiological Supervision Service under the Ministry of Health and Social Protection.
The contact phone number of the GRMC at the National level: (+992372) 33-88-25, 31-13-30

Third step - Court of Law
In case the decision of the National GRMC is not found satisfactory, the person making the compliant can appeal to the relevant Court of Law (as aforementioned, they can also take the complaint to a court of law at an earlier stage).

All grievances will be recorded on a register/ log and an identification number given to the grievance so it can be tracked to ensure actions are carried out. The register will include details of the date of complaint, method of complaint, date grievance entered into register, stages of and outcomes of complaint and summary of responses. The register will highlight if the PAP is classed as vulnerable in order that additional assistance can be provided.
The mechanism will establish responsibilities of the construction Contractor for complaint management during construction. The grievance mechanism should be accessible to local project affected persons thorough PMU assistance. The construction Contractor and the relevant authorities should also provide comprehensive support to resolve disputes and satisfy complaints if there is a negative impact of the project on the social aspect.
In addition to the project grievance mechanism, communities and individuals who believe that they are adversely affected by a World Bank project may submit complaints to the World Bank's Grievance Redress Service (GRS). The complaint should be submitted in writing and addressed to the World Bank Grievance Redress Service.

Environmental and Social Monitoring Plan

Environmental and social monitoring requirements, and responsibilities of different parties, are summarized in a table for each zone in the ESMP. The tables present a simple monitoring plan for each sub-project zone to enable both the Contractor, Operator, relevant authorities and the World Bank specialists to monitor due implementation of environmental management and protection measures and detect deviations and shortcomings in a timely manner. The Contractor will ensure preparation of a monthly report on ESMP implementation, as per the template attached to the ESMP. The monitoring plans present information on the parameters that need to be monitored, the location, how and when the parameter is to be monitored, why the parameter is being monitored, and who is responsible for monitoring. Monitoring is divided into the two project phases: construction and operation.

It will be the responsibility of the PMU to control implementation of the monitoring plan, collate all monitoring data and arrange agreements with the relevant agencies and other responsible parties to undertake monitoring with Hukumat, Operator, PMU, SES and SCEP.

6. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

The ESMP summarizes the responsibilities of different parties responsible for implementing the ESMP including: the Project Management Unit, Grievance redress management commissions and relevant authorities, the Operator of the WS, Construction Contractor, the Supervision Consultant, Local Self-Government (region, district), Jamoats and Communities.

The Project Management Unit (PMU) will coordinate project activities and will be responsible for coordinating the implementation of the ESMP. For these purposes, in addition to those provided by the PMU Sociologist whose responsibilities include ensuring the coordination and implementation of social protection measures, supervision and reporting on population mobilization within the RWSSP, and Environmental Engineer which is responsible for supervising the implementation of the Environmental and Social Management Framework (ESMF), ESMP, as well as the control of the contractor team to ensure that all environmental obligations are included in construction works and work processes.

6.1. Training needs

There is a need to train stakeholders involved in the project for effective and efficient implementation of the ESMP. Responsibility for conducting the training is assigned to the Project Management Unit with involvement of the relevant local experts. The PMU will develop an annual training program including mechanisms, schedules and topics, as well as training groups.

For effective and efficient implementation of the ESMP, the following training topics are offered:

- *Environmental and Social Management Plan (ESMP)*
- *Environmental and Social Monitoring*
- *Environmental and Social Reporting*
- *Grievance Redress Mechanism*
- *Health and safety including management of hazardous waste and materials*
- *Solid waste management*
- *Management of gray wastewater at the household level, including in conjunction with local authorities in*

the field of sanitation and ecology and taking into account their experience in monitoring the quality of gray water;

- *Emergency response plan and reporting procedures if issues arise*
- *Resettlement training*
- *Chance finds procedure*
- *Social responsibilities of parties*

6.2. Reporting arrangements

Reports will be prepared by the PMU to inform the World Bank, the KMK and other decision-makers on the progress of ESMP implementation, results of mitigation and the need for corrective actions. The ESMP summarizes regular reporting requirements. Frequency of reports other than the Monthly Compliance Reports will vary depending on the nature of the non-compliance and monitoring schedule. The PMU will develop the standard quarterly compliance checklist template, which will be part of the quarterly compliance report to be prepared by the PMU and submitted to the KMK and World Bank.

6.3. ESMP Disclosure

In accordance with the World Bank Policy on Access to Information and the Disclosure requirements of the Operational Policy 4.01, the ESMP was publicly consulted on «__»_____ and it summary was distributed to the relevant authorities for their review on Committee on Environmental Protection under the Government of the Republic of Tajikistan and its structural units. Upon review and approval of the WB, the final ESMP will be disclosed at the PMU, KMK and MEWR websites to inform stakeholders about anticipated environmental and social impacts, and proposed mitigation measures. The procedure should also follow requirements of relevant Tajik law. The potential basis for disclosure is presented in the ESMP. The PMU will ensure that content of the document is available to stakeholders and affected persons.

7. ENVIRONMENTAL AND SOCIAL MITIGATION PLAN

№	Location/ Subject	Activity	Environmental/ Social Aspect	Real/Potential Environmental /Social Impact	Mitigation measures	Responsibility for implementation	Responsibility for supervision
1.	**CONSTRUCTION PHASE**						
1.1.	**Water resources**						
1.1.1.	Place of water intake	Checking the water	Water treatment	- Water does not meet national standards for drinking water - Long- term negative impact on health of water users	Evaluation of water analyses incl. recommendations for water treatment technology	Operator supported by PMU Field engineer / Hydrochemist to be hired by PMU	PMU / SES
1.2.	**Waste management**						
1.2.1.	Sites of water intake	Storing/operating oil-containing equipment (vehicles, machinery, transformers)	Oil leaking from equipment	-Soil contamination, contamination of surface and/or ground water and living nature by: - residuum of petroleum substances - PCB (transformers) - contaminated construction materials.	- Use of protective equipment (sorbent, absorbent mat, safety bin) when necessary - Removing all equipment with oil from the protection zone	Construction contractor Operator	SCEP PMU
1.2.2.	All sub-project construction sites	Routine and non-routine activities of Contractor	Dumping waste in natural habitats	Pollution of living nature, soil, water, air, unnecessary need for new materials/products as the dumped waste is not going to be reused, treated or recycled	- Develop and implement a waste management plan - Use officially licensed and appropriately managed local treatment facilities/ landfills - Prioritize capacity-building for waste segregation so that hazardous materials can be kept out of the general waste stream - Possibility to store hazardous waste separately - No burning	Construction Contractor	SCEP PMU

					of waste		
1.2.3.	All sub-project construction sites	Incorrect or careless transport, handling, storing and use of materials or products/chemicals	Hazardous waste/waste generation	Pollution of living nature, soil, water, negative visual impacts, land occupation due to waste landfilling, excessive exploitation of natural resources to produce new materials/products	Adequate transportation of materials/products, including covering materials to prevent loss of materials - Storing materials and chemicals in adequate conditions - Chemical and fuel storage tanks, refueling and maintenance points located more than 50 m from any watercourse, well or private house. Correct labelling of chemicals - Implement Traffic management plan and waste management plan - Appropriate disposal of waste – officially licensed and appropriately managed local landfills - Awareness-raising and training of workers - Using protective clothing	Construction Contractor	PMU SCEP
1.2.4.	All sub-project construction sites	Handling/storing oil-containing equipment	Oil from leaking equipment	Soil contamination, contamination of surface and/or ground water, living nature by: - residuum of petroleum substances - contaminated construction materials	- Regular maintenance and control of all equipment with oil content (vehicles, equipment) - Using protective equipment (sorbent, absorbent mat, safety bin) when necessary - Fuel storage tanks, refueling and maintenance points will be located more than 50 m of any watercourse, well or private house	Construction Contractor	PMU SCEP
1.2.5.	All sub-project construction	All activities generating waste (construction waste,	Generation of unsorted domestic and other waste (incl. hazardous waste)	- Wasting natural resources - no sorting for recycling	- Implementation of waste management plan, which includes recycling of used	Construction Contractor	PMU SCEP

	sites	domestic waste from Worker´s camps), even by accident		- Potential contamination of the environment from landfills	construction materials - Using hazardous waste/waste containers - Using official licensed and appropriately managed local landfills - No burning of waste - Awareness-raising and training of workers		
1.2.6.	All sub-project construction sites	Hazardous waste generation and asbestos-containing material (ACM) generation	Generation of hazardous waste/asbestos-containing material	Health risk for workers	- Implementation of waste management plan including records and monitoring (storage, segregation, legal disposal, hazardous and toxic substances) - Development and implementation of hazardous materials handling/storing procedure. - Use of protective equipment - Specialized contractors with appropriate training, experience and protective equipment to be hired when operating with asbestos materials - Awareness-raising and training of workers - Hazardous waste/ACM disposal in suitable approved landfills only at suitable approved landfills - Implementation of the waste management plan, including accounting and monitoring (storage, separation, legal disposal, hazardous and toxic substances)	Construction Contractor Specialized contractor	PMU SCEP
1.2.7.	All sub-project construction	Activities such as rehabilitation of facilities, demolition	Dust generation	Air pollution (TSP/PM)	- Using personal protective equipment (PPE). - Decreasing levels of dust	Construction Contractor	ЦУП

	sites	work, transportation of materials and other activities with potential for high levels of dust generation			from operations (e.g. water sprinkling on roads, and dust prone areas) - Include preventive measures in the construction plans Implement Traffic Management Plan. - Dust- generating items should be transported under tarpaulin/ in covered trucks Implement speed limit of maximum 30 km/h on unmade roads under dry conditions.		
1.2.8.	All sub-project construction sites Construction transport routes	Running cars and other engines	Releasing air contaminants: NOx, (CO, SO2), TSP	Air pollution, consumption of natural resources, negative impacts on living organisms	- Implement Traffic Management Plan. - Planning transportation of construction materials – optimal routes, washing of vehicles before leaving site, sprinkling water on dust prone areas and roads, covering trucks during transport to prevent loss of materials - Monitoring of mileage - Use of low emission vehicles and their regular maintenance of vehicles (exhaust control) - Using quality lead-free gasoline	Construction Contractor	PMU
1.3.	**Environment**						
1.3.1.	All project documents	Technical review and verification of project presumptions and project hypotheses	Depletion of water resources. Generating waste (inadequate solution/material)	Insufficient quantity of drinking water. Insufficient parameters of WSS (pipelines, pumps, treatment plant)	Checking of hydraulic model based on the actual measurements of positions and levels of the facilities as well as flows in the system	PMU supported by Field engineer/Consultants to be hired by PMU (Civil engineer, hydrogeologist, hydraulic engineer)	SES SCEP Tajik geology department

