

Republic of Uzbekistan

Rural Infrastructure Development Project

Environmental and Social Management Plan

Construction of Water Supply in Shaxartepa Mahalla
Citizens' Assemblies of Qo'shtepa district of Farg'ona
region

Project customer

" Royal dizayn loyiha " LLC

Farg'ona, 2022

Table of Contents

Table of Contents	2
LIST OF ABBREVIATIONS.....	3
1 PROJECT INFORMATION	4
2 INTRODUCTION.....	5
2.1 The Environmental and Social Management Plan (ESMP).....	7
2.2 The purpose of the ESMP and its objectives	7
2.3 Preparation and use of ESMP	8
3 ADMINISTRATION, POLICIES, LEGAL AND REGULATORY FRAMEWORKS	8
3.1 The Nature Protection Normative Documents.....	8
3.2 National EIA rules and procedures.....	11
3.3 The World Bank Safeguards Policies and Environmental and Social Assessment Requirements.....	12
4 CONSTRUCTION OF WATER SUPPLY IN MCA “SHAXARTEPA”	13
4.1 Current State of Water Supply System.....	13
4.2 Planning works.....	13
4.2.1 Wells.....	15
4.2.2 Water Towers.....	15
4.2.3 Building for water neutralization	15
5 ENVIRONMENTAL AND SOCIAL CONDITIONS.....	16
5.1 Geography and topography	16
5.2 Climatic data	18
5.3 Topography, Geology, Soils and Hydrology	19
5.4 Water resources	20
5.5 Socio-economic conditions.....	21
5.5.1 Agricultural and Mineral Development.....	23
5.5.2 Transportation	23
5.5.3 Standard of Living and Community Health.....	24
5.5.4 Human Settlement in the Project Area.....	25
5.5.5 Archaeological and Historical Features and Sites.....	25
5.5.6 Access roads.....	25
5.5.7 Land Acquisition.....	26
6 PROJECT ALTERNATIVES	26
6.1 "Zero option"	26
6.2 Project Alternative.....	26

7	ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES	27
7.1	Pre-construction stage	27
7.2	Construction stage	29
7.2.1	Physical resources	29
7.3	Operation stage	46
8	ENVIRONMENTAL AND SOCIAL MONITORING PLAN	58
8.1	Environmental and Social Reporting	58
9	INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION	63
10	GRIEVANCE REDRESS MECHANISMS	64
	Annexes	67
	Annex 1: Conclusion (No. 991 of 08/08/2022) of the State Environmental Expertise	67
	Annex 2: Consultations materials	72
	Annex 3: Environmental Screening Procedure	75
	Annex 4. Social Screening Procedure	79
	Annex 5. Chance Finds Procedure	81
	Annex 6. Khokim's Decision	83
	Annex 7. Location of WDF and well	84
	Annex 8. SDDR	85
	INTRODUCTION AND PROJECT BACKGROUND	85
	SCOPE OF LAND ACQUISITION AND RESETTLEMENT IMPACTS	85
	METHODOLOGY OF THE SOCIAL DUE DILIGENCE EXERCISE	86
	PROJECT AREA DESCRIPTION	86
	SOCIO-ECONOMIC PROFILE OF THE POPULATION	88
	DUE DILIGENCE ON LAND ACQUISITION AND RESETTLEMENT	89
	CONSULTATIONS AND INFORMATION DISCLOSURE	91
	GRIEVANCE REDRESS MECHANISM	92
	Annexes	96
	Annex 1. Khokim's decision	96

LIST OF ABBREVIATIONS

AIIB	Asian Infrastructure Investment Bank
AP	Affected Person
ARAP	Abbreviated Resettlement Action Plan
CE	Civil Engineer
CSC	Construction Supervision Consultant
DSEI	Draft Statement of the Environmental Impacts
EA	Executive Agency
EIA	Environmental Impact Assessment
ESA	Environmental and Social Assessment
ESHS	Environmental, Social Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
F&L	Fuel and Lubricants
FS	Feasibility Study
IA	Implementation agency
GoU	Government of Republic of Uzbekistan
GRM	Grievance Redress Mechanism
LLC	Limited Liability Company
LRSCD	Land Resources and State Cadaster Department
MIFT	Ministry of Investments and Foreign Trade
MCA	Mahalla Citizens' Assemblies
NMSCP	National Medium-Size Cities Program
PIU	Project Implementation Unit
PD	Project designer
PC	Project contractor
PE	Private enterprise
RPIU	Regional Project Implementation Unit
SEC	Statement on Environmental Consequences
SEE	State Environmental Expertise
SEI	Statement of the Environmental Impacts
SS	Safety Specialist
SSESMP	Site-Specific Environmental and Social Management Plan
UV	Ultraviolet radiation
WB	World Bank
WDF	Water Distribution Facility

1 PROJECT INFORMATION

INSTITUTIONAL & ADMINISTRATIVE ARRANGEMENTS

Country	Uzbekistan			
Project title	The Rural Infrastructure Development Project			
Scope of project and activity	The objective of Water Supply Project in Shaxartepa is to improve drinking water supply to rural Population of MCA Shaxartepa of Qo'shtepa district of Farg'ona region. The main activities under the current project are: new construction of drinking water supply system infrastructure; institutional strengthening of the potential of project District Water Supply Organization; proposing measures on strengthening of commercial structure of District Water Supply Organization.			
Institutional arrangements (names and contacts)	WB (Project Team Leader)	Project Management	Local Counterpart and/or Recipient	
		Project Implementation Unit (PIU) under the Ministry of Economic Development and Poverty Reduction of the Republic of Uzbekistan	Hokimiyat of Farg'ona region Hokimayat of Qo'shtepa district	
Implementation arrangements (Name and contacts)	Safeguard Supervision PIU Env. Safeguard Specialist PIU Social Safeguard Specialist	Local Counterpart Supervision RPIU Facilitator	Local Inspectorate Supervision " Royal dizayn loyiha " LLC	Contactor To be determined after tender
SITE DESCRIPTION				
Name of site	Shaxartepa MCA of Qo'shtepa district of the Farg'ona region			
Describe site location	Project territory is located in north part of the Farg'ona region at Qo'shtepa district. From the north and east it borders Quva district, from the south - with Marg'ulon district, from the west - with Qo'qond region.			
Who owns the land?	Hokimiyat of Qo'shtepa district			
Geographic description	Geographic coordinates of the points of the territory of Water Distribution Facilities: 1) Water Distribution Facility – 40°31'46.8"N 71°43'40.0"E			

2 INTRODUCTION

1. In order to implement the Decree by the President of the Republic of Uzbekistan #PP-4898 as of 25 November 2020 it is necessary to implement the Project on Improvement of Water Supply System in Shaxartepa Mahalla Citizens' Assemblies (MCA) of Qo'shtepa district of Farg'ona

region. The Project is a part of the Rural Infrastructure Development Project to be implemented during the period of 2020-2024 and approved together with World Bank.

2. The Rural Infrastructure Development Project (RIDP, the “Project”) is an initiative of the GoU that promotes participatory, village-based development to reduce infrastructure and service-delivery gaps. The RIDP is based on the principles of community-driven decision-making, outreach to and inclusion of the poor and vulnerable within communities, gender equity, and transparency and accountability. Using a learning-by doing approach, the RIDP will trial design adjustments aimed at increasing community participation in project decision-making and oversight, transparency and accountability in project implementation, and the quality and sustainability of subproject investments that can be replicated and scaled up through other state programs.

3. The RIDP is implemented by the MoED with support from the World Bank (WB) and the Asian Infrastructure Investment Bank (AIIB). The development objective of the RIDP is to (i) improve the quality of basic infrastructure, and (ii) strengthen participatory local governance processes in selected qishloqs, where “participatory local governance” refers to inclusive village participation in needs assessments; the planning, prioritization, and selection of subproject investments; and oversight activities including the monitoring of procurement, subprojects, and social audits. To increase participation and village-led decision-making and oversight, a key design innovation introduced under the RIDP is the provision of facilitation support to participating district administrations and qishloqs in the form of trained Qishloq Facilitation Teams.

4. The implementation of the proposed Water Supply Project in Qo’shtepa district is triggered by the necessity to find solutions for the problems related to drinking water supply of rural population of MCA Shaxartepa.

5. The Project will be implemented with the purpose of strengthening of social security of Qo’shtepa population as well as for implementation resources preserving policy, improvement of drinking water supply infrastructure and provision of effective functioning and preserving optimal level of tariffs for services rendered by the water supply enterprises.

6. The ESMP for the subproject was prepared on the basis of the working draft documents and “Draft Statement of the Environmental Impacts” document, which was prepared by “Fergana eko projekt Eko-loyiha servis” LLC, approved by “Royal dizayn loyiha” LLC and submitted to State Environmental Expertise. The conclusion (No. 991 of 08/08/2022) of the State Environmental Expertise was issued for the prepared EIA (Annex 1).

7. The objective of Water Supply Project in MCA Shaxartepa is to improve drinking water supply to rural population of MCA Shaxartepa of Qo’shtepa district of Farg’ona region. The main activities under the current project are: new construction of drinking water supply system infrastructure; institutional strengthening of the potential of project District Water Supply

Organization; proposing measures on strengthening of commercial structure of District Water Supply Organization; study of environmental and social issues.

8. The present ESMP for the Subproject of the project "Construction of Water Supply in Shaxartepa Mahalla Citizens' Assemblies of Qo'shtepa district of Farg'ona region" is prepared based on ESMF and performed Environmental Screening Procedure (Annex 3).

2.1 The Environmental and Social Management Plan (ESMP)

9. This ESMP has been prepared based on an overall environmental and social assessment, which included (i) analysis of the general information in subproject area; (ii) evaluation of potential environmental and social impacts of the project components and subcomponents; (iii) assessment of environmental requirements and practices in different ongoing and completed projects; (iv) national requirements by the Government of Uzbekistan for implementation of similar subprojects; (v) World Bank Safeguard requirements before implementation of any development project, and, (vi) consideration of several other international and regional regulations for implementation of development projects. The ESMP has identified various impacts, both positive and negative and provides the guidelines for the mitigating the impacts.

2.2 The purpose of the ESMP and its objectives

10. It is a requirement by both the Government of Uzbekistan and World Bank (WB) that environmental and social assessments are carried out at the identification, preparation or appraisal stages of any development project. The main objective of this ESMP is to ensure that the implementation of the Construction of Water Supply in Shaxartepa Mahalla Citizens' Assemblies Subproject in Qo'shtepa district of the Farg'ona region meets the requisite environmental and social impacts legal, regulatory and policy frameworks and, is implemented with the environmental and social sustainability in mind and are determined well in advance. The ESMP provides the plan that will enable project implementers to mitigate potential environmental and social impacts of the project activities. The specific objectives of ESMP are: (i) To establish clear procedures and methodologies for the environmental and social screening, planning, review, approval and implementation of sub-projects to be financed under the Project; (ii) To identify potential and possible environmental and social impacts associated with the proposed project components and propose appropriate mitigation measures for the impacts caused by implementation of the project activities; (iii) To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to the project; (iv) To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMP; (v) To propose and establish the funding required to implement the ESMP and subsequent environmental and social assessments, monitoring and management; (vi) Provide support to relevant implementing local authorities to review plans and determine if additional, more detailed environmental or social

planning is required before applications can be approved; and, (vii) To provide practical information for implementing the ESMP.

11. The United Project Implementation Unit (UPIU) under the Ministry of Economic Development and Poverty Reduction is based in Tashkent. Also there is a Regional PIU established in Farg'ona region who is expected to work in joint collaboration with the State Committee on Ecology and Environmental Protection (Goskomecologiya) and other relevant authorities in Farg'ona region and will ensure compliance with this ESMP.

2.3 Preparation and use of ESMP

12. This ESMP was prepared by " Royal dizayn loyiha " LLC and submitted by the PIU. The ESMP provides a guide to be used within existing Government Policy regulations for environment and social processes and other international legislation by donor organizations. This ESMP will be a living document that will be subject to periodic reviews to address specific concerns raised by stakeholders, and emerging policy requirements.

3 ADMINISTRATION, POLICIES, LEGAL AND REGULATORY FRAMEWORKS

3.1 The Nature Protection Normative Documents.

13. A legal basis in the sphere of protection and the use of environment has been established in Uzbekistan, which is aimed at guaranteeing rights and duties stipulated by Articles 50 and 55 of the Constitution of the Republic of Uzbekistan. These are over than 20 laws, approximately 50 decrees of the President and of the Cabinet of Ministers of the Republic of Uzbekistan as well as other subordinate acts and normative documentation.

14. With regard to the present project, the following basic legal acts are acting at present in Uzbekistan that are directed to provide environment protection, guaranteeing public healthcare as well as managing the environment protection sector, namely Laws of the Republic of Uzbekistan:

- «On the protection of the environment» (1992);
- «On water and water use» (1993);
- «On the State Environmental Expertise» (2000);
- «On the State sanitary epidemiological supervision in the Republic of Uzbekistan» (1992);
- «On the protection and use of objects of cultural heritage» (2001);
- «On special protected areas» with amendments (30.08.93);
- «On protection and use of flora» (as of 26 December 1997);
- «On protection and use of fauna» (as of 26 December 1997);

- «On protection of atmospheric air» (as of 27 December 1996);
- «On wastes» as of 05/04/2002;
- «On protection of the Population and areas from emergency situations of natural and anthropogenic character» as of 20/08/1999.

15. The key acting subordinate acts and normative documents adopted by the Government of Uzbekistan in the sphere of environment protection are as follows:

- “On the Further Improvement of the Environmental Impact Assessment Mechanism” (No 541, 7/09/2020);
- “On Improvement of the Environmental Monitoring System in the Republic of Uzbekistan” (No 737, 5/09/2019);
- “On assigning the status of special protected areas to zones of sources formation of fresh ground waters” (No 302, 26/08/2002);
- "On Approval of the Regulations on the Order of Establishment of Water Protection Zones and Sanitary Protection Zones of Water Bodies in the Territory of the Republic Of Uzbekistan" (No 981, 11/12/2019);
- "On Measures for Further Improvement of Economic Mechanisms to Ensure the Protection of Nature" (No 820, 11/10/2018);
- "On The Further Improvement of Economic Mechanisms of Environmental Protection in the Territory of the Republic of Uzbekistan" (No 202, 12/04/2021);
- "On Approval of Some Administrative Regulations for Rendering Public Services in the Sphere of Natural Use" (No 255, 31/03/2018);
- "On Approval of the Instructions for Conducting Inventory of Pollution Sources and Regulation of Emissions of Pollutants into the Atmosphere for Enterprises of the Republic Of Uzbekistan" (No 105, 15/12/2005);
- State Standard - Water quality. O’z DST 951:2011 – Sources of centralized household water supply. Hygienic, technical requirements and classification code;
- State Standard - Drinking water. O’z DST 950:2011 – Drinking water. Hygienic requirements and quality control;
- State standard O’z DSt 1057:2004 “Vehicles. Safety requirements for technical conditions” and O’z DSt 1058:2004 “Vehicles. Technical inspection. Method of control”;
- SanR&N RUz No.0255-08 “Main criteria for the hygienic assessment of the degree of pollution of water bodies in terms of danger to public health in Uzbekistan”;
- SanR&N RUz No. 0179-04 Hygienic norms. List of Maximum Allowable Concentrations (MACs) of pollutants in ambient air of communities in the Republic of Uzbekistan including Annex 1;
- SanR&N RUz No. 0233-07 Sanitary norms and regulations for occupational health and environmental protection in the production and use of asbestos-containing products;

- SanR&N RUz No. 300-11 Sanitary rules and regulations for the collection, inventory, classification, disposal, storage and disposal of industrial waste in Uzbekistan;
- SanR&N RUz No. 0267-09 Admissible noise level into the living area, both inside and outside the buildings;
- SanR&N RUz No, 0120-01 Sanitarian Norms of allowed level of noise at the construction sites;
- SanR&N RUz No. 0202-06. The procedure for issuing permits for special water use, development and approval of projects of maximum permissible discharges (MPD) of substances entering with wastewater into water bodies and on the terrain;
- KMK (Construction norms and rules) 2.04.02-19 “Water Supply. External network and facilities”;
- Decree of the Cabinet of Ministers of the Republic of Uzbekistan on Approval of the collection and disposal of used mercury-containing lamps. No. 266 of 21.09.2011;
- SanR&N RUz No. 0233-07 On occupational health and environment protection during production and usage of asbestos contained materials;
- SanPiN RUz No. 0372-20 (new edition) Temporary sanitary rules and norms for organizing the activities of state bodies and other organizations, as well as business entities during the application of restrictive measures during the COVID-19 pandemic.

16. The key acting subordinate acts and normative documents adopted by the Government of Uzbekistan in the sphere of Social and Resettlement issues are as follows:

- The Land Code (dated on April 30, 1998 with the latest changes from December 23, 2020);
- The Civil Code (CC);
- The Town Planning Code (January 06, 2021);
- Resolution of Cabinet of Ministers # 146 (May 25, 2011) (with revisions dated June 14, 2019);
- Resolution of the Cabinet of Ministers "On additional measures to improve the procedure for providing compensation for the seizure and provision of land and ensuring guarantees of property rights of individuals and legal entities" (November 16, 2019 # 911);
- Resolution of the Government of Uzbekistan “On Measures on Improvement Efficiency of Preparing and Implementation of Projects funded by International Financial Institutions and Foreign Governmental Financial Organizations” (July 16, 2018 , # 3857);
- Resolution of the Government of Uzbekistan “About Approval of the Procedure of Accumulating and Use of Funds of Centralized Stocks for Compensation of Damages to Individual Persons and Legal Entities Due to Acquisition of Lands for Public Needs»(December 26, 2018, # 1047);

- Resolution of the President “About the Measures for Fundamental Improvement of Urbanization Processes” (January 10, 2019 # 5623);
- Resolution of the President of Uzbekistan “About the Measures for Basic Improvement of Investment Climate in the Republic of Uzbekistan”. (August 1, 2018 # UP-5495).

3.2 National EIA rules and procedures.

17. The national Environmental Impact Assessment (EIA) procedure is regulated by Law on Environmental Expertise and The Regulation on State Environmental Expertise (SEE) approved by Cabinet of Ministry Decree No.541 dated from 7 September 2020. The regulation defines the legal requirements for EIA in Uzbekistan. SEE is a review process conducted by the Center for SEE (‘Centrgosecoexpertiza’) under Goskomecologiya at either the national or the regional level, depending on the project category.

18. Goskomecologiya on state environmental expertise is a uniform system of Center for Environmental Expertise, methodological guidance of which implemented by Centrgosecoexpertize.

19. According to Section 21 of the Regulation on SEE, an application for the submission of EIA (‘OVOS’ is the national acronym) materials to the State Environmental Expertise is submitted by the customer through the personal account of the State Committee for Environmental Protection on the Internet in the Global information network of the State Environmental Committee.

20. The types of activities of I and II categories of environmental impact are pre-project and are subject to State Environmental Expertise, if the project documentation is confirmed in the prescribed manner at public consultations. The procedure for holding public consultations is given in Annex 2 of this Resolution of the Cabinet of Ministers No. 541 of September 7, 2020.

21. Section 24 of the Regulation on SEE outlines the information that should be within the documentation at each of these stages. The three OVOS stages and their required deliverables are summarized as follows:

- Stage I: The ‘Draft Statement of the Environmental Impacts (DSEI)’ (‘OZVOS’ is the national acronym), to be conducted at the planning stage of the proposed project prior to development funds being allocated.
- Stage II: The ‘Statement of the Environmental Impacts (SEI)’ (‘ZVOS’ is the national acronym), to be completed where it was identified by the Glavgosecoexpertiza/Gosecoexpertize at Stage I that additional investigations or analyses were necessary. The Statement must be submitted to the Glavgosecoexpertiza/Gosecoexpertize before approval of the project’s feasibility study, and therefore before construction.
- Stage III: The ‘Statement on Environmental Consequences (SEC)’ (‘ZEP’ is the national acronym) represents the final stage in the SEE process and is to be conducted

before the project is commissioned. The report details the modifications to the project design that have been made from the Glavgosecoexpertiza/Gosecoexpertise review at the first two stages of the EIA process, the comments received through the public consultation, the environmental norms applicable to the project and environmental monitoring requirements associated with the project and principal conclusions.

22. SEE approval (Centrgosecoexpertiza/Gosecoexpertise opinion) is a mandatory document for project financing by Uzbek banks and other lenders (Section 18) at Stages I and II and for project commissioning at Stage III of the national EIA procedure.
23. All economic activities subject to SEE are classified into one of four categories:
- Category I — “high risk of environmental impact” (SEE is conducted by the national Glavgosecoexpertiza within 10 days, all EIA materials are required);
 - Category II — “medium risk of environmental impact” (SEE is conducted by the national SNPC within 7 days, all EIA materials are required);
 - Category III — “low risk of impact” (SEE is conducted by regional branches of (Gosecoexpertise) within 5 days, all EIA materials are required); and
 - Category IV – “low impact” (SEE is conducted by regional branches of Gosecoexpertise within 3 days, only a questionnaire form is required).

3.3 The World Bank Safeguards Policies and Environmental and Social Assessment Requirements

24. **Main provisions of the Environmental and Social Assessment.** Per the WB safeguards policies Environmental and Social Assessment (ESA) is a process of the pre-implementation stage which evaluates a project’s potential environmental and social risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. ESA is mandatory for projects, which may potentially have negative impacts. Furthermore, a well-organized public participation is mandatory in all the stages of the process. In the case when the projects activities to be financed are not identified at the design stage, the Bank applies an Environmental and Social Management Framework (ESMF), which should: provide details on procedures, criteria and responsibilities for subproject screening, preparing, implementing and monitoring of subproject specific ESAs and ESMPs.

25. **World Bank Screening Categories and Environmental Assessment Procedures.** Environmental Screening is a Mandatory Procedure OP/BP 4.01 on Environmental Assessment. The Bank undertakes environmental screening of each proposed project for which it will provide funding to determine the appropriate extent and type of the Environmental Assessment to be conducted. The Bank classifies a proposed project into one of four categories, depending on the

page. 12

type, location, sensitivity and scale of the project and the nature and magnitude of its potential environmental impacts. These four Categories are A, B, C, and FI:

- Category A projects are likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented.
- Category B projects has potential adverse environmental impacts on human Populations or environmentally important areas - including wetlands, forests, grasslands, and other natural habitats - which are less adverse than those of Category A projects.
- Category C. An EIA or environmental analysis is normally not required for Category C projects because the project is unlikely to have adverse impacts; normally, they have negligible or minimal direct disturbances on the physical setting.
- Category FI. A Category FI project involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts.

4 CONSTRUCTION OF WATER SUPPLY IN MCA “SHAXARTEPA”

4.1 Current State of Water Supply System

26. The administratively designed object belongs to the MCA Shaxartepa, Qo’shtepa district, Farg’ona region.

27. Currently, there are 2 old water towers for drinking water supply in the village of Shaxhartepa, but they do not work and the water is in an unusable condition. Part of the Qo’shtepa population of MCA Shaxartepa drilled several wells on their own for household needs that do not meet drinking water standards, and part of the Qo’shtepa population uses water from existing WDF.

28. The design and construction of the facility is envisaged on the basis of the Decree of the President of the Republic of Uzbekistan on measures to implement the "Rural Infrastructure Development" Project with the participation of the International Development Association of the World Bank and the Asian Infrastructure Investment Bank No. PP-4898 dated November 25, 2020.

4.2 Planning works

29. The Construction of Water Supply in MCA Shaxartepa of Qo’shtepa district Project will involve the (i) construction of one new well, water towers with water treatment system, (ii) construction of water distribution networks. The WB identified this project as a Category B undertaking, meaning the requirement for the preparation of an ESMP. The original ESMP consultant carried out assessment to comply with undertake an environmental screening document for this Sub-project, and confirmed a similar conclusion that the Project should be categorized as a B project.

30. The working draft defines the following scope of work:

- drilling of well - 1 pcs;
- installation of a water tower with a volume of 25 m³ - 1 pcs;
- installation of a transformer substation - 1 pcs;
- construction of a house for a cascade and a bactericidal installation in an amount – 1 pcs;
- fencing, gates and wickets;
- laying of polyethylene pipes with a length –20.1 km;
- device of shut-off valves.

31. In accordance with the working documentation, 1 area was identified for the construction of the well and towers. After decontamination, water will be supplied from the towers through a ring system of pipes to consumers. The developed design scheme provides for the laying of pipes only on existing rural roads, sidewalks and reserve lands, without affecting private property. See Figure 1.

32. Parameters of the occupied area of the intake structure:

- Total occupied Land area - 900 m² x 1 = 900 m²
- Building area – 27 m² x 1 = 27 m²
- Hard surface area – 480m² x 1 =480 m²
- Landscaping area - 393 m² x 1 = 393 m²

33. Trench parameters:

- Trench length – 20.1 km;
- Trench depth – 1.2 m;
- Trench width - 0.8 m.