1.3.2.	All project documents	Permits and approvals for the project	Non-compliance with legal requirements/ state authority requirements	Construction and Operation may cause environmental, cultural heritage or social problems	- Submission of documents to appropriate authorities for approval of construction/demolition works. - Obtaining all necessary approvals before construction starts - Agreeing chance finds procedure (outline procedure to be finalized)	PMU, supported by Consultant Design Engineers KMK / Operator	SES SCEP National/Regional/ Local state authorities
1.3.3.	All construction sites	Construction of all parts of WSS (water intake sites, network) and septic tanks	Damaging vegetation (trees etc.)	Damaging living nature	Survey and an inventory of large trees in the vicinity of the construction activity, large trees marked	Operator supported by PMU Field engineer/Supervision Consultant	SCEP
1.3.4.	Operator	Control of demolition works	Non-compliance with ESMP and other environmental protection requirements	Damaging the environment.	Appointment of Environmental Specialist	Operator to work in close collaboration with PMU field engineer and PMU environmental specialist.	PMU SCEP
1.3.5.	All project documents	Incorporate Environmental Social, Health & Safety requirements and grievance mechanism requirements in the tender documents for contractors and the construction	Non-compliance with ESMP, RAP and other environmental/ social protection requirements Non-compliance with ESMP and other H&S legal requirements.	- Deterioration of the quality of the environment and /or quality of life - Decrease in safety of civil and installation works	- Environmental, Cultural, Social, Health & Safety requirements and grievance mechanism are included in the tender documents for contractors - Environmental, Cultural, Social, Health & Safety requirements, grievance mechanism and chance finds procedure are included in the construction contractor's contract - Grievance mechanism and procedures should ensure that the voices of poor	PMU, supported by the Consultant Design Engineers	PMU

1.3.6.	All departments of the Operator	Emergency preparedness and response plan	Environmental preparedness capacity building	Improved preparedness for potential uncontrolled environmental emergencies.	- Development and regular update of Emergency preparedness and response action plan jointly with the Committee for Emergency situations and Civil Defense under the Government of the RT. - Staff training, also in emergency preparedness and procedures	Operator	Operator
1.4.	**Health and safety**						
1.4.1.	Operator	Control of demolition works	Non-compliance with ESMP and other H&S legal requirements	Damage to human health	Appointment of Health & Safety specialist	Operator to work in close collaboration with PMU Social Safeguard specialist	PMU
1.5.	**Social**						

1.5.1.	All sub-project areas	Interaction with stakeholders	Choice of project sites and project activities Project delays	Discontent of the population	Finalize project Stakeholder Engagement Plan in line with ESMF and Tajik legal requirements. This should include engagement activities prior to commencement of construction. Stakeholder engagement from the early stages of the project. Details of the project sites and activities will be publicly disclosed and feedback sought. The reasons for the selection of sites (construction sites; villages to be served with water, social institutions to be served with septic tanks) should be explained. In cases of delays to construction, local communities should be informed. Stakeholder engagement should be inclusive, with representatives of women and vulnerable persons, including those with disabilities. Opinions on issues and needs related to water and sanitation of poor households (HH) and other vulnerable groups, including people with disabilities, should be actively sought during stakeholder engagement.	PMU	PMU

1.5.2.	All areas project	Interaction with stakeholders	Active participation of women in the project	Underrepresentation of women and their views	Participation, inclusion and representation of women's interests and opinions throughout the project. Project SEP should specify how women will be adequately involved. PMU will also arrange for the following: Women representatives on grievance committees including staff member from the women's and family affairs department, Legal League representative, village women representative • Community water committees includes women representatives. At least 30% committees are chaired by women • Identified village women representatives present in each stakeholder meeting	PMU Local Authorities Grievance Management Committees	PMU Grievance Management Committees Operator

1.5.3.	All sub-project areas	Interaction with stakeholders	Process of submission of complaints	Discontent of the population	The PMU will finalize the grievance mechanism (see proposed mechanism) and oversee establishment and operation of the Grievance Management Committees. The grievance mechanism will be clearly explained and advertised to the local population and implemented in the pre-construction phase. The mechanism will establish responsibilities of the construction contractor for complaint management during construction. Grievance mechanism and procedures should ensure that the needs of poor HH and other vulnerable groups, including people with disabilities, are properly reflected and addressed.	PMU Grievance Management Committees	PMU Grievance Management Committees

1.5.4.	All sub-project construction sites	Construction	Temporary street and home inaccessibility during construction Temporary restriction of access to public services and social institutions	Impacts on local population accessing services, business and homes.	Implement RAP/ ARAP mitigation. Implement construction plans and preventative measures, such as: - Minimizing impacts through planning construction strategy - Temporary crossing bridges, alternative safe routes should be provided to provide safe and continued access to public services and institutions, offices, shops and accommodation if buildings remain open. - Alternative connection with selected objects (schools, hospitals.) - Information campaign - Vulnerable users, including those with disabilities, should be adequately taken into account.	Construction Contractor	PMU Operator Local authorities

1.5.5.	All sub-project areas	Interaction with stakeholders	Interaction with Stakeholders Social tensions Project impacts Community Health & Safety	Dissatisfaction in the community and community conflicts on project activities, construction activities, project locations, accidents and other impacts on the community.	Implement SEP throughout the project, including regular provision of information on project activities through the media, local authorities, information boards and signs and community meetings. Locations of project facilities, construction, H&S and other impacts should be clearly explained to the population. Public education campaign on the rational use of water and safe sanitation. Inclusive stakeholder engagement, representatives of women and vulnerable persons, including those with disabilities, involved. The Construction Contractor will liaise with the local community on a regular basis on construction activities and disruptions. Implement and contractor and project grievance redress mechanisms.	PMU Construction Contractor Grievance Redress Management Committees	PMU Grievance Redress Management Committees Local authorities

1.5.6.	All sub-project areas	Interaction with stakeholders	Active participation of women in the project	Underrepresentation of women and their views	Participation and inclusion of women's interests and opinions. Implementation of Project SEP and gender action plan, including amongst others: Community support groups should include at least 30% women representatives, including representatives in group leadership. • Identified village women representatives present in each stakeholder meeting	PMU Local Authorities Grievance Management Committees	PMU Grievance Management Committees
1.5.7.	All sub-project areas	Interaction with stakeholders	Process of Submission of complaints	Discontent of the population	- Implement project grievance mechanism, contractor grievance mechanism and ensure they are advertised to the local community so it is clear where project complaints should be submitted. - The Operator grievance mechanisms should also be monitored in relation to complaints about disruptions to existing WSS systems. Grievance mechanism and procedures should ensure that the needs of poor HH and other vulnerable groups, including people with disabilities, are properly reflected and addressed.	PMU Grievance Management Committees Contractor Operator	PMU Grievance Management Committees Local authorities

1.5.8.	All sub-project construction sites	Construction activities	Temporary project induces labor influx Labor relations	Possible tensions between workers and the local community due to cultural and economic reasons Increased burden on public services (water, electricity) Inadequate waste disposal Wastewater discharges	-Implementation of Contractor Labor Influx/ Worker Management Plan and Contractor site-specific ESMP -Maximize the number of workers hired from the local area. The Contractor will justify the hiring of any workers from outside the local area. -Ensure contractors and subcontractors comply with labor laws and standards and implement fair work practices. -The Contractor will ensure contracts in compliance with Tajik labor laws are in place with all workers, and ensure that workers are provided with the required insurance (including accident insurance) according to Tajik laws. -Measures to prevent gender discrimination -Fair wages -No child or forced labor -Working conditions meet health and safety standards required by Tajik legislation -Workers must comply with local cultural protocols and behaviors (e.g. appropriate clothing) -Expected behaviors in community areas clearly explained to workers (e.g. noise, alcohol, behavior to women etc.) -Closed worker camps with access to safe water and sanitation Management of visitors to worker camps -	Construction Contractor	PMU Grievance Redress Management Committees Local authorities

					Camps located at safe distance from sanitation zones Effective Project and -Contractor grievance redress mechanisms in operation -Liaison with local authorities and community representatives		
1.6.	**Mobilization and major construction work**						
1.6.1.	Construction contractor documents	Preparation for construction works	Non-compliance with ESMP, RAP and other environmental/ social protection requirements and other H&S legal requirements.	Deterioration of the quality of the environment and /or quality of life. Decrease in safety of civil and installation works	Construction Contractor to develop plans to address Environmental Social, Health & Safety requirements, including requirements from ESMP, RAP, ESMF and other project documents. Plans toinclude: Site-specific ESMPs • Labor influx/ worker management plan Waste management plan • Hazardous materials handling/storing procedure Emergency action plan • Traffic management plan, including planning routes of construction materials Staff training plan • Pollution Prevention and Control Plan • ARAP/RAP and social screening checklist in case of need of additional land, (in coordination with PMU) Grievance mechanism • Worker Health & Safety Plan • Community Health and Safety Plan Construction camp management plan	Construction Contractor	PMU Approval of plans by KMK, the World Bank and relevant authorities

1.6.2.	Operator	Control of construction works	Non-compliance with ESMP and other environmental protection requirements	Damaging environment	Full time employed and competent Environmental specialist with defined role and responsibilities, and authority to ensure project compliance with environmental national legislative requirements and WB requirements	Operator to work in close collaboration with PMU field engineer and PMU environmental specialist	PMU SCEP
1.6.3.	Operator	Control of construction works	Non-compliance with ESMP and other health and safety requirements	Damage to human health	- Full time employed and competent Health and Safety specialist with defined role and responsibilities, and authority to ensure project compliance with OHS national legislative requirements and WB requirements	Operator to work in close collaboration with PMU and PMU Social Safeguard specialist	PMU
1.6.4.	Water intake sites	Dumping waste on site	Non-compliance sanitation zones	Soil and groundwater contamination	Removal and legal disposal of waste, including existing waste on construction sites	Operator Construction contractor	SCEP PMU
1.6.5.	Water intake sites	Demolition of old facilities (reservoirs, pumping stations, unused buildings)	Waste generation	Soil/groundwater contamination	Sorting waste Use local legal landfills	Construction contractor	SCEP PMU

1.6.6.	Water intake sites	Demolition of old facilities (reservoirs, pumping stations, unused buildings)	Dust generation	Air pollution (TSP/PM)	Using personal protective equipment (PPE). Decreasing levels of dust from operations (e.g. water sprinkling) All activities carried out according to the approved schedule In case of unforeseen deviation from the schedule communities will be informed Communities will have the opportunity to complain about excessive dust through grievance mechanism	Construction contractor	SCEP PMU Operator
1.6.7.	Water intake sites	Demolition of old facilities (reservoirs, pumping stations, unused buildings)	Noise generation.	Noise pollution of the environment/ population.	Using personal protective equipment (PPE). All activities carried out according to the approved schedule In case of unforeseen deviation from the schedule communities will be informed. Communities will be able to complain about excessive noise through the complaint mechanism	Construction contractor	SCEP PMU Operator

1.7.	**Water use and distribution**						
1.7.1.	Place of water intake	Temporary working camps during construction works	Hazardous waste/waste generation. Leakages from vehicles/machinery	Soil / Groundwater contamination.	- Adherence of sanitary zones of catchment area. Proper maintenance of sanitary zones - Waste management plan - Construction camp management plan - Properly maintained vehicles and machinery - Vehicles/ machinery parked/stored outside of water intake sites - Safe sanitation accessible	Construction Contractor	PMU Operator SCEP SES
1.7.2.	Place of water intake	Surface water exploitation	Water consumption Energy consumption	- Groundwater contamination - Overloading of hydrogeological structure - Wasting natural sources	- Sanitary zone of catchment area and protection of individual source. - Verification of hydrogeological assumptions - Groundwater monitoring.	Construction Contractor	PMU supported by Field engineer/ Hydrogeologist to be hired by PMU SES SCEP
1.8.	**Environment aspects of the construction works**						

1.8.1.	All sub-project construction sites	Construction of Water treatment facilities (WTF)	Damaging vegetation (trees, crops etc.) due to clearance for construction especially in agricultural areas and in gardens	Damaging living nature, wasting natural resources (such as trees, plants, water…).	- Include preventive measures in the construction plans, for example: Appropriate timetable for construction work, respecting vegetation period - Temporary tree/shrub protection against damage caused by vehicles and machinery - Appropriate site restoration/revegetation and tree planting after completion of construction - Staff awareness building - Large trees in the vicinity of the construction activity shall be cordoned off with fencing, their root system protected, and any damage to the trees avoided	Construction Contractor	PMU SCEP
1.8.2.	All sub-project construction sites	Backfilling and compaction of trenches	Vibration	Negative impact on workers using hand vibration equipment	Use of personal protective equipment (PPE)	Construction Contractor	PMU
1.8.3.	All sub-project construction sites	Accidents and breakdowns of vehicles	Oil/fuel spills	Soil contamination, contamination of surface and/or ground water, waste generation	- Regular training of drivers/machine operators including emergency preparedness training - Regular vehicle maintenance and control. - Regular cleaning of parking lot - Implement Emergency action plan - List of emergency contacts	Construction Contractor	PMU
1.8.4.	All vehicles/ machinery	Washing vehicles/machinery	Oil/fuel spills	Surface water and soil contamination	Construction vehicles and machinery will be washed only in designated areas, where runoff will not pollute waterbodies/ groundwater / soil	Construction Contractor	PMU SCEP

1.8.5.	All sub-project construction sites	Traffic disturbance	Noise generation, emission of air contaminants	Air pollution, consumption of natural resources, negative impacts on living organisms	- Implement Traffic Management Plan (TMP) - Traffic signs and road markings/barriers - Planning transport of construction materials – optimal routes and daytime hours - Reduction of driven kilometers/ fuel consumption	Construction Contractor Local Authorities (approval of TMP)	PMU
1.8.6.	All sub-project construction sites	Activities such as rehabilitation of facilities, demolition work and other activities with high noise	Noise generation	Noise pollution of the environment /population	- Use approved, suitably maintained equipment. - Wear ear protective equipment, when needed - Adhere to approved working hours - All activities carried out according to the approved schedule - In case of unforeseen deviation from the schedule communities will be informed - Communities will have the opportunity to complain about excessive noise through grievance mechanism	Construction Contractor	PMU
1.8.7.	All sub-project construction sites	Fire (on And off site) caused by force majeure and various activities using open fire (smoking, welding)	Generation of waste, release of air pollutants	- Air pollution, damage of physical environment and living organisms, wasting natural resources, risk to life / personal injury, damage of property - Contamination of soil and surface water	- Implement Emergency Action Plan. - Firefighting equipment on site - Regular training in emergency preparedness and procedures - Regular inspections of firefighting equipment - Good construction practices to prevent fires as a result of project activities, including appropriate storage of flammable materials, fuel and liquids	Construction Contractor	PMU

1.8.8.	All sites	Force majeure - emergencies such as earthquake, floods…	Generation of waste, release of contaminants	Wasting natural resources, burden on the environment while disposing of waste, groundwater pollution	- Implement Emergency Action Plan - Staff trained in emergency preparedness and procedures - List of emergency contacts	Construction Contractor	PMU
1.8.9.	All construction sites	Compliance with environmental legislation	Non-compliance with legal requirements	Legal baseline for all activities with possibility of environmental impact	- Submission/update documents to appropriate authorities for approval with operation of existing/new wells, water intake sites and their sanitary zones	Construction Contractor Operator	PMU SES SCEP

					- In the area of cultural heritage sites, various additional mitigation measures should be taken, for example, such as: construction work will only be carried out in the presence of a designated specialist / representative for cultural heritage for the project from the cultural heritage authority. - Trenches should be excavated		
1.8.10.	All sub-project construction sites	Construction works	Use of construction materials that are hazardous to health	Health risks	- The use of construction materials that are hazardous to health (e.g. asbestos and asbestos-containing materials) is not permitted	Construction Contractor	PMU

1.8.11.	All sub-project construction sites	Construction works	Accidents due to construction activities	Increased risks of accidents of workers/residents	- Implement Worker H&S plan, Community H&S plan and Traffic Management Plan - Contractor is responsible for recruiting staff with relevant qualifications and experience, and ensuring regular training in H&S - Construction of temporary crossing bridges - Contractor will ensure that the construction site is properly secured (fencing etc.) and that public access to construction sites is restricted - Appropriate Sites shall be equipped with appropriate information informing the workers about the rules and standards of work. - Availability of first aid on site. - Provision of personal protective equipment (PPE). - Information campaign - Local communities will be adequately informed of the work through publications, media and information boards	Construction Contractor	PMU Operator

1.8.12.	All sub-project construction sites	Traffic disturbance	Direct or indirect impacts on transport in the project areas and pedestrian safety	Increased risks of accidents of workers/residents Disruptions to the flow of traffic	- Implement traffic management plan - Warning signs, barriers, and traffic management. - Provision of safe passages and crossings for pedestrians impeded by construction traffic. - Adjusting site working hours to avoid major transport during peak traffic hours or during livestock movements. - Ensure safe and continuous access, including for people with disabilities, to office space, shops and residential properties if buildings remain open.	Contractor	PMU
1.8.13.	All sub-project construction sites	Final phase of construction works	Insufficient site clear- up/ restoration to its original or improved condition	Risk to life / personal injury Damage of environment Damage of property	- Removing all waste, surplus soil and materials, temporary roads, camps and temporary fencing - Removing all construction machinery and equipment - All post holes filled and the surface of the ground restored as near as practicable to its original or improved condition - All working areas both within and outside clear-up. - All negotiations and	Construction Contractor	PMU Operator

					compensation for land, crops, trees, houses and other relevant items have been satisfactorily completed		
1.8.14.	All sub-project construction sites where crosses with existing local water supply systems	Network construction	Temporary inaccessibility of drinking water.	People use unsafe sources of drinking water	- Minimizing time between cutting off existing and connecting new system - Planning total interruptions in off-peak hours (preferably during night time hours) - Water supply through water bowsers (placed nearby kolonka sites) - Ensuring the supply of water to vulnerable groups - Timely warning of the public of interruptions	Construction Contractor	PMU Operator
1.8.15.	All sub-project construction/camp sites	Shiftwork during construction works	Fecal contamination near construction sites	Increases incidents of sanitary caused diseases for workers	Safe sanitation accessible on site for labor	Construction Contractor	PMU
2.	**OPERATION PHASE**						
2.1.	**Water resources**						
2.1.1.	Water system supply	Water distribution	Regular verification of drinking water quality	- Water does not meet national standards for drinking water - Long-term negative impact on the health of water users	- Regular monitoring and evaluation of water quality in the whole distribution network - Treatment technology used if necessary - Adequate chlorination	Operator	SES
2.1.2.	Water treatment plants (WTF)	Operating and maintenance of water distribution network	Leakages Water leakages (technical NRW) from pipes and reservoirs	Wasting water. Serious leaks and breakdowns in the water network, local flooding causing damage to property Energy consumption	- Proper rehabilitation, maintenance and operation of the entire network - Use of leak detection equipment - Remove illegal connections	Operator	Operator

2.1.3	Wastewater discharge network	Wastewater discharge by the consumers, including increased greywater discharge due to construction/reconstruction of the water supply system	Improper grey/wastewater management	Potential contamination of the environment	- Organization of the grey wastewater discharge site in agreement with the relevant regulatory authorities for grey/wastewater washout with disinfection of conduits and water distribution network - Regular maintenance of sewage network and wastewater treatment facilities	Operator PMU	SES
		Discharge of gray waste water by consumers	Mismanagement by consumer in the private sector (households) of gray / wastewater, lack of sewerage or other drainage (trough) system.	Potential environmental pollution	- use of existing chute systems and collectors; - the use of drainage wells, which are widely used in rural areas with the organization of wastewater filtration (gravel, sand); - the use of energy-efficient bioponds (artificial swamps), followed by the use of areas and substrates of artificial swamps in subsidiary plots; - use of the simplest barriers (nets, filters, sedimentation tanks) for separating solid particles of gray water and simple gravel filters for separating fat; - wide campaigning and educational work on the management of gray wastewater, including the development of relevant booklets, explanatory leaflets. -Gray water quality monitoring in an ongoing way by the	PMU, Mobilization Company with WASH Committees and Communities	SES

					authorized local authorities in thesanitation and ecology field.		
2.1.4.	Consumer connections	Use of water by consumers	-Excessive use of water by consumers Leaks on customer property	Depletion of natural resources	- Installation of water meters to reduce water consumption and effluent volume - Regular maintenance (calibration) of water meters. - Clear ownership and management responsibilities for shared yard connections Information campaign - Public awareness-building - Water metering - Proper maintenance and operation of private networks (networks on customer's property – after the service valve)	Operator Client PMU (information campaign and awareness raising during final phase of construction phase and in the beginning of the operational phase)	Operator PMU
2.2.	**Waste management**						
2.2.1.	All departments of the Operator/ network facilities	Routine and non-routine activities of the Operator	Dumping waste in natural habitats	Pollution of living nature, soil, water, air, unnecessary need for new materials/products as the dumped waste is not going to be reused, treated or recycled	- Use local officially licensed and appropriately managed treatment facilities and landfills - Prioritize capacity- building for waste segregation so that hazardous materials can be kept out of the general te stream - Develop and implement waste management plan - Possibility to store hazardous waste separately - No burning of waste	Operator	SCEP

2.2.2.	All departments of the Operator/ network facilities	Incorrect or careless transportation, handling, storing and use of materials or products/ chemicals	Hazardous waste/waste generation Generation / leaking / spillage of chemicals.	Pollution of living nature, soil, water, negative visual impacts, land occupation due to waste landfilling, excessive exploitation of natural resources to produce new materials/products Air pollution	- Correct transportation of materials/products Storing materials and chemicals in suitable conditions - Correct labeling of chemicals Appropriate disposal of waste – officially licensed and appropriately managed local landfills - Awareness-raising and training of staff - Using protective equipment	Operator	SCEP
2.2.3.	All departments of the Operator/ network facilities	Handling/storing oil-containing equipment	Oil leaking from equipment	Soil contamination, contamination of surface and/or ground water, living nature by: - residuum of petroleum substances - contaminated construction materials	- Regular maintenance and control of all equipment with oil content - Use of protective equipment when necessary - Proper utilization/disposal of oil	Operator	SCEP SES
2.2.4.	All departments of the Operator/ network facilities	Routine and non-routine operations	Generation of electric and electronic waste (WEEE)	Wasting natural resources, pollution of the environment by waste/hazardous waste	- Develop and implement waste management plan including monitoring records WEEE containers	Operator	SCEP
2.2.5.	All departments of the Operator network facilities	All activities generating waste, even by accident	Generation of unsorted municipal and other waste (incl. hazardous waste)	Wasting natural resources – no sorting for recycling Potential contamination of environment from landfills Potential contamination of the environment due to improper waste storage	- Develop and implement waste management plan - Using hazardous waste/waste containers - Incentives for sorting waste - Using official licensed and appropriately managed local landfills - No burning of waste Awareness-raising and training of staff	Operator	SCEP