Figure 1.
Location
MCA
Shaxartepa

4.2.1 Wells

34. Well construction includes: rotary drilling of a well, filter string and casing pipes, clay de-claying, backfilling of the annular space with gravel.

35. On the territory of water intake facilities the following is carried out:

- installation of a cascade house and a bactericidal installation.
- installation of water towers;
- installation of a transformer substation;
- laying of polyethylene pipes;
- fences, gates and wickets.

4.2.2 Water Towers

36. The tower equipment consists of a pressure-distributing pipeline, overflow and drain pipes. From the pumping station through a pipeline, water enters the lower part of the tower support. The same pipeline serves to drain water from the tower to consumers. The overflow pipe ends at the highest water level in the tank. To allow complete emptying of the tower during flushing and repairs, a special mud pipe is laid from the lower part of the support.

37. To accommodate the necessary equipment, a well is arranged with a tower. In which on the water supply and downpipe are installed gate valves with a manual drive, and the end of the overflow pipe is released above the ground by sprinkling at a height of 3.2 m from the ground. from the well, the drain pipe is diverted with a rupture of the jet into a drain or an open ditch.

38. For the possibility of using the tower for fire extinguishing and water sampling, a riser is installed on the pressure distribution pipeline 70 mm in diameter with shut-off valves with two connecting heads. Filling the barrel of the tower with water makes it possible to lower the water horizon from the maximum level in the tank to the foot of the tower support, which creates a reserve supply of water consumed when the supply of electricity is cut off.

4.2.3 Building for water neutralization

39. To disinfect water after wells, a house is being built. A bactericidal unit OV-50 is installed inside the tank.

40. Ultraviolet radiation has a high efficiency - 99.9% against a wide range of microorganisms: bacteria, viruses, spores and parasitic protozoa, including their chlorine-resistant forms. UV radiation destroys pathogens of infectious diseases such as typhoid, cholera, dysentery, salmonellosis, typhoid fever, viral hepatitis, etc.

41. The UV water disinfection method is safe. Unlike oxidizing technologies (chlorination, ozonation), after exposure to ultraviolet radiation, harmful organic compounds are not formed in

water, even if the required dose is repeatedly exceeded. The absence of the risk of overdose simplifies the operation of the equipment. The use of UV disinfection makes it possible to reduce the amount of chlorine used by up to 5 times and to minimize the negative impact of the by-products of reagent methods on the health of children.

42. Ultraviolet acts only on microorganisms practically instantly (3-10 sec) and does not change the chemical composition and physical properties of water.

43. In UV systems DUV-N, the source of ultraviolet radiation is an amalgam lamp. The amalgam lamp does not contain liquid mercury, which guarantees safe use and easy disposal of the lamp.

5 ENVIRONMENTAL AND SOCIAL CONDITIONS

5.1 Geography and topography

Farg'ona region is located in the southern part of the Fergana Valley in the far eastern part of the country. It borders with Republic of Kyrgyzstan, Namangan and Andijan Region. It covers an area of 39.000 km².^[1]

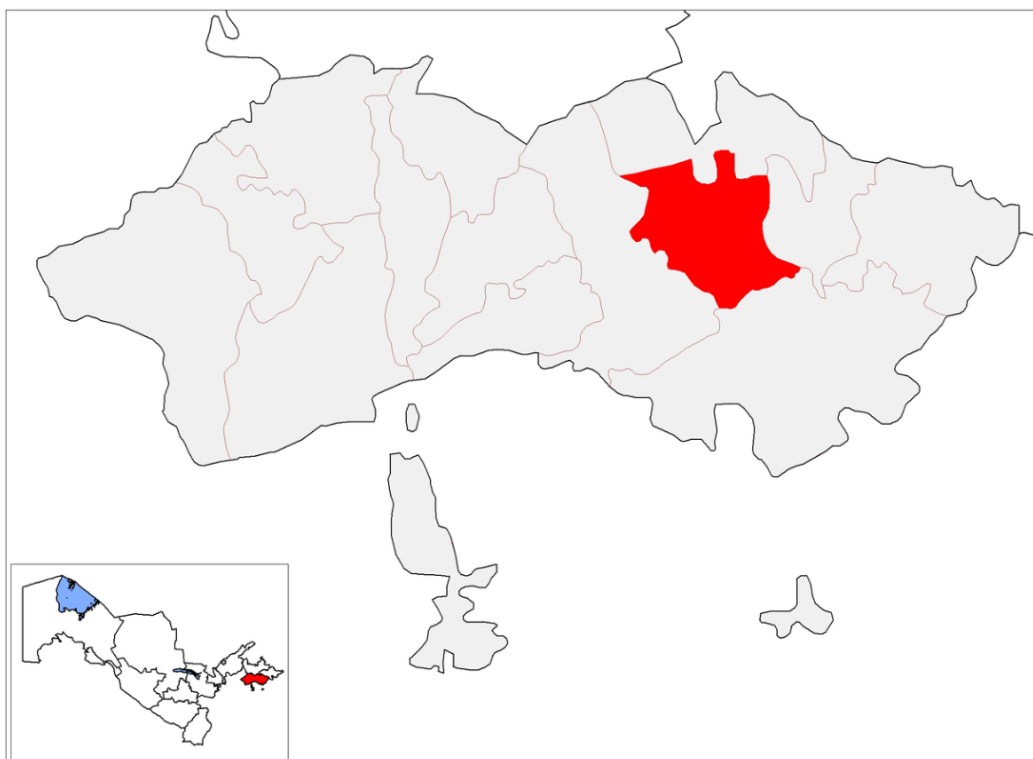


Figure 2.
Location of
Farg'ona
region and
Qo'shtepa
District

44. The Qo'shtepa population is estimated to be around 196 000 people (as of 1st May 2021). Its area is 39 000 km². The district consists of 19 MCA rural communities (Boltaliko'l, Do'rmon,

5.2 Climatic data

47. The climate of the Farg’ona region is subtropical inland with a clearly pronounced seasonality. Winter (a period with an average daily temperature below 0 °C) lasts on average from the 3rd decade of November to the 2nd decade of March.

Climate data for Fergana (1981-2010, extremes 1881-present)													[hide]
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	16.3 (61.3)	23.1 (73.6)	29.0 (84.2)	34.4 (93.9)	39.2 (102.6)	41.3 (106.3)	42.2 (108.0)	41.4 (106.5)	37.1 (98.8)	32.6 (90.7)	29.0 (84.2)	17.6 (63.7)	42.2 (108.0)
Average high °C (°F)	4.6 (40.3)	7.6 (45.7)	14.7 (58.5)	22.3 (72.1)	27.6 (81.7)	33.1 (91.6)	34.7 (94.5)	33.6 (92.5)	28.8 (83.8)	21.2 (70.2)	13.4 (56.1)	6.2 (43.2)	20.7 (69.3)
Daily mean °C (°F)	0.3 (32.5)	2.9 (37.2)	9.3 (48.7)	16.0 (60.8)	20.9 (69.6)	25.7 (78.3)	27.4 (81.3)	25.8 (78.4)	20.7 (69.3)	13.8 (56.8)	7.4 (45.3)	1.7 (35.1)	14.3 (57.7)
Average low °C (°F)	-2.8 (27.0)	-0.6 (30.9)	4.9 (40.8)	10.5 (50.9)	14.6 (58.3)	18.5 (65.3)	20.3 (68.5)	18.7 (65.7)	13.7 (56.7)	8.0 (46.4)	3.2 (37.8)	-1.2 (29.8)	9.0 (48.2)
Record low °C (°F)	-25.8 (-14.4)	-25.5 (-13.9)	-17.9 (-0.2)	-4.8 (23.4)	1.2 (34.2)	7.4 (45.3)	10.1 (50.2)	7.8 (46.0)	0.5 (32.9)	-7.4 (18.7)	-22.8 (-9.0)	-27.0 (-16.6)	-27.0 (-16.6)
Average precipitation mm (inches)	18.3 (0.72)	20.7 (0.81)	25.4 (1.00)	22.8 (0.90)	21.7 (0.85)	11.1 (0.44)	5.3 (0.21)	3.1 (0.12)	6.0 (0.24)	16.7 (0.66)	18.0 (0.71)	24.2 (0.95)	193.3 (7.61)
Average precipitation days	9	10	10	11	13	10	8	5	4	6	7	9	102
Average rainy days	4	7	10	10	13	10	8	5	4	6	7	6	90
Average snowy days	7	5	1	0.1	0	0	0	0	0	0.3	1	5	19
Average relative humidity (%)	81	76	67	61	56	48	48	52	56	66	74	82	64
Mean monthly sunshine hours	106	109	153	205	276	337	362	345	292	218	150	95	2,648

Source 1: Centre of Hydrometeorological Service of Uzbekistan^[7]

48. During the calendar winter, there may be short (3-8 days) periods of frost (with night temperatures down to -13 °C, less often up to -20 °C).

49. The average January temperature is -3°C, and the average July temperature is + 40 °C. There are frequent thaws throughout the winter, when the temperature rises from -5 °C to + 7 °C and higher, sometimes reaching values of +12 .. + 16 °C.

50. Transition seasons are short enough. Almost summer temperatures are often recorded in mid and late March, in April.

51. Summer (the period with daytime temperatures above + 20 °C and daily average above + 15 °C) lasts from the 2nd decade of April to the 3rd decade of October.

52. In June and July, daytime temperatures usually exceed 40 degrees (on average 20-40 days per summer season).

53. On average, 350-360 mm of precipitation falls on the territory of the region per year (the main part of precipitation is in spring and autumn). The growing season lasts 239-240 days.

Air Quality and Noise

54. **Air Quality.** More recent ambient air quality data for Farg’ona city is obtained from the Farg’ona provincial center of sanitary and epidemiological welfare and public health. The data (Table 1) provided showed that most of the pollutants tested were within permissible standards.

Table 1. Average annual atmospheric air analyze of the Farg'ona city

Parameters	2017		2018		2019		2020		Permitted concentrations (daily average) mg/m ³
	No. of tests	Test results	No. of tests	Test results	No. of tests	Test results	No. of tests	Test results	
Ammonia	105	0.1 – 0.6	116	0.12 – 0.7	136	0.3 – 0.8	58	0.2 – 0.7	0.12
Nitrogen dioxide	109	0.02	111	0.019	126	0.018	42	0.015	006
Sulphur dioxide	107	0.032	111	0.041	126	0.029	42	0.025	0.02
Phenol	54	0.004	49	0.002	64	0.002	28	0.001	7.0
Anhydrous hydrogen fluoride	51	0.065	49	0.042	64	0.046	28	0.043	8.0

Source: sanitary and hygienic laboratory of the Farg'ona provincial center of sanitary and epidemiological welfare and public health, 2020

55. Since this project will have no significant effect on air quality, the baseline data do not need to be extensive. During construction a few pieces of heavy equipment and trucks will be used to carry out the work. The dust control along the haul road in and out of the site, these temporary problems should be well controlled.

56. **Noise.** The noise level according to Farg'ona Provincial Health Department averages around 50 dBA, well within the national standards in Uzbekistan which is 65-70 dBA in the day and 50 dBA at night (KMK 12.01.08-96).

5.3 Topography, Geology, Soils and Hydrology

57. The Fergana region is a plain that rises from west to east from 360 to 500 m, and also from north to south from the Kokand-Margilan line towards the Alai Range up to 576 m in the area of the city of Fergana and 700-1200 m - in foothills. The northern part of the Fergana region is occupied by the Karakalpak and Yazyavan steppe lands of Central Fergana. It is covered with sands alternating with salt marshes. To the south of the Tashkent-Andijan railway there are dunes. The lands of Central Ferghana (Karakalpak steppe) in the south are bordered by a strip of extensive alluvial fans of rivers flowing from the Alai Range (Isfayramsay, Sokh, Isfara). The cones consist of sandy, loamy and clayey deposits. The flat part of the region in the south is limited by a strip of adyrs 1000–1200 m high, dissected by deep river valleys. Behind the strip of adyrs are the foothills of the Alai Range, cut by ravines and gorges, and longitudinal valleys are located between them. In the Fergana region there are deposits of copper (on the left bank of the Syr Darya and in the territory of the Kirov region), oil (Chimion), sulfur (Shorsu), mineral springs (in the region of Altyaryk). The region is rich in various natural resources. There are large deposits of quartz, deposits of gold, silver, platinum, diamonds, aluminum, copper, iron, tungsten, uranium, molybdenum, granite, coal, marble, large reserves of oil and gas have been explored.

58. In the Fergana region, gray-earth and meadow-swamp soils prevail. And the holes are occupied mainly by light and typical gray earths. On the terraces of the Syr Darya – alluvial meadow soils. They are characterized by a high content of mineral nutrients and, under irrigation, have high natural fertility.

5.4 Water resources

Surface water

59. The Ferghana region has significant water reserves. The Syr Darya and smaller rivers flow here — Isfara, Sokh, Shakhimardansai and Isfayramsai, flowing down from the Alai ridge and not reaching the Syr Darya. The rivers are full of water, have flow modes convenient for watering fields. The maximum water consumption falls during the summer months.

60. The Naryn River gives rise to the Great Ferghana, Southern Ferghana, as well as the Great Andijan Canal, and many other major irrigation highways that run through the territory of the region. Although the bulk of the water falls on the Syr Darya, its moisture consumption from March to September is 47% of the annual runoff. The Syrdarya riverbed is located significantly below the level of the Fergana region, as a result of which the withdrawal of irrigation channels from the river is extremely difficult. Therefore, in recent years, Frunze and Abdusamat pumping stations have been built on the coast of the Syr Darya, providing water to the fields of Frunze and other districts.

All the named rivers, with the exception of the Sokha, are glacial-snow feeding with two maxima of expenditure. Sox – mainly glacial food. These rivers carry the largest amount of water during the melting of glaciers – in July and August. Large water runoff occurs from March to September – 59% per year.

61. Near the object of surface watercourses on the southern side of the object flows the channel "BFC" at a distance of 2250,0 meters. This territory is located behind the water protection zone of these surface watercourses. The ditch network is a water intake of drainage and filtration effluents of irrigated villages of farm fields of the district farms. The amount of water in the network is rated Class III. The water mass contains pollutants in the form of sludge particles. The forecast of the effect on surface water from the operation of the greenhouse is minimal.

Ground Water

62. Water for the Ferghana region is provided by underground sources located along the Syrdarya River, as well as some springs.. Underground aquifers are replenished by infiltration of precipitation, mountain runoff and infiltration of irrigation channels. The latter source is of concern, as heavily polluted water is often discharged into these irrigation and drainage channels. The main sources of groundwater pollution in the Syrdarya are municipal enterprises, agricultural production methods, industrial enterprises and poorly functioning sewage treatment plants (National Report on the Environment and Use of Natural Resources in Uzbekistan. Tashkent, Chinor ENK, 2013).

Biological resources

63. **Flora and Fauna** - The vegetation in the area is very diverse and rich. In the northern part, salt marshes or sazy (in the Syr Darya region) and open grasslands are developed, on the salt marshes of Central Ferghana — mainly various solyanka. A significant part of the land is occupied by cultivated vegetation (mainly cotton). In the oases, the most common are pyramidal poplar, tut,

elm, djida, willow, walnut, apricot, apple, pear, peach, pomegranate, fig, quince, cherry, grape, plum, almond. There are also white acacia, tulip tree, maclure, ailanthus and many others, and in the eastern part of the region (Ferghana and its environs) — plane trees. Deciduous and juniper forests are located along the river valleys, protecting mountain slopes from erosion processes and having economic significance. The animal world is diverse and rich. Of the mammals, wild boars are found in the tugai of the Syr Darya. Wolves, foxes, badgers, porcupines are not uncommon in the band of the Adyrs and the foothills of the Alai ridge. There are big—eared hedgehogs and bats in the oases. Sparrows, pink starlings, pigeons (especially turtledoves), shurkas, swallows, quails, hoopoes, cuckoos, crows, nightingales and others are common birds here. In the foothills on the rocky scree — stone partridge (keklik) and larks. From predatory — eagles and vultures. There are many species of ducks, waders and other waterfowl on the shores of reservoirs. Reptiles include turtles, numerous lizards and snakes. From arachnids — phalanges, scorpions and tarantulas. From fish — marinka, barbels, catfish and small carp.

64. Critical habitat: ecologically sensitive areas, rare and endangered flora and fauna and protected areas. None of these facilities are located on the project territory. For many kilometers around the well and the water tower and along the water supply network, the area is a rural landscape with buildings, roads and roadsides.

Critical Habitat: Environmentally Sensitive Areas, Rare and Endangered Flora and Fauna and Protected Areas

65. Critical Habitat: Environmentally Sensitive Areas, Rare and Endangered Flora and Fauna and Protected Areas - The project area does not contain any of these features. For many kilometres around the well and watertowers and along the water distribution network, the area is rural landscape with buildings, roads and road shoulders.

5.5 Socio-economic conditions

66. Farg'ona region was founded in 1876. The administrative center of the province is Farg'ona city. Total area is 95.6 km². Population is 229200, density – 3.100/km². The province is divided into 15 administrative districts: Quva, Toshloq, Qo'shtepa, Yozyavon, Oltiariq, Farg'ona, Rishton, Bog'dod, Buvayda, Uchkuprik, Dangara, Furqat, Beshariq, O'zbekiston va Sox. The administrative division of Farg'ona province is presented below in Figure 4.

67. Population of Qo'shtepa district is about 221 000 people (as of 1st January 2021). Estimated population growth based on historical trends is 2.5% per year (Source: State Committee on Statistics).

Паспорт региона



Figure 4. Administrative map of Farg'ona region

68. The main socio-economic indicators of Farg'ona region are provided in Table 2.

Table 2: Socio-economic indicators of Farg'ona region

Name	Indicators
Territory, km ²	6,760
Farg'ona population	
Population density, per/km ²	580
Total number of people	3 896 395
Women, per	1 950 094
Men, per	1 944 301
Urban Population, per	2 181 981
Rural Population, per	1 714 414
Education Institutions	
Primary schools	946
Secondary professional (colleges)	84
Academic lyceums	4
Higher education institutions	5
Medical Institutions	
Hospitals	33
State clinics	51

Name		Indicators
Infrastructure, km		
Transport	Car roads	4031
	Railways	4400
	Airport	2

69. The main sectors of agriculture in the province are cotton growing, grain growing, vegetable growing, horticulture and viticulture, and meat and dairy farming. The main industries are electric power industry, machine building, metalworking, building materials, and light and food industry.

5.5.1 Agricultural and Mineral Development

70. The land fund of the district as a whole is 700 500 hectares. Of these, 247 600 hectares are used for the cultivation of agricultural products.

71. The following branches of agriculture are mainly developed in the Qo'shtepa region: cattle breeding, agriculture (horticulture, vegetable growing, melon growing, cotton growing viticulture).

72. There are several shirkat (cooperative) farms specializing in animal husbandry, poultry farming, beekeeping, grain growing, cotton growing and vegetable growing.

73. The total number of farms – 6 in Shaxartepa MCA.

74. The project area is mostly in an rural setting and as such there is no appreciable agricultural or mineral development affected by the project.

5.5.2 Transportation

a) Roads and transport

75. The province has significant transit potential. The region's transport infrastructure is characterized by a high degree of concentration: the main roads, railways.

b) Automobile transport

76. Ferghana – Kakand — 100 km, Ferghana – Margilan — 15 km, Ferghana – Kuvasai — 20 km, Ferghana – Tashkent - 350 km, Ferghana – Andijan - 85 km, Ferghana – Namangan - 100 km.

c) Railway transport

One of the main modes of transport, both passenger and civil, is rail transport. The stretch of railways in the Ferghana region is 4,400 km, including highways of the international mark of Margilan-G. Tashkent-380 km, Margilan- Termiz-1500 km, Margilan- Bukhara-1000 km, Margilan- Urgench-1300 km, Margilan- Kiev — 100 km, Margilan- Namangan-120 km.

5.5.3 Standard of Living and Community Health

77. Qo'shtepa is a middle to low-income community, Poverty in the subproject area is due to factors such as a lack of employment opportunities and inadequate provision of water supply and sanitation services. Positive impacts from the Shaxartepa subproject are likely to include improvement in the quality of life, time-saving and reduced workload particularly for women, improved household and personal hygiene, and improved health status of adults and children particularly through a reduction in the incidence of infectious diseases.

78. Public health is the most important factor in the socio-economic development of the state and society. It is generally accepted that human health is determined by three main factors: genetics, quality of living and environmental factors. Therefore, the health indicators, the epidemiological situation, changing patterns of disease are directly dependent on condition of the environment. The national situation is improving (Table 3) while conditions in Farg'ona are not as good (Table 4).

79. Dysentery incidence in three provinces of the country varies between 64 and 228 people per 100 000 people according to the Ministry of Health of Uzbekistan (Table 3).

Table 3. Number of acute dysentery cases per 100000 people

Regions	2018	2019	2020	2021
Uzbekistan	8,3	8,9	2,0	3,8

Source: Statistics Yearbook, State Statistics Committee of Uzbekistan, Tashkent 2013

Table 4. Water-Quality related disease incidence in Farg'ona city (No. / 100,000 people)

Disease	2018	2019	2020	2021
Acute intestinal infections	247,6	232	109,4	214,7
Viral hepatitis	188	162,4	66,5	45,2
Acute infections of the upper and lower respiratory tract	2657,1	3042	2503,1	3010,7

Source: Data of State Epidemiological Surveillance of Farg'ona province and Farg'ona city health department.

80. Data for the period 2018-2021 on the incidence of four other water-borne diseases were obtained from the Farg'ona Health Department and suggest a steady rise in incidences (Table 4), underscoring the urgency of better water treatment. The rise in gallstones and urolithiasis is more associated with highly mineralized water.

81. Goskomecology reported that in 2017 in Farg'ona Province 10% of potable water tests (likely an underestimate) did not meet nation standards due to bacterial contamination (National

Report on Environment and Use of Natural Resources in Uzbekistan, State Nature Protection Committee of Uzbekistan, Tashkent: Chinor ENK, 2013).

5.5.4 Human Settlement in the Project Area

82. According to the results of the socio-economic study of the Sub-project, the project will not entail the acquisition of private land or any physical or economic movement of people, gardens and structures. The construction will be carried out on the territory transferred in 2022 by the Decree of the hokim (#1316/3 April 21, 2022) for the construction of a water supply systems (Annex 6). According to the letter from the Hokim Qo'shtepa district, the transferred land was in the reserve of the hokim.

83. In order to confirm the ownership of the land transferred to the project, a request was made to the Khokimiyat and Cadastral Agency. By the decision of Hokim and the certificate it was confirmed that all land transferred for project impact belong to Hokimiyat, the land to be affected by the project does not belong, is not leased and not used by any person; there are no buildings, trees, crops on the plot (see Annex 6,7).

84. A sociological screening was conducted (see Annex 4).

85. Sub-project "Construction of water supply systems to provide drinking water to the Population of the MCA Shaxartepa of the Qo'shtepa district of the Farg'onah region» was screened for social safeguards and possible social and involuntary resettlement impacts. As a result, subproject was categorized as "No resettlement effect (Category 3)". Therefore, in consideration absence of involuntary resettlement and adverse social impacts, this Social Due Diligence Report (SDDR) has been developed. (See Annex 8)

5.5.5 Archaeological and Historical Features and Sites

86. Based on discussions with Qo'shtepa hokimiyat there are no archaeological sites, or historical or culturally important features or sites within 200 m radius (centred over the alignment) of any of the water distribution network.

5.5.6 Access roads

87. The project does not provide the construction of new access roads. The existing roads are being used as access roads. Upon the completion of construction works the roads and other local infrastructure will be restored to at least their pre-construction condition.

5.5.7 Land Acquisition

88. For the construction of 20.1 km water distribution networks no land acquisition is required. The networks will be laid within the borders of the existing site, along the grounded and asphalted roads. Temporary impacts on private municipal infrastructure may be expected, as described above.

6 PROJECT ALTERNATIVES

89. This ESMP study sought to consider possible alternatives to the proposed project. Two alternatives were considered. They included the “Zero option” and the Alternative Water Treatment.

6.1 "Zero option"

90. Refusal from the planned activities for the implementation of the Working Project “Construction of Water Supply in Shaxartepa Mahalla Citizens’ Assemblies of Qo’shtepa district of Farg’ona region” while maintaining the existing state of water supply for MCA Shaxartepa will entail a shortage in household drinking water. Thus, the overall environmental situation in the region will deteriorate and the socio-economic damage will increase.

91. Therefore, as a result of a comprehensive consideration of the issue of water supply for this MCA, a choice was made of a technological solution for the construction of a water supply system and is considered optimal for solving the task.

92. It is planned to reduce water losses to a minimum level through the use of the latest equipment.

93. The implementation of the design solutions outlined in this Working Project will allow the uninterrupted supply of potable water and in the required amount to the Population of the MCA Shaxartepa, improve the sanitary and ecological situation in the project region.

6.2 Project Alternative

94. To disinfect water after wells, a house is being built. The OB-50 bactericidal installation is installed inside the task.

95. Ultraviolet radiation has a high efficiency - 99.9% against a wide range of microorganisms: bacteria, viruses, spores, and parasitic protozoa, including their chlorine-resistant forms. UV radiation destroys pathogens of infectious diseases such as typhoid, cholera, dysentery, salmonellosis, typhoid fever, viral hepatitis, etc.

96. The UV water disinfection method is safe. Unlike oxidizing technologies (chlorination, ozonation), after exposure to ultraviolet radiation, harmful organic compounds are not formed in water, even if the required dose is repeatedly exceeded. The absence of the risk of overdose simplifies the operation of the equipment. The use of UV disinfection can reduce the amount of chlorine used by up to 5 times and minimize the negative impact of by-products of reagent methods on human health.
97. Ultraviolet acts only on microorganisms practically instantly (3-10 seconds) and does not change the chemical composition and physical properties of water.
98. In OB-50 systems, the UV source is an amalgam lamp. The amalgam lamp does not contain liquid mercury, which guarantees its safe use and easy lamp disposal.

7 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

99. Anticipated the project's environmental impacts were reviewed at the three stages – pre-construction, construction and operation stages.
100. This subproject will have a large positive impact on MCA Shaxartepa, bringing water supply services to many thousands of families. Some temporary impacts associated with construction works will occur. To deal with those impacts, the most important mitigation measures are proposed, and described in the Environmental and Social Management Plan (ESMP) table 13.

7.1 Pre-construction stage

Impact

101. During pre-construction stage the following aspects may impact on effectiveness of implementation of environmental safeguards during whole project cycle and may lead to noncompliance with requirements: (i) design of water storage facilities will not ensure efficient water quality, (ii) non-efficient sanitarian zone for wells and water towers may lead to deterioration of water quality, (iii) non-inclusion of environmental requirements into the bidding and contract, (iv) no compliance on receiving all required permissions, (v) purchase of goods, techniques and machinery which is not comply with IFC Exception List (Project Negative/ Exclusion List) set forth at Appendix 7 of the Project ESMF Document.

Design of water treatment facilities

102. Selection of inefficient water treatment technology may lead to production of water with quality which does not meet national standards for drinking water (GOST 950-2011. Hygienic requirements and quality control). For the current project, ground water from all 4 wells will be used as a water source for drinking water supply for MCA Shaxartepa. Water disinfection by UV

disinfection method is planned (OB-50 bactericidal installation) and laboratory analysis will be conducted to ensure water quality with biological indicators (GOST 950-2011).

103. Locations of a new well has been selected in accordance with national requirements indicated in regulation ShNK 2.04.02-19 “Water Supply. External network and facilities”. For almost all Well and ground water intake the condition for first level of sanitarian zone are met.

104. Some changes in well location could be done at the stage of the project details design. It may lead to generating new impacts which will require updating the current ESMP.

105. The following activities are proposing to mitigate impacts identified at the preconstruction stage.

Mitigation measures

- During detail design stage layout Well, route of main trunk and water distribution networks will be updated with consideration of minimizing impact on environment and Population during construction and operation phases;
- Ensure that first sanitarian zone (within 15 meters radius from the well) for ground water intakes is in compliance with national standards ShNK 2.04.02-19 “Water Supply. External network and facilities” (2019) and the territory is fenced ;
- IA with assisting Project Management Consultant’s (PMC) environmental specialist will ensure inclusion of environmental provision along with ESMP in the bidding documents and in contracts for Contractors;
- Bids evaluation needs to be done with consideration of: capacity of bidders to meet ESMPs requirements, proposing adequate budget efficient for implementation ESMP, existence of good practice in environmental performance within other similar projects;
- Within 30 days after contract award and prior to commencing any physical works, Site-specific Environmental Management Plan (SSEMPs) will be developed by the Contractors under the guidance of the PMC, and be endorsed by PMC before submission to Project Implementation Unit (PIU) for approval;
- In addition to SSEMPs, Topic Specific SEMP need to be prepared by Contractors, endorsed by PMC and approved by PCU for the following activities: Traffic Management Plan for construction of distribution network within settlements, Waste management Plan for sites with demolishing works, Hazardous Wastes Management Plans as described in the next sub-sections, Construction Camps Management Plan and Occupational Health and Safety Plan (OHS Plan);
- Goods procured for project implementation will be done in compliance with IFC Exception List (Project Negative/ Exclusion List) set forth at Appendix 7 of the Project ESMF Document;

- Environmental specifications have to be included in bidding packages for purchase machinery within the project. Particularly, toxic level of machinery must meet “Euro 3” environmental requirements as defined by national regulations ;
- If any changes in the project design will take place, the ESMP has to be updated accordingly.

7.2 Construction stage

7.2.1 Physical resources

Impact on air quality

106. During construction stage pollutants emissions will be caused by earth works, construction/demolishing activities and exhaust gases from vehicles. It is expected that dust pollution will occur more frequently. Especially, risk of dust pollution will increase during the windy weather and movements of trucks with high speed inside settlements.

107. At the same time equipment and vehicle with improper technical characteristics or in poor conditions also may lead to pollution by exhausted gases. Improper waste management, particularly burning of construction and domestic wastes may lead to air pollution.

108. Well is located close to settlements (20-45 meters). For this settlements dust level monitoring needs to be conducted. In case of exceeding standards for dust level for this area (0.15 mg/m³) additional mitigation measures for dust control need to be undertaken – more often watering or installation of dust screen.

Mitigation measures:

109. During construction period regular mitigation measures shall be used in the most of the cases:

- Apply watering of construction sites and roads inside settlements during dry season;
- Cover transported bulk materials;
- Control speed limitation for vehicles during movement inside of settlements - no more than 40 km/h;
- All vehicles and techniques must comply with technical requirements and have to pass regular inspection as indicated into the national standards¹;
- Prohibit open burning of solid wastes generated particularly from labor camps and construction activities;
- Clean wheels and under carriage of haul trucks prior to leaving construction site;

¹ “O’z DSt 1057:2004 Vehicles. Safety requirements for technical conditions” and “O’z DSt 1058:2004 Vehicles. Technical inspection. Method of control”.

- Restrict demolition activities during period of the high winds or under more stable conditions when winds could nevertheless direct dust towards adjacent communities;
- Conduct monitoring of dust level in front of settlements located close to constructed Well. In case of exceeding standards for dust level for this area $(0.15 \text{ mg/m}^3)^2$ additional mitigation measures for dust control need to be undertaken – more often watering or installation of dust screen;
- Pipe laying works in street with width less than 2 meters, needs to be conducted manually.

Noise and vibration

Noise

110. To assess an anticipated noise level during these type of works calculations were done based on existing information about operation of various equipment. During construction works on Well and water pipelines temporary noise emissions may be caused from the following equipment:

- Drilling machine
- Construction equipment
- Earth moving activity
- Generators
- Vehicles used for material transport

111. Level of noise generated by various equipment was used based on existing standards. It is expecting that during the following equipment will be used for construction of wells, water towers, and pipe laying of distribution network.

Table 5. Noise Level Form Various Techniques (at the distance 50 feet³)

Noise source	Equivalent noise level, dB
Excavator	81
Dozer (Bulldozer)	82
Compactor (ground)	83

Source: WSDOT measured data in FHWA’s Roadway Construction Noise Mode Database (2005).

112. As a rule, noise caused by moving equipment is reduced at some distance. Such reduction has logarithmic properties. In case of noise caused by construction activities, noise spread pattern from the noise point is used, that can be determined as: Noise level1 –

113. Noise level2 = $20 \log r2/r1$.

² SanR&N RUz No.0179-04 Hygienic norms. List of Maximum Allowable Concentrations (MACs) of pollutants in ambient air of communities in the Republic of Uzbekistan including Annex 1

³ One feet is equivalent to 0.348 meters, 50 feet is meters 15m

Table 6. Noise Levels at the Various Distances

Distance	Equivalent noise level (maximum), dB		
	Excavator (81)	Dozer (82)	Compactor (83)
5	78	79	80
10	66	67	68
75	63.7	64.7	65.7
100	60	61	62
300	48.6	50	50.6

114. Taken in account that due to fencing (at least 2 meters) which will be constructed first on the project sites, noise levels will decrease by 6 dB. In addition, noise levels will reduce by 1.5 dB due to non-asphalted soil absorption.

115. Based on results of noise propagation presented in Table 6, and taking into account reductions in noise level listed above, noise level at the distance 100 m from the fence site will comply with standards - 55 dB⁴ for daytime in the area adjusted to the living houses. Baseline assessment showed that ambient noise level for the area adjusted to construction exceeds standards on 10 dB and it is equivalent to 65 dB. In accordance with IFC requirements when “noise impacts should not exceed the levels of presented in Table 1.7.1, or results in a maximum increase in background levels of 3 dB at the nearest receptor location off-site”⁵. Therefore, noise level generated by construction equipment should not exceed 68 dB in front of houses faced to construction site.

116. Project site is located in the MCA Shaxartepa settlement. Therefore, for this site anticipated noise impact was assessed.

117. Thus, for the territory of “Shaxartepa”, residential houses from east and west are located at a distance of 20 -45 meters respectively (Figure 5). According to ShNK-2.04.02-19 “Water supply. Outdoor networks and facilities” the boundary of the first zone of the zone of waterworks should coincide with the fence of the site of the facilities and be provided at a distance from the walls of other structures and the shafts of water towers - at least 15 m (clause 10.17). Since the water tower is being designed in the middle of the territory, the sanitary and protective boundaries of the first belt of the zone are observed and resettlement of the nearby residential buildings is not required. On the territory of the second zone of the zone of the surface source of water supply, it is necessary to regulate the allocation of territories for settlements (clause 10.25). However, they could therefore be considered as sensitive receptors due to the location of the impact zone (closer than 100 meters). The second and further rows of houses should not be impacted by noise from construction activities due to reduction of noise of walls and fences of first row houses.

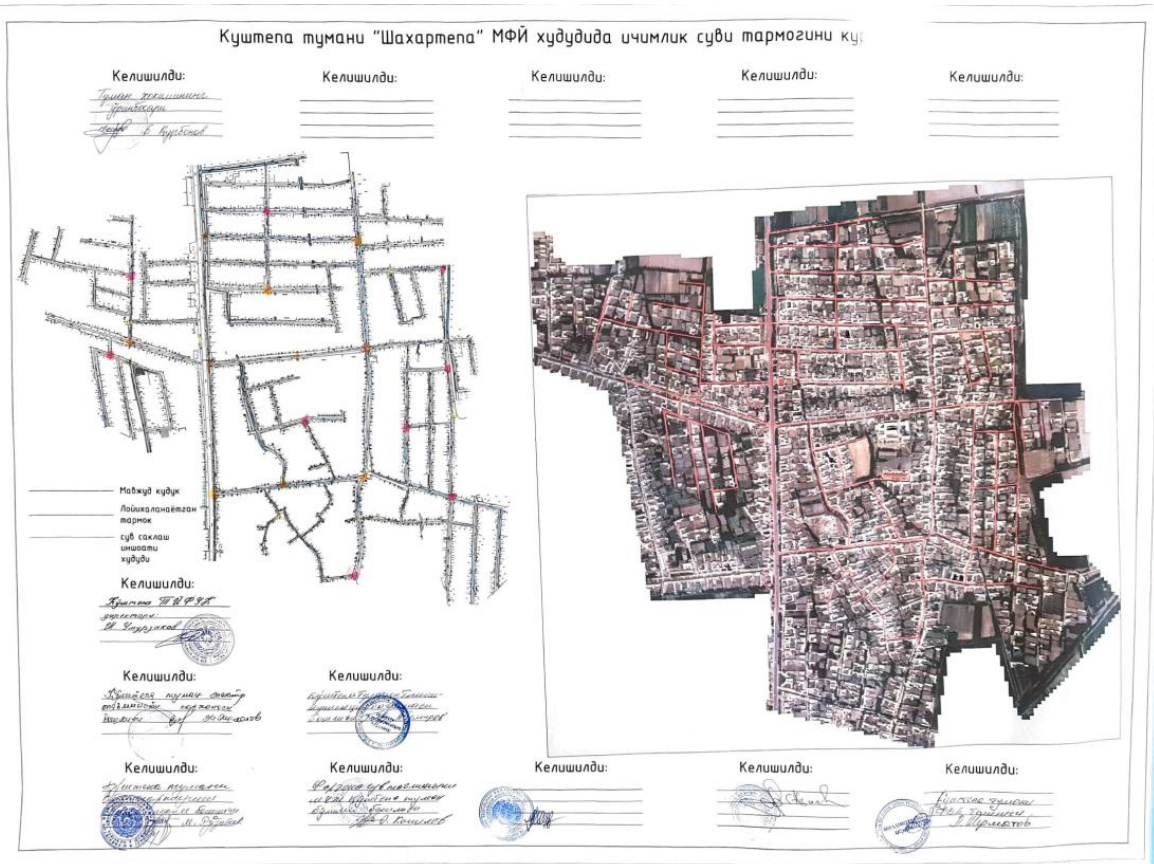
⁴ SanN&R 0267-09, Acceptable noise levels for habitable areas Uzbekistan 0267-09 and IFC, EHS Guidelines, 2011

⁵ IFC, EHS General Guideline, 2007, chapter 1.7.

Figure 5. The territory of “Shaxartepa” k (MCA Shaxartepa)



Figure 5. Water pipes of “Shaxartepa” MCA



118. During pipe lying works some noise impact will occur due to work of technics. Even impact will be short term, it is required to implement mitigation measures.

Mitigation measures:

119. The following measures need to be implemented to avoid noise and vibration impacts on project sites located within MCA Shaxartepa:

- Install acoustic barrier next to the Well
- If noise level in front of houses near to Well increases 68 dB during the day time, install acoustic screen;
- During construction period establish limits on speed for vehicles inside of settlements (40 km/h);
- In case of receiving any complaints from Population, noise measurements need to be conducted and in case of exceeding established standards, additional mitigation actions for decreasing noise level need to be undertaken (establishing temporary sound absorbing barriers and others);
- Schedule construction so as to minimize the multiple use of the most noisier equipment near sensitive receptors (houses, schools);
- Use of Personal Protective Equipment (PPE) by workers involving in demolishing and construction works in conditions of increased noise level (more than 80dB) is mandatory;
- Conduct weekly noise measurements at the all Well. Make sure that noise level not exceed 55 dB during the day time;
- During pipe lying works in the site where digging of tranche will be implemented closer than 2 meters to the wall use compact less noisier pipe lying techniques;
- Inform Population about anticipated works.

Vibration**Vibration impact**

120. Vibration impact during construction stage could be caused by the same machinery. The level of vibration and its propagation within a distance was calculated in accordance with methodology indicated in Transportation and Construction Vibration Guidance Manual (2013).

121. The Manual with reference to Transit Noise and Vibration Impact Assessment (Federal Transit Administration 2006), provides information on vibration level from different construction equipment (Table 7). The table does not provide data on mobile and assembles cranes since vibration level is not significant.

Table 7. Vibration Source Amplitudes for Construction Equipment

Equipment	Reference in PPV at 25 feet (in/sec)
Excavator (Calm shovel drop)	0.202
Lange Bulldozer	0.089
Small Bulldozer	0.003

Equipment	Reference in PPV at 25 feet (in/sec)
Loaded trucks	0.076

Source: Federal Transit Administration 1995 (except Hanson 2001 for vibratory rollers).

122. Using these source levels, vibration from this equipment can be estimated by the following formula:

$$PPV_{eqp} = PPV_{Ref} \left(\frac{25}{D}\right)^n$$

Where:

PPV_{Ref} = reference PPV at 25 ft.

D = distance from equipment to the receiver in ft;

N = 1.4 (the value related to the attenuation rate through ground).

123. Values of vibration level calculated in accordance with this formula are presented in Table 8.

Table 8. Calculation of Vibration from Equipment

Distance	Vibration from equipment							
	Large Bulldozer		Small Bulldozer		Loaded trucks		Excavator	
	in PPV (in/sec)	in dB	in PPV (in/sec)	in dB	in PPV (in/sec)	in dB	in PPV (in/sec)	in dB
20	0.12	67	0.004	37	0.1	66	0.25	
30	0.07	63	0.002	34	0.05	62	0.16	
50	0.03	58	0.001	29	0.028	57	0.08	

Source: PPTA’s Consultants, 2018.

124. National standards for vibration level in residential houses are provided in Sanitarian Norms and Rules (SNR) № 0146-04 “Design of the living houses in climatic conditions of Uzbekistan”. For living houses the standards is 67 dB for night time and 72 dB for day time with frequency in 37 and 61 Hz and for night time is 67 dB. (Table 9)

Table 9. National Standards for Vibration

Period	Permanent vibration, dB
Day time	72
Night time	67

125. The standards are provided in “Transportation and Construction Vibration Guidance Manual” (2013). The Manual provides two types of limits for vibration level – for “frequent events” and “infrequent events”. The Manual defines that “Frequent events” (continuous) is defined as more than 70 events per day and “Infrequent events” (single event) is defined as fewer

than 70. As showed calculation of maximum amount of trucks which will move to and from site will be more than 80. Therefore, more stringent (lower threshold) is applied for the current assessment for vibration impact. For example, a threshold for residential buildings with plastered walls/... is 0.2 in/s for continuous vibration and for single event condition is 0.5 in/s.

126. The Table 10 presents maximum continuous vibration level for preventing damages for different type of buildings. This data could be used as thresholds for both phases – construction and operation for structural integrity of buildings/houses.

Table 10. Maximum Continuous Vibration Levels for Preventing Damage (mm/s)

Description of building type	AASHTO (1990)			SAS (1992)		
	mm/s	in/s	dB*	mm/s	in/s	dB*
Historic sites or other critical locations	2.5	0.09	94	2.5	0.09	94
Residential buildings with plastered walls / Building with foundation walls and floors in concrete, wooden ceilings and walls in masonry	5.1-7.6	0.09	100-104	5.1	0.2	100
Residential buildings in good repair/ Building with foundation walls and floors in concrete, walls in concrete or masonry	10.2 – 12.7	0.40-0.49	106 - 108	7.6	0.29	100
Engineered structures without plaster / Buildings in steel or reinforced concrete	25.4 – 38.1	0.99 – 1.4	114-118	12.7	0.49	108

AASHTO = American Association of State Highway and Transportation Officials, SAS = Swiss Association of Standardization.

Source: California Department of Transportation (2013), US Transportation Research Board (2012).

* Converting into dB was done based on formula provided in para 57.

127. To convert vibration level presented in dB into vibration velocity presented in mm/s and vice versa the following formulas were used:⁶

$$V_{dB} = 20 * Lg10(V) + 86,$$

$$V = 10^{(V_{dB}-86)/20}$$

Where: V_{dB} - vibration level in dB, and V – vibration velocity in mm/s

128. As showed results of calculation of vibration level (Table 12), vibration from construction activities on this stage will not impact on people living on surrounded area and structures since it is below standard in 72 dB for day time.

129. Anticipated vibration levels at the distances 65 meter is below standard. It will not also impact on residential building as well, since the highest vibration level will not exceed 0.2 in/s or 100 dB (Table 21).

Main Construction activities and construction of access road

⁶ <http://vibrocenter.ru/vibroacc.htm>

130. Data on vibration from equipment generating vibration during these stages of construction activities are presented in Table 11. For completion of construction of access road (asphalting) vibration roller will be used as well.

Table 11: Noise Level Form Various Techniques (at the distance 50 feet⁷)⁸

Noise source	Equivalent noise level, dB
Excavator	0.202
Dozer (Bulldozer) large	0.089
Compactor (ground) (vibration roller)	0.21
Loaded Trucks	0.076
Vibrator for concrete compaction	0.21
Pulling machinery	0.0734
Backhoe	80

Source: FTA, 2006

131. Calculation of vibration level at the different distance are presented in table 12.

Table 12: Calculation of Vibration from Equipment

Distance	Vibration from equipment									
	Lange Bulldozer		Pilling mächenary		Excavator		Vibration for concrete compaction		Compactor (vibration roller)	
	in/s	in dB	in/s	in dB	in/s	in dB	in/s	in dB	in/s	in dB
20	0.12	68	1.00	86	0.28	75	0.29	75		
30	0.07	63	0.57	81	0.16	70	0.16	70		
50	0.03	56	0.30	76	0.08	64	0.08	64		
	0.03	56	0.21	72	0.06	62	0.06	62+9+		

132. Therefore, vibration level, generating during construction works will not exceed standards for people (Table 12 – 72 dB) at the distance 65 and 70 m. It will also not exceed standard for buildings and structures (0.2 in/s). For integrity of building located in the distance 25-45 meters from construction site, usage of piling machinery on the distance closer than 60 meters may have some risk. Even calculation of vibration level showed that the vibration level will not exceed the level which may impact on people’s health and houses integrity, it is recommended to conduct a visual observation of the farmer’s temporary house before commissioning construction works and on monthly base during works of pilling machinery. In case of any cracks or damages mitigation measures need to be applied:⁹ pre-drilling, using alternatives non-impact drivers, using cast-in-place or auger cast piles and etc.

Mitigation measures:

⁷ One feet is equivalent to 0.348 meters, 25 feet is 8.7 meters.

⁸ Part Two – Construction noise impact assessment, Table 7-4.

⁹ List of mitigation measures indicated in “Transportation and Construction Vibration Guidance Manual”, 2013, Chpater 8.

133. The following measures need to be implemented to avoid noise and vibration impacts on project sites located within settlements:

- Schedule land leveling so as to minimize the multiple use of the noisiest equipment on the site;
- Do not use several machineries at the same time within the distance closer than 75 meters to the north border of the construction site;
- Use of Personal Protective Equipment (PPE) by workers involving during construction stage in the sites where noise level will exceed 80 dB as per national regulation;
- Inform Population about anticipated works;
- Schedule construction works between 8 am and 7 pm. In case of extension working hours, inform community (MCA Shaxartepa) in advance;
- Conduct visual observation of temporary faced to construction site on integrity
- Nevertheless, noise level monitoring needs to be implemented on the regular in accordance with the methodology indicated into the Environmental Monitoring Plan (Chapter 10, Table 18). In case of exceeding noise level during construction phase on 3 dB in comparison with baseline situation, additional mitigation measures, such as construction acoustic screen could be applied;
- Conduct a visual observation of the house near to Well before commissioning construction works and on monthly base during works of pilling machinery. In case of any cracks or damages mitigation measures need to be applied: pre-drilling, using alternatives non-impact drivers, using cast-in-place or auger cast piles and etc.

134. Therefore, impacts on air quality, noise and vibration will be temporary and it could be mitigated by implementation of recommended measures.

Impact on water resources

135. The surface water may be polluted due to improper placement of excavated soil, poor management of construction camps, and improper storage of construction materials, leakage of fuel and lubricates from construction machinery, washing of vehicles and techniques without proper treatment.

136. Construction of new well as well as construction of water tower will not be conducted next to the water bodies.

137. Implementation of the mitigation measures and continuously monitoring of water quality in the points indicated in Environmental Monitoring Table (Chapter 10) is necessary to avoid deterioration of water quality.

Mitigation measures:

138. The following mitigation measures shall be implemented to minimize impact on water resources:

- Construction and labor camps, including storage places for lubricant, fuel and other oils will be located 100 m away from water bodies;
- Conduction of refueling, oil replacement or repairing works will be banded at the area within 50 m from water streams;
- Sanitary waters and solid wastes will not be released directly into water streams;
- Topsoil stripped material shall not be stored where natural drainage will be disrupted;
- Water samples will be taken and compared with the baseline monitoring results obtained in the preconstruction stage. Location of monitoring points, frequency and monitoring substances are presented in Environmental Monitoring Plan (Chapter 10).

139. Groundwater table level in the Project zone is located lower 18-20 meters. Therefore, potential impact arises from maintenance of contractors' camps, transport, maintenance of vehicles and handling and storage of lubricants and fuel. The required provisions for construction camps and monitoring of ground water quality are described in the subsections describing impacts on soil quality and waste management.

140. Although location of Well are selected at the highest elevation in order to provide good pressure of pumping water, there is some possibility that ground water may impact during construction of Well. Therefore, it is recommended that all construction works related to digging on the depth more than 3 meters (pump station and administrative buildings basement) need to be conducted during non-irrigation season. The irrigation season in that region is May-August. If this period could not be avoided, usage of standard technology for construction in areas with high water logging needs to be applied – pumping water into the nearest drainage canal.

141. Direct or indirect (through soil) pollution of ground water may deteriorate of water quality in the hand pumps, which Population use for drinking purposes. Therefore, monitoring of water quality in the hand pumps houses located close to the rehabilitating or constructing new Well needs to be undertaken by Contractor on the monthly base. In case of exceeding standards, ground water pollution source(s) need to be identified and repaired.