2.2.6.	All departments of the Operator/ old network facilities	Hazardous waste generation and asbestos-containing material (ACM) generation	Generation of hazardous waste /asbestos-containing material	Health risk for workers	- Develop and implement waste management plan including safety measures procedures and practices - Records of asbestos-containing materials - Use of protective equipment Specialized contractors	Operator Specialized contractor	SCEP SES
2.3.	**Environment**						
2.3.1.	construction sites	Activities such as modernization of facilities, demolition work and other usually irregular activities with high levels of dust	Dust generation	Air pollution (TSP/PM)	- Using personal protective equipment (PPE). - Decreasing levels of dust from operations (e.g. water sprinkling)	Operator	Operator SCEP
2.3.2.	construction sites	Running company cars and other engines	Generation air contaminants: NOx, (CO, SO2), TSP	Air pollution, consumption of natural resources, negative impacts on living organisms	- Monitoring of mileage - Regular maintenance of vehicles (exhaust control) - Using quality lead-free gasoline	Operator	Operator
2.3.3.	construction sites	Activities not considerate to greenery or insufficient care of greenery	Damaging greenery	Damaging living nature, wasting natural resources (such as plants, water…)	Staff awareness building	Operator	Operator
2.3.4.	All staff using vehicles	Accidents and breakdowns of vehicles	Oil/fuel spills.	Soil contamination, contamination of surface and/or ground water, waste generation	Regular drivers training Regular vehicle maintenance and control Regular cleaning of parking lots List of emergency contacts	Operator	Operator
2.3.5.	construction sites	Activities such as rehabilitation of facilities, demolition work and other usually irregular activities with high noise	Noise generation.	Noise pollution of the environment/population	- Use approved, suitably maintained equipment - Wear ear protective equipment, when needed - Adhere to approved working hours - All activities carried out according to the approved schedule	Operator	Operator

2.3.6.	construction sites	Fire (on and off site) caused by force majeure and various activities using open fire (smoking, welding, grinding)	Generation of waste, air pollutants	Air pollution, damage of physical environment and living organisms, wasting natural resources, risk to life / personal injury, damage of property Contamination of soil and surface water	- Emergency action plan developed, implemented and regularly updated - Firefighting equipment on site - Regular staff training in emergency preparedness and procedures - Regular inspections of firefighting equipment and preparedness of staff -Appropriate storage of flammable materials, fuel and liquids - Designated smoking areas, away from flammable materials/ liquids - List of emergency contacts	Operator	Operator
2.3.7.	construction sites	Force majeure - emergencies such as earthquake, floods…	Generation of waste, release of contaminants	- Wasting natural resources, burden on the environment while disposing of waste, groundwater pollution	- Regular staff training in emergency preparedness and procedures - List of emergency contacts	Operator	Operator
2.3.8.	construction sites	Routine and non-routine operations	Electricity and water consumption.	- Exploitation of resources natural	- Rational use of electricity and water for operator´s use. - Staff awareness building.	Operator	Operator
2.4.	**Environment (Management)**						

2.4.1.	All departments of the Operator	Training	Training of environmental awareness effectiveness and of management of environmental aspects.	- Improved environmental awareness across all staff - Optimization of environmental management through formalized system - Elimination of negative impacts on environment	- Full time employed and competent Environmental specialist - Preparation and implementation of Environmental and Emergency action training plan - Training of initial operator´s management and staff - Provide training for designated staff on environmental topics	Operator	Operator
2.4.2.	All departments of the Operator	Environmental monitoring program	Acting Environmental monitoring program	Monitoring and evaluation of operations with potential/real impact on environment	- Development and implementing Environmental monitoring program - Establish procedures to monitor the implementation performance of identified	Operator	Operator SES SCEP
2.4.3.	All departments of the Operator	Environmental legislation	Knowledge of actual Environmental legislation	Following legal requirements for all activities with possibility of environmental impact.	- Verification of validity of current documents. - Monitoring of environmental and other relevant legislation - Active communication with relevant local authorities – SES, SCEP (existing and planned activities)	Operator	Operator SES SCEP
2.4.4.	All departments of the Operator	Emergency preparedness and response plan	Environmental preparedness capacity building	Improved preparedness for potential uncontrolled environmental emergencies.	- Development and regular update of Emergency preparedness and response action plan jointly with Committee for Emergency situations and Civil Defense under the Government of the RT. - Staff training, also in emergency preparedness and procedures	Operator	Operator
2.5.	**Health and Safety**						

2.5.1.	Water treatment locations	Chlorination	Leakage of chlorine, inadequate dosing. Multiplication of dangerous microorganisms in pipes.	Health risk for customers and operators of water treatment technology	- Improved dosing measurement equipment to enable more accurate chlorination and achievement of the desired residual Safety measures and practices while using chemicals, including chlorine handling manual. - Proper storage of chemicals used for water treatment (chlorine) - Using PPE. Staff training - Regular maintenance of used technologies. - Monitoring of concentration of chlorine in the water	Operator (staff operating WT technology, H&S specialist)	Operator SES
2.5.2.	Water supply system	Water supply system breakdown	Technical problem (technology failure, material fatigue etc.) Human factor failure	Water related diseases Water shortage	Regular maintenance of WSS. Effective communication and information channels. Effective grievance mechanism Adequately equipped mobile maintenance teams.	Operator	Operator SES
2.5.3.	All staff using vehicles	Vehicles accidents and breakdowns	Technical problem (technology failure, material fatigue etc.) Human factor failure	Temporary or permanent negative impacts on human health and property	- Regular training of drivers/machine operators including first aid - Regular vehicle maintenance and control - First aid kit available in every vehicle - Clear vehicle responsibility	Operator	Operator
2.5.4.	All departments of the Operator	Training	Training of H&S awareness and effectiveness of management of H&S aspects	Improved H&S awareness across all staff Optimization of H&S management through formalized system	- Full time employed and competent a H&S specialist - Development and implementation of H&S documentation and procedures - Training of initial operator´s management and staff - Provide training for designated staff on H&S topics	Operator	Operator

2.5.5.	All departments of the Operator	Provision of administrative buildings and equipment	Inadequate premises for administration and operation staff and equipment	Risks to the health and safety of employees Low effectiveness of operations and management	- Identification of potential funding for projects for the rehabilitation of operator´s administrative premises - Provision of buildings and equipment with safety instructions at the workplace	KMK Operator	Operator
2.6.	**Social**						
2.6.1.	Sub-project sites	Provision of water to customers	Resettlement	Permanent loss of land, structures, access to services	- Continued implementation of applicable entitlements outlined in RAP/ ARAP as necessary. - Additional assistance during resettlement processes should be offered to poor households, single female headed households, PAPs with disabilities and other vulnerable households.	Operator PMU Grievance management committees	Operator PMU Grievance management committee KMK
2.6.2.	All departments of the Operator	Providing water supplies to clients	Customer dissatisfaction with WSS service Customer liaison	- Unwillingness to pay for water supply services. - Illegal connections - Population use sources with unsafe drinking water	- Regular maintenance and control of WSS including testing water quality. - Information campaign on Operator grievance procedure - Regular customer liaison activities (information provided to customers, community meetings etc.), including for example WSS, tariffs, rational use of water etc. - Public education campaign on the rational use of water and safe sanitation at the start of the operation period/ end of construction	Operator PMU	Operator PMU

2.6.3.	Sub-project areas covered by WSS	Providing water supplies to clients	Affordability of access Affordability of consumption Difficulty for poor HH and other vulnerable HH connecting to WSS	- Economic impacts on poor households and on collection of tariffs for WSS operator - Population uses sources with unsafe drinking water - Vulnerable HH have difficulty organizing	- Implement support measures to ensure connection costs will not pose a barrier to poor households - Review and update assessments of affordability of poor HH to pay tariffs annually - Assistance provided to poor HH and other vulnerable HH to help them organize the connection to the WSS with the Operator/ special Contractor. - Implement social support program to enable poor HH to consume water from the WSS	Operator, PMU	PMU Operator Relevant Authorities Social Protection department of Vosse Hukumat
2.6.4.	Sub-project areas covered by WSS	Providing water supplies to clients	Social tensions	Community conflicts over water use	Information campaign and stakeholder consultation Operator complaints and conflict resolution mechanism in place	PMU and Grievance management committees Operator Local Authorities	PMU and Grievance management committees Operator Local Authorities
2.6.5.	Sub-project areas covered by WSS	Interaction with stakeholders	Active participation of women	Underrepresentation of women and their views	• Community water committees include women representatives. At least 30% of committees are chaired by women • Identified village women representatives present in each stakeholder meetings/ community liaison meetings	Operator Local Authorities	Operator Local Authorities

8. ESMP IMPLEMENTATION AND MONITORING

The monitoring plan for each sub-project zone is provided in the following tables to enable both the Contractor, Operator, relevant authorities and the World Bank specialists to monitor due implementation of environmental management and protection measures and detect deviations and shortcomings in a timely manner.

Relevant parties responsible for monitoring the ESMP have been recommended in the following tables. They include PMU specialists, the Operator, the Contractor as well as specialized agencies (SES, SCEP, Committee for Emergency situations and Civil Defense under the GoT) operating in the District. It will be the responsibility of the PMU (Monitoring and Evaluation specialist) to oversee implementation of the monitoring plan, collate all monitoring data and arrange agreements with the relevant agencies and other responsible parties to undertake monitoring.

In order to aid this process, it is recommended that an agreement is made between the chairman of Vosse District and the PMU on the Hukumat's involvement in the coordination of the District SES, Vosse Environmental Protection Committee and other parties involved in monitoring. This could be complemented by establishing a coordination group of relevant parties at the district level (Hukumat, Operator, PMU, SES and SCEP), which would be chaired by the chairperson of Vosse District. The PMU and Hukumat, and the coordination group (if established), should agree on key measures to ensure that monitoring is undertaken at the appropriate times and frequency by relevant parties and that monitoring data and results are handed over to the PMU in a timely manner, including establishing a system whereby a copy of monitoring results and/or reports are provided to the project/ Operator immediately after carrying out the monitoring, before leaving the site/premises.

At an appropriate time in the Operation Phase, responsibility for overseeing ongoing monitoring will be handed over from the PMU to the Operator. Any coordination groups and agreements should be continued in order to ensure continued effective coordination of monitoring with relevant agencies.