Impact on soil

142. The main anticipated impacts on soil during construction stage will be: disturbance or loss of top soil, its compaction and pollution. For pipe lying works, earth excavation, pipe laying and backfill of material including compaction will be implemented. Excavated soil will be temporary stored alongside the trench and refilled after pipe lying. Gravel will be used as a bed for the pipes and excavated soil will be placed back to fill tranche and be compacted. Certain amount soil will surplus due to pipes and gravel in trench.

143. Surplus excavated soil will be generated during construction of Well particularly for construction of water towers and pump stations. Even surplus materials will be used as embankment fill as far as possible certain amount of earth will remain.

144. The movement of equipment and the temporary storage of materials on the ground during the construction may lead to compaction of the soil. This compaction will take place in the area affected by the construction works, in its vicinity, in the access areas, pipelines, etc.

145. Gravel and sand will be required for pipe lying and rehabilitation of damaged roads. Unauthorized excavation of such construction materials and improper restoration works on closing used carriers will negatively impact on soil.

Mitigation measures:

146. To minimize this impact on soil quality the following measures shall be implemented:

- The top soil of about 30 cm depth shall be removed and stored separately during excavation work, and after the construction of the main trunk pipes the same soil shall be replaced on the top, in unpaved areas;
- The excess top soil and earth reminded after construction new Well will be used at other project sites or disposed at the places prior approved by local government authorities and The State Committee for Ecology and Environmental protection (Goskomecology);
- To minimize soil compaction, movement of all type techniques will be allowed only through identified assess roads;
- Contractors will be required to use only authorized carriers with getting all necessary permissions per respective national legislation.

147. Pollution of soil during construction phase maybe caused by improper handling of fuel and oil during refueling and poor waste management which is reviewed in the next chapters.

Waste management

Hazardous wastes

148. During the construction phase hazardous wastes (used oil and batteries, fuel and bitumen residuals) will be generated from operation and maintenance of machinery. In case of improper handling and dispose of such materials it will lead to pollution of environment and such wastes are hazardous to human health.

Mitigation measures:

- Used oil shall be collected into containers placed at the concreted sites and disposed to national oil companies designated for accepting and treatment of used oils¹⁰;

¹⁰ Resolution of Cabinet Ministries of RUz # 258 “On collection, storage and further disposal of used technical oil” dated from 4 September 2012

- Refueling vehicles and oil replacement have to be conducted in the special designated and properly equipped places. Such places have to be organized in the way avoiding releasing or leakage of oil on the ground or water courses. Emergency facilities have to be at the place for elimination of accident of oil spills;
- Used batteries have to be collected separately and transferred to the local branches “Cvetmet” for further disposal.

Non-hazardous wastes

Municipal wastes

149. Municipal solid wastes and waste waters will be generated at the construction and camp sites. Mainly it will be rubbish, plastic or glass bottles, waste food, organic wastes and etc. Improper wastes management may cause the spread of infectious diseases, emergence of insects and parasites in construction camp sites. In addition, it may lead to pollution of water courses and soil, conflicts with local Population.

150. For disposal of municipal wastes, the Contractor will receive permit on waste disposal from State Committee on Ecology and Environment protection (SCEEP) and will conclude agreements with relevant national agencies on their disposal for whole construction period. All wastes have to be disposed only in the areas indicated into the permits.

151. Sewage and “grey” water (water from bathroom and canteens) generated at site offices and work camp should be appropriated managed, so it does not produce odors or pollute water courses. There is no centralized sewage system in construction site. Therefore, Contractor is required to provide his own on-site waste water treatment facilities such as septic tanks. For disposal sewage from septic tanks Contractor will have also to get permit from State Committee on Ecology and Environment protection (SCEEP) and conclude agreement with national agency “Toza Hudud”. Direct discharge of untreated sewage or oily water in surface water courses will be prohibited.

Construction wastes

152. Construction wastes generating during the leveling stage will be mainly residuals of plants. There is some probability that stones will be founded during this type of works. All these wastes could be disposed on the municipal landfills indicated by local agency “Toza hudud” which is under State Committee on Ecology and Environmental Protection (SCEEP).

153. During the main works, construction of internal and access roads construction wastes will consist of packing materials, welding rods, broken bricks and etc. Therefore, the following mitigation measures need to be applied for whole construction site period.

Mitigation measures:

- Segregate municipal on recyclable and non-recyclable;
- Obtain permit on disposal all types of wastes;

- Sell recyclable wastes to relevant local waste processing organizations (paper, glasses, plastic) and timely dispose of non-recyclable wastes to the landfill, determinate by local hokimiyat;
- Provide hydro isolated septic tank for collecting waste waters at the construction camp sites and bio toilets for workers at the construction sites and timely dispose waste waters to the local waste water treatment plants;
- Prohibit burning of all types of wastes;
- Prohibit discharge of sewage or oily water in surface water courses or soil;
- Create a safe (sheltered with concrete foundation) storage facility for water.

Biological resources

154. It is expected that during the construction works limited impact on biological resources may occur. Project sites are combination of populated area and agricultural lands represented by typical rural and agro-biocoenosis. There are no natural protected areas or sensitive environmental receptors close to project sites.

155. There are no cutting trees planned in the project area. If during the construction period it is revealed that it is necessary to cut down trees and shrubs, then before cutting trees compensation payment will be done as indicated in the RPF for this project.

156. The project site is located on the rural lands without representatives of wild animals. Nevertheless, burning of the plants' residual during project cleaning stage will be prohibited.

157. To mitigate adverse impact on vegetation and wildlife and to comply with national requirements the following measures should be apply:

Mitigation measures:

- Clear mark the project site in order to avoid unnecessary felling of trees;
- During land leveling don not use chemical and burning for removing vegetation;
- Don not use chemical and burning for removing vegetation.

Impacts on land use

158. Impacts on land use was accessed based on Socio-economic Study materials prepared for this project. The feasibility design attempted to minimize the land acquisition and involuntary resettlement. The impacts are categorized as permanent and temporary. The project components which require permanent land acquisition include 1 ground water distribution facility. Total land requirement for acquisition is 0.09 hectares (ha) hokimiyat reserved lands. This is an estimation based on the technical input received from the engineering team.

159. Temporary impacts occur in terms of loss of crops during the construction of pipe lines especially the transmission mains and distribution mains which pass along the rural roads. The

roads will be restored to the previous use post the construction and the users will be allowed to use it.

160. Totally 0,09 hectares of land is likely to be impacted temporarily due to construction of transmission main and supply main pipelines.

Socio-economic resources

161. Only minimal impacts on land use are expected, since sites are typically located on lands not used for any other purpose or in built-up areas. However, the contractor will produce a plan showing the impacts of pipe-laying affecting some utilities and/or trees established within the road allowances, which will be coordinated and in conformance with the land and resettlement framework.

162. Any temporary loss of access to houses and business will as far as possible be mitigated by establishing temporary access routes to affected households and businesses, especially when risk of economical impact to businesses due to lack of access for customers is identified or foreseen.

163. The project activities will have no adverse environmental impacts and the minor impacts that will arise during especially the construction phase, and which will be mitigated by the ESMP requirements, will not affect particular vulnerable groups disproportionately.

Mitigation measures:

- Inform community in advance about planning works;
- For construction works which do not require specific skills, hire local Population as much as possible;
- If cutting trees is unavoidable, to compensate losses as indicated in the RPF for this project and in cost for trees.
- conduct explanatory work among workers about the local culture and traditions;
- Any accidental or unanticipated impacts that could not be identified during preparation stage of the project will be fully restored and/or compensated by the Contractor. This provision will be included in the contract for civil works and budgeted for by the contractor.

Health and safety issues

164. Besides impacts on air, water and soil quality, described in previous chapters, certain risks related to community health and safety, for workers in campsites may occur during construction phase.

For community

165. Inadequate lighting and fencing of construction sites inside of settlement areas can be dangerous for pedestrians and vehicles especially during the night time. Increasing of traffic due

to trucks and vehicles movements to construction sites, temporary closing of roads during construction of access roads may cause inconvenience for local Population as well.

166. Untimely and inefficient disposal of solid waste and improper sanitary conditions generated by the construction workers at construction sites and labor camps may cause pollution of the surrounding environment and affect on the health of local people. There also could be some social problems due to irresponsible behavior of the outside work force such as gambling, alcoholism and disrespect to local people and their culture.

167. Cultural interference workers with local communities may cause HIV and sexually communicable diseases (STD) spreading in case of law awareness about these diseases among workers and community.

168. The following measures need to be undertaken to minimize this impacts:

Mitigation measures:

- Inform Population of the MCA Shaxartepa about planning works in advance;
- Together with traffic police authority of MCA Shaxartepa Contractor should develop a Traffic Management Plans with clear indication routes of vehicles' movements, placement of special signs, and speeding allowance. The Traffic Management Plan has to be approved by MCA Shaxartepa and disclosed to local community prior commencement of construction works on respective sites;
- Provide proper lightening of construction site;
- Development of Site Specific Plans for campsites;
- Carry out regular awareness campaigns among work staff, including specific hazards associated with the spread of HIV/AIDS;
- After completion of the construction works reinstate construction and camp sites by bringing them to its primary condition;
- PSC will conduct a post-construction audit during a defect liability period to make sure that construction sites and camps are properly cleaned and restored before hand-over to Executive agency – Ministry of Economy Development and Poverty Reduction.

For workers

169. Separate Site Specific ESMP (SSESMP) for labor/construction camps will be developed by Contractors, endorsed by PSC and approved by the Environmental Specialist of PIU prior commencement of works. SSESMP for labor/construction camps will describe waste collection and disposal procedure, set up of camp facilities (such as a storage place for construction materials and techniques if any, laundry and toilets, access roads) in the way, which will allow to minimize impacts on environment and disturbance of local Population. Labor camps have to provide safe and adequate living conditions for workers, such as dining rooms, toilets, shower rooms

emergency medical kits. Other measures for fire-fighting and preventing electric shocks etc. need to be organized in accordance with national standards.

170. The Contractors will require to develop Occupation Safety and Health Plan, which covers among others the following topics: usage of Personal Protection Equipment's (PPE), working procedure in dangerous conditions (works at height, with noise equipment and etc.), training activities and others.

Impact assessment due to COVID-19

171. The projects' construction/civil works will involve work force, together with suppliers and supporting functions and services. The work force may comprise workers from national, regional, and local labor markets. They may need to live in on-site accommodation, lodge within communities close to work sites or return to their homes after work. There may be different contractors permanently present on site, carrying out different activities, each with their own dedicated workers. Supply chains may involve international, regional and national suppliers facilitating the regular flow of goods and services to the project (including supplies essential to the project such as fuel, and water). As such there will also be regular flow of parties entering and exiting the site; support services, such as catering, cleaning services, equipment, material and supply deliveries, and specialist sub-contractors, brought in to deliver specific elements of the works.

172. Given the complexity and the concentrated number of workers, the potential for the spread of infectious disease in projects involving construction is serious, as are the implications of such a spread. Projects may experience large numbers of the work force becoming ill, which will strain the project's health facilities, have implications for local emergency and health services and may jeopardize the progress of the construction work and the schedule of the project. Such impacts will be exacerbated where a work force is large and/or the project is in remote or under-serviced areas. In such circumstances, relationships with the community can be strained or difficult and conflict can arise, particularly if people feel they are being exposed to disease by the project or are having to compete for scarce resources. The project must also exercise appropriate precautions against introducing the infection to local communities.

173. The GoU has adopted the special procedure on acting in conditions of pandemic - the Temporary Sanitarian Norms and Rules (SanN&R) # 0372-20 "On organization of performance of state agencies and other organizations, commercial entities in limited measures condition due to pandemic COVID-19». The document was approved by the Agency on Sanitarian Epidemiological Well-Being (3rd edition), May 11, 2020. The SanN&R provides general requirements and specific requirements for different sectors: pharmacy, public transport, markets, construction sites and etc.

174. According to SanN&R, the managers of organizations are personally responsible for compliance with the SanN&R. All works have to be organized in order to ensure:

- preventing the introduction of infection into the organization;
- taking measures to prevent the spread of coronavirus infection (COVID-19) in teams in organizations;
- implementation of organizational and technical measures to prevent infection of workers;
- other organizational measures to prevent infection of workers.

175. The rules present requirements for safe transportation workers, organizing medical examination at the entrance points, provision with disinfection equipment and disinfectants, catering facilities, construction camps, etc. Also, SanN&R describes requirements on organizing an isolator in medical centers (if any) in case if patient is identified with a high fever or with individual symptoms of an acute respiratory viral infection (lack of smell, dry cough, malaise, etc.) and isolating him from the work team.

176. All managers have to conduct introductory training for new workers and routine training for working staff. The rules provide an action plan for cases when workers with COVID-19 symptoms.

177. Section 5.1.4 of SanN&R provides specific norms for construction sites. The section pays special attention to dust and provides recommendation for dust generation mitigation and protection. The rules provide a list of Personal Protection Equipment for COVID-19.

178. The document also provides instruction on communication with local health care institutions for organizing regular medical examination of workers and mobilization in case of identification infections.

Mitigation measures

- In conditions of pandemic risk organize works in accordance with Temporary Sanitarian Norms and Rules (SanN&R) # 0372-20;
- Ensure proper recording and reporting of any cases of infection and undertaken actions.

Cultural heritage

179. The land and vegetation clearing, earthmoving activities during the construction of the new WDU and extension of existing ones, pipelaying works may affect the archaeological heritage in the project areas. Near to the project no Cultural Heritage Objects, therefore on impact on Cultural Heritage.

180. Nevertheless, there is still possibility that some artifacts could be found during digging of foundation pits. For that case, the following mitigation measures will be undertaken in accordance with the procedure indicated in the Law of RUZ “On Protection and Use of Objectives of the Archeological Heritages” (2009). Procedure on chance finds procedure is presented in Annex 5.

Mitigation measures:

- Excavation and other works need to be suspended immediately;
- Area with possible heritage shall be fenced with fencing tape;
- A designated focal point from a local administration (khokimiyat) and representative of Ministry of Culture of RUz need to be informed and invited for assessment of potential heritage and undertaken necessary actions;
- Civil works at the finding place could be recommenced after obtaining permission from the representative of Ministry of Culture of RUz and from focal point from Khokimiyats.

7.3 Operation stage

Impact on the air

181. No permanent impact on air is expecting during operation phase. Some temporary impact may occur during maintenance works.

Mitigation measures

- Watering of earth during maintenance works
- Immediately replacing defective equipment and removing it from the work site;
- No truck movements in inhabited areas between 22:00 and 6:00.

Impact on water

182. Extensive pumping of ground water from wellfield may impact on ground water level and it may lead to depletion of ground water reserve. A hydrogeological assessment provided by the State Committee on Geology and Mineral Resources establishes a maximal amount of water which could be withdrawn from wellfield without impact on water balance between ground and surface water.

Mitigation measures

- The quality of water supplied for household and drinking needs must comply with the requirements of GOST 2874-82 or regulatory documents of the Republic of Uzbekistan that determine the quality of drinking water.
- When storing water used for household and drinking needs, reagents, internal anti-corrosion coatings, as well as filtering materials that meet the requirements of the sanitary and epidemiological department of the Ministry of Health of the Republic of Uzbekistan should be used for use in the practice of household and drinking water supply.
- After the commissioning of this facility, it is necessary to ensure the proper and efficient use of water resources and to prevent water losses and leaks and excessive water consumption - installation, operation and periodic checking of water meters at water users;

- Conduct awareness program among Population to ensure the sustainable operation of the constructed water supply system.

Soil quality

183. The main possible impact on soil during the project operation is risk related to land subsidence in case of excessive extraction of ground water at the wells in MCA Shaxartepa territory. To avoid such situation, water from wells has to be pumped strictly in the amount, indicated in the design documents and permission for special water use. Water Supply Operation Company will have to obtain the permission from State Committee on Ecology and Environment Protection (Goskomecology).

Mitigation measures:

- The top soil of about 30 cm depth shall be removed and stored separately during excavation work, and after the construction of the main trunk pipes the same soil shall be replaced on the top, in unpaved areas;
- The excess top soil and earth reminded after construction new Well will be used at other project sites or disposed at the places prior approved by local government authorities and The State Committee for Ecology and Environmental protection (Goskomecology);
- To minimize soil compaction, movement of all type techniques will be allowed only through identified assess roads;
- Contractors will be required to use only authorized carriers with getting all necessary permissions per respective national legislation.

Table 13: Environmental and Social Mitigation Plan

Impact	Mitigation measure	Responsibility	Cost
Pre-construction stage			
Project design	<ul style="list-style-type: none"> During detail design stage layout Well, route of main trunk and water distribution networks will be updated with consideration of minimization of impact on environment and Population during construction and operation phases; Ensure that first sanitarian zone (within 15 meters radius from the well) for ground water intakes is in compliance with national standards ShNK 2.04.02-19 “Water supply. External networks and facilities” (1997) and the territory is properly fenced; 	PMC develops detail design PCU monitor compliance	No cost required
Lack of proper environmental requirements	<ul style="list-style-type: none"> Ensure that ESMP is included in bidding documents. Ensure that environmental and social covenants, tools for resolving issues with Contractors non-compliance with established requirements are included in the bidding documents (such as penalties for violence environmental requirements and etc.) and further in contracts. Include list of required national approval and licenses (indicated in chapter 1, Table 1) are included in the bidding documents and responsible for receiving such permission are identified. 	PCU, PMC’s Environmental Specialist	No cost required
Improper assessment of bidders’ environmental capacity	<ul style="list-style-type: none"> IA with assisting Project Management Consultant’s (PMC) environmental specialist will ensure inclusion of environmental provision along with ESMP in the bidding documents and in contracts for Contractors; Bids evaluation needs to be done with consideration of: capacity of bidders to meet EMSPs requirements, proposing adequate budget efficient for implementation ESMP, existence of good practice in environmental performance within other similar projects; 	CSA, PCU	No cost required
Non-compliance with national environmental legislation in term of conduction environmental impact assessment and required permission	<ul style="list-style-type: none"> Prepare ZVOS and submit it to Provincial Committee for Ecology and Environmental protection (Goskomecology) for revision and approval. Include the requirements indicated in EA into the final ESMP. 	PD	Will be founded PD budget

Impact	Mitigation measure	Responsibility	Cost
Generation of different potential environmental impacts due to changes in design, layout	<ul style="list-style-type: none"> If any changes in the project design will take place, the ESMP has to be updated accordingly. 	PD, PCU with PMC	Included in PMC contract
Non-compliance with national and international requirements during conduction bidding for purchase machinery and mechanisms	<ul style="list-style-type: none"> Goods procured for project implementation will be done in compliance with IFC Exception List (Project Negative/ Exclusion List) set forth at Appendix 7 of the Project ESMF Document; Environmental specifications have to be included in bidding packages for purchase machinery within the project. Particularly, toxic level of machinery must meet “Euro 3” environmental requirements as defined by national regulations¹¹; 		
Improper SEMP and SSEMP development	<ul style="list-style-type: none"> Within 30 days after contract award and prior to commencing any physical works, Site-specific Environmental and Social Management plan (SSESMP) will be developed by the Contractors under the guidance of the PMC, and be endorsed by PMC before submission to PIU for approval; In addition to SSESMP, Topic Specific SEMPs need to be prepared by Contractors, endorsed by PMC and approved by PIU for the following activities: Traffic Management Plan for construction of distribution network within settlements, Waste management Plan for sites with demolishing works, Hazardous Wastes Management Plans as described in the next sub-sections, Construction Camps Management Plan and Occupational Health and Safety Plan (OHS Plan); 	Contractors develop SSEMP PMC review and endorses PIU approve	Included in the Contractors budget
Construction stage			
Air pollution	<ul style="list-style-type: none"> Apply watering of construction sites and roads inside settlements during dry season; Cover transported bulk materials; 	Contractors implement	Included in the Contractors budget

¹¹ Resolution of President of RUz “On measures for further development of production at the Samarkand automobile plant and renewal automobile park”, dated from December 14, 2006

Impact	Mitigation measure	Responsibility	Cost
	<ul style="list-style-type: none"> Control speed limitation for vehicles during movement inside of settlements - no more than 40 km/h; All vehicles and techniques must comply with technical requirements and have to pass regular inspection as indicated into the national standards¹²; Prohibit open burning of solid wastes generated particularly from labor camps and construction activities; Clean wheels and under carriage of haul trucks prior to leaving construction site; Restrict demolition activities during period of the high winds or under more stabile conditions when winds could nevertheless direct dust towards adjacent communities; Conduct monitoring of dust level in front of settlements located close to constructed Well. In case of exceeding standards for dust level for this area (0.15 mg/m³)¹³ additional mitigation measures for dust control need to be undertaken – more often watering or installation of dust screen; Pipe lying works in street with width less than 2 meters, needs to be conducted manually. 	PIU and PMC monitor implementation	
Noise and vibration	<ul style="list-style-type: none"> Install acoustic barrier next to the Well, “Shaxartepa 2” and “Shaxartepa 4”; For the rest of Well acoustic screens have to be used if construction activities will be implemented closer than 100 m; If noise level in front of houses near to Well “Shaxartepa 1” and “Shaxartepa 3” increases 68 dB during the day time, install acoustic screen; During construction period establish limits on speed for vehicles inside of settlements (40 km/h); Operation of heavy equipment shall be conducted between 7 am and 7 pm only, limitation on speed for vehicles; In case of receiving any complaints from Population, noise measurements need to be conducted and in case of exceeding established standards, additional mitigation 	Contractors implement PIU and PMC monitor implementation	Included in the Contractors budget

¹² “O’z DSt 1057:2004 Vehicles. Safety requirements for technical conditions” and “O’z DSt 1058:2004 Vehicles. Technical inspection. Method of control”.

¹³ SanR&N RUz No.0179-04 Hygienic norms. List of Maximum Allowable Concentrations (MACs) of pollutants in ambient air of communities in the Republic of Uzbekistan including Annex 1

Impact	Mitigation measure	Responsibility	Cost
	<p>actions for decreasing noise level need to be undertaken (establishing temporary sound absorbing barriers and others);</p> <ul style="list-style-type: none"> • Schedule construction so as to minimize the multiple use of the most noisy equipment near sensitive receivers (living houses or school); • Use of Personal Protective Equipment (PPE) by workers involving in demolishing and construction works in conditions of increased noise level (more than 80dB) is mandatory; • Conduct weekly noise measurements at the all Well. Make sure that noise level not exceed 55 dB during the day time; • During pipe lying works in the site where digging of tranche will be implemented closer than 2 meters to the wall use compact less noisier pipe lying techniques; • Inform Population about anticipated works; • Schedule land leveling so as to minimize the multiple use of the noisiest equipment on the site; • Do not use several machineries at the same time within the distance closer than 75 meters to the north border of the construction site “Shaxartepa 2” and “Shaxartepa 4”; • Use of Personal Protective Equipment (PPE) by workers involving during construction stage in the sites where noise level will exceed 80 dB as per national regulation; • Inform Population about anticipated works; • Schedule construction works between 8 am and 7 pm. In case of extension working hours, inform community (MCA Shaxartepa) in advance; • Conduct visual observation of temporary faced to construction site on integrity • Nevertheless, noise level monitoring needs to be implemented on the regular in accordance with the methodology indicated into the Environmental Monitoring Plan (Chapter 10, Table 18). In case of exceeding noise level during construction phase on 3 dB in comparison with baseline situation, additional mitigation measures, such as construction acoustic screen could be applied; • Conduct a visual observation of the house near to WDF “Shaxartepa 2” and “Shaxartepa 4” before commissioning construction works and on monthly base during works of pilling machinery. In case of any cracks or damages mitigation measures 		

Impact	Mitigation measure	Responsibility	Cost
	need to be applied: pre-drilling, using alternatives non-impact drivers, using cast-in-place or auger cast piles and etc.		
Pollution of surface and ground water	<ul style="list-style-type: none"> • Construction and labor camps, including storage places for lubricant, fuel and other oils will be located 100 m away from water bodies; • Conduction of refueling, oil replacement or repairing works will be banded at the area within 50 m from water streams; • Sanitary water and solid wastes will not be released directly into water streams; • Topsoil stripped material shall not be stored where natural drainage will be disrupted; • Water samples will be taken and compared with the baseline monitoring results obtained in the preconstruction stage. Location of monitoring points, frequency and monitoring substances are presented in Environmental Monitoring Plan (Chapter 10.2) • All works related to digging on the depth more than 2 meters need to be conducted during non-irrigation season. The irrigation season in that region is May-August. • If this period could not be avoided, use standards technology for construction in areas with high water logging: pumping water into the nearest drainage canal. • Conduct monitoring of water quality in the hand pumps houses located close to the rehabilitating or constructing new Well needs to be undertaken by Contractor on the monthly base (Chapter 10.2, ESMP). In case of exceeding standards, ground water pollution source(s) need to be identified and repaired. 	Contractors implement PIU and PMC monitor implementation	Included in the Contractors budget
Soil contamination	<ul style="list-style-type: none"> • The top soil of about 30 cm depth shall be removed and stored separately during excavation work, and after the construction of the main trunk the same soil shall be replaced on the top, in unpaved areas; • The excess top soil and earth reminded after construction new Well will be used at other project sites or disposed at the places prior approved by local government authorities and The State Committee for Ecology and Environmental protection (Goskomecology); • To minimize soil compaction, movement of all type techniques will be allowed only through identified assess roads; • Contractors will be required to use only authorized carriers with getting all necessary permissions per respective national legislation. 	Contractors implement PIU and PMC monitor implementation	Included in the Contractors budget

Impact	Mitigation measure	Responsibility	Cost
Hazardous materials	<ul style="list-style-type: none"> Used oil shall be collected into containers placed at the concreted sites and disposed to national oil company designated for accepting and treatment of used oils; Refueling vehicles and replacement oils also have to be conducted in special designated and properly equipped places. Emergency facilities have to be at the place for elimination of accident of oil spills. Used batteries have to be collected separately and transferred to the local branches “Cvetmet” for further disposal. 	<p>Contractors implement</p> <p>PIU and PMC monitor implementation</p>	Included in the Contractors budget
Non-hazardous materials	<ul style="list-style-type: none"> Segregation of wastes on recyclable and non-recyclable wastes; Obtain permit on disposal all types of wastes; Selling recyclable wastes to relevant organizations (paper, scraps, accumulators) and timely disposal of non-recyclable wastes to the landfill, determinate by local hokimyat. Providing hydro isolated septic tank for collecting waste waters at the camp sites and bio toilets for workers at the construction sites and timely disposal of waste waters to the local waste water treatment plants. Burning of waste on any construction site is forbidden with the exception of stub and small branches from felled trees and bushes, which is better to be burned in order to avoid pest dissemination; Prohibit discharge of sewage or oily water in surface water courses or soil; Create a safe (sheltered with concrete foundation) storage facility for water. 	<p>Contractors implement</p> <p>PIU and PMC monitor implementation</p>	Included in the Contractors budget
Losses of assets, trees and crops	<ul style="list-style-type: none"> Site cleaning for extension existing and construction new Well should be done exactly within marked area. If impact to any private or public assets is required during the construction, the contractor will inform affected households in advance, fully restore or reimburse losses as agreed with affected persons, and maintain records including visual records of the pre-and post-project state of land and assets; If cutting trees is unavoidable, to compensate losses as indicated in the RPF for this project; Do not use chemicals or burning for removal of vegetation; Greening of Well as part of the project design. 	<p>Contractors implement</p> <p>PIU and PMC monitor implementation</p>	Included in the Contractors budget
Socio-economic resources	<ul style="list-style-type: none"> Inform community in advance about planning works; 	Contractors implement	No cost required

Impact	Mitigation measure	Responsibility	Cost
	<ul style="list-style-type: none"> For construction works which do not require specific skills, hire local Population as much as possible; Conduct explanatory work among workers about the local culture and traditions; Any resettlement impacts that cannot be identified at preparation stage (i.e., are accidental or concern temporary access) will be fully restored and/or compensated by the Contractor. 	PIU and PMC monitor implementation	
Health and safety issues	<ul style="list-style-type: none"> Contractor and PIU will inform Population about anticipated works in the settlement in advance; Contractors will require to develop a Traffic Management Plans with clear indication routes of vehicles' movements, placement special signs, and speeding allowance inside of the settlements and schedule transportation activities by avoiding peak traffic periods; The Traffic Management Plans will be approved by Traffic Police and disclosed to local communities prior commencement of construction works on respective sites; Clear signs will be placed at construction sites in view of the public, warning people of potential dangers such as moving vehicles, hazardous materials, excavations etc. and raising awareness on safety issues. Contractor will ensure safe access to all sidewalks, houses, public buildings etc. throughout the time of construction; Contractor will fully restore or improve all sidewalks, entrances, and points of access to buildings; Contractor will sequence works so as to cause minimal disturbance to residents; All construction sites will be properly lightened and fenced; Development of Site Specific Plans for campsites; After completion works all roads shall be rehabilitated at least up to condition of pre-construction stage. Development Occupation Safety and Health Plan, which covers among others the following topics: usage of PPE, working procedure with hazardous materials (such as asbestos materials, PCBs etc.), training activities and others. The workers have to be provided with appropriate living conditions: safe water supply, washing conditions. 	Contractors implement PIU and PMC monitor implementation	Included in the Contractors budget

Impact	Mitigation measure	Responsibility	Cost
	<ul style="list-style-type: none"> Comply with requirements of Labor Code of Uzbekistan (1998) and standards on work and health safety; Ensure that all site personnel have a regular E&S training and basic level of environmental awareness training; Ensuring all workers are provided with and required to use personal 		
Construction camps	<ul style="list-style-type: none"> Development of Separate Site Specific ESMP for labor/construction camps (or part of general SSESMP). SSESMP for labor/construction camps will describe waste collection and disposal procedure, set up of camp facilities (such as a storage place for construction materials and techniques if any, laundry and toilets, access roads). If washing equipment and vehicle is planning to be conducted at the labor/construction camp's site, appropriate wastewater treatment facilities have to be organized on the camp and respective permissions on water intake and waste water disposal need to be received by Contractor from Goskomecology Provide safe and adequate living conditions for workers, such as dining rooms, toilets, shower rooms etc. Contractors shall instruct all the workers to act in a responsible manner after completion works, construction camps. 	<p>Contractors implement</p> <p>PIU and PMC monitor implementation</p>	Included in the Contractors budget
Impact due to COVID-19	<ul style="list-style-type: none"> In conditions of pandemic risk organize works in accordance with Temporary Sanitarian Norms and Rules (SanN&R) # 0372-20; Ensure proper recording and reporting of any cases of infection and undertaken actions. 	<p>Contractors implement</p> <p>PCU and PMC monitor implementation</p>	Included in the Contractors budget
Archeological heritages: Chance of finding heritage	<ul style="list-style-type: none"> Excavation and other works need to be suspended immediately; Area with possible heritage shall be fenced with fencing tape; A designated focal point from a local administration (khokimiyat) needs to be informed and invited for assessment of potential heritage and undertaken necessary actions; Civil works at the finding place could be recommenced after obtaining permission from the representative of Ministry of Culture of RUz and the focal point. 	<p>Contractors implement</p> <p>PCU and PMC monitor implementation</p>	Included in the Contractors budget

Impact	Mitigation measure	Responsibility	Cost
		Representative from Khokimiyat assist in assessment and undertake necessary actions	
Operation phase			
Impact on air	<ul style="list-style-type: none"> Periodically water down temporary roads on site; Immediately replacing defective equipment and removing it from the work site; No truck movements in inhabited areas between 22:00 and 6:00. 	Suvta'minot/NGO	Included on Suvta'minot/NGO operational costs
Impact on water resources	<ul style="list-style-type: none"> The quality of water supplied for household and drinking needs must comply with the requirements of GOST 2874-82 or regulatory documents of the Republic of Uzbekistan that determine the quality of drinking water. When storing water used for household and drinking needs, reagents, internal anti-corrosion coatings, as well as filtering materials that meet the requirements of the sanitary and epidemiological department of the Ministry of Health of the Republic of Uzbekistan should be used for use in the practice of household and drinking water supply. After the commissioning of this facility, it is necessary to ensure the proper and efficient use of water resources and to prevent water losses and leaks and excessive water consumption - installation, operation and periodic checking of water meters at water users. Conduct awareness program among Population to ensure the sustainable operation of the constructed water supply system. 	Suvta'minot/NGO	Included on Suvta'minot/NGO operational costs
Soil pollution	<ul style="list-style-type: none"> The top soil of about 30 cm depth shall be removed and stored separately during excavation work, and after the construction of the main trunk pipes the same soil shall be replaced on the top, in unpaved areas; The excess top soil and earth reminded after construction new Well will be used at other project sites or disposed at the places prior approved by local government authorities and The State Committee for Ecology and Environmental protection (Goskomecology); 	Suvta'minot/NGO	Included on Suvta'minot/NGO operational costs

Impact	Mitigation measure	Responsibility	Cost
	<ul style="list-style-type: none"> To minimize soil compaction, movement of all type techniques will be allowed only through identified access roads; Contractors will be required to use only authorized carriers with getting all necessary permissions per respective national legislation. Permits for waste disposal should be received from Provincial Goskompriroda. Sludge from HH septic tanks has to be timely disposed at the municipal waste area (located . Untimely disposal of generated sludge and place of its disposal will be provided in environmental permission (limits on sludge disposal) which “Suvoqova” has to get prior commissioning of WTP. 		
Health safety	<ul style="list-style-type: none"> Providing required facilities: storage of SHC in well ventilated rooms; Applying special marking for containers with this agent; 	Suvta'minot/NGO	Included on Suvta'minot/NGO operational costs
Over extraction of ground water	<ul style="list-style-type: none"> Volume of extracted water has not exceed established threshold in 960 m³/day (240 m³/day for each well) 	Suvta'minot/NGO	Included on Suvta'minot/NGO operational costs

8 ENVIRONMENTAL AND SOCIAL MONITORING PLAN

184. Environmental and social monitoring during project implementation should provide information about its actual environmental impacts, social consequences, the effectiveness of mitigation measures and compliance with the ESMP. Such information enables the PIU and the Supervision Consultant to evaluate the success of mitigation measures and compliance of the contractors' activities as part of project supervision and allows corrective action(s) to be implemented in a timely manner, when needed.

185. Environmental monitoring will focus on compliance of various labor and ESHS requirements, implementation of mitigation measures identified in ESMP and SSESMP and corrective measures (if any). Standard checklists will be used to monitor and on compliance issues. The contractors will carry out compliance inspection on a daily basis; the RPIU and CSC will do random supervision of compliance during regular inspections.

186. For the environmental quality, the monitoring plan is presented in Table 4. If as a result of this monitoring, exceedance of compliance and standard are observed, corrective actions will be proposed by the CSC and implemented by the contractors in a timely manner.

187. The Environmental and Social Monitoring Report will focus on the implementation of the ESMP and ARAP. It will (i) verify the compliance to regulations, contract agreements, the ESMP and ARAP, (ii) summarize the monitoring results of environmental quality, capacity building and accidents, (iii) review the implementation of GRM; and (iv) recommend corrective actions or amendments of the ESMP, SSESMP and ARAP.

188. Separately, WB experts will also carry out bi-annual site-specific visits to review compliance. In the case of non-compliance, the PIU would investigate the nature and reason(s) for non-compliance, and a decision would have to be made on what is needed to bring the project into compliance.

8.1 Environmental and Social Reporting

189. Results of environmental performance including monitoring activity have to be properly documented and reported. In accordance with national legislation, each contractor has to perform a log book with information about conducted training on ESHS for workers, book for registration accidents during the civil works, book a complaint log, a daily health log from COVID. In case of conduction instrumental monitoring, original records on results of required instrumental environmental monitoring (air and water quality) also need to be kept in the separate file for records.

190. It is recommended, that prior commencement of the civil works Contractor with assistance of RPIU's Environmental and Social Specialists will develop a format for site inspection to

optimize a process of environmental and sociological supervision. The format may could be in form of checklist with list of mitigation measures to be implemented at the construction sites, their performance status and some explanations as required.

191. The reporting of progress of implementation of the ESMP would be the responsibility of the subproject beneficiaries and such reports would be submitted to RPIU, as relevant monthly. Monitoring reports during project implementation would provide information about key environmental and social aspects of the subproject activities, particularly on the environmental impacts and effectiveness of mitigation measures. Such information enables the PIU and WB to evaluate the success of mitigation as part of project supervision, and allows corrective action to be taken when needed.

Table 14: Environmental Monitoring Plan

Mitigation measures	Parameter to be monitored	Location	Frequency	Responsibility	Standards	Cost
Construction Stage						
Air quality	NOx, SO ₂ , CO, Dust	Construction sites located within settlements	Ones per month	PC will hire certified laboratory to conduct analysis	Hygienic norms. List of Maximum Allowable Concentrations (MACs) of pollutants in ambient air of communities in the Republic of Uzbekistan including Annex 1. SanR&N RUz No.0179-04 ¹⁴	Cost for hiring laboratory to conduct measurements on monthly base are included in PC budget Cost is included in Contractor's budget - 6 measurements for 6 month – 500 USD
Noise level	Noise level	1. Construction sites with demolishing works 2. Living houses located next to construction sites	Per complaints from people on noise disturbance during construction	PC	1. Noise level during the day time should not exceed 55 dB and for night time – 45 dB 2. Noise level should not exceed 3 dB than baseline – 75 dB day time and 73 dB – night time	PC's contract. 1 devise for noise measurements is 200 USD
Vibration	Integrity of houses	Houses and buildings located close to construction site and pipe lying area	Once before construction activity will start	PC implements and PMC monitors	No new cracks	Cost is included in the PC budget
Water quality	1. Visual monitoring of surface water on	Water bodies located next to construction sites	1. Visual during each visit of construction site (at least weekly).	1. PC	1. Absence of oil films on the water bodies surface.	Included in PC's contracts.

¹⁴ National standards comply with international IFC standards

Mitigation measures	Parameter to be monitored	Location	Frequency	Responsibility	Standards	Cost
	existence oil film and turbidity 2. Oil products, dry residual, pH, ammonia, SO ₄ 3. Ground water quality monitoring (from hand pumps)	and water from hand pumps	2-3. Baseline – before construction works and after on monthly base and per complaints from people	2-3. Contract will hire certified laboratory to conduct analysis.	2 If baseline shows non exceeding standards indicated in “Sanitarian requirements for development and approval of maximum allowed discharges (MAD) of pollutants discharged into the water bodies with waste waters”. SanR&N No 0088-99, this standards need to be used. If baseline exceeds standards use baseline indicators for comparison. 3. If baseline shows non exceeding standards indicated in “Drinking water.” O’z’DST 950:2011 – Drinking water. Hygienic requirements and quality control this standards need to be used. If baseline exceeds standards use baseline indicators for comparison.	Cost for hiring laboratory to conduct measurements on monthly base are included in PMO budget - 6 measurements for 6 month is 900 USD
Operation Stage						
Air quality	Noise level	Pump Stations (Wells)	1. Ones per three years as part certification of work places 2. Per complaints from people on noise disturbance due to work of pump station	Suvta’minot/NGO	1. "Sanitarian Norms of allowed level of noise at the construction sites” SanR&N №0120-01. 2. SanR&N No.026709 Sanitarian Rules and Norms on providing allowed noise level into the living building, public building and territory of living areas	Cost is included into the annual budget of Suvta’minot/NGO

Mitigation measures	Parameter to be monitored	Location	Frequency	Responsibility	Standards	Cost
Water quality	Amount of water extracted from the Wells	Wells in “Shaxartepa 1”, “Shaxartepa 2”, “Shaxartepa 3”, and “Shaxartepa 4”	Daily	Suvta’minot/NGO	The volume has not to exceed a threshold established by State Committee on Geology and Mineral Resources – 960 m ³ /day (240 m ³ /day for each well)	Cost is included into the annual budget of Suvta’minot/NGO
Water quality	Monitoring in accordance with 13.060.20. Drinking water. O’z DST 950:2011 (instead of O’z DST 950:2000) – Drinking water. Hygienic requirements and quality control.					Cost is included into the annual budget of Suvta’minot/NGO

9 INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

192. One of the main goals of the ESMP is to facilitate the participation of all stakeholders and local communities at all stages of the project cycle: from the pre-construction phase and construction activities to its operation. In this regards, a consultation was held in the project district to capture the stakeholders' opinions about the project, and agree on the project activities.

193. Prior to the public consultation meeting was conducted with internal and external stakeholders, such as representatives of the provincial and districts level committee on Ecology and Environment Protection, district Khokimiyats and makhallas, land cadaster committee, district water supply agency (Suvoqova) and district energy entities.

194. Public consultation (PC) was conducted on September 8, 2022 at the Conference Room of the MCA Shaxartepa Qo'shtepa district. Due to the Covid-19 Quarantine restrictions consultations were carried out in accordance with the national sanitary norms and regulations 15. Representatives of the settlements Shaxartepa, representatives of local administration, " Royal dizayn loyiha " LLC participated in the meeting. Grievance Redress Mechanism and WB requirements were introduced on public disclosure process.

195. The participants were explained that the project currently on the detail design stage. If any changes in the project design will take place, the environmental assessment will be revised per new circumstances and new round of public consultation will be conducted with affected people.

196. During the Public consultation people were requested to give their opinions and suggestions. In addition, participants were provided with contact information of PIU environmental specialist for further suggestions and questions.

197. The stakeholders and consultation participants were informed that Contractor would install an informative banner with information on project objectives, activities, implementers, schedule of construction works, deadlines, contact information and logbooks for complaints and suggestions on each construction site.

198. Among 12 participants from Shaxartepa settlement surrounding the project site, 5 were females. The main issues raised during the public consultation in regards environmental issues are presented in the Table 15:

¹⁵ Temporary Sanitarian Norms and Rules (SanN&R) # 0372-20 "On organization of performance of state agencies and other organizations, commercial entities in limited measures condition due to pandemic COVID-19»

Table 15. Issues Raised During Public Consultation

#	Issues raised	Answer provided
1	Is it possible to start construction as soon as possible?	Construction will begin after the completion of the necessary procedures in paperwork. We are trying to speed up the process.
2	Can community members participate during the construction phase?	Yes, they can, by contract
3	is 1 WDF enough to whole MCA ?	Yes, it will cover all MCA

199. The participants noted the importance and high expectations from this project as the local residents of MCA Shaxartepa will be provided with water for household, drinking and domestic needs, which they currently do not have.

200. This ESMP incorporates comments and suggestions from all concerned stakeholders. The final ESMP report will be made available on local language on RIDP official website and in English on WB's website.

201. As part of information disclosure, the final version of ESMP will be translated into local language and will be delivered to local communities and relevant authorities (hokimiyats). The final ESMP report will be sent to Ecology and Environment Protection Committee in Farg'ona region for further use during the construction and operation phases.

202. Future consultations for project stakeholders shall follow as mentioned below.

- (i) During detailed design stage, in case of any major changes in the design/alignment/location, the ESMP will be updated accordingly. The PC will hold at least one public consultation meeting at early stages to solicit perceived impacts, issues, concerns and recommendations from affected communities.
- (ii) Prior to construction, the PC will conduct an intensive information, education and communication campaign (IEC) to ensure the sufficient level of awareness/information among the affected communities regarding the upcoming construction, its anticipated impacts, the grievance redress mechanism, contact details and location of the PC, and status of compliance with the Government's environmental safeguard requirements. Among others, the information banners containing information about the subproject, implementation schedule and contact details of the executing agency and PC will be installed at the strategic locations within the subprojects' main areas of intervention. The grievance redress procedure and details will be posted at the offices of the district branches of PC, PIU and district hokimiyat.

10 GRIEVANCE REDRESS MECHANISMS

203. The PIU has developed an appeal mechanism based on the legislation of the Republic of Uzbekistan

204. RIDP is implementing an information system for managing complaints, including citizens' complaints – the Grievance Redress Mechanism (GRM).

205. The main purpose of the RIDP GRM is the process of obtaining prompt, objective information, evaluating and reviewing appeals (applications, proposals, complaints, requests, positive feedback) at all stages of the project implementation, which are received from citizens / beneficiaries to further improve their work. Strengthen communication with project beneficiaries and provide channels for feedback, as well as identify and solve problems, increase transparency and accountability.

206. The dissemination of information about the GRM is carried out through the following activities:

- conducting a presentation by PIU specialists to local authorities, (DH);
- at public hearings, trainings conducted by RIDP staff. After the training, RIDP Qishloq facilitators and regional PIU specialists on ESS conduct a presentation;
- Banner on site visibly displaying contact information for all GRM channels in the case of citizen questions or complaints;
- the official website has a section of the GRM.

207. All appeals and complaints of citizens that are received within the framework of RIDP are sent to a single system for further processing and control.

Channels for submitting requests.

<p>1. Helpline: + 99871 207-84-07 2. Social networks (Facebook-QIRL qishloq infratuzilmasini rivojlantirish loyihasi); telegram - +99899 225-63-32 3. RIDP website: www.ridp.uz 4. Oral or written appeals, Received in the course of the project by contractors, local authorities; 5. Incoming correspondence on purpose in RIDP reception; 6. Incoming correspondence on to the GRM email address: ridp@mineconomy.uz 7. PIU Office phone.: + 99871 207-84-07 (reception), Regional safeguard specialist - +998 91 668 15 05 8. PIU address: 4, Chilanzar street, Tashkent, Republic of Uzbekistan. 9. There is a box for suggestions and complaints in the MCA building</p>	<p>1. Requests are recorded in the log incoming correspondence of the GRM and they are accepted for consideration provided that the following data is reported:</p> <ul style="list-style-type: none"> • last name, first name, patronymic; • registration and residence address or phone number; • content of the appeal; • other background information <p>1. In cases where requests have been received in the absence of any of the above data, it is recorded in the incoming mail log correspondence of the GRM and is notified the sender, and the results of the appeal will be published in the local media for example, on the RIDP website.</p> <p>2. Appeals can be submitted anonymously. Confidentiality must be provided in all cases, including number, when the identity of the person submitting the application the treatment is known, in order to avoid</p>
---	--

208. The person who sent the request will receive a notification in which the Social Safeguards specialist will inform by phone or through other channels of the GRM:

1. Full name of the contractor (project employee) to whom the request was sent
2. Terms of execution (minimum 15 days, maximum 30 days from the date of registration)
3. The terms and the course of actions are determined in accordance with the instructions of the GRM RIDP on working with appeals.

209. The notification will be registered in the outgoing mail log. Social Safeguards Specialist. The GRM will assist the applicant at all stages of the consideration of their application and ensure that their application is properly considered.

210. If the citizen/beneficiary is not satisfied with the decision received as a result of the consideration of the application, he/she has the right to appeal. The appeal is considered by the RIDP for consideration of appeals.

211. After the appeal review, the citizen/beneficiary who is dissatisfied with the decision received as a result of the review has the right to appeal the decision in court.

Annexes

Annex 1: Conclusion (No. 991 of 08/08/2022) of the State Environmental Expertise



O'ZBEKISTON RESPUBLIKASI EKOLOGIYA VA ATROF-MUHITNI MUHOFAZA QILISH
DAVLAT QO'MITASI
FARG'ONA VILOYAT EKOLOGIYA VA ATROF-MUHITNI MUHOFAZA QILISH
BOSHOQARMASI

150105, Farg'ona shahar Yu.Sakkokiy 39/41 tel:+998 (73) 244-62-19, faks 244-61-80
Veb-sahifa: <http://www.ecofargona.uz>, <http://eco.gov.uz> elektron pochta: fargona@uznature.uz

DAVLAT EKOLOGIK EKSPERTIZA XULOSASI

Obyekt:	Qo'shtepa tumani Shahartepa mahalla fuqarolar yig'ini aholisini ichimlik suv ta'minoti tizimini yaxshilash maqsadida Shahartepa mahalla fuqarolar yig'ini xududida bir dona ichimlik suv qudug'i qazish hamda 20,1 km masofada ichimlik suv tarmog'i tortish uchun "Atrof muhitga ta'sir to'g'risida ariza" (ATTA) loyihasi
Buyurtmachi:	"ROYAL DIZAYN LOYIHA" MCHK
INN	300898378
Toifasi:	O'z.Res. VM. 07.09.2020 y. 541-qaror 1-ilova 3-toifa
Loyihachi:	"FERGANA EKO PROYEKT" MCHK
Ekspert:	Sultonqo'ziyev Jamoldin -

Tashkilot: "ROYAL DIZAYN
LOYIHA" MCHK
Rahbar: NE'MATOV ORIF
OLIMOVICH

"Davlat ekologik ekspertizasi markazi" davlat unitar korxonasi Farg'ona viloyati filialiga taqdim qilingan ushbu obyekt bo'yicha tayyorlangan "Atrof muhitga ta'sir to'g'risida ariza" (ATTA) loyihasi O'zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 7-sentyabrdagi 541-sonli "Atrof muhitga ta'sirini baholash mexanizmini yanada takomillashtirish to'g'risida"gi qarori 1-ilovasiga asosan atrof muhitga ta'sir ko'rsatishi yuzasidan 3-toifa 7-bandiga mansub (past darajada xavfli) faoliyat turiga kiradi.

"Atrof muhitga ta'siri to'g'risida ariza" (ATTA) loyihasini ishlab chiqishdan maqsad, mo'jallanayotgan faoliyat turini joylashtirishni ekologik nuqtai nazardan asoslash, atrof muhit xolatini taxlil qilish, amalga oshirilishi lozim bo'lgan ekologik talab va tadbirlarni aniqlashdan iborat.