9. ENVIRONMENTAL AND SOCIAL MONITORING PLAN

CONSTRUCTION OBJECT "RECONSTRUCTION OF THE WATER TREATMENT FACILITIES (WTF)"

Monitoring parameter	Monitoring site	Monitoring methodology	Frequency	Cause of monitoring	Responsible for monitoring
During design and construction					
Water quality	At the water intake place	*Sampling and analyses of water from the wells in the regional laboratory. Comparison with national standards*	Twice, once in the spring and once in the autumn	Meet national standards for quality of drinking water	Operating company PMU Design Consultant
Energy consumption	At the water intake place:	*Review* *Specifications for energy-efficient pumps in the tender documentation*	Once When finalizing procurement documentation	Avoid excessive energy consumption that increases the cost of operation and the tariffs.	PMU Design Consultant
Toxic/Hazardous waste management	On site, in the vicinity of site	*Visual (analytical if in doubt) inventory of hazardous waste (including asbestos)*	Once	Reduce public and workplace health and safety risks To minimize environmental pollution;	PMU
Waste (including hazardous waste) management)	On site and in office	*Visual* *Check if design and project planning foresee diligent procedures for waste/hazardous waste disposal on legally designated landfill sites (waste management plan)*	Once	Minimize soil contamination, contamination of surface and/or ground water, living nature through improper disposal of (hazardous) waste. Timely detection and remediation of solid waste disposal bottlenecks	PMU
Water and soil quality, wildlife	Sanitary and hygiene zones of one existing and one new designed water intake	*Visually* *Oil-filled equipment, moved from sanitary zones, including transformers*	Monthly Continuous	Avoid contamination of soil, surface and/or groundwater, wildlife.	PMU supported by SCEP
Ecosystem protection	Construction sites	*Visually* *Survey and inventory of large trees in*	Once	Prevention of damage to wildlife	SCEP Local government

		close proximity to the construction site			
Any hazards to the environment and/or human health	On site and in office	*Review* *Compliance of detailed design with current national norms and standards* *Verification of hydraulic model: Measurements of positions and levels of the facilities as well as flows in the system*	Once before the launch of tenders	Minimize risks and impacts on human health and the environment	PMU, supported by Consultant (Hydrological modeling, Engineer-Constructor)
Permits and approvals for the project	Construction sites Procurement packages	*Review of tender documentation* *Required approvals/permits to be obtained from all relevant authorities, construction*	Once	-Ensure compliance with legislation -Minimize impacts (environmental, social, cultural heritage)	PMU
Stakeholder engagement	Meetings, in office, local communities	*Visual Records of community engagement activities, including involvement of poor HH and other vulnerable groups (including people with disabilities) and their opinions in relation to water and sanitation.* *Stakeholder Engagement Plan finalized Engagement and Disclosure activities undertaken before start of construction* *Monitor feedback from consultation events Feedback including whether the local population are aware of project activities, locations, impacts, delays, disruptions, and involvement of women etc.*	Continuous After events Once Before construction After activities	Ensure compliance with ESMP, ESMF and Stakeholder Engagement Plan The local community should be informed of project activities, the choice of project sites, potential impacts and project delays.	PMU (Social safeguards team)
Active participation of women in the project	Meetings, in office, local communities	Implementation of gender oriented activities; • Women representatives on grievance committees including staff member	Continuous	Gender equality, women's views included in the project, compliance with ESMP	PMU (Social safeguards team)

		from the women's and family affairs department, Legal League representative, village women representative • Community water committees include women representatives. At least 30% committees are chaired by women Identified village women representatives present in each stakeholder meeting Visual Meeting attendance lists; women's participation during meetings; committee membership Monitor feedback from consultation events Stakeholder survey on involvement of women as part of the project baseline survey	After activities Once		
Management of grievances	On site and in office	*Review grievance procedures* *Project Grievance procedures are operating in accordance with ESMP requirements and Tajik law* *Committee membership in accordance with ESMP requirements, including PAP representatives and women representatives. Grievance procedure easily accessible to poor HH and other vulnerable groups, including people with disabilities. Monitor project grievances register Monitor feedback from stakeholder engagement*	Monthly Weekly Weekly Weekly After activities	Ensure compliance with ESMP and Tajik law Management of Grievances Communities have the opportunity to complain about the project activities	PMU (social safeguards team) Grievance Management Committees Relevant authorities
Water quality	At the water intake site	*Visual examination of fencing around the sanitation zones* *Visual examination* of the protection of wells	Monthly Continuous	Prevent the pollution of water by human and animal waste	SES, SCEP (both indicators)

Waste management	All construction sites	*Visual* Waste disposed in accordance with waste management plan Waste deposited on local legal landfills No waste is burned	During construction works	Minimize pollution of living nature, soil, water, air, unnecessary need for new materials/products (as the dumped waste is not going to be reused, treated, or recycled).	Contractor, PMU, SCEP
Toxic Hazardous materials management (e.g. paints/solvents)	All construction sites	*Visual, comparing with the list of toxic/hazardous materials* Toxic materials properly stored and disposed No construction materials that are hazardous to health (e.g. asbestos, asbestos-containing materials) are used in the project. Compliance with Contractor Hazardous materials handling/storing procedure prepared before construction activities *Visual* – waste management plan	During construction works	Minimize the risks of soil contamination, contamination of surface and/or ground water, living nature	Contractor, PMU
Hazardous waste management and Asbestos-containing materials (ACM) management	All construction sites	*Checking compliance with waste management plan prepared before construction activities* - Hazardous materials kept out of the general waste stream. - Correct transport of materials/products. - Storing materials and chemicals in suitable conditions. - Correct labeling of chemicals. - Disposal at official appropriately licensed and managed local landfills. - Using protective equipment.	Contractor throughout construction PMU at least monthly	Reduce public and workplace health and safety risks Reduce the risk of potential contamination of soil, surface and/or ground water, living nature through improper handling and disposal of (hazardous) waste.	Contractor, PMU

		- Specialized contractors with appropriate training, experience and protective equipment to be hired when operating with asbestos waste			
Water quality, living nature	All construction sites	*Checking operation and maintenance logs* Regular maintenance and control of all equipment with oil content (vehicles, equipment). *Visual* Using of protective equipment (sorbent, absorbent mat, safety bin) when necessary.	Contractor throughout construction PMU at least monthly	Reduce the risk of contamination of surface and/or ground water, living nature by residuum of petroleum substances or contaminated construction materials.	Contractor, PMU
Air quality	All construction sites	*Visual* Using personal protective equipment (PPE). Decreasing dustiness of operations in accordance with required mitigation measures (e.g. water sprinkling). *Visual, community meetings* Grievances, responses to complaints	Contractor throughout construction PMU at least monthly	Minimize air pollution with dust (TSP/PM).	Contractor, PMU (Engineer, Social Expert), Communities
Air quality	All construction sites Construction transport routes	*Visual on site* Switching off engines when vehicles/equipment not in use	Monthly spot-checks	Minimize air contaminants: NOx, (CO, SO2), TSP	Contractor
Direct or indirect hazards to traffic and pedestrians by construction activities	All construction sites	*Visual* *Monitor grievances register* *Accident records* *Survey of population* Compliance with the approved Traffic Management Plan.	Throughout construction works Once Throughout construction works Once	Reduce the probability of traumas and accidents to constructors and pedestrians	Contractor PMU Sociologist and M&E Specialist

		Marked and properly secured construction sites. Maintenance of transport routes and the vicinity of construction sites Construction of temporary crossing bridges Information campaign Appropriate site restoration after completion of construction	Handover of sites		
Ecosystem protection	All sites of Water treatment facilities	*Monitor implementation of provisions in this Environmental and Social Monitoring Plan* Appropriate timetable respecting vegetation period. Temporary tree protection – large trees are marked and cordoned off with fencing, their root system protected	During construction	Prevent damaging trees during vegetation clearance for construction	Contractor, PMU
Ecosystem protection	All construction sites	*Visual and comparison with recommended procedures* Monitoring compliance with working procedures recommended for earthworks by geologist/geotechnician	During earth works	Minimize damaging vegetation and stability of slopes during earthworks that can lead to soil disturbance and erosion	Contractor, PMU supported Consultant (Geotechnician, Civil Engineer)
Dust generation - Air pollution (TSP/PM) Soil/ground water contamination Noise pollution of the environment and population	All construction sites Local communities	*Publish and update construction schedule.* *Monitor grievances register*	With every update of the construction schedule Regularly during construction	Construction works generate dust, can contaminate soil/ground and water, are noisy, can result in temporary interruptions of water supplies Communities have the opportunity to complain about excessive dust, noise	PMU PMU Sociologist, M&E Specialist

				and other inconveniences through grievance redress mechanism	
Human health and safety	On site and in office	*Visual - review of contracts* Safe sanitation accessible on site for labor included in contract Health & Safety requirements included in contract *Visual inspection on site* Safe sanitation accessible on site for labor Health & Safety practices, including use of PPE, first aid provision etc.	At the beginning of construction phase Regularly during construction	Oral / facal contamination leading to increased incidence of sanitation-related diseases affecting laborers and local communities Health & Safety of works Compliance with laws	Contractor, PMU
Implementation of Contractor plans (as per list in ESMP mitigation table):	Construction sites In office	*Visual inspection Check of records*	Twice a week	Ensure compliance with plans in order to minimize and mitigate for environmental, social and health & safety impacts	PMU (supported by Supervision Consultant)
Management of grievances	On site and in office Local communities	*Review grievance procedures* Grievance procedures (Project, Contractor, Operator) are operating in accordance with ESMP requirements and Tajik law Grievance procedure easily accessible to poor HH and other vulnerable groups, including people with disabilities. *Monitor contractor grievance register* *Monitor project grievances register* *Monitor Operator grievances register* *Monitor feedback from stakeholder engagement*	Monthly Daily Daily Daily Continuous	Ensure compliance with ESMP and Tajik law Management of grievances Communities have the opportunity to complain about the project activities	PMU (social safeguards team, Supervision Consultant) Contractor Grievance Management Committees Operator Relevant authorities

Stakeholder engagement	Meetings, in office, local communities	*Visual* • • Engagement and Disclosure activities undertaken before start of construction • • Records of community engagement activities, including records of engagement with vulnerable persons/groups • • Public education campaign on the rational use of water and safe sanitation implemented • • Engagement in accordance with SEP & ESMP requirements *Monitor feedback from consultation events* Feedback, including about Are local people aware of project activities, locations, consequences, delays, failures and participation women etc.	Regularly during construction	-Ensure compliance with ESMP, ESMF and Stakeholder Engagement Plan -The local community should be informed of project activities, the choice of project sites, potential impacts and project delays.	PMU (Social safeguards team)
Active participation of women	Meetings, in office, local communities	Implementation of gender action plan stipulating, amongst others: • • Women representatives on grievance committees including staff member from the women's and family affairs department, Legal League representative, village women representative • • Community water committees include women representatives. At least 30% committees are chaired by women	Continuous	Gender equality, women's views included in the project, compliance with ESMP	PMU (Social safeguards team)

		• • Identified village women representatives present in each stakeholder meeting *Visual* Meeting attendance lists; women's participation during meetings; committee membership *Monitor feedback from consultation events*	Continuous		
Labor influx/ worker management	In office and on site Local communities	*Visual inspection* Implementation of Labor influx/ worker management plan and requirements in ESMP (behavior, worker management etc.) Justifications for hiring workers from outside local area *Review grievances register* *Review of feedback from stakeholder engagement*	Weekly Daily After each activity	Compliance with ESMP, Labor Influx/ worker management plan and Tajik laws	Contractor PMU (supported by Supervision Consultant) Grievance Redress Management Committees Relevant authorities
During operations					
Groundwater pollution	At the water intake place	*Visual* Fences and protection of sanitary zone of catchment areas are intact and maintained in good condition to serve its purpose *Regular tests of water quality*	Monthly	Ensure water quality that meets legal requirements for drinking water	Operator SCEP (sanitary protection zone)
Water quantity and quality Energy consumption Affordability	Distribution network	*Visual* *Leakage detection equipment* *Complaints register* Leakages, break downs, illegal connections	Break downs as soon as they are reported	Excessive volume of water available for sale increases cost/tariffs	Operator, communities
Willingness to pay	Distribution network	*Regular tests of water quality*	Leakages/illegal connections monthly	Prevent the pollution of drinking water due to damaged pipes which causes health problems	SES (only tests of water quality)