Obyekt uchun asos: O'zbekiston Respublikasi Prezidentining 2020-yil 25-noyabrdagi "Jahon bankining Xalqaro taraqqiyot uyushmasi va Osiyo infratuzilmaviy investitsiyalar banki ishtirokida "Qishloq infratuzilmasini rivojlantirish" loyihasini amalga oshirish chora-tadbirlari to'g'risida"gi PQ-4898-sonli qarori, Qo'shtepa tumani hokimining 2021-yil 6-sentyandagi 204-b-sonli yig'ilish bayoni ijrosini ta'minlash.

Mahalla fuqarolar yig'ini xududida maktab, bolalar bog'chasi, qishloq oilaviy poliklinikasi kabi kommunal obyektlar joylashgan. Asosiy faoliyati: chorvachilik, dehqonchilik, kichik biznes. Qishloqning ayollar yarmi asosan uy ishlari bilan shug'ullanadi.

Obyekt shimol, sharq, janub hamda g'arbdan – Shahartepa mahalla fuqarolar yig'ini hududi bilan chegaralangan;

Eng yaqin aholi suv inshootining janubiy tomonida, suv ta'minoti tizimi chegaralaridan 20,0 m dan ortiq masofada joylashgan.

Eng yaqin yer usti suv oqimi obyektning janubiy tomonida, Katta Farg'ona kanali bo'lib, obyekt chegarasidan 2250,0 metrdan ortiq masofada joylashgan.

Shahartepa mahalla fuqarolar yig'ini aholisini ichimlik suv ta'minoti tizimini yaxshilash maqsadida bir dona ichimlik suv qudug'ini rekonstruksiya qilish, bir dona elektr tejamkor suv ko'tarish nasosi, bir dona yangi 25 m³ hajmli suv minorasi, TP (transformator) o'rnatish va elektr xavo liniyasi tortish, bir dona elektr boshqaruv shiti (koskad), zamonaviy elektr va suv xisoblagich o'rnatish, suvni zararsizlantirish binosi (OB-50 rusumli bakteriosid qurilmasi o'rnatish) qurish hamda 20,1 km masofada ichimlik suv tarmog'i tortish rejalashtirilgan. Qurilish ishlarida 20 kishi bir kunda 8 soat, bir yilda 90 kun ishlashi mo'ljallangan.

Suv olish inshootining umumiy maydoni - 900 m². Shundan qurilish maydoni - 27,0 m², qattiq qoplamali maydoni - 480,0 m², obodonlashtirish maydoni - 393,0 m². Loyihalashtirilgan quduqlarga xizmat ko'rsatish uchun zarur bo'lgan ishchilar soni - 1 kishi.

Elektr ta'minoti: Texnik shartlarga muvofiq, loyihalashtirilgan obyektning elektr ta'minoti 35/6 kV "Shahartepa" podstansiyasidan amalga oshiriladi. KТП tipidagi 63 kVA quvvatga ega transformator podstansiyasi o'rnatish hamda 165 metr masofada 6 kV elektr uzatish liniyasi tortish rejalashtirilgan.

Chekko'prik mahalla fuqarolar yig'ini hududida joylashgan xonadonlar soni - 925 ta, aholi soni - 4600 nafar. Qoramollar soni - 1580 bosh, qo'y va echlijar soni - 430 bosh. Umumiy suv sarfi yiliga 296,56 m³ ni tashkil etadi.

Qurilish va rekonstruksiya davrida ishchilarni ichimlik ehtiyojlari uchun 150,0 m³/y, xududga suv sepish uchun 5,38 m³/y, ko'kalamzor maydonni sug'orish uchun 2,55 m³/y suv sarflanishi ko'zda tutilgan.

Loyihaviy ishlarni bajarish uchun kavlash, surish, tekislash ishlari ekskavator yordamida bajariladi. Ekskavator ishlashi uchun dizel yoqilg'isi ishlatiladi. Ishlarini amalga oshirish davrida atmosfera havosiga avtomobil dvigatellarini 0,288 tonna dizel yoqilg'isi bilan ishlashi vaqtida atmosfera havosiga 0,0288 tn uglerod oksidi, 0,01152 tn azot oksidi, 0,0011 tn aldegidlar, 0,00576 tn oltingugurt gazi, 0,004464 tn qurum, oz miqdorda benzaprien kabi zararli moddalar tashlanishi kutiladi. Bundan tashqari payvandlash uskunalaridan foydalanish natijasida 0,0009738 tn temir

oksidi, 0,0001062 tn marganes birikmalari, polietilen quvurlarni payvandlashda 0,001848 tn uglerod oksidi, 0,004990 tn uksus kislotasi, surish-tekislash ishlari natijasida 0,002522 tn noorganik chang kabi zararli tashlamalar tashlanishi kutildi.

Qurilish va rekonstruksi davrida ishchilarni ish jarayonidan 1,0 tn qattiq maishiy, paybandlash jarayonida 0,027 tn elektrod chiqindisi hosil bo'lishi kutiladi. Xosil bo'lgan chiqindilar sanitar servis korxonalarini bilan shartnoma asosida tumandagi markaziy chiqindixonaga tashib ketiladi.

Obyektni faoliyati davomida tabiiy muhitni muhofaza qilish bo'yicha quyidagi ekologik chora-tadbirlar bajarilsin:

Qurilish ishlari amaldagi SanPiN talabi va qoidalariga amal qilinsin;

Qurilish ishlari tegishli mutasaddi tashkilotlar ruxsatnomasi olingan so'ng amalga oshirilsin;

Ishlab chiqarish davrida atrofdagi ko'p yillik va manzarali daraxtlarga ziyon yetkazilmasin hamda kesilishiga yo'l qo'yilmasin;

Buyurtmachiga:

1. Obyektda qurilish ishlarini amalga oshirish vaqtida uning atrofidan o'tgan (yer osti va yer usti) muhandislik (gaz, elektr, suv, yo'l, aloqa va boshqalar) tarmoqlarining muhofaza mintaqalari saqlanishi shart.

2. O'zbekiston Respublikasi Vazirlar Mahkamasining 2017-yil 27-iyundagi 430-sonli ["Er osti suvlaridan foydalanish sohasidagi faoliyatni yanada tartibga solish chora-tadbirlari to'g'risidagi nizomni tasdiqlash haqida"gi qaroriga asosan ishlar olib borilishi shart.](#)

3. Ichimlik suvi sifatiga muvofiqligini aniqlash maqsadida maxsus laboratoriyalar tomonidan quduq suvining kimyoviy tahlillarini o'tkazish shart.

4. Ochiq suv xavzalari, irrigatsiya tarmoqlari, soy qirg'oq bo'yi muxofaza mintaqalarini saqlash buyurtmachiga yuklatiladi;

5. Obyekt uchun muhofaza mintaqasi tashkil etilsin.

6. Yer ishlarini bajarishdan avval yer osti va yer usti kommunikatsiyalariga ta'luqli bo'lgan mutasaddi tashkilot va idoralardan tegishli ruxsatnomalar olinsin va kelishilsin. Tarmoq tortish jarayonida xosil bo'lgan tuproq tarmoq tortilgandan keyin o'z joyiga mustaxkalansin;

7. Obyekt qurilishi tugatilgandan so'ng, atrof-muhitni obodonlashtirish, ko'kalamzorlashtirish va manzarali daraxt ko'chatlarini o'tqazish ishlarini ishlab chiqiladigan ishchi loyixalarda ko'zda tutilsin hamda ishlarni tumani DSENM belgilagan talab va amaldagi qoidalarga asosan ular bilan kelishilgan xolda amalga oshirilsin.

8. Qurilish davrida obyekt xududida mavjud bo'lgan manzarali va ko'p daraxtlarga zarar yetkazilmasin. (O'zbekiston Respublikasi Prezidentining 2019-yil 30-oktyabrdagi "2030 yilgacha bo'lgan davrda O'zbekiston Respublikasining atrof muhitni muxofaza qilish konsepsiyasini tasdiqlangan haqida"gi PF-5863 sonli farmoyishiga asosan daraxtlarni kesish taqiqlanadi).

9. O'zbekiston Respublikasi Vazirlar Mahkamasining 2019-yil 11-dekabrdagi 981-sonli [qaroriga asosan](#) "O'zbekiston Respublikasi hududidagi suv ob'ektlarining suvni muhofaza qilish va sanitariya-muhofaza zonalarini belgilash tartibi to'g'risida Nizomni tasdiqlash haqidagi" qarori ijrosini ta'minlash buyurtmachiga yuklatiladi.

10. O'zbekiston Respublikasi Suv va suvdan foydalanish to'g'risidagi qonuni 351-modda.

Suv iste'molchilarining majburiyatlari

Suv iste'molchilari:

suv resurslaridan oqilona foydalanishi, suvning maqsadsiz iste'mol qilinishiga yo'l qo'ymasligi, suvni tejab sarflash, suvlarning sifatini tiklash va yaxshilash to'g'risida g'amxo'rlik qilishi;

belgilangan suv olish limitlari va suv iste'moli qoidalariga rioya etishi;

suvni maxsus iste'mol qilishda qonun hujjatlarida belgilangan tartibda ruxsatnomani rasmiylashtirishi;

ifloslantiruvchi moddalar mavjud bo'lgan oqindi suvlarni suv ob'ektlariga oqizishni tamomila tugatish chora-tadbirlarini ko'rishi;

boshqa suv iste'molchilari va suvdan foydalanuvchilarning huquqlari hamda qonuniy manfaatlari buzilishiga, shuningdek suv ob'ektlariga, xo'jalik ob'ektlari va tabiiy resurslarga (erlar, o'simlik va hayvonot dunyosi, foydali qazilmalar va boshqalarga) zarar yetkazilishiga yo'l qo'ymasligi;

suv olish joylarini suvni boshqarish va hisobga olish vositalari bilan jihozlashi, ichki suv ob'ektlari va inshootlarini texnik jihatdan soz holatda saqlashi, ulardan foydalanishning belgilangan qoidalariga rioya etishi;

olinayotgan suv miqdori hisobini yuritishi va suvni maxsus iste'mol qilish uchun ruxsatnoma bergan organlarga zarur axborotni taqdim etishi;

suv resurslaridan foydalanganlik, shuningdek suvni yetkazib berish bo'yicha xizmatlar va ko'rsatilgan boshqa suv xo'jaligi xizmatlari uchun to'lovlarni o'z vaqtida shartnomaviy asosda to'lashi;

suvni tejash chora-tadbirlarini ko'rishi;

suvlarni muhofaza qilish bo'yicha belgilangan tartibda kelishilgan texnologiya, o'rmon-melioratsiya, agrotexnika, gidrotexnika, sanitariya tadbirlari va boshqa tadbirlarni amalga oshirishi;

suvlarning bug'lanishi, ifloslanishi va kamayib ketishining oldini olish hamda ularni bartaraf etish chora-tadbirlarini amalga oshirishda o'zlariga xizmat ko'rsatuvchi suvdan foydalanuvchilarning, mahalliy davlat hokimiyati organlarining talabiga ko'ra ishtirok etishi, shuningdek yer usti va yer osti suvlari to'planadigan maydonlarning ifloslanishiga yo'l qo'ymasligi;

suv obyektlarining suvni muhofaza qilish zonolari, sohil bo'yi mintaqalari va sanitariya muhofazasi zonalarini muhofaza qilish va ulardan foydalanish tartibi hamda shartlariga rioya etishi;

suvlardan foydalanish va ularni muhofaza qilish ustidan davlat nazoratini amalga oshiruvchi organlarning vakillarini o'z suv xo'jaligi ob'ektlariga belgilangan tartibda kiritishi hamda ularga zarur axborotni taqdim etishi;

suvlarning va suv ob'ektlarining holatiga ta'sir etadigan avariya va boshqa tabiiy hamda texnogen xususiyatli favqulodda vaziyatlar yuzaga kelganligi to'g'risida o'zlariga xizmat ko'rsatuvchi suvdan foydalanuvchilarni, mahalliy davlat hokimiyati organlarini o'z vaqtida xabardor qilishi, shuningdek ularning oqibatlarini bartaraf etish bo'yicha ishlarni amalga oshirishda ishtirok etishi;

Suv iste'molchilarining zimmasida qonun hujjatlariga muvofiq boshqa majburiyatlar ham bo'lishi mumkin.

13. "Ekologik ekspertizasi to'g'risida"gi qonunining 9-moddasi, 3-bandiga muvofiq ekologik ekspertizasi buyurtmachi yuqorida ko'rsatilgan ekologik talablari bajarishi shart.

14. Mazkur davlat ekologik ekspertizasi xulosasida ko'rsatilgan ekologik talablar buyurtmachi tomonidan bajarilishi shart. Agarda buyurtmachi davlat ekologik ekspertizasi xulosasida ko'rsatilgan talablarga rioya etmagan taqdirda O'zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 7-sentyabrdagi "Atrof muxitga ta'sirni baxolash mexanizmining yanada takomillashtirish to'g'risida"gi № 541-sonli qarorga asosan 7-bob, 57-bandiga asosan xulosani amal qilishini to'xtatishi belgilab qo'yilgan;

Yuqorida ko'rsatilgan ekologik talablarni bajarish sharti bilan "Davlat ekologik ekspertizasi markazi" DUK Farg'ona viloyati filiali tomonidan Qo'shtepa tumani Shahartepa mahalla fuqarolar yig'ini aholisini ichimlik suv ta'minoti tizimini yaxshilash maqsadida Shahartepa mahalla fuqarolar yig'ini xududida bir dona ichimlik suv qudug'i qazish hamda 20,1 km masofada ichimlik suv tarmog'i tortish uchun "Atrof muhitga ta'sir to'g'risida ariza" (ATTA) loyihasini amalga oshirishga ijobiy xulosa beradi.

O'zbekiston Respublikasi "Ekologik ekspertiza to'g'risida"gi qonunning 22-moddasiga binoan ushbu obyektning ekologik talablarga muvofiqligi xususida Davlat ekologik ekspertizasining bergan xulosasi, berilgan kundan e'tiboran 3 yil mobaynida yuridik kuchga ega.

Xulosada ko'rsatilgan shartlar bajarilmagan va yuqorida ko'rsatilgan faoliyatdan tashqari boshqa qo'shimcha qurilish va faoliyat turlari tashkil etilgan taqdirda ushbu ekologik ekspertiza xulosasi o'z kuchini yo'qotadi.

Ushbu davlat ekologik ekspertizasi xulosasida berilgan ekologik talablarni bajarilishi nazorati Farg'ona viloyati Ekologiya va atrof-muhitni muhofaza qilish boshqarmasi Qo'shtepa tumani bo'limiga yuklatiladi.

Boshqarma boshlig'i

B. Jumanov

Baj.: Sultonqo'ziyev Jamoldin -
Tel. 73-244-64-94

Хулоса рақами 991
Хулоса санаси 08.08.2022
Текшириш учун



Annex 2: Consultations materials

MINUTES OF PUBLIC DISCUSSION

Ilova-11. Atrof-muhit va ijtimoiy boshqaruv rejasi nazorat ro'yxati jamoatchilik muhokamasi

O'tkazilgan joyi: Farg'ona viloyati, Qo'shtepa tumani Shahartepa MFY binosi

Sana "13" oktyabr 2022 yil

"Qishloq infratuzilmasini rivojlantirish" loyihasi doirasida Farg'ona viloyati Qo'shtepa tumani Shahartepa MFY «Aholini ichimlik suvi bilan ta'minlash uchun suv ta'minoti tizimlarini qurish» subloyihasi bo'yicha Atrof-muhit va ijtimoiy boshqarish rejasi nazorat ro'yxati jamoatchilik muhokamasi to'g'risida

Jamoatchilik muhokamasi: Atrof-muhit va ijtimoiy boshqaruv rejasi nazorat ro'yxati

Tayyorlandi: LAOG mutaxassislari, «Royal dizayn loyiha" MCHJ

Taqim etdi: LAOGning Hududiy atrof-muhit va ijtimoiy himoya mutaxassisi D.Shahobidinov

Ishtirokchilar: LAOG mutaxassislari, Shahartepa MFY fuqarolari va V-MTG raisi va a'zolari, Qo'shtepa tuman obodonlashtirish boshqarmasi, Toza hudud DUK Qo'shtepa tuman filiali, tuman ekologiya inspeksiyasi, Qishloq muhandislar va hududiy atrof-muhit va ijtimoiy himoya mutaxassisi.

Yig'ilishni Qo'shtepa tuman hokimining yordamchisi Mirzoxid Xakimov ochib berdi va yig'ilish qatnashuvchilari bilan tanishtirdi. So'ngra, AMIBRNR haqida kirish so'z qilinib, LAOG ning Hududiy atrof-muhit va ijtimoiy himoya mutaxassisi D.Shahobidinovga so'z berdi.

LAOG ning Hududiy atrof-muhit va ijtimoiy himoya mutaxassisi D.Shahobidinov tomonidan Shahartepa MFYda "Aholini ichimlik suvi bilan ta'minlash uchun suv ta'minoti tizimlarini qurish" subloyhasining Atrof-muhit va ijtimoiy boshqarish rejasi nazorat ro'yxati (AMIBRNR) hujjatining jamoatchilik muhokamasi taqdimoti o'tkazildi.

Unga ko'ra, amalga oshiriladigan subloyiha haqida ma'lumotlar (manzil, maydoni, loyihaning umumiy ko'rinishi), Jahon Banki va O'zbekiston Respublikasi atrof-muhitni muhofaza qilish qonunchilik talablari, subloyihaning ekologik va ijtimoiy ta'sirlari va qurilish jarayonlari hamda foydalanishga topshirilgandan so'ngi faoliyati davomida atrof-muhit, inson salomatligi va ularning mol-mulkiga ta'sirini oldini olish choralarini hamda monitoringi, loyihaga aloqador bo'lgan taraflarni va zifalari, murojaatlar bilan ishlash va nazorat qilish mexanizmlari va boshqa muhim jihatlari haqida to'xtalib o'tildi.

Shuningdek, «Royal dizayn loyiha" MCHJ rahbari I.Inomjonov tomonidan Shahartepa MFYda Aholini ichimlik suvi bilan ta'minlash uchun suv ta'minoti tizimlarini qurish" subloyihasi loyiha hujjatlari aholi bilan birga o'rganilib tayyorlangani, atrof muhitga va aholiga nojo'ya ta'sirlar mavjud bo'lmasligi, suv inшоati tarmoqlari belgilangan loyiha asosida qurilishini ta'kidlab o'tdi.

Yig'ilish davomida Shahartepa MFY V-MTG raisi A.Abdullaev so'zga chiqdi. Loyiha doirasida olib borilayotgan ishlar shaffoflik tamoyiliga asoslanganini aytib o'tdi. Bundan tashqari, loyiha mutaxassislari tanlangan subloyihani har tomonlama tahlil etganliklarini alohida gapirdi.

Aholi Loyiha tashkilotchilaridan minnatdorligini va qurilish ishlari boshlanishini kutayotganliklarini aytib o'tdi.

O'z o'rnida, Loyiha rahbariyati tomonidan MFY aholisi ham jamoatchilik nazorati jarayonida faol qatnashishga chaqirildi.

Shu bilan birga, tegishli murojaatlarni ko'rib chiqish kanallari orqali shikoyatlar va ma'lumotlarni o'rtoqlashish mumkinligi aytildi.

Taqdimot so'ngida ishtirokchilarning savollar bilan murojaati:

Savollar	Javoblar
Ushbu loyihaning qurilish ishlari qachon amalga oshiriladi?	Quruvchini tanlash uchun loyiha hujjatlari tenderga qo'yilgan, tender paketlari 22-oktyabr kuni ochiladi.
Qurilish ishlarida aholi vakillari xashar yo'li bilan qatnasha bu'ladimi?	Yo'q, faqatgina monitoring qilib borishlaringiz mumkin.
Bitta suv inшоati butun maxallaga suvni etkazib bera oladimi?	Ha, loyihalashtirish jaroyonlaridagi gidravlik hisob-kitobiga ko'ra suvni barchaga etkazib bera oladi.

Taklif va mulohazalar: Shahartepa MFY V-MTG raisi A.Abdullaev hukumat tomonidan amalga oshirilayotgan ishlar va unga ma'sul etib tayinlangan LAOG faoliyatiga Shahartepa MFY aholisi tomonidan ishonch bildirilayotganligi va sublohinani amalga oshirilishida jamoat nazorati o'tkazishda bosh qosh bo'lishi haqida so'zlashdi

Hududiy atrof-muhit va ijtimoiy himoya mutaxassisi:



D. Shahobidinov

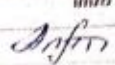


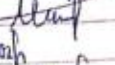
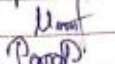
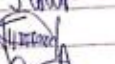
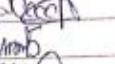




Qishloq muhandisi:



A. Nabijonov

AMIBR nazorat ro'yxati, jamoatchilik muhokamasida qatnashganlar ro'yxati.

Shahartepa MFY

No	F.I.SH	imzo
1	Atakurov U	
2	Abdullaev A B-MTG	
3	Hijroboeva M	
4	Ermatova I	
5	Bozataeva M	
6	Sulaymonov B.	
7	Karimov Muzaffar Korumipgan	
8	Diyozov P	
9	Turdiyev K.	
10	Abdusattorov A	
11	Bozataeva X.	
12	Umarova M	



Annex 3: Environmental Screening Procedure

1- SHAKL

Benefisiar tomonidan to'ldiriladi (ko'makdosh hamkorlar / qishloq fasilitatorlari, qishloq muhandislari yordamida mahalla taraqqiyot guruxi a'zolari tomonidan)

Sana: "5" *1000* 2021 yil

Manzil: Farg'ona viloyati Qo'shtepa tumani Shaxartepa MFY.

- Loyiha nomi: *Qishloq infratuzilmasini rivojlantirish loyihasi*
- Loyihaning qisqacha tavsifi quyidagilarni o'z ichiga oladi:

• loyihaning mohiyati	- Toza ichimlik suvi ta'minoti
• Qiymati	- 3550 000 000 (uch milliard besh yuz ellik million so'm)
• jismoniy hajmi	- Shaxartepa MFY aholisini ichimlik suvi ta'minotini yaxshilash uchun Shaxartepa MFY ning "Do'stlarobod" ko'chasida 1 dona toza ichimlik tik suvi qudug'ini qazish, 1 dona 25 m ³ hajmdagi bosimli suv minorasini o'rnatish, 1 dona 63 kVt TP transformatorini o'rnatish, loyiha asosida suv ko'tarish nasosini suv qudug'iga tushirish, Suv qudug'I va suv minorasining sanitar himoya zonasini qurish, bio-bak uskunasi o'rnatish, jami 23 km D 110 mm, 12 km uzunlikda D 63 mm 11 km uzunlikda ichimlik suvi tarmog'ini tortish.
• Maydoni	- 23 km.
• joylashgan joyi	- Farg'ona viloyati Qo'shtepa tumani Shaxartepa MFY
• mulkga eglik qilish	- "Farg'ona suv ta'minoti" MCHJ, Qo'shtepa tumani filiali
• olib boriladigan ishlar davomiyligi	- 18 oy
• kengaytirish yoki yangi qurish rejalari	- Shaxartepa MFY ning "Do'stlarobod" ko'chasida 1 dona toza ichimlik tik suvi qudug'ini qazish, 1 dona 25 m ³ hajmdagi bosimli suv minorasini o'rnatish, 1 dona 63 kVt TP transformatorini o'rnatish, loyiha asosida suv ko'tarish nasosini suv qudug'iga tushirish, Suv qudug'I va suv minorasining sanitar himoya zonasini qurish, bio-bak uskunasi o'rnatish, jami 23 km D 110 mm, 12 km uzunlikda D 63 mm 11 km uzunlikda ichimlik suvi tarmog'ini tortish.

Qurilish yoki ekspluatatsiya bosqichlarida loyiha quyida keltirilgan atrof-muhit parametrlariga ta'sir ko'rsatadimi? Qaysi davrlarda ta'sir qilishi va engillashtiruvchi choralarini ko'rish zarurligini ko'rib chiqib to'ldiring.