Water quantity Energy consumption Affordability	Household connections	*Billing* For consumption of whole buildings	Monthly or as per contracts	Excessive volume of water available for sale and not billed increases cost/tariffs	Operator
Soil contamination Groundwater contamination Human health &safety	Schools, health care facilities, kindergarten and water intake sites with septic tanks	*Visual – review of records (budget institutions and landfill)* - Appropriate disposal of sludge from wastewater systems (septic tanks) in official, appropriately licensed and managed local landfills/treatment facilities. - Emptying and removal done by specialized/licensed company *Visual and oral* - Review of available budgets for schools, health care centers and kindergarten to pay for emptying and maintaining septic tanks completed. - - Measures taken to address shortfalls in budget. - Schools, kindergarten and health institutions confirm regular emptying and maintenance - The Operator confirms regular emptying and maintenance of septic tanks at water intakes	Semi-annually	Prevent leakage of pathogens from septic tanks, which contaminate soil and ground water and can cause oral-fecal infections.	SES (PMU and local authorities for the review of budgets)
Soil contamination Groundwater contamination Ecosystem protection Unpleasant odor	Locations of wastewater discharges	*Visual* *Laboratory tests (water)*	Semi-annually	Prevent the increased discharge of untreated wastewater into streams and	Operator

Health and safety				open spaces due to increased water supply	
Soil contamination Water quality Ecosystem protection Air (unpleasant odor) Health & safety	All operation sites	*Checking compliance with waste management plan*	As per plan	- Prevent pollution of living nature, soil, water and air due to improper transport, storage, handling, and disposal of waste. - Reduce potential contamination of the environment from landfills. - Minimize potential contamination of the environment due to waste storage on site - Prevent contamination of water due to accumulation of waste in the sanitary zone.	Operator, SES, SCEP
Air pollution	Operation sites Administrative building	*Review of logbooks/maintenance records* Regular maintenance of vehicles and equipment by the authorized service provider, monitoring mileage *Visual* Sprinkling water during dusty operations Idling engines Workers use PPE	During demolition/repair activities Monthly (logbooks, maintenance records)	Prevent irregular activities causing high levels of dust (such as demolitions) which increase TSP/PM. Running cars and other engines release air contaminants: NOx, (CO, SO2), TSP Cooling agent leakages (from operating/repairing AC, refrigerators) contribute to depletion of ozone layer	Operator
Noise pollution of the environment/population	Operation sites Administrative building	*Visual* Workers wear ear protective equipment *Monitor compliance with approved working hours* *Monitor grievances register*	During implementation of noisy activities	Prevent irregular activities such as rehabilitation of facilities, demolition work and other noisy activities	Operator

		For people's complaints			
Generation of waste Air pollution Health & Safety	Operator's premises Emergency preparedness plan and activities records Operations area	*Check emergency preparedness and response plan* Implementation of preparedness activities including regular inspections of firefighting equipment, regular staff training in emergency preparedness and procedures *Visual* Condition and location of firefighting equipment, appropriate storage of flammable materials, no burning of waste	Monthly Burning of waste as/if detected	Reduce the risk of fire (on and off-site) caused by force majeure and various activities using open fire (smoking, welding, grinding)	Operator
Groundwater pollution Ecosystem	Affected locations within the operations area/administrative building	*Check emergency preparedness and response plan* on Implementation of preparedness activities and procedures	Monthly	Force majeure - emergencies such as earthquake, floods, can lead to release of contaminants, burden on the environment while disposing of waste, groundwater pollution.	Operator
Electricity consumption Water volume Ability to pay	Administrative buildings, pumps	*Monitoring electricity meters of the operator* *Monitoring pumps' logs* Avoiding unnecessary use of pumps *Monitoring NRW- unbilled authorized consumption*	Monthly	Minimize excessive use of electricity and water for own use by the operator for routine and non-routine operations (such as cleaning of the WSS), for watering public spaces or for fire brigades increases the volume of NRW and tariffs.	Operator
Emergency preparedness	All departments of the operator	*Regular update of Emergency preparedness and response action plan*	Annual	Ensure improved preparedness for potential uncontrolled environmental emergencies	Operator jointly with Committee for Emergency situations

					and Civil Defense under the GoT
Health and safety	Parking lots Operator's logistics section	*Review of log books* For regular vehicle maintenance and control Clear responsibility for each vehicle *Visual* First aid kit available in every vehicle. Inspection of accident records	Monthly	Reduce the probability of accidents and breakdowns due to badly maintained vehicles, the delays in treating injuries if first aid not available	Operator
Health and safety	Operator's premises	*Visual* *Comparison with legal requirements*	Annual	The current administrative premises of the operator do not meet basic environmental and H&S standards, causing risks to the health and safety of employees and low effectiveness of operations and management.	KMK
Management of grievances	Operation sites Office Local communities	*Review* Operator grievance mechanism *Monitor Operator grievances register*	At the beginning of Operation Daily	Compliance with Tajik law Management of grievances Communities have the opportunity to complain about the WSS system Customers who are dissatisfied with the WSS are less willing to pay water bills	PMU Operator Relevant authorities
Stakeholder engagement Customer liaison	Operation sites Office Local communities	*Review of stakeholder engagement records; Visual:* Public education campaign on the rational use of water and safe sanitation completed *Visual review:* Regular information and outreach activities to customers.	At the beginning of Operation Annually	Ensure compliance with ESMP Education campaigns will help to reduce costs, decrease water use, decrease wastewater, improve sanitation practices. Regular customer liaison helps foster good relationships with clients, aids resolution of issues and can improve willingness to pay	PMU Operator Relevant authorities

10. ANNEXES

10.1. THE LIST OF SOCIAL SCREENING OF THE OBJECT "RECONSTRUCTION OF WATER TREATMENT FACILITIES (WTF)"

Subproject name and reference no.	**RWSSP. OBJECT "RECONSTRUCTION OF WATER TREATMENT FACILITIES (WTF)"**
Checklist completed by:	**PMU team with stakeholder participation**
Date (day month, year)	**September, 2021**

Types of resettlement impacts	**Yes/ No (only 1 answer possible**	**Temporary / permanent (both answers)**	**Quantity**	**Comments**
Land acquisition				
- Will the subproject require land acquisition?	No			
- Are there any existing rights of way/ easements on this land?	-			
- Is the land tenure status known?	-			
- Are there people with no recognizable legal right or claim to the land they are occupying?	-			
- Is the current usage of land to be acquired known?	-			
- Loss of agricultural land (estimate area)?	no			
- Loss of pastures (grazing) (estimated area)?	no			
- Loss of commercial land (estimate area)?	no			
- Loss of shelter and residential land (estimate area)?	no			
- Are vulnerable[1] land users affected by land acquisition known?	-			
Loss of crops, fruit trees and other agricultural production				
- Will the project result in temporary or permanent loss of crops?	no			

[1] Vulnerable persons in particular those below the poverty line, the landless, the elderly, women and children, indigenous peoples, ethnic minorities, or other displaced persons who may not be protected through Tajik land compensation legislation

Types of resettlement impacts	Yes/ No (only 1 answer possible	Temporary / permanent (both answers)	Quantity	Comments
- Will the project result in temporary or permanent loss of fruit trees?	No			
- Will the project result in temporary or permanent loss of other agricultural production? (specify)	No			
- Will any vulnerable PAPs be affected by loss of agricultural production?	No			
Loss of income sources or means of livelihood				
- Will the project reduce people's access to their businesses or enterprises?	No			
- Will the project reduce people's access to other income sources or means of livelihood? (Specify)	No			
- Will vulnerable PAPs be affected by loss of access to productive assets?	No			
Access to public services and state or communal resources				
- Will the project reduce access to drinking water supply?	Yes			Temporary limit of access during the construction and installation works, alternative water supply will be provided
- Will the project reduce access to education facilities?	No			
- Will the project reduce access to health facilities?	No			
- Will the project reduce access to power supply and other communal services?	No			
- Will the project reduce access to other state services or resources?	No			
- Will vulnerable PAPs suffer from reduced access to public services?	No			

Types of resettlement impacts	Yes/ No (only 1 answer possible	Temporary / permanent (both answers)	Quantity	Comments
Loss of household infrastructure				
- Will the project lead to the loss of housing? (specify estimated number)?	No			
- Will the project result in loss of other household infrastructure?	No			
- Will vulnerable PAPs be affected by loss of shelter and/or household infrastructure?	No			
Significance of impacts				
- TOTAL: Estimated number of PAPs	-			
- Does the number of PAPs displaced by land acquisition exceed 200?	-			
- Number of PAPs not displaced losing more than 10% of their productive assets	-			

SUMMARY

Is RAP or ARAP necessary?	Justification
Not necessary	**Not required, since no resettlement consequences have been identified (there is no need for resettlement), and there is no need to withdraw buildings and structures, land plots for various purposes, farmland, and green fund.**
RAP necessary	**No**
ARAP necessary	**No**

PMU Chief Social Specialist J. Kurbanov
PMU Environmental Engineer R. Ibrohimzoda

10.2. Checklist for preliminary environmental audit

Part 1

1. **Name and code of the subproject: "Reconstruction of Water treatment facilities (WTF)"**
2. **Brief description of the subproject:**

The project provides for construction of the following structures on the object "Reconstruction of Water treatment facilities (WTF)":
- Fast sand filters;
- Boiler room;
- Administrative and household building;
- Main pumping station
- Clean water tanks 2 x 6000 m3;
- Sewage pumping station (SPS);
- On-site technological communications

3. **Will the project affect the environmental parameters :**

a) Construction phase

Impacts	Mitigation measures
Air quality (possible partial air pollution, emissions, odour, dust, noise and vibrations)	-In all project work, construction waste should accumulate in a designated control zone and should be continuously moistened with water spraying systems to prevent dust generation from construction waste. -Dust control when working with construction machinery and electrical equipment using permanent water spray systems and/or dust-catchment shields installed on the site. - Keep the surrounding environment (including pedestrian paths and roads) clean and avoid construction waste to minimize dust and contamination of the territory. -In no case construction waste and structures should be incinerated in open fire right on the site. -Do not allow excessive accumulation of non-operational construction equipment on the worksite. -Construction noises are permitted only during the specified time periods from 8:00 to 18:00 (in residential areas). -In time of operation, cover plate and hoods on generator engeens, air compressors and other machines and mechanical devices must be covered, and these machines and mechanisms must be located as far away from residential buildings as possible.
Waste generation	- Garbage collection sites and schemes for its removal and disposal should be prepared for all major types of construction waste expected during construction work. - Mineral waste from construction work should be separated from ordinary waste and organic, liquid and chemical waste by sorting the waste on site and then placing it in appropriate containers. - Construction waste should be collected and disposed of in an appropriate manner in a district landfill, in accordance with an agreement with the district utility service. - all materials and documentation for waste removal and disposal records should be properly maintained as evidence of proper waste management at the project site according to the project. - Household and food waste generated from the permanent presence of