Atrof - muhitga daxldor komponentlar	Qurilish bosqichi	Foydalanish bosqichi	Engillashtirish choralari
Er va er osti muhiti, chiqindi			
Er va tuproqning tanazzulga uchrashi: loyiha er qazishni o'z ichiga oladimi?	Ha	Yo'q	<ul style="list-style-type: none"> • qurilishda soz texnikalardan foydalanish; • texnikalarni ishlash

			jarayonida yerni unumdor qatlamligiga zarar yetkazmaslik choralarini ko'rish.
Qattiq, shu jumladan toksik chiqindilar hosil bo'ladimi?	Ha	Yo'q	• Chiqindilarni joylashtirish, saqlash, tashish va utilizatsiya qilish choralarini ko'rish.
Tuproq va er osti suvlarining ifloslanishi ?	Ha	Yo'q	• qurilishda soz texnikadan foydalanish; • hududda texnikalarning yoqilg'i moylarini almashirilishini taqiqlash.
Atmosfera havosi			
Loyiha davomida atrof-muhitga ifloslantiruvchi chiqindilar tashlanadimi ?	Ha	Yo'q	• qurilish jarayonida changni bostirish • qurilish maydonchasiga suv sepish;
Suv			
Suv miqdori: loyiha davomida suvdan foydalaniladimi?	Ha	Ha, ichimlik maqsadida	• suvdan maqsadli foydalanish va uning limitlariga rioya qilish.
Suv sifati/ifloslanish: loyiha er usti suvlarining ifloslanishiga ta'sir qiladimi?	Yo'q	Yo'q	-
O'simlik dunyosi			
Loyiha davomida o'simlik dunyosiga ta'siri?	"Ha" agar loyiha hududida daraxtlar mavjud bo'lsa.	Yo'q	• loyiha hududagi daraxtlarni maksimal saqlash yoki ko'chirish choralarini ko'rish; • o'simlik dunyosiga zarar yetkazmaslik.
Ijtimoiy-iqtisodiy muhit			
Loyiha inson salomatligining yomonlashishiga, mehnat xavfsizligi va loyiha hududi yaqinida yashovchi aholining bezovtalanmasligini ta'minlay oladimi?	Ha	Yo'q	• qurilish vaqtida shovqin darajasini belgilangan me'yor darajasidan oshirmaslik; • majburiy mehnat va bolalar mehnatidan foydalanmaslik; • mehnat xavfsizlik qoidalariga to'liq rioya qilish.
Mazkur loyiha mahalliy aholining atrof-muhit bo'yicha muammo va mulohazalarini inobatga olish uchun jamoaviy maslahatlarni talab etadimi ?	Ha	Yo'q	• loyihaning skirining ishlari to'liq tugatilganidan so'ng, aholi bilan jamoaviy maslahatlashuv ishlarini olib borish.
Ijtimoiy ta'sirlar?	Ha	Yo'q	• Quruvchilarni havfsizlik bo'yicha ko'rsatmalar bilan ta'minlash; • qurilish hududiga kirish joyiga qurilish ishlari amalga oshirilayotganligini bildiruvchi belgilar o'rnatish; • quruvchilarni maxsus kiyimlarda ishlashiga va ish vaqtiga rioya qilish, majburiy mehnat, bollar mehnatidan
			foydalanmaslik.

Imzolandi:

Vaqtinchalik mahalla taraqqiyot guruhi a'zolari

Qishloq muhandisi

A.Abdullayev
(f.l.sh)

A.Nabijonov
(f.l.sh)



2- SHAKL

(viloyat AMIH mutaxassisi tomonidan ekologik skrining cheklist natijalari asosida to'ldiril)

Sana: «05» noyabr 2022 yil

Manzil: "Shahartepa" MFY, Qo'shtepa tumani, Farg'ona viloyati.

1. Loyiha nomi: *Qishloq infratuzilmasini rivojlantirish loyihasi, "Aholini ichimlik suvi bilan ta'minlash uchun suv ta'minoti tizimlarini qurish" sub-loyihasi*
2. Jahon Banki talabi va O'zRes qonunchiligiga asosan sub-loyihaning ekologik toifasini belgilang: Jahon Banki "A" "B" "C" O'zRes qonunchiligiga – "1" "2" "3" "4" (agar loyiha "A" yoki "1" toifaga mansub bo'lsa, keyingi bo'limlarni to'ldirishni kerek emas, bunday sub-loyihalarni loyihaga kiritish mumkin emas va moliyalashtirilmaydi)
3. Loyihaviy tadbirlar quyidagi tarzda amalga oshiriladi:
 - a) Nozik va qiymati yuqori ekotizimlarda - botqoq erlarda, yovvoyi erlarda va yo'qolib ketish xavfi ostida turgan turlarning yashash joylarida - yo'q (ha yoki yo'q)
 - b) arxeologik va / yoki tarixiy joylar yoki mavjud madaniy va ijtimoiy muassasalar joylashgan joylarda yoki uning yonida - yo'q (ha yoki yo'q)
 - c) ko'chirish talab etiladigan yoki ifloslanishning potentsial ta'siri va boshqa buzilishlar jamoalarga jiddiy ta'sir ko'rsatishi mumkin bo'lgan zich joylashgan joylarda - yo'q (ha yoki yo'q)
 - d) katta qurilish faoliyatlari bor bo'lgan hududlarda yoki tabiiy resurslarni taqsimlashda ziddiyatlar mavjud bo'lgan joylarda; suv oqimlari bo'ylab, suvli suv zaryadlanadigan joylarda yoki ichimlik suvi uchun ishlatiladigan suv omborlarida; va qimmatbaho resurslarga ega bo'lgan erlarda yoki suvlarda (baliqchilik, minerallar, dorivor o'simliklar, qishloq xo'jaligining yaxshi tuproqlari) - yo'q (ha yoki yuq)

Agar "ha" bo'lsa, sub-loyiha dasturdan chiqariladi
4. Ekologik baholash (EB) talab etiladimi? (ha yoki yo'q) - ha
5. Talab qilinadigan EB hujjatlarining turlari (keraklisini belgilang):
 - a) atrof-muhit va ijtimoiy ta'sirni baholash (AMITB) va atrof-muhit va ijtimoiy boshqaruv rejasi (AMIBR);
 - b) "B" toifadagi sub-loyihalar uchun AMIBR;
 - c) atrof-muhit boshqaruv rejasi (AMBR) cheklist (kichik hajmdagi qurilish / qayta ta'mirlash sub-loyihalari uchun);
 - d) AMIBR cheklist (kichik miqyosdagi yo'llarni qayta ta'mirlash loyihalari uchun);
 - e) Atrof-muhit (ekologik) skrining checklist
 - f) Atrof-muhitga ta'sir ko'rsatish to'g'risidagi ariza loyihasi
 - g) Ekologik oqibatlarini to'g'risidagi ariza (faqat 2-3-toifalar uchun sub-loyihalari uchun)
6. Sub-loyiha qanday ekologik va ijtimoiy muammolarni ko'taradi?

Qurilish jarayonida atmosfera havosini ifloslanishi, qurilish va maishiy chiqindilar hosil bo'lishi, o'simlik dunyosi obe'ktlariga zararli ta'sirlar ko'rsatishi, (suv qudug'i burg'lanadigan

bo'lsa, hosil bo'ladigan oqava suvlar bilan er va er usti suvlarini ifloslanishi), texnikalarni ishlashi davomida shovqin darajasi yuqori bo'lishi extimoli mavjud.

7. Agar EB zarur bo'lsa, qanday muammolar hal qilinishi kerak?

Qurilish ishlari amalga oshiriladigan xududlarda atmosferaga havosini ifloslanishi, joy reliefi(tuproq), yer osti va yer usti suvlarini ifloslanishi va o'simlik dunyosi ob'ektlarini zararlanishini oldini olish chora-tadbirlarini belgilash, Hosil bo'ladigan qurilish va maishiy chiqindilarni vaqtinchalik saqlash, saralash, keyinchalik qayta ishlash mumkin bo'lgan chiqindilarni tegishli korxonalariga topshirish va boshqa chiqindilarni Qo'shtepa tumani "Toza xudud" DUK bilan shartnoma asosida markaziy chiqindixonaga joylashtirish. Aholi yashash punktlarida shovqin darajasini kunduzi 55 DB, tunda 45 DB dan oshmaslik choralarini ko'rish.

8. EB ni o'tkazish muddati va taxminiy narxi qancha?

3 mlrd. 210 mln. so'm.(uch mlrd. ikki yuz o'n mln. so'm).

Xulosa (sub-loyihani dasturga kiritish mumkin va agar "Ha" bo'lsa, qanday sharoitlarda):

O'zbekiston Respublikasining Atrof-muhitni muhofaza qilishga oid qonunlari va shu sohaga oid qarorlar, qonunosti hujjatlarida belgilangan me'yorlarga hamda Davlat ekologik ekspyertizasining ob'ektda qurilish ishlarini amalga oshirish uchun byerilgan ekspyertiza xulosasidagi talablarga asoslanib, Farg'ona viloyati Qo'shtepa tumani "Shahartepa" MFYda "Aholini ichimlik suvi bilan ta'minlash uchun suv ta'minoti tizimlarini qurish" sub-loyihasi amalga oshirishni ma'qullayman.

Atrof-muhitni va ijtimoiy himoya
mutaxassisi:



D.Shahobidinov

Annex 4. Social Screening Procedure

2.1 Shaki. Ko'chirish rejasi va ijtimoiy skrining shakli

Sub-loyiha nomi: **"Toza ichimlik suvi ta'minoti"**

Sub-loyiha amalga oshiriladigan joy: **Farg'ona viloyati Oo'shtepa tumani "Shahartepa" MFY**
(Fotosuratlar bilan xarita-xxemasida belgilash bilan loyiha amalga oshiriladigan joyni ko'rsating)

Faoliyat turi: **Mavjud suv quduqlari va 1 dona yangi suv qudugini burg'ulash orqali chimlik suvi tarmog'i tortish, suv minorasi qurish**

(yangi qurilish, rekonstruksiya qilish, tiklash, texnik xizmat ko'rsatish)

Taxminiy boshlanish sanasi: **2022 yil**

Tekshirish ro'yxati:

№	Mavjud ta'sirlar	Mavjudligi (Ha/Yo'q)	Tafsilotlar
1.	Sub-loyiha uy-joy, boshqa mol-mulk va resurslarga zarar yetkazishi yoki yo'qolishiga olib kelishi mumkinmi? Iltimos aniqlik kiriting, vaqtinchalikmi yoki doimiy	Yo'q	
2.	Sub-loyiha xususiy yoki davlat yeriga tushadimi?	Ha	Davlat yeriga
3.	Loyihani amalga oshirish tufayli vaqtincha majburiy ko'chirish /jismoniy ko'chib o'tishga sabab bo'ladimi?	Yo'q	
4.	Loyihani amalga oshirish uchun aholini yoki korxonalarni jismoniy yoki iqtisodiy jihatda ko'chirish kerakmi? Iltimos, aniqlik kiriting	Yo'q	
5.	Yer olish bo'ladimi? Bu yer vaqtinch amajburiy olib qo'yiladimi yoki in'om qilib beriladimi?	Yo'q	
6.	Agar yer olingan yoki in'om qilingan bo'lsa, iltimos, uning xajmi va egalik holatini ko'rsating.	Yo'q	Yer MFY tassarufida
7.	Sizningcha, zarar ko'rgan yer egalari in'om qilgan erlarining 20% dan ko'prog'idan mahrum bo'lishi mumkinmi?	Yo'q	
8.	Bahsli hududlar bormi?	Yo'q	
9.	Vaqtinchalik jismoniy ko'chirishda, qurilish davomida, tijorat inshootlari, turar-joy binolari, yo'llar, piyodalar yo'lakchalari va veloyo'laklarga o'tish imkoniyati bo'ladimi?	Yo'q	
10.	Vaqtinchalik jismoniy ko'chirishda, aholi va tadbirkorlik sub'ektlarining daromadi kamayishi xavfi bormi?	Yo'q	
11.	Qurilish ishlari uchun foydalaniladigan sub-loyiha joylashgan yerda yashaydigan yoki tadbirkorlik bilan shug'ullanadigan biron-bir ro'yxatga olinmagan odamlar bormi? Vaqtinchalik ta'sir ko'rsatishi mumkinmi?	Yo'q	
12.	Vaqtinchalik ko'chirish paytidagi yo'qotishlarni taxminiy baholay olasizmi? Masalan: maktabga va ishga piyoda yurish vaqti ko'payadi va transportdan foydalanish talab etiladi (moliyaviy og'irlik); hovlilarda mevalarni yig'ib olish kechikadi yoki bo'lmaydi, natijada moliyaviy yo'qotishga olib keladi; va xokazo.	Yo'q	
13.	Sub-loyihalar bilan bog'liq qurilish /tiklashishlari tufayli odamlar ob'ektlar, xizmatlar yoki tabiiy resurslardan foydalanish huquqidan doimiy yoki vaqtincha mahrum bo'ladimi?	Yo'q	
14.	Sizningcha, vaqtincha ko'chirish aholining noroziligi va tashvishlariga sabab bo'ladimi?	Yo'q	
15.	Sizningcha, vaqtincha ko'chirishdan zarar ko'rgan shaxslarga teng munosabatda bo'linmaydimi? Masalan, kambag'al va yordamga muhtojlarga ta'sir qilishi yoki yomonroq munosabatda bo'lishi mumkin.	Yo'q	

16.	Ushbu qishloqda shaharsozlik ishlari, davlat infratuzilma loyihalari va boshqalar doirasida vaqtincha yoki doimiy ravishda yerni olish va majburiy ko'chirish holatlari bo'lganmi? Agar xa bo'lsa, iltimos, tafsilotlarni ko'rsating	Yo'q	
17.	Berilgan hududda majburiy ko'chirishning ayni paytda to'g'irlashni talab etadigan avvalgi ta'siri to'g'risida biron bir fakt mavjudmi?	Yo'q	
18.	Odamlarni vaqtinchalik ko'chirishga oid boshqa muhim faktlarni ko'rsating	Yo'q	

Muayvanta'sirlarni taxmin qilish:

Ta'sir	Tafsilotlar
Sub-loyihaning komponentlari	<i>Qurilish jarayonida atrof-muhitga va inson salomatligiga zararli ta'sir ko'rsatishni oldini olish choralarini ko'rish.</i>
Xususiy va talab etiladigan yer m ²	Yo'q
10% dan ko'proq yerlarini yo'qotayotgan mulkdorlar soni	Yo'q
m ² da davlat va talab etilgan yerlar	360 m ² va 23000 metr
m ² da talab etiladigan o'rmon yerlari	Yo'q
Zarar ko'rgan uylar soni	Yo'q
Do'konlar va boshqa tadbirkorlik sub'ektlari soni	Yo'q
Zarar ko'rgan communal xizmat korxonalari	Yo'q
Boshqa faktlar	Yo'q

Loyihadan zarar ko'rgan shaxslar (LZSh) to'g'risida ma'lumot:

- Sub-loyihadan zarar ko'radigan taxminiy uy xo'jaliklari soni? Yo'q
- Ishlab chiqarish aktivlarining 10% dan ko'prog'ini yo'qotadigan LZSh (er/molxona/do'konlar/daraxtlar va boshq.) Yo'q
- Ishlab chiqarish aktivlarining 10% dan kamrog'ini yo'qotadigan LZSh (er/molxona/do'konlar/daraxtlar va boshq.) Yo'q
- Yordamga muhtoj uy xo'jaliklari zarar ko'radimi? Ha bo'lsa, iltimos, tafsilotlar va mavjud ijtimoiy va iqtisodiy ta'sirlarni tavsiflab bering. Yo'q
- Ayollar boshqaradigan uy xo'jaliklar izarar ko'radimi? Ha bo'lsa, iltimos, tafsilotlar va mavjud ijtimoiy va iqtisodiy ta'sirlarni tavsiflab bering. Yo'q

Kategoriyalar bo'yicha qaror:

Yig'ilgan ma'lumotlarni o'rganib chiqqandan so'ng, kichik loyiha quyidagicha tasniflanganligi aniqlandi:

1-toifa – to'liq KHR talab qilinadi;

2-toifa – QKHR talab qilinadi;

3-toifa – Kompleks Tekshiruv Hisoboti (KTH).

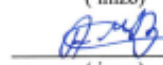
Imzolandi:

**Hududiy Atrof-muhitva
Ijtimoiy himoya mutaxassisi:**


(imzo)

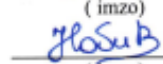
D. Shaxobidinov
(F.I.Sh)

VMTG raisi:


(imzo)

A. Abdullayev
(F.I.Sh)

KH/QF va QM:


(imzo)

A. Nabijonov
(F.I.Sh)

Sana: 5.11.2021/4

Annex 5. Chance Finds Procedure

Purpose

Construction sites could be considered as subject to heritage survey and assessment at the planning stage. These surveys are based on surface indications alone, and it is therefore possible that sites or items of heritage significance will be found in the course of development work. The procedure set out here covers the reporting and management of such finds.

Scope: The “chance finds” procedure covers the actions to be taken from the discovery of a heritage site or item to its investigation and assessment by a trained archaeologist or other appropriately qualified person.

Compliance: The “chance finds” procedure is intended to ensure compliance with relevant provisions of the Law of Ruz “On protection and Use of Objective of the Archeological Heritage” (2009). The procedure of reporting set out below must be observed so that heritage remains reported to the Ministry of Archeology are correctly identified in the field.

Responsibility

Operators/Workers - To exercise due caution if archaeological remains are found

Foreman/construction site manager - To secure site and advise management timeously

Contractor’s manager - To determine safe working boundary and request inspection

Archaeologist: To inspect, identify, advise management, and recover remains

Procedure

MITIGATION/MONITORING ACTION	RESPONSIBILITY	SCHEDULE
Should a heritage site or archaeological site be uncovered or discovered during the construction phase of the project, the “change find” procedure should be applied. The details of this procedure are highlighted below:	Person identifying archaeological or heritage material	When necessary.
<ul style="list-style-type: none"> • If operating machinery or equipment: stop work • Identify the site with flag tape • Determine GPS position if possible • Cease any works in immediate vicinity 	Person identifying archaeological or heritage material	

<ul style="list-style-type: none"> • Report findings to foreman • Report findings, site location and actions taken to superintendent 	<p>Foreman/construction site manager</p>	
<ul style="list-style-type: none"> • Visit site and determine whether work can proceed without damage to findings • Determine and mark exclusion boundary • Site location and details to be added to project GIS for field confirmation by archaeologist 	<p>Contractor's manager</p>	
<ul style="list-style-type: none"> • Inspect site and confirm addition to project GIS • Advise the Ministry of Culture (MoC) and request written permission to remove findings from work area • Recovery, packaging and labelling of findings for transfer to National Museum 	<p>Archaeologist</p>	
<ul style="list-style-type: none"> • Should human remains be found, the following actions will be required: <ul style="list-style-type: none"> ○ Apply the change find procedure as described above. ○ Schedule a field inspection with an archaeologist to confirm that remains are human. ○ Advise and liaise with the (MoC)and Police ○ Remains will be recovered and removed either to the National Museum or the National Forensic Laboratory. 	<p>Archaeologist</p> <p>Representatives of Khokimiyat and Ministry of Culture</p> <p>Police</p>	

Annex 6. Khokim's Decision



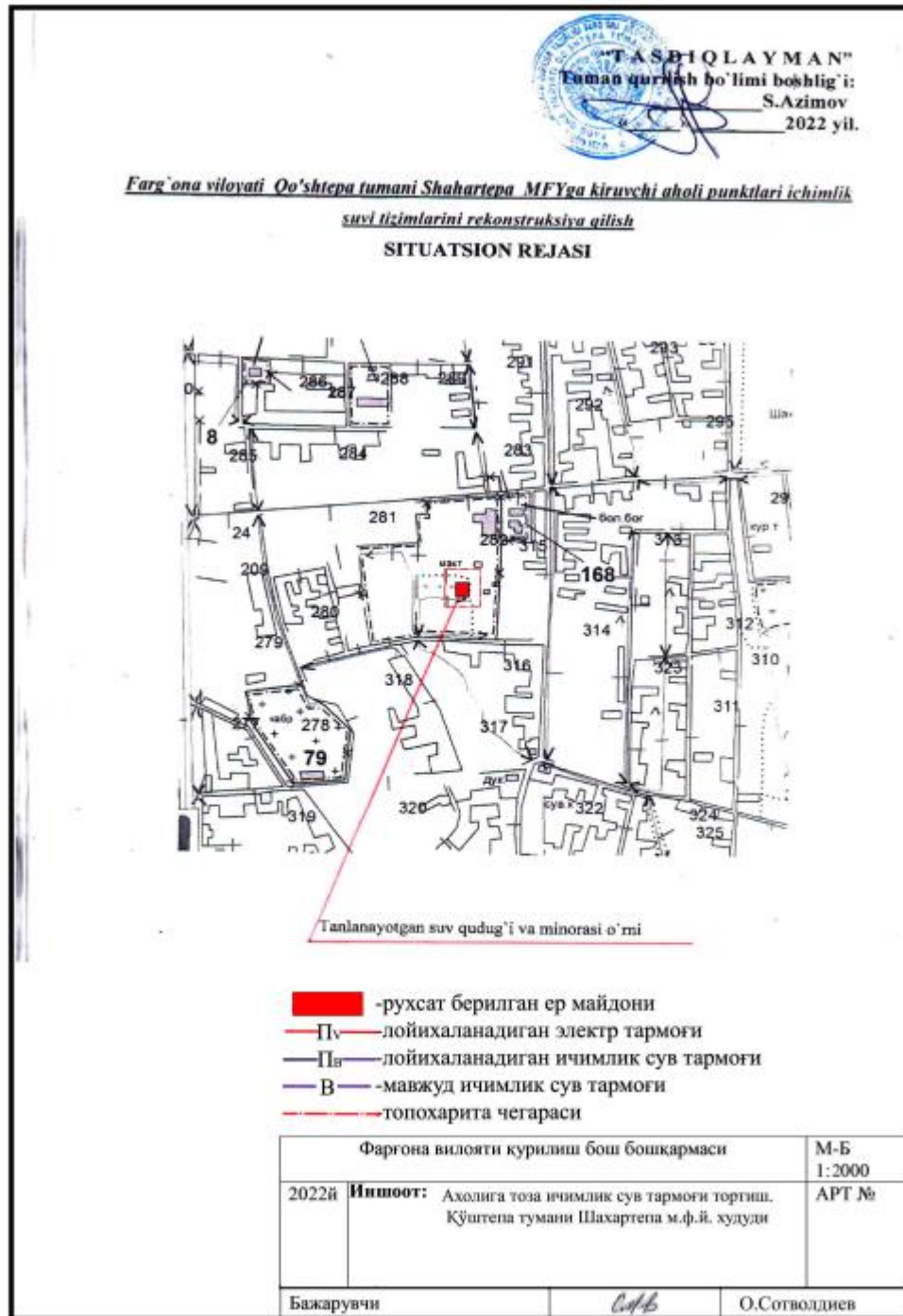
**Фаргона вилояти ҳокимлиги “Капитал
қурилиш соҳасида буююртмачи хизмати”
раҳбари Х.Долимовга**

Сизнинг 2022 йил 24 апрель кунги № 01/20-3/548-сонли хатингизга асосан Ўзбекистон Республикаси Президентининг 2020 йил 25 ноябрьдаги ПҚ-4898-сонли қарорига мувофиқ тумanning 3 та маҳалла фуқаролар йиғинларида лойиҳалар амалга оширилиши режалаштирилган. Лойиҳа бўйича Қўштепа туман ҳокимининг 2021 йил 6 сентябрь 204/б-сонли йиғилиш баёнига асосан Борот МФЙ ҳудудига қирувчи аҳоли пунктлари ичимлик суви тизимларини реконструкция қилиш, 14,5 км тармоқ тортиш, Намуна МФЙ ҳудудига қирувчи аҳоли пунктлари ичимлик суви тизимларини реконструкция қилиш, 15,8 км тармоқ тортиш, Шахартепа МФЙ ҳудудига қирувчи аҳоли пунктларига янги тик ичимлик суви қудугини қазитиш ва сув минорасини ўрнатиш ҳамда 20,1 км тармоқ тортиш ишлари амалга оширилиши режалаштирилганини маълум қиламан.

**Туман ҳокимининг
ўринбосари**

Б.Қурбонов

Annex 7. Location of WDF and well



Annex 8. SDDR**Social Due Diligence Report**

Subproject: "Construction of water supply systems to provide drinking water to the Population of the MCA Shaxartepa of the Qo'shtepa district Farg'onah region

INTRODUCTION AND PROJECT BACKGROUND

1. The Subproject component of the project: "Construction of water supply systems to provide drinking water to the Population of the MCA Shaxartepa of the Qo'shtepa district of the Farg'onah region» within the framework of the Rural Infrastructure Development Project, which is funded by the World Bank (WB).
2. The RIDP (the "Project") is an initiative of the GoU that promotes participatory, village-based development to reduce infrastructure and service-delivery gaps
3. The RIDP's development objectives are (i) to improve the quality of basic infrastructure and (ii) to strengthen participatory local governance processes in targeted rural villages in the following Areas-Fergana,2 Andijan, Farg'ona, Syrdarya and Farg'onah regions. It has two Components: Component 1: Demand-driven investments in basic infrastructure and local governance capacity support. This component will provide subgrants to finance local-level, climate-resilient investments in social infrastructure and services that communities plan and prioritize. This component will also support hokimiyats and Mahalla Citizens Assemblies (MCAs) to engage communities in inclusive, transparent processes to plan, select, implement and maintain investments as defined in the Project Operational Manual (POM). Component 2 covers project management, monitoring and evaluation and capacity building activities.
4. The impact of the subproject will be improved living standards, environment, and public health in mahally.
5. This sub-project is aimed at providing drinking water to the Population of MCA Shaxartepa, Qo'shtepa district, Farg'onah region.