	Contractor's personnel on site should be separated from other construction waste and placed in special containers, which should be disposed of in the district landfill as it fills up.
Possible partial contamination of soil, water;	Adequate erosion and slide control measures shall be applied at the worksite, including, for example, the installation of protective fences to prevent the sediment movement outside the worksite, which may cause the exceeding of turbidity values in adjacent streams and rivers, irrigation ditches.
Temporary water supply interruptions	Minimizing time between cutting off existing and connecting new system Planning total interruptions in off-peak hours (preferably during night time hours) Water supply through water bowsers (placed nearby standpipes), water trucks Ensuring the supply of water to vulnerable groups Timely warning of the public of interruptions
Possible deterioration of drinking water quality in existing water supply systems during the course of work	It should be noted that the quality of drinking water in existing systems does not meet standards. Nevertheless, it is necessary to provide for this: -Temporary supply of good quality drinking water; -warning consumers about water quality in a timely manner.
Direct or indirect dangers to traffic and pedestrians caused by construction work, inaccessibility of streets and houses during construction and limited access to services and buildings	In accordance with the requirements of national regulations and standards, the contractor must ensure adequate protection of construction sites as well as proper regulation of traffic during construction. This activity should include, but not be limited to, the following components: - Work sites should be equipped with information and warning signs, fences and traffic interchanges so that the work site is clearly marked and visible and the public is properly informed and warned about possible dangers. - ensure safe and permanent access to administrative buildings, shops and living quarters during work on sites with provided temporary scaffolding, crossings, etc.
Negative impact on employee health;	- The local inspectorates supervising the construction works and environmental safety, as well as the local residents, are duly notified about the upcoming project works and the grievance redress system; - The local community is duly notified about the works through appropriate publications and/or media reports and/or signs in public areas (including the worksite). - All permissions required by legislation (in particular, permissions for the use of the land plot, use of natural resources, waste dump, permission from the sanitary inspection, etc.) for construction or rehabilitation work at the given site shall be obtained. -All works shall be carried out in the safest and most disciplined manner and shall be organized in such a way as to minimize negative impacts of the production process on local residents and the natural environment; - If the Contractor engages external personnel to carry out the repair and construction work, who will be on site on a permanent basis, all necessary amenities shall be provided, including accommodation for accommodation and kitchens, showers, toilets and normal meals.
Negative impact on employee health;	- Preparation and implementation of Health and Safety Plan, Waste Management Plan during Construction, Traffic Management Plan, Camp Management Plan, Hazardous Materials Processing / Storage Procedures, Workforce Inflow Management Plan, Construction Plan; - Appropriate fencing should be installed around the construction site to ensure worker safety.

	-Individual protective equipment for workers should meet the international best safety standards (with mandatory permanent wearing of helmets, protective masks where necessary, protective goggles, safety belts and safety footwear), including the prevention of acute respiratory diseases (coronavirus). -Adequate instruction and information signs should be placed on the site to inform workers about the basic rules and regulations for the work to be carried out. -Signs providing clear information to patients on access to medical services during construction work. -If the Contractor engages external personnel to carry out the repair and construction work, all necessary amenities must be provided, including accommodation and kitchen, showers, toilets and normal meals.
Increased accident risks for employees/residents	-Adequate fencing should be installed around the construction site to guarantee the safety of the population and children. - If the Contractor involves external personnel in the repair and construction works, who will be permanently on site, all necessary living conditions, including accommodation and kitchen, showers, toilets and normal meals shall be provided.

b) Operational phase:

Impacts	Mitigation measures
Wastewater discharge by the consumers, including increased greywater discharge due to construction/reconstruction of the water supply system	- organization of the grey wastewater discharge site in agreement with the relevant regulatory authorities for grey/wastewater washout with disinfection of conduits and water distribution network
Discharge of gray wastewater by consumers (households), due to increased water consumption	- use of existing tray systems; - the use of drainage wells, which are widely used in rural areas with the organization of wastewater filtration (gravel, sand); - the use of energy-efficient bioponds (artificial swamps), followed by the use of areas and substrates of artificial swamps in subsidiary plots; - use of the simplest barriers (nets, filters, sedimentation tanks) for separating solid particles of gray water and simple gravel filters for separating fat; - Extensive advocacy for gray wastewater management by the Mobilization Company in conjunction with WASH committees and communities.
Water losses caused by network leaks / overuse of water by consumers	-Property rehabilitation, maintenance and operation of the entire network -Use of leak detection equipment -Dismantling illegal connections -Regular maintenance and control of WSS, including water quality analysis.
Generation of waste	- For all basic types of garbage to be collected during operation, a special collection point and schemes for its transportation and disposal should be organized. - Wastes should be separated (normal solid waste, organic, liquid and chemical) by sorting on site and then placed in appropriate containers.

	- Garbage should be collected and disposed of in an appropriate manner in a district landfill, in accordance with an agreement with the district utility service. - All materials and documentation for waste removal and disposal records should be properly maintained as evidence of proper waste management.
Air pollution, emissions, odor, noise	- all types of solid waste should accumulate in a designated control zone and be disposed of in a timely manner in the district landfill. -Dust control when electrical equipment is operating through permanent water spray systems and/or dust catchment shields installed at the site. - Keep the area clean and free of waste to minimize dust and contamination of the territory. -In no case waste should be incinerated directly on the territory. - Ensure that electrical and pumping equipment is operating properly to avoid noise.
possible impact on soil, water pollution / ground water	- to ensure normal well operation; - timely elimination of leaks in the water supply system; - to provide special drains for clean water reservoirs to specified places.
Unwilling to pay for water services, illegal connections, inability of poor households to pay for water services and connection to the water system	- Information campaign of the Operator on the procedure of contracting, calculation and payment system, addressing complaints -Regular communication with consumers (information provided to consumers, public meetings, etc.), including, for example, WSS, tariffs, rational use of water, etc. -State education campaign on water management and safe sanitation at the beginning of operation/construction period
Conflicts with local community due to use of land and water resources	- Reducing the potential for conflict (installing water meters will help establish actual water consumption and reduce the potential for conflict between neighbours sharing a common water source and between consumers and the service provider); - Information campaign and stakeholder consultations; - a grievance redress mechanism (GRM) is identified; - effective communication and information channels.
Increase of cases of diseases related to hygiene and sanitation, water related diseases	- continuous control by Sanitary and Epidemiological Service of the quality of water supplied to consumers and its compliance with standards; - Employees of the company operating water supply facilities should be constantly inspected for their health condition and provided with sanitary books; -conducting regular preventive works in the water supply system, according to the regulatory requirements.
Health risk to employees/operators	- Development and implementation of a waste management plan, including safety procedures and practices; - Use of protective equipment, if necessary; - raising awareness and training of personnel; -disposal of hazardous wastes/ACM only at suitable approved landfills

Part 2

Category of environmental risk for the project - **Moderate**

EIA required? - **EIA developed by**

Environment Engineer of PMU Ibrohimzoda R.

10.3. Sample ESMP implementation report

MONTHLY REPORT

ON MITIGATION OF SOCIAL AND ENVIRONMENTAL IMPACTS DURING CONSTRUCTION WORKS

Checklist for inspections and audits at the construction stage

General information

Subproject title, (abbreviated name, number if available)	
Inspected facilities	
Subproject stage, object name (construction phase, types of work)	
Details of the person filling in this report (Name, position, division)	
Contact details of the person filling in this report (phone, e-mail)	
Date and time of inspection	
Signature	

Comments

Aspect	Performance			Notes
	Yes	No	N/A	
Impact on air quality (gaseous emissions)				
Forced filtration/ventilation systems, etc. are installed and function properly at the location of sensible receivers.				
The equipment and vehicles used at the facility meets the Euro-3 standard at least.				
Diesel generators are equipped with well-functioning nitrogen oxide emission reduction systems				
No idle-mode machinery or equipment on site				
Number of simultaneously working machines corresponds to the work plan and/or control plans (minimum under current conditions)				
The equipment is not operated under adverse meteorological conditions (e.g. inversion).				
Reports on timely preventive maintenance of engines of construction equipment and vehicles are available, there are no visual signs of malfunctions of engines of equipment operating at the site.				
For all machinery and vehicles operating on the site documentation on the timely completion of technical inspection and verification of exhaust gas toxicity is available.				
No waste incineration (including brush wood) at the facility, no signs of waste incineration at the facility or in its surroundings				
Low-sulfur fuel of at least Euro-5 standard is used in construction (confirmed by documents)				

Aspect	Performance			Notes
	Yes	No	N/A	
Impact on air quality (dust)				
Intrasite and off-site unpaved roads, unpaved sites are regularly sprayed in dry weather.				
No excavation work is carried out in strong winds.				
Backfilling is carried out according to the work plan and/or management plans (in minimum time after excavation).				
Open areas with minimal traffic are grass-covered or covered.				
Speed limit signs on intrasite driveways are installed and clearly visible, the vehicles are moving without exceeding the speed limit.				
Impact on air quality (odours)				
Water-based paints are used at the site, use of paints based on organic solvents is limited.				
Noise and vibration impact				
Noisy works are only carried out during daytime.				
The number of noisy machines working at the same time corresponds to the work plan				
Noisy equipment is placed as far away as possible from sensible receivers (domestic buildings, construction camps, habitats, etc.).				
Anti-noise covers and enclosures are installed where required by the work plan and/or management plans.				
The trailers in the construction camps are equipped with soundproofing means according to the management plans.				

Aspect	Performance			Notes
	Yes	No	N/A	
Impacts on subsoil and soil cover				
Recultivation is carried out on the disturbed soils in accordance with the recultivation project.				
The works on the slopes strengthening of the roadbed, ditches bottom, new channels etc. are carried out.				
Removed fertile soil layer is stored in burts				
Contracts for the disposal of solid and liquid waste with licensed contracting organizations, disposal is carried out in accordance with the terms of contracts				
Machinery and equipment at the site have no signs of malfunctions, no traces of fuel, lubricants, working fluids, etc. leaks.				
The system of collection and treatment of waste water at the facility is installed and functions properly, there is no discharge of untreated wastewater into the natural environment.				
Septic tanks and bio-toilets are installed and functioning properly.				
An impermeable coating is installed at equipment service sites and temporary waste accumulation areas; the coating has no signs of permeability disturbance (cracks, holes, chips, etc.).				

Aspect	Performance			Notes
	Yes	No	N/A	
Impacts on Groundwater				
All necessary permits and approvals were obtained for water intake facilities, and the water intake(s) operates in accordance with the permits obtained				
Water meters are installed at the facility (at the water intake, in construction camps, etc.).				
Water reuse technologies are used at the facility (e.g., water reuse in concrete production).				
Careers (if available) are equipped with drainage systems of sufficient capacity, no signs of failure of drainage systems detected				
Staff are trained in water-saving behaviour (confirmed by the programme and the instruction log) and apply the skills acquired.				
Storm flow collection and treatment system for the operation phase is planned and installed during the construction phase.				
Impacts on surface water				
The regime of water protection zones and coastal protection strips is complied with, fences / signs to prevent violations are installed.				
Work within river floodplains is carried out only in the low streamflow period.				
At small watercourse crossings: bank crossing structure, without riverbed impact (foreseen in design documentation)				
Wherever practicable, small valleys and narrows within the construction area are covered with metal plates for possible passage of construction machinery, or moved using drainage pipes for free drainage.				