SCOPE OF LAND ACQUISITION AND RESETTLEMENT IMPACTS

6. This Social Due Diligence Report (SDDR) is prepared as part of the process of compliance with the operational policy 4.12 of the World Bank regarding sub- project "Construction of water supply systems to provide drinking water to the Population of the Shaxartepa mahalla of the Qo'shtepa district of the Farg'onah region» based on the final detailed design and the Resettlement Policy Framework.
7. Sub-project "Construction of water supply systems to provide drinking water to the Population of the MCA Shaxartepa of the Qo'shtepa district of the Farg'onah region» was screened for social safeguards and possible social and involuntary resettlement impacts. As a result, subcomponent was categorized as "No resettlement effect (Category 3)". Therefore, in consideration absence of involuntary resettlement and adverse social impacts, this Social Due Diligence Report (SDDR) has been developed.
8. The objective of this SDDR is to confirm that sub project "Construction of water supply systems to provide drinking water to the Population of the MCA Shaxartepa of the Qo'shtepa district of the Farg'onah region» does not trigger the World Bank's Operational Policy 4.12 regarding Involuntary Resettlement and all the possible social impacts and physical displacement avoided. Based on this main objective, this Social due diligence was carried out to:
 - assess the likely social impacts of the project concerning land acquisition, if any; on the people in terms of displacement, loss of incomes; and community links, safety, and health.

- ascertain, if appropriate measures were taken during the planning stage concerning design to minimize adverse impacts; and if safeguard measures were adopted during the implementation stage to mitigate adverse impacts if any.
 - confirm that social safeguard issues have been addressed in compliance with the applicable National and State acts and policies particularly as the project had been prepared in line with World Bank's OP 4.12 requirements.
 - identify gaps in addressing mitigation measures, if any, in respect of OP 4.12.
 - provide support in the development of an Action Plan to address the identified gaps.
9. On April 21, 2022, the letter of the Khokim of Qo'shtepa district, Farg'onah region No. 1316/3 permits for the construction of water supply, electricity, internal roads on the territory of settlements and villages of Qo'shtepa district was adopted (Hokims' letter is attached in Annex 6). Decision will be made after the subproject is launched.

METHODOLOGY OF THE SOCIAL DUE DILIGENCE EXERCISE

10. The social due diligence methodology was based on two parts, the desk study and site survey which are considered as two essential components of social due diligence survey. The desk study was carried out before the site survey. Its purpose was to find out as much technical and other information as possible about the proposed works for the construction of a water supply systems to provide drinking water. All aspects of construction were taken into account, including access, equipment storage, sanitary zone requirements in accordance with local law.
11. The sites survey was carried out after the desk study was largely completed.
12. During the screening, technical documents were examined. Meetings were held with local authorities (mahalla committee), as well as site visits and conversations with neighboring residents.

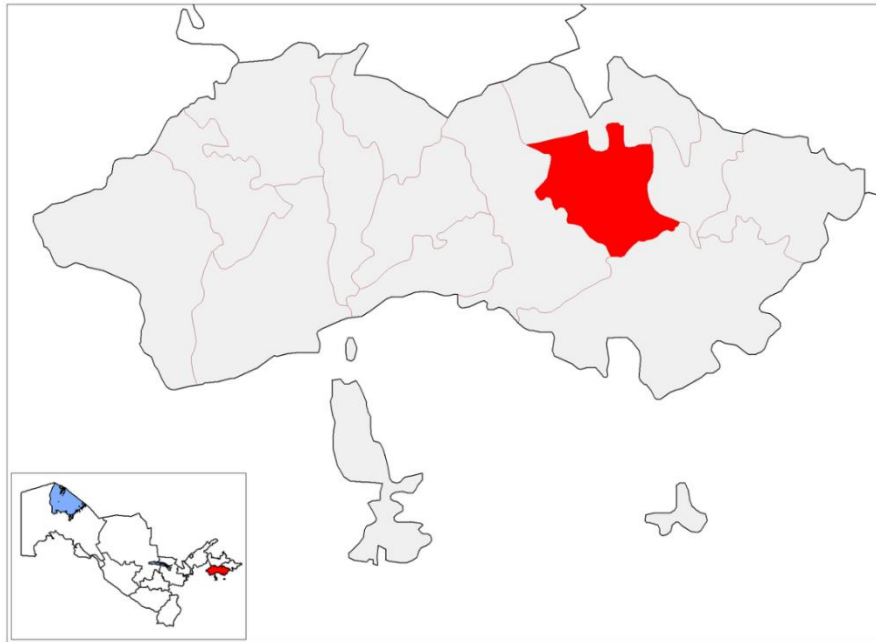
PROJECT AREA DESCRIPTION

13. The area of the work site is located on the territory of the MCA Shaxartepa.
14. Conducting construction work for the construction of well, water intake and the laying of underground pipelines are classified as a small enterprise that cannot significantly affect the socio-economic situation and the way of life of people.
15. At the same time, water supply to residential settlements will have a positive effect on the social and living conditions of the Population.
16. On the territory of MCA, it is planned to water well:
 - The one WW is designed to provide drinking water to the mahalla
17. Water is used for household drinking needs of the Population and watering of livestock
18. Carrying out construction work on the construction of water well, water intake, and laying underground pipelines are classified as small enterprises that cannot significantly affect the socio-economic situation and the way of life of people.
19. At the same time, the water supply of residential settlements will positively affect the social and living conditions of the Population.
20. Providing the Population with drinking water will be carried out from water well in the amount of 1 pieces, which will be drilled and equipped.
21. Water towers will be built, in the amount of 1 pcs. – 25 m³ each, from which water will be distributed through the water distribution network (20.1 km).
22. During the construction of water supply systems, the distribution network will be made of polyethylene pipes.

23. The volume of excavated soil from the trench being laid is 19400 m³. The length of the trench is 20.1 km. trench depth - 1.2 m, trench width - 0.8 m.

Photo 1. The location of the sub-project

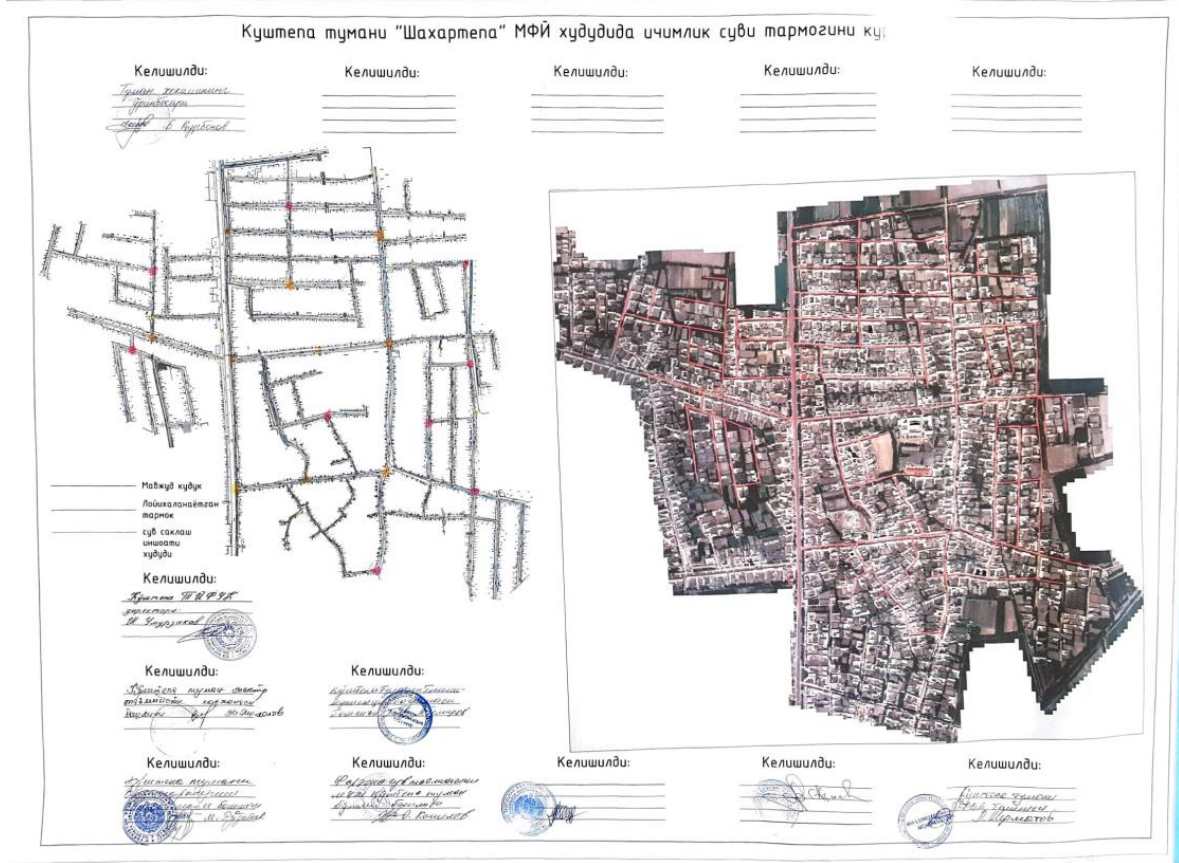
Location of towers and water supply in «Shaxartepa» MCA



Location of well and towers



Water pipes of Shaxartepa



SOCIO-ECONOMIC PROFILE OF THE POPULATION

24. The total number of people living in the territory of MCA is 4520 people. Of these, men – 2320, women - 2200, youth - 156, of this minors - 156.

Table 1. Total Population

Total number of people	
Of them	4520
men	2320
Women	2200
Of them	
Young people	1257
Minors	1409

25. The number of households located on the territory of Shaxartepa MCA is 890 houses.

26. On the territory of MCA "Shaxartepa" There are:

- 2 - Preschool institutions;

- 1 - General education schools;
 - 0- Family polyclinic;
 - 0- Pharmacies, and 1 ambulance soon for medical assistance;
 - 0- Sports halls;
 - 0- Bazaar;
 - 0- mosque
27. The main activity of the Population: animal husbandry, agriculture, small business.
28. The female half of the Population is mainly involved in the household.
29. Within the territory of:
- 330 retirees;
 - 43 persons with disabilities;
 - 35 low-income families;
 - "Temir Daftary" - 3 families;
 - "Ayollar daftari" - 55 persons;
 - "Yoshlar Daftari" - 31 people.

Table 2. Information in the context of mahallas

		Total houses	Number of households	Number of families	Population	Of them		Working-age Population	0-17	pensioners
						husband	wives			
1	Shaxartepa	890	890	1120	4520	2320	2200	2518	1409	330
	TOTAL									

30. 6 farms on the territory of MCA.
31. The number of cattle is 1650 heads, the number of small cattle is 450 heads, the number of horses is 2 heads.
32. There are 15 large enterprises on the territory of MCA.
33. 14 registered business entities.
34. There is no running water supply on the territory. Most of the residents use spring water, more prosperous families make their own wells, with electric motors, which often burn out due to unstable electricity supply.

DUE DILIGENCE ON LAND ACQUISITION AND RESETTLEMENT

35. Implementation of the Subproject: "Construction of water supply systems to provide drinking water to the Population of the Shaxartepa mahalla of the Qo'shtepa district of the Farg'onah region» does not entail the acquisition of private land or any physical or economic movement of people, gardens and structures. The

construction will be carried out on the territory transferred in 2022 by the Decree of the khokim for the construction of a water supply systems (Annex 1).

36. In order to confirm the ownership of the land transferred to the project, a request was made to the Khokimiyat and Cadastral Agency. By the decision of Hokim and the certificate it was confirmed that all land transferred for project impact belong to Hokimiyat, the land to be affected by the project does not belong, is not leased and not used by any person; there are no buildings, trees, crops on the plot.

37. Social screening has been carried out by Social Safeguards Specialist on 08 September 2022 for the identification of possible involuntary resettlement per 4.12 OP/BP of the World Bank. The results of the social screening of the water supply system (water wells, water towers, water pipe laying) site showed that no resettlement impact is expected during the construction of the water supply system.

38. The Population will be provided with drinking water from well, which will be drilled and equipped.

39. Water tower will be built - 25 m³ each, from water will be distributed through the water distribution network (20.1 km).

40. During the construction of water supply systems, the distribution network will be made of polyethylene pipes.

41. The project "Construction of water pipelines in MFY «Shaxartepa» will include (i) construction of new wells, water towers with water treatment system, (ii) construction of water supply networks.

42. The detailed design identifies the following scope of work:

- drilling of well in the number of - 1 pcs.
- installation of water tower with a capacity of 25 m³ - 1 pcs.
- construction of cascade house and bactericidal plant in an amount of - 1 pcs.
- polyethylene pipe laying with the length of – 20.1 km
- arrangement of water supply well VC;
- installation of shut-off valves.

43. According to the working documentation, wells and water towers are planned to be located in one area.

44. Pressure pipes will be laid between the wells and the water towers to supply water to the towers. After decontamination, water will be supplied from the towers through a ring system of pipes to consumers. The developed design scheme provides for the installation of pipes only on existing rural roads, sidewalks and reserve lands, without affecting private property.

45. Well and tower will be located on land reserved by the district administration.

46. The developed design scheme provides for the installation of pipes only on existing rural roads, sidewalks and reserve lands, without affecting private property. Temporary impacts will be fully restored and/or compensated by the Project Contractor. The PC will ensure that residents are properly notified of the upcoming work and expected impacts prior to the start of work, and that all safety measures relating to traffic control, crosswalks, and access to private and public buildings are maintained throughout the work.

47. For the construction of 20.1 km water distribution networks no land acquisition is required. The networks will be laid within the borders of the existing site, along the grounded and asphalted roads. Temporary impacts on private municipal infrastructure may be expected, as described above.

48. According to the working documentation, wells and water towers are planned to be located in one area.

49. Pressure pipes will be laid between the wells and the water towers to supply water to the towers. After decontamination, water will be supplied from the towers through a ring system of pipes to consumers. The developed design scheme provides for the installation of pipes only on existing rural roads, sidewalks and reserve lands, without affecting private property.

“Shaxartepa” Water well 1 and Water tower



50. **Water well and the water tower**– it will be located on vacant lands that are in the reserve of the khokimiyat. The land to be affected by the project is not owned, leased to, or used by any person; there are no structures, trees, crops on the land.

CONSULTATIONS AND INFORMATION DISCLOSURE

51. Consultations were carried out with stakeholders:

- Public consultation was held with the mahally staff - informing about the project and the consequences of the project.

52. Consultations were carried out with the PAP at early stages of project preparation, i.e., during feasibility study, especially during preparation of the draft SSDR. Most of the people are aware about of the project and supported the project.

53. The main objectives of the consultation meeting with private households were:

- to make people aware of the project and discuss possible social impacts.
- to disseminate information to the people about the project in terms of its activities and scope of work.
- to make people aware of future actions.
- to make people aware of the process of Grievance Redress Mechanism in case of any unexpected impacts occur during the construction phase.
- to seek local peoples' views on minimizing probable adverse social impacts, and indirect impact on the livelihood.

On February 2022 meeting with the Population, informing the Population about the project, conducting a socio-economic research.

- **September 08, 2022** - meeting with the Population of the MCA Shaxartepa

Aim of the meeting:

- ✓ Inform the Population of the project area about the project, about the start of work on the sub-project;
- ✓ Provide the public with information on environmental and social measures;
- ✓ Explain the procedure for filing complaints;
- ✓ Discuss the current situation, wishes and concerns of the Population regarding the construction of water wells, water towers and a water pipeline;

54. Information about the project is disclosed on web sites of government bodies, official publications, and mass media.

55. Detailed report will be available to PAPs anytime. The SDDR will be posted on the WB website in English and on RIDP website in English, and Uzbek after approval.

GRIEVANCE REDRESS MECHANISM

56. The PIU has developed an appeal mechanism based on the legislation of the Republic of Uzbekistan

57. RIDP is implementing an information system for managing complaints, including citizens' complaints – the Grievance Redress Mechanism (GRM).

58. The main purpose of the RIDP GRM is the process of obtaining prompt, objective information, evaluating and reviewing appeals (applications, proposals, complaints, requests, positive feedback) at all stages of the project implementation, which are received from citizens / beneficiaries to further improve their work. Strengthen communication with project beneficiaries and provide channels for feedback, as well as identify and solve problems, increase transparency and accountability.

59. The dissemination of information about the GRM is carried out through the following activities:

- conducting a presentation by PIU specialists to local authorities, (DH);
- at public hearings, trainings conducted by RIDP staff. After the training, RIDP Qishloq facilitators and regional PIU specialists on ESS conduct a presentation;
- Banner on site visibly displaying contact information for all GRM channels in the case of citizen questions or complaints;
- the official website has a section of the GRM.

60. All appeals and complaints of citizens that are received within the framework of RIDP are sent to a single system for further processing and control.

<p>1. Helpline: + 99871 207-84-07 2. Social networks (Facebook-QIRL qishloq infratuzilmasini rivojlantirish loyihasi); telegram - +99899 225-63-32 3. RIDP website: www.ridp.uz 4. Oral or written appeals, Received in the course of the project by contractors, local authorities; 5. Incoming correspondence on purpose in RIDP reception; 6. Incoming correspondence on to the GRM email address: ridp@mineconomy.uz 7. PIU Office phone.: + 99871 207-84-07 (reception), Regional safeguard specialist - 91 668 15 05</p>	<p>1. Requests are recorded in the log incoming correspondence of the GRM and they are accepted for consideration provided that the following data is reported:</p> <ul style="list-style-type: none"> • last name, first name, patronymic; • registration and residence address or phone number; • content of the appeal; • other background information <p>1. In cases where requests have been received in the absence of any of the above data, it is recorded in the incoming mail log correspondence of the GRM and is notified</p>
---	---

<p>8. PIU address: 4, Chilanzar street, Tashkent, Republic of Uzbekistan.</p> <p>9. There is a box for suggestions and complaints in the MCA building</p>	<p>the sender, and the results of the appeal will be published in the local media for example, on the RIDP website.</p> <p>2. Appeals can be submitted anonymously. Confidentiality must be provided in all cases, including number, when the identity of the person submitting the application the treatment is known, in order to avoid stakeholder conflicts</p>
---	---

Channels for submitting requests.

61. The person who sent the request will receive a notification in which the Social Safeguards specialist will inform by phone or through other channels of the GRM:

1. Full name of the contractor (project employee) to whom the request was sent
2. Terms of execution (minimum 15 days, maximum 30 days from the date of registration)
3. The terms and the course of actions are determined in accordance with the instructions of the GRM RIDP on working with appeals.

62. The notification will be registered in the outgoing mail log. Social Safeguards Specialist. The GRM will assist the applicant at all stages of the consideration of their application and ensure that their application is properly considered.

63. If the citizen / beneficiary is not satisfied with the decision received as a result of the consideration of the application, he / she has the right to appeal. The appeal is considered by the RIDP for consideration of appeals.

64. After the appeal review, the citizen / beneficiary who is dissatisfied with the decision received as a result of the review has the right to appeal the decision in court.

DETAILED MEASUREMENT SURVEY

	Subproject /Affects	Voluntary Land Donation (yes/no) If yes, description	PAPs	Mitigation measures/ resettlement support	Responsible
1	<i>Land acquisition for subproject</i>	<i>NO</i>	-	-	-

IMPLEMENTATION SCHEDULE

65. Upon the approval of the final SDDR, this document will be attached to the tender documents for bidding to the Contractors, and in case of bidding process passed, then to the Contractor. The activities mainly include initiation of the land development process, site preparation for delivering the site to contractors for construction, and finally commencement of the civil work. There are no compensation payments and allowances so that construction works can be commenced right after the no-objection form the World Bank and disclosure of SDDR on the website of PIU and telegram channel.

66. If during the implementation stage any involuntary resettlement, land acquisition from households or entities will be identified, then identified PAPs are eligible to get entitlements specified in Entitlements Matrix of RPF developed for RIDP.

67. Implementation of SDDR and post-implementation are summarized in Table 2.

Table 2: Implementation schedule

Step	Action	Responsibility	Timing
A.	Development SDDR		
1.	Finalization of SDDR and submission to WB	PIU	August 2022
B.	SDDR IMPLEMENTATION		
2.	No objection notice from WB	WB	September 2022
3.	Disclosure of SDDR on websites	PIU/WB	September 2022
4.	Notice to proceed for civil works is issued	WB	October 2022
5.	Start of construction works	Contractor	November 2022
C.	ITERATIVE TASKS		
6.	Internal monitoring. Quarterly reporting to WB	PIU/Supervision Consultant/ Contractor	continuous
7.	Inter-agency coordination and communication	PIU	continuous

DISCLOSURE AND MONITORING

68. **Disclosure.** This draft SDDR will be sent to the World Bank and after addressing the comments of WB, the final SDDR will be developed. After getting the “No Objection Notice” from the World Bank, the final SDDR will be uploaded for public disclosure on PIU’s official website.

69. Disclosure of SDDR meeting is to be carried out for the residents living near to the water well and water tower. The main purpose of the meeting is to inform households and makhalla representatives about the grievance redress mechanism in case of any involuntary resettlement impacts or other kinds of social impacts occur and their entitlements per RPF. This draft SDDR shall be summarized and to be distributed as a brochure to all the participants in order for them to know about their entitlements in case of any involuntary resettlement occurs during the implementation of the RIDP in the future.

70. **Monitoring.** PIU will submit quarterly social monitoring progress reports to the World Bank on all activities of subcomponent "Construction of water supply systems to provide drinking water to the Population of the MCA Shaxartepa of the Qo’shtepa district of the Farg’onah region» on compliance of social safeguards measures. Monitoring of the proposed corrective actions will be the responsibility of the Social Safeguards Specialists (SSS) contracted by the Supervision Consultants and Contractor for Construction. SSS will regularly monitor and measure the progress of implementation of this SDDR. In case of occurrence of possible Land Acquisition and Resettlement (LAR) related activities or adverse social impacts, mitigation measures shall be proposed and in case of not possibility to avoid LAR relevant activities, then relevant resettlement plans (ARAP/RAP) shall be prepared.

71. SSS will prepare monthly monitoring reports to ensure that the implementation of the SDDR and proposed corrective measures have produced the desired outcomes. PIU will submit quarterly social monitoring progress reports to the World Bank on all activities of subcomponent on compliance of this SDDR by the PIU will provide WB with an effective basis for assessing the progress of social safeguards measures, possible land acquisition and resettlement activities, corrective measures, and identifying potential difficulties and problems.

72. The monitoring will involve administrative monitoring to ensure that implementation is on schedule and problems are dealt with on a timely basis. SSS of SPMC will:

- Monitor the progress of implementation of LAR-related activities and proposed corrective measures.
- Verify the compliance with safeguard measures and their progress toward intended outcomes.
- Document and disclose monitoring results and identify necessary corrective and preventive actions in the monthly monitoring reports.
- Submit monthly progress monitoring reports to PIU.

73. The final SDDR will be handed to the Contractor together with ESMP, and Contractor shall develop C-ESMP based on the general ESMP and final SDDR.

CONCLUSION AND RECOMMENDATIONS

74. According to the results of this social due diligence study, the new scope of the project does not have an involuntary resettlement impact and land acquisition in relation with the Construction of water supply systems to provide drinking water.

75. At this stage, the proposed water supply systems to provide drinking water construction work has been verified on the basis of final detailed design, information and diagrams currently available. If resettlement impacts are identified and cannot be avoided or mitigated in the construction phase the Contractor shall inform to PIU. PIU will inform WB and ARAP/RAP will be prepared and implemented based on the RPF prepared for RIDP.

76. Start of civil works will be conditional to the following:

- No objection from WB and disclosure of this SDDR

Annexes

Annex 1. Khokim's decision



**Фаргона вилояти ҳокимлиги “Капитал
қурилиш соҳасида буюртмачи хизмати”
раҳбари Х.Долимовга**

Сизнинг 2022 йил 24 апрель кунги № 01/20-3/548-сонли хатингизга асосан Ўзбекистон Республикаси Президентининг 2020 йил 25 ноябрьдаги ПҚ-4898-сонли қарорига мувофиқ тумanning 3 та маҳалла фуқаролар йиғинларида лойиҳалар амалга оширилиши режалаштирилган. Лойиҳа бўйича Қўштепа туман ҳокимининг 2021 йил 6 сентябрь 204/б-сонли йиғилиш баёнига асосан Борот МФЙ ҳудудига қирувчи аҳоли пунктлари ичимлик суви тизимларини реконструкция қилиш, 14,5 км тармоқ тортиш, Намуна МФЙ ҳудудига қирувчи аҳоли пунктлари ичимлик суви тизимларини реконструкция қилиш, 15,8 км тармоқ тортиш, Шахартепа МФЙ ҳудудига қирувчи аҳоли пунктларига янги тик ичимлик суви қудугини қазитиш ва сув минорасини ўрнатиш ҳамда 20,1 км тармоқ тортиш ишлари амалга оширилиши режалаштирилганини маълум қиламан.

Туман ҳокимининг
ўринбосари

Б.Курбонов