Aspect	Performance			Notes
	Yes	No	N/A	
Preservation of water regime, natural riverbeds, bottom sediments and floodplains wherever possible (foreseen in design documentation)				
Maximum possible use of natural materials (grass-plot, trees) in combination with steel structures (gabions) to protect and stabilize the banks, instead of monolithic concrete (provided in the design documentation)				
In case of displacement of channels - installation of sinuous (instead of straight) new channels with asymmetrical section lines and natural (ground) bottom (provided by design documentation)				
During the period of heavy rainfall no work related to the generation of large amounts of suspended solids is carried out; if necessary, open surfaces and storage areas are covered.				
Slime water from concrete plants and water from cement trucks is disposed (or reused) according to the established procedures.				
There is an Emergency Response Plan prepared in accordance with regulatory requirements				
Impacts on visual landscape characteristics				
Lighting of construction sites is designed and installed taking into account the impact on nearby domestic buildings (no bright night light, the height of the masts is selected to avoid direct lighting into the windows etc.).				
Opaque and semi-transparent fencing of the construction site is installed if necessary				

Aspect	Performance			Notes
	Yes	No	N/A	
Impact on biodiversity				
Traffic of construction machinery and vehicles is restricted by the right-of-way and permitted roads, there are no signs of traffic outside the right-of-way and not on permitted roads (tracks, complaints from local residents, etc.).				
Drivers and personnel are instructed to take care of flora and fauna and apply the acquired knowledge in practice.				
If necessary, construction sites have fencing to prevent the entry and death of animals as a result of accidents.				
Cut-out and clearance of construction sites is carried out in stages, as far as possible, in late autumn and/or winter.				
The brush woods are stored in designated areas.				
An unauthorized gathering of wild-growing herbs and hunting and fishing in the vicinity of construction sites and construction camps is banned on the site				
An expert is engaged to work in areas of greatest biodiversity risk.				
Work on water facilities is not carried out during the period of mass spawning and migration of fish.				
Wheel washing points are installed and used at the entrances and exits of the facility.				
Only local plant species are used in landscaping and recultivation, invasive alien species are not used.				

Aspect	Performance			Notes
	Yes	No	N/A	
Impact on cultural heritage				
The procedure for handling chance finds is developed, the General Contractor's and Subcontractor's employees are aware of it and know the procedure for handling chance finds.				
Protected areas of cultural heritage sites are complied with				
Impact on business enterprises				
Temporary access to all affected business enterprises (additional interchange ramps, bypass roads, etc.) is provided.				
Construction sites and traffic routes of construction machinery are restricted by permanent and temporary allotment sections and public roads; placement of construction materials and traffic of machinery on land plots of private persons without their consent				
Representatives of affected business enterprises are aware of the Grievance Redress Mechanism				
Impacts on engineering infrastructure				
Technical conditions for relocation of communications were received, schedule and mitigation measures are agreed with communications owners				
Impact on road infrastructure and traffic				
Temporary bypasses are provided.				
Additional road signs are installed.				
The work schedule takes into account changes in traffic intensity in the reconstructed section during the day and season.				
Information on the types and schedule of work is posted in advance on the website, information leaflets, stands and communicated to affected parties in ways that ensure proper coverage.				

Aspect	Performance			Notes
	Yes	No	N/A	
Public health and safety				
Schedule and mitigation measures are aligned with affected social infrastructure facilities				
In the quarries: the career site is fenced, an information board is installed, recultivation of the career is provided (see above), consultations with local residents on the implementation of additional measures (improvement of the career territory and arrangement of a recreation area) are held.				
Influx of shift workers				
The Code of Conduct for employees is developed and employees are aware of its existence and content.				
The rules of employee accommodation is developed, employees are aware of their availability and content				
Medical services are available in construction camps				
All employees are assessed for health conditions before being employed.				
All workers living in construction camps are vaccinated according to national requirements				
All employees are informed about the danger of the spread of acutely reactive infectious diseases, including (COVID-19) STDs and methods of prevention as part of introductory safety instruction and regular safety training; the possibility of getting free condoms is provided				
The local population is informed of the existence of a Grievance Redress Mechanism				

Aspect	Performance			Notes
	Yes	No	N/A	
Other impacts				

10.4.PROTOCOL OF PUBLIC CONSULTATIONS

Протокол
Общественных Консультаций в районе Кушониён

Дата и место проведения: « 10 » августа 2021 года, Республика Таджикистан, Хатлонская область, район Кушониён.

Присутствовали:
представители ЦУП:
- главный специалист по социальным вопросам;
- инженер-эколог;

Представитель Консультанта (группа проектирования):
- ГИП проектируемых зон.

Представители исполнительного органа государственной власти:
- заместитель Председателя района;
- председатель джамоата «Бустонкалъа» и председатели махаллей сел Богпарвар, Озодии мехнат и Бустонкалъа;
- директор УДП «Оби дехот» района Кушониён;
- и.о. завотделом по охране окружающей среды района Кушониён;
- и.о. начальник ГлавАПУ;
- ведущий специалист Комитета по землеустройству района Кушониён;
- районный СЭС;
- отдел образования района.
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Повестка Общественных консультаций: Ознакомление заинтересованных сторон с Планом социально-экологических мероприятий, предусмотренных к реализации в районе Кушониён.

Выступили: первый заместитель Председателя района, главный специалист ЦУП по социальным вопросам, инженер-эколог ЦУП и ГИП проекта.

В ходе Консультаций:
участники Общественных консультаций были проинформированы выступавшими в целом о реализации Проекта, его главных целей и задач, а также непосредственно о мероприятиях, направленных на минимизацию и предотвращения воздействия Проекта на социальные и экологические аспекты жизни населения проектных джамоатов и сел.

Было указано, что будущая деятельность по Проекту, например, строительство новых трубопроводов или других объектов водоснабжения, может привести к некоторым потенциальным негативным последствиям для проектных зон, в том числе:
- загрязнение воздуха;
- шум строительной техники;
- проблемы с качеством воды;
- производство и утилизация строительных материалов (в основном неиспользуемых труб) и других твердо-бытовых отходов (из рабочих и стройплощадок);
- управление рабочими площадками (поселками), которое будет временными с незначительными и локализованными негативными последствиями;
- недоступность улицы / домов во время строительства;
- управление движением;
- отключение воды без предварительного объявления или продолжительное нарушение водоснабжения во время строительства;
- использование или изъятие земли (постоянное или временное);
- влияние на имущество и средства к существованию;
- влияние притока рабочей силы на соседние общины.

По каждому из указанных потенциальных воздействий участники общественных консультаций были проинформированы о предусмотренных мероприятиях.

Также присутствующие были ознакомлены относительно куда должны обращаться с вопросами по указанным воздействиям и в целом по реализации Проекта.

В конце консультаций участники были проинформированы о необходимости строгого соблюдения санитарно-гигиенических мер по предотвращению острых инфекционных заболеваний, в том числе коронавируса COVID-19, в том числе выполнения элементарных гигиенических условий жизнедеятельности.

В ходе Общественных Консультаций были заданы следующие вопросы, на которые были даны исчерпывающие ответы, в том числе:

- Проинформированы ли руководители органов местного самоуправления, в частности, и население проектных сел в целом о реализации Проекта, а также строительстве магистрального?

Все участники Консультаций единогласно ответили, что проинформированы. Несмотря на это участники Консультаций были дополнительно досконально проинформированы о строительстве водовода в частности и реализации Проекта в целом (цели и задачи, а также аспекты реализации Проекта).

- Попадают ли в зоне влияния Проекта жилые здания, домохозяйства, сады и огороды, сельхозугодья?

В зоне влияния Проекта жилые здания, домохозяйства, сады и огороды не подпадают.

- Какие неудобства или воздействия могут быть при реализации Проекта, то есть при строительных работах?

При реализации Проекта могут возникнуть следующие проблемы, в том числе загрязнение воздуха, шум строительной техники, проблемы с качеством воды, производство и утилизация строительных материалов (в основном неиспользуемых труб) и других твердо-бытовых отходов (из рабочих и стройплощадок), управление рабочими площадками (поселками), которое будет временными с незначительными и локализованными негативными последствиями поблизости или в ваших населенных пунктах, временная недоступность улицы / домов во время строительства, проблемы при управлении движением, отключение воды без

предварительного объявления или продолжительное нарушение водоснабжения во время строительства, влияние притока рабочей силы на соседние общины. Но Настоящий План предусматривает минимизацию или не допущение вышеуказанных проблем.

- Какое воздействие окажет прокладка водовода поблизости жилых домов и какие меры будут приняты, чтобы минимизировать воздействия?

В ходе Консультаций участники были досконально проинформированы относительно предусмотренных мер для минимизации воздействия, в том числе организации подрядными предприятиями временных мостов, ограждений, запрещающих, информационных знаков и дорожно-строительных знаков. Кроме того, прокладка водоводов будет осуществляться согласно нормативных правил и требований на расстоянии не менее 5,0 метров от фундамента строений. Вместе с тем, участники Консультаций были призваны оказать всемерное содействие в воспитательно-просветительских работах по данному вопросу.

- Куда можно обращаться с вопросами, жалобами и предложениями по реализации Проекта?

По любым вопросам можете обращаться в Комиссию по рассмотрению жалоб и предложений при Хукумате, в джамоат, а также можете обращаться непосредственно в ЦУП (дополнительно продиктованы контакты).

- Когда начнутся строительные работы?

Начало строительных работ предварительно запланировано на 3-4 квартал 2021 года.

- Возможно ли устроиться на какую-либо работу во время реализации Проекта, в том числе и в строительстве?

По данному вопросу ни каких препятствий не имеется и зависит от квалификации и специализации и можно будет обращаться непосредственно к подрядным организациям.

В конце еще раз было отмечено, чтобы со стороны органов местного самоуправления, были также проведены разъяснительные работы среди жителей проектных сел и джамоатов относительно воспитательной работе среди детей и подростков по правилам безопасности и удалении от строительных площадок.

Список участников Общественных Консультаций

№	Ф.И.О.	должность	Подпись
1	Курбанов Чамшед	гл. спец социолог	[подпись]
2	Джураконов Бахадур	дир. ООО „Накуф"	[подпись]
3	Иброхимзода Рустам	эколог ЦУП	[подпись]
4	Сафарзода Шариф	зам Предс. р. Кушониён	[подпись]
5	Саттарзода Джамшед	дир. УП „Оби декоб"	[подпись]
6	Давлатов Сайфиддин	гл. спец Глав АПУ	[подпись]
7	Саидов Бахтиёр	мушовири раиси ноҳияи Кушониён	[подпись]
8	Тиллоев Саидневмат	юрист райСЭС	[подпись]
9	Эргашев Нарзулло	и.о. зав отделом экологии	[подпись]
10	Самадов Х.	ст. ин. отдел. образ	[подпись]
11	Давлатов Ҷ. И	И. Ш. Ҷ. Кольба	[подпись]
12	Давлатов Махмадали	Пр. мах. Богпарвар	[подпись]
13	Мансуров Мехмар	Пр. пос. Бустонкала	[подпись]
14	Розиков Сабохуддин	Пр. мах. Озодии нехгат	[подпись]
15	Бояков Сафархон	муҳосиби Ҷ. Бустонкала	[подпись